

GRUM

8606 MODEL

017657

PRINTOUT OF ROCK-TYPE INFORMATION FOR RECORDS [ 1] TO [ 12]

GEOLOGICAL AND GEOTECHNICAL DATA

| REC | STAT | ROCK<br>CODE | DESCRIPTION                                                          | RELATIVE<br>DENSITY<br>[tn/bcm] | PEN | SLOPE ANGLES [DEGREES] |      |      |      |      |      |      |      |
|-----|------|--------------|----------------------------------------------------------------------|---------------------------------|-----|------------------------|------|------|------|------|------|------|------|
|     |      |              |                                                                      |                                 |     | NW                     | N    | NE   | W    | E    | SW   | S    | SE   |
| 1   | 1    | 0            | AIR                                                                  | .000                            | 1   | 90.0                   | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 |
| 2   | 1    | 1            | A TYPE / 2ND CODE A, A4, C, E, L                                     | 3.000                           | 1   | 45.0                   | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| 3   | 1    | 2            | A4 TYPE / 2ND CODE A, A4, C, D, E, E4, G, H, L & AD, AE4, AG, AH     | 3.000                           | 1   | 45.0                   | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| 4   | 1    | 3            | C TYPE / 2ND CODE A, C, E, L                                         | 3.000                           | 1   | 45.0                   | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| 5   | 1    | 4            | D TYPE / 2ND CODE A, A4, C, D, E, E4, G, H, L & CA4, CD, CE4, CG, CH | 3.000                           | 1   | 45.0                   | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| 6   | 1    | 5            | E TYPE / 2ND CODE A, A4, C, AE, AL                                   | 3.000                           | 1   | 45.0                   | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| 7   | 1    | 6            | E4 TYPE / 2ND CODE A, A4, C, D, E, E4, G, H, L & ED, EE4, EG, EH     | 3.000                           | 1   | 45.0                   | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| 8   | 1    | 7            | G TYPE / 2ND CODE A, A4, C, D, E, E4, G, H, L                        | 3.000                           | 1   | 45.0                   | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| 9   | 1    | 8            | H TYPE / 2ND CODE A, A4, C, D, E, E4, G, H, L                        | 3.000                           | 1   | 45.0                   | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| 10  | 1    | 9            | L TYPE / 2ND CODE A, A4, C, D, E, E4, G, H, L                        | 3.000                           | 1   | 45.0                   | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| 11  | 1    | 10           | WASTE ROCK                                                           | <del>2.500</del>                | 1   | 45.0                   | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| 12  | 1    | 11           | OVERBURDEN                                                           | <del>2.000</del>                | 1   | 35.0                   | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 | 35.0 |

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Pb+Zn, Pb, Zn, Ag, Au  
 1 2 3 4 5

PRINTOUT OF BOREHOLE INFORMATION

SUMMARY PRINTOUT

| RECORD | BOREHOLE | TYPE | NORTHING<br>CO-ORD<br>[m ] | EASTING<br>CO-ORD<br>[m ] | COLLAR<br>ELEVATION<br>[m ] | LENGTH<br>[m ] | GEOLOGICAL<br>INTERSECTS | ASSAY<br>INTERVALS | SURVEY<br>INTERVALS | DATE       | STATUS |
|--------|----------|------|----------------------------|---------------------------|-----------------------------|----------------|--------------------------|--------------------|---------------------|------------|--------|
| 1      | AGA201   | ddh  | 9144.50                    | 7296.70                   | 1269.00                     | 243.00         | 19                       | 19                 | 8                   | 11/ 6/1986 | 1      |
| 2      | AGA209   | ddh  | 9205.60                    | 7293.50                   | 1274.90                     | 234.80         | 13                       | 13                 | 7                   | 11/ 6/1986 | 1      |
| 3      | AGA207   | ddh  | 9265.10                    | 7288.60                   | 1277.20                     | 233.30         | 10                       | 10                 | 7                   | 11/ 6/1986 | 1      |
| 4      | AGA105   | ddh  | 9018.40                    | 7265.00                   | 1263.10                     | 199.50         | 22                       | 22                 | 13                  | 11/ 6/1986 | 1      |
| 5      | AGA162   | ddh  | 9053.20                    | 7264.40                   | 1263.70                     | 130.00         | 10                       | 10                 | 5                   | 11/ 6/1986 | 1      |
| 6      | AGA081   | ddh  | 9082.60                    | 7259.70                   | 1264.80                     | 273.50         | 23                       | 23                 | 11                  | 11/ 6/1986 | 1      |
| 7      | AGA122   | ddh  | 9141.90                    | 7264.70                   | 1270.20                     | 232.30         | 17                       | 17                 | 7                   | 11/ 6/1986 | 1      |
| 8      | AGA107   | ddh  | 9204.50                    | 7265.90                   | 1275.90                     | 216.10         | 26                       | 26                 | 5                   | 11/ 6/1986 | 1      |
| 9      | AGA103   | ddh  | 9265.70                    | 7265.10                   | 1277.70                     | 213.60         | 13                       | 13                 | 9                   | 11/ 6/1986 | 1      |
| 10     | AGA102   | ddh  | 9326.60                    | 7266.60                   | 1279.30                     | 182.90         | 5                        | 5                  | 3                   | 11/ 6/1986 | 1      |
| 11     | AGA129   | ddh  | 9386.80                    | 7266.30                   | 1283.20                     | 152.50         | 7                        | 7                  | 3                   | 11/ 6/1986 | 1      |
| 12     | AGU171   | ddh  | 9192.70                    | 7263.30                   | 1182.30                     | 30.50          | 4                        | 4                  | 3                   | 11/ 6/1986 | 1      |
| 13     | AGU179   | ddh  | 9194.10                    | 7263.00                   | 1185.10                     | 51.70          | 14                       | 14                 | 5                   | 11/ 6/1986 | 1      |
| 14     | AGU177   | ddh  | 9196.80                    | 7263.30                   | 1184.50                     | 65.50          | 5                        | 5                  | 5                   | 11/ 6/1986 | 1      |
| 15     | AGU169   | ddh  | 9197.40                    | 7263.10                   | 1182.50                     | 45.70          | 1                        | 1                  | 1                   | 11/ 6/1986 | 1      |
| 16     | AGU175   | ddh  | 9197.00                    | 7263.30                   | 1181.70                     | 58.20          | 5                        | 5                  | 5                   | 11/ 6/1986 | 1      |
| 17     | AGU173   | ddh  | 9193.30                    | 7263.30                   | 1182.20                     | 57.80          | 6                        | 6                  | 4                   | 11/ 6/1986 | 1      |
| 18     | AGA203   | ddh  | 9145.10                    | 7232.50                   | 1269.60                     | 279.70         | 33                       | 33                 | 13                  | 11/ 6/1986 | 1      |
| 19     | AGA211   | ddh  | 9205.50                    | 7233.90                   | 1276.80                     | 261.10         | 39                       | 39                 | 9                   | 11/ 6/1986 | 1      |
| 20     | AGA204   | ddh  | 9268.30                    | 7233.10                   | 1277.90                     | 254.50         | 13                       | 13                 | 3                   | 11/ 6/1986 | 1      |
| 21     | AGA077   | ddh  | 9084.60                    | 7202.50                   | 1267.60                     | 305.10         | 31                       | 31                 | 9                   | 11/ 6/1986 | 1      |
| 22     | AGA028   | ddh  | 9144.00                    | 7203.90                   | 1274.00                     | 280.30         | 25                       | 25                 | 9                   | 11/ 6/1986 | 1      |
| 23     | AGA026   | ddh  | 9205.80                    | 7204.80                   | 1277.10                     | 273.30         | 56                       | 56                 | 13                  | 11/ 6/1986 | 1      |
| 24     | AGA152   | ddh  | 9235.80                    | 7204.40                   | 1277.30                     | 208.70         | 12                       | 12                 | 7                   | 11/ 6/1986 | 1      |
| 25     | AGA055   | ddh  | 9266.90                    | 7204.20                   | 1277.60                     | 217.40         | 18                       | 18                 | 7                   | 11/ 6/1986 | 1      |
| 26     | AGA149   | ddh  | 9298.20                    | 7203.90                   | 1284.60                     | 198.10         | 10                       | 10                 | 5                   | 11/ 6/1986 | 1      |
| 27     | AGA058   | ddh  | 9328.10                    | 7206.30                   | 1282.60                     | 187.30         | 13                       | 13                 | 3                   | 11/ 6/1986 | 1      |
| 28     | AGA136   | ddh  | 9357.50                    | 7204.80                   | 1284.70                     | 158.90         | 22                       | 22                 | 7                   | 11/ 6/1986 | 1      |
| 29     | AGA112   | ddh  | 9388.00                    | 7207.20                   | 1287.20                     | 172.30         | 13                       | 13                 | 3                   | 11/ 6/1986 | 1      |
| 30     | AGA137   | ddh  | 9417.70                    | 7205.30                   | 1289.60                     | 135.90         | 13                       | 13                 | 5                   | 11/ 6/1986 | 1      |
| 31     | AGU163   | ddh  | 9201.20                    | 7203.40                   | 1174.90                     | 111.90         | 13                       | 13                 | 8                   | 11/ 6/1986 | 1      |
| 32     | AGU167   | ddh  | 9201.60                    | 7203.40                   | 1176.90                     | 61.70          | 18                       | 18                 | 7                   | 11/ 6/1986 | 1      |

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SUMMARY PRINTOUT

| RECORD | BOREHOLE | TYPE | NORTHING<br>CO-ORD<br>[m ] | EASTING<br>CO-ORD<br>[m ] | COLLAR<br>ELEVATION<br>[m ] | LENGTH<br>[m ] | GEOLOGICAL<br>INTERSECTS | ASSAY<br>INTERVALS | SURVEY<br>INTERVALS | DATE       | STATUS |
|--------|----------|------|----------------------------|---------------------------|-----------------------------|----------------|--------------------------|--------------------|---------------------|------------|--------|
| 33     | AGU165   | ddh  | 9201.50                    | 7203.20                   | 1174.30                     | 53.20          | 10                       | 10                 | 6                   | 11/ 6/1986 | 1      |
| 34     | AGA206   | ddh  | 9143.90                    | 7172.30                   | 1275.30                     | 317.80         | 10                       | 10                 | 5                   | 11/ 6/1986 | 1      |
| 35     | AGA210   | ddh  | 9205.50                    | 7173.40                   | 1276.30                     | 127.40         | 24                       | 24                 | 5                   | 11/ 6/1986 | 1      |
| 36     | AGA202   | ddh  | 9266.50                    | 7174.50                   | 1278.80                     | 288.40         | 30                       | 30                 | 10                  | 11/ 6/1986 | 1      |
| 37     | AGA212   | ddh  | 9199.50                    | 7158.50                   | 1276.80                     | 310.70         | 33                       | 33                 | 5                   | 11/ 6/1986 | 1      |
| 38     | AGA157   | ddh  | 9114.00                    | 7143.40                   | 1273.90                     | 155.40         | 12                       | 12                 | 7                   | 11/ 6/1986 | 1      |
| 39     | AGA117   | ddh  | 9143.20                    | 7147.90                   | 1275.80                     | 214.10         | 22                       | 22                 | 7                   | 11/ 6/1986 | 1      |
| 40     | AGA066   | ddh  | 9207.70                    | 7142.50                   | 1276.90                     | 182.80         | 36                       | 36                 | 11                  | 11/ 6/1986 | 1      |
| 41     | AGA121   | ddh  | 9265.40                    | 7140.90                   | 1282.50                     | 262.90         | 26                       | 26                 | 7                   | 11/ 6/1986 | 1      |
| 42     | AGA241   | ddh  | 9291.40                    | 7143.90                   | 1284.80                     | 161.50         | 6                        | 6                  | 4                   | 11/ 6/1986 | 1      |
| 43     | AGA099   | ddh  | 9322.70                    | 7143.10                   | 1285.80                     | 189.20         | 18                       | 18                 | 7                   | 11/ 6/1986 | 1      |
| 44     | AGA135   | ddh  | 9353.40                    | 7143.80                   | 1287.10                     | 175.60         | 23                       | 23                 | 9                   | 11/ 6/1986 | 1      |
| 45     | AGA109   | ddh  | 9383.50                    | 7143.20                   | 1289.50                     | 190.50         | 11                       | 11                 | 3                   | 11/ 6/1986 | 1      |
| 46     | AGA139   | ddh  | 9413.60                    | 7142.50                   | 1292.30                     | 150.10         | 8                        | 8                  | 3                   | 11/ 6/1986 | 1      |
| 47     | AGA116   | ddh  | 9444.30                    | 7142.30                   | 1294.00                     | 181.30         | 4                        | 4                  | 3                   | 11/ 6/1986 | 1      |
| 48     | AGU141   | ddh  | 9210.80                    | 7143.00                   | 1168.00                     | 96.10          | 18                       | 18                 | 5                   | 11/ 6/1986 | 1      |
| 49     | AGU147   | ddh  | 9209.90                    | 7142.90                   | 1170.30                     | 76.20          | 15                       | 15                 | 3                   | 11/ 6/1986 | 1      |
| 50     | AGU159   | ddh  | 9213.60                    | 7143.00                   | 1171.00                     | 76.20          | 20                       | 20                 | 4                   | 11/ 6/1986 | 1      |
| 51     | AGU143   | ddh  | 9213.60                    | 7143.00                   | 1167.00                     | 132.20         | 16                       | 16                 | 5                   | 11/ 6/1986 | 1      |
| 52     | AGU145   | ddh  | 9214.90                    | 7142.50                   | 1167.90                     | 121.80         | 18                       | 18                 | 7                   | 11/ 6/1986 | 1      |
| 53     | AGU157   | ddh  | 9213.10                    | 7142.80                   | 1166.80                     | 132.40         | 19                       | 19                 | 8                   | 11/ 6/1986 | 1      |
| 54     | AGU155   | ddh  | 9213.60                    | 7143.00                   | 1166.80                     | 61.00          | 16                       | 16                 | 5                   | 11/ 6/1986 | 1      |
| 55     | AGU161   | ddh  | 9210.80                    | 7143.00                   | 1166.90                     | 59.30          | 29                       | 29                 | 3                   | 11/ 6/1986 | 1      |
| 56     | AGA213   | ddh  | 9142.10                    | 7115.80                   | 1277.00                     | 306.80         | 17                       | 17                 | 9                   | 11/ 6/1986 | 1      |
| 57     | AGA205   | ddh  | 9205.60                    | 7111.90                   | 1277.60                     | 284.00         | 32                       | 32                 | 11                  | 11/ 6/1986 | 1      |
| 58     | AGA200   | ddh  | 9264.00                    | 7111.80                   | 1280.50                     | 283.70         | 46                       | 46                 | 15                  | 11/ 6/1986 | 1      |
| 59     | AGU185   | ddh  | 9214.10                    | 7112.30                   | 1164.80                     | 91.40          | 12                       | 12                 | 3                   | 11/ 6/1986 | 1      |
| 60     | AGU187   | ddh  | 9214.20                    | 7111.90                   | 1164.20                     | 91.40          | 22                       | 22                 | 5                   | 11/ 6/1986 | 1      |
| 61     | AGU189   | ddh  | 9218.80                    | 7112.10                   | 1164.20                     | 123.40         | 23                       | 23                 | 5                   | 11/ 6/1986 | 1      |
| 62     | AGU191   | ddh  | 9216.30                    | 7112.20                   | 1168.30                     | 61.00          | 15                       | 15                 | 5                   | 11/ 6/1986 | 1      |
| 63     | AGA017   | ddh  | 9022.30                    | 7079.10                   | 1273.90                     | 282.40         | 19                       | 19                 | 13                  | 11/ 6/1986 | 1      |
| 64     | AGA216   | ddh  | 9048.80                    | 7081.50                   | 1273.80                     | 428.60         | 32                       | 32                 | 9                   | 11/ 6/1986 | 1      |
| 65     | AGA074   | ddh  | 9082.90                    | 7083.90                   | 1272.90                     | 322.90         | 21                       | 21                 | 15                  | 11/ 6/1986 | 1      |

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| RECORD | BOREHOLE | TYPE | NORTHING<br>CO-ORD<br>[m ] | EASTING<br>CO-ORD<br>[m ] | COLLAR<br>ELEVATION<br>[m ] | LENGTH<br>[m ] | GEOLOGICAL<br>INTERSECTS | ASSAY<br>INTERVALS | SURVEY<br>INTERVALS | DATE       | STATUS |
|--------|----------|------|----------------------------|---------------------------|-----------------------------|----------------|--------------------------|--------------------|---------------------|------------|--------|
| 66     | AGA145   | ddh  | 9110.70                    | 7082.70                   | 1275.40                     | 86.00          | 6                        | 6                  | 5                   | 11/ 6/1986 | 1      |
| 67     | AGA013   | ddh  | 9145.90                    | 7088.10                   | 1277.10                     | 185.90         | 14                       | 14                 | 10                  | 11/ 6/1986 | 1      |
| 68     | AGA142   | ddh  | 9176.20                    | 7082.90                   | 1277.50                     | 267.70         | 37                       | 37                 | 11                  | 11/ 6/1986 | 1      |
| 69     | AGA023   | ddh  | 9207.00                    | 7082.60                   | 1277.90                     | 306.00         | 68                       | 68                 | 13                  | 11/ 6/1986 | 1      |
| 70     | AGA147   | ddh  | 9237.90                    | 7082.90                   | 1278.20                     | 184.30         | 22                       | 22                 | 9                   | 11/ 6/1986 | 1      |
| 71     | AGA045   | ddh  | 9266.30                    | 7083.00                   | 1281.60                     | 235.30         | 37                       | 37                 | 13                  | 11/ 6/1986 | 1      |
| 72     | AGA153   | ddh  | 9295.30                    | 7082.40                   | 1286.60                     | 217.80         | 33                       | 33                 | 9                   | 11/ 6/1986 | 1      |
| 73     | AGA052   | ddh  | 9328.30                    | 7083.90                   | 1289.30                     | 261.50         | 14                       | 14                 | 5                   | 11/ 6/1986 | 1      |
| 74     | AGA134   | ddh  | 9354.20                    | 7081.80                   | 1290.60                     | 196.20         | 35                       | 35                 | 16                  | 11/ 6/1986 | 1      |
| 75     | AGA106   | ddh  | 9382.50                    | 7084.60                   | 1293.00                     | 190.30         | 13                       | 13                 | 7                   | 11/ 6/1986 | 1      |
| 76     | AGA143   | ddh  | 9412.70                    | 7083.50                   | 1295.70                     | 167.20         | 6                        | 6                  | 5                   | 11/ 6/1986 | 1      |
| 77     | AGU181   | ddh  | 9216.30                    | 7082.40                   | 1161.40                     | 68.50          | 17                       | 17                 | 4                   | 11/ 6/1986 | 1      |
| 78     | AGU183   | ddh  | 9216.30                    | 7082.40                   | 1160.60                     | 76.20          | 15                       | 15                 | 4                   | 11/ 6/1986 | 1      |
| 79     | AGU193   | ddh  | 9201.10                    | 7051.50                   | 1155.60                     | 76.20          | 6                        | 6                  | 3                   | 11/ 6/1986 | 1      |
| 80     | AGU195   | ddh  | 9206.00                    | 7051.80                   | 1155.80                     | 91.40          | 12                       | 12                 | 3                   | 11/ 6/1986 | 1      |
| 81     | AGU197   | ddh  | 9202.20                    | 7051.60                   | 1158.30                     | 35.10          | 1                        | 1                  | 1                   | 11/ 6/1986 | 1      |
| 82     | AGA159   | ddh  | 9113.90                    | 7022.40                   | 1276.80                     | 148.00         | 13                       | 13                 | 5                   | 11/ 6/1986 | 1      |
| 83     | AGA208   | ddh  | 9153.20                    | 7021.00                   | 1278.10                     | 224.00         | 30                       | 30                 | 9                   | 11/ 6/1986 | 1      |
| 84     | AGA062   | ddh  | 9206.20                    | 7018.20                   | 1279.80                     | 300.80         | 31                       | 31                 | 14                  | 11/ 6/1986 | 1      |
| 85     | AGA070   | ddh  | 9266.20                    | 7022.00                   | 1286.10                     | 108.20         | 19                       | 19                 | 5                   | 11/ 6/1986 | 1      |
| 86     | AGA240   | ddh  | 9294.50                    | 7020.80                   | 1289.50                     | 111.10         | 31                       | 31                 | 11                  | 11/ 6/1986 | 1      |
| 87     | AGA096   | ddh  | 9327.80                    | 7022.80                   | 1293.00                     | 151.40         | 26                       | 26                 | 6                   | 11/ 6/1986 | 1      |
| 88     | AGA133   | ddh  | 9361.80                    | 7023.00                   | 1296.80                     | 143.70         | 1                        | 1                  | 1                   | 11/ 6/1986 | 1      |
| 89     | AGA100   | ddh  | 9388.60                    | 7022.90                   | 1298.60                     | 249.90         | 26                       | 26                 | 13                  | 11/ 6/1986 | 1      |
| 90     | AGA138   | ddh  | 9418.40                    | 7021.80                   | 1304.40                     | 96.80          | 1                        | 1                  | 1                   | 11/ 6/1986 | 1      |
| 91     | AGU131   | ddh  | 9202.00                    | 7021.20                   | 1151.10                     | 45.70          | 8                        | 8                  | 5                   | 11/ 6/1986 | 1      |
| 92     | AGU136   | ddh  | 9203.10                    | 7021.30                   | 1152.90                     | 76.20          | 17                       | 17                 | 5                   | 11/ 6/1986 | 1      |
| 93     | AGU139   | ddh  | 9204.10                    | 7020.60                   | 1154.00                     | 76.20          | 14                       | 14                 | 7                   | 11/ 6/1986 | 1      |
| 94     | AGU137   | ddh  | 9205.40                    | 7019.90                   | 1153.40                     | 61.00          | 1                        | 1                  | 1                   | 11/ 6/1986 | 1      |
| 95     | AGU127   | ddh  | 9206.30                    | 7021.30                   | 1151.20                     | 45.70          | 19                       | 19                 | 4                   | 11/ 6/1986 | 1      |
| 96     | AGU123   | ddh  | 9206.00                    | 7021.20                   | 1150.00                     | 118.90         | 36                       | 36                 | 12                  | 11/ 6/1986 | 1      |
| 97     | AGU133   | ddh  | 9205.50                    | 7021.30                   | 1149.90                     | 126.40         | 26                       | 26                 | 10                  | 11/ 6/1986 | 1      |
| 98     | AGU119   | ddh  | 9203.20                    | 7021.10                   | 1149.90                     | 103.50         | 16                       | 16                 | 4                   | 11/ 6/1986 | 1      |

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|--------|----------|------|----------------------------|---------------------------|-----------------------------|----------------|--------------------------|--------------------|---------------------|------------|--------|
| 99     | AGU121   | ddh  | 9201.90                    | 7021.10                   | 1149.90                     | 65.50          | 5                        | 5                  | 4                   | 11/ 6/1986 | 1      |
| 100    | AGU092   | ddh  | 9325.60                    | 7014.00                   | 1146.50                     | 73.20          | 34                       | 34                 | 3                   | 11/ 6/1986 | 1      |
| 101    | AGU096   | ddh  | 9326.00                    | 7014.20                   | 1147.40                     | 121.80         | 48                       | 48                 | 7                   | 11/ 6/1986 | 1      |
| 102    | AGU100   | ddh  | 9325.90                    | 7015.20                   | 1148.40                     | 121.70         | 32                       | 32                 | 4                   | 11/ 6/1986 | 1      |
| 103    | AGU102   | ddh  | 9326.80                    | 7014.70                   | 1150.00                     | 47.20          | 21                       | 21                 | 4                   | 11/ 6/1986 | 1      |
| 104    | AGU104   | ddh  | 9329.00                    | 7014.70                   | 1149.90                     | 31.30          | 7                        | 7                  | 2                   | 11/ 6/1986 | 1      |
| 105    | AGU106   | ddh  | 9330.50                    | 7014.90                   | 1146.60                     | 137.10         | 22                       | 22                 | 4                   | 11/ 6/1986 | 1      |
| 106    | AGU108   | ddh  | 9330.20                    | 7015.90                   | 1145.60                     | 72.50          | 19                       | 19                 | 4                   | 11/ 6/1986 | 1      |
| 107    | AGU090   | ddh  | 9330.30                    | 7013.80                   | 1145.40                     | 79.20          | 8                        | 8                  | 2                   | 11/ 6/1986 | 1      |
| 108    | AGU113   | ddh  | 9329.40                    | 7015.50                   | 1146.00                     | 102.70         | 23                       | 23                 | 7                   | 11/ 6/1986 | 1      |
| 109    | AGU111   | ddh  | 9326.30                    | 7015.10                   | 1145.50                     | 122.60         | 20                       | 20                 | 7                   | 11/ 6/1986 | 1      |
| 110    | AGU115   | ddh  | 9327.20                    | 7015.70                   | 1145.40                     | 74.00          | 10                       | 10                 | 3                   | 11/ 6/1986 | 1      |
| 111    | AGU125   | ddh  | 9325.80                    | 7015.50                   | 1146.00                     | 92.20          | 43                       | 43                 | 5                   | 11/ 6/1986 | 1      |
| 112    | AGU199   | ddh  | 9203.60                    | 6991.20                   | 1146.40                     | 132.60         | 30                       | 30                 | 7                   | 11/ 6/1986 | 1      |
| 113    | AGU200   | ddh  | 9208.00                    | 7001.80                   | 1147.60                     | 45.70          | 15                       | 15                 | 5                   | 11/ 6/1986 | 1      |
| 114    | AGU204   | ddh  | 9328.30                    | 6991.00                   | 1144.30                     | 36.60          | 10                       | 10                 | 3                   | 11/ 6/1986 | 1      |
| 115    | AGU205   | ddh  | 9331.10                    | 6989.60                   | 1144.90                     | 106.50         | 1                        | 1                  | 1                   | 11/ 6/1986 | 1      |
| 116    | AGU206   | ddh  | 9327.90                    | 6991.80                   | 1149.00                     | 106.70         | 45                       | 45                 | 5                   | 11/ 6/1986 | 1      |
| 117    | AGA083   | ddh  | 9082.80                    | 6964.30                   | 1278.50                     | 360.00         | 13                       | 13                 | 7                   | 11/ 6/1986 | 1      |
| 118    | AGA060   | ddh  | 9146.50                    | 6961.60                   | 1278.80                     | 361.30         | 27                       | 27                 | 14                  | 11/ 6/1986 | 1      |
| 119    | AGA019   | ddh  | 9206.30                    | 6961.20                   | 1284.90                     | 256.70         | 49                       | 49                 | 11                  | 11/ 6/1986 | 1      |
| 120    | AGA021   | ddh  | 9266.70                    | 6961.40                   | 1291.10                     | 260.70         | 29                       | 29                 | 7                   | 11/ 6/1986 | 1      |
| 121    | AGA056   | ddh  | 9326.10                    | 6960.30                   | 1299.80                     | 342.80         | 73                       | 73                 | 15                  | 11/ 6/1986 | 1      |
| 122    | AGA132   | ddh  | 9358.10                    | 6961.00                   | 1302.60                     | 144.10         | 36                       | 36                 | 9                   | 11/ 6/1986 | 1      |
| 123    | AGA095   | ddh  | 9386.10                    | 6963.30                   | 1302.80                     | 212.10         | 9                        | 9                  | 3                   | 11/ 6/1986 | 1      |
| 124    | AGU019   | ddh  | 9187.20                    | 6964.10                   | 1144.70                     | 59.30          | 18                       | 18                 | 5                   | 11/ 6/1986 | 1      |
| 125    | AGU014   | ddh  | 9190.60                    | 6966.40                   | 1147.10                     | 51.70          | 20                       | 20                 | 7                   | 11/ 6/1986 | 1      |
| 126    | AGU003   | ddh  | 9232.00                    | 6962.90                   | 1144.70                     | 82.20          | 21                       | 21                 | 6                   | 11/ 6/1986 | 1      |
| 127    | AGU021   | ddh  | 9231.70                    | 6963.10                   | 1145.00                     | 76.20          | 17                       | 17                 | 5                   | 11/ 6/1986 | 1      |
| 128    | AGU004   | ddh  | 9236.20                    | 6962.90                   | 1145.00                     | 53.20          | 17                       | 17                 | 5                   | 11/ 6/1986 | 1      |
| 129    | AGU006   | ddh  | 9236.60                    | 6963.90                   | 1145.00                     | 36.60          | 18                       | 18                 | 3                   | 11/ 6/1986 | 1      |
| 130    | AGU025   | ddh  | 9246.90                    | 6964.80                   | 1144.60                     | 114.20         | 17                       | 17                 | 5                   | 11/ 6/1986 | 1      |
| 131    | AGU024   | ddh  | 9245.60                    | 6963.30                   | 1144.60                     | 59.40          | 1                        | 1                  | 1                   | 11/ 6/1986 | 1      |

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| RECORD | BOREHOLE | TYPE | NORTHING<br>CO-ORD<br>[m ] | EASTING<br>CO-ORD<br>[m ] | COLLAR<br>ELEVATION<br>[m ] | LENGTH<br>[m ] | GEOLOGICAL<br>INTERSECTS | ASSAY<br>INTERVALS | SURVEY<br>INTERVALS | DATE       | STATUS |
|--------|----------|------|----------------------------|---------------------------|-----------------------------|----------------|--------------------------|--------------------|---------------------|------------|--------|
| 132    | AGU008   | ddh  | 9270.00                    | 6959.90                   | 1145.30                     | 50.20          | 12                       | 12                 | 3                   | 11/ 6/1986 | 1      |
| 133    | AGU010   | ddh  | 9296.90                    | 6960.50                   | 1145.30                     | 64.00          | 21                       | 21                 | 7                   | 11/ 6/1986 | 1      |
| 134    | AGU026   | ddh  | 9317.40                    | 6964.70                   | 1146.30                     | 76.20          | 34                       | 34                 | 5                   | 11/ 6/1986 | 1      |
| 135    | AGU027   | ddh  | 9323.10                    | 6965.60                   | 1146.80                     | 106.00         | 59                       | 59                 | 9                   | 11/ 6/1986 | 1      |
| 136    | AGU002   | ddh  | 9320.60                    | 6965.00                   | 1144.10                     | 50.20          | 7                        | 7                  | 2                   | 11/ 6/1986 | 1      |
| 137    | AGU086   | ddh  | 9323.80                    | 6964.30                   | 1143.40                     | 93.80          | 12                       | 12                 | 8                   | 11/ 6/1986 | 1      |
| 138    | AGU011   | ddh  | 9323.90                    | 6965.90                   | 1143.10                     | 24.30          | 8                        | 8                  | 5                   | 11/ 6/1986 | 1      |
| 139    | AGU084   | ddh  | 9318.50                    | 6961.50                   | 1142.60                     | 76.20          | 23                       | 23                 | 5                   | 11/ 6/1986 | 1      |
| 140    | AGU009   | ddh  | 9296.90                    | 6960.50                   | 1141.40                     | 64.00          | 34                       | 34                 | 13                  | 11/ 6/1986 | 1      |
| 141    | AGU007   | ddh  | 9270.00                    | 6959.90                   | 1141.20                     | 73.20          | 15                       | 15                 | 7                   | 11/ 6/1986 | 1      |
| 142    | AGU016   | ddh  | 9246.80                    | 6964.10                   | 1141.20                     | 106.70         | 11                       | 11                 | 5                   | 11/ 6/1986 | 1      |
| 143    | AGU017   | ddh  | 9246.80                    | 6963.80                   | 1141.20                     | 125.00         | 29                       | 29                 | 9                   | 11/ 6/1986 | 1      |
| 144    | AGU023   | ddh  | 9237.50                    | 6963.40                   | 1141.10                     | 70.00          | 23                       | 23                 | 4                   | 11/ 6/1986 | 1      |
| 145    | AGU005   | ddh  | 9236.80                    | 6963.20                   | 1141.00                     | 99.00          | 41                       | 41                 | 11                  | 11/ 6/1986 | 1      |
| 146    | AGU022   | ddh  | 9236.50                    | 6963.20                   | 1141.10                     | 99.00          | 41                       | 41                 | 4                   | 11/ 6/1986 | 1      |
| 147    | AGU018   | ddh  | 9190.00                    | 6964.10                   | 1142.40                     | 88.40          | 33                       | 33                 | 5                   | 11/ 6/1986 | 1      |
| 148    | AGU012   | ddh  | 9189.90                    | 6964.20                   | 1142.30                     | 79.70          | 27                       | 27                 | 4                   | 11/ 6/1986 | 1      |
| 149    | AGU013   | ddh  | 9189.40                    | 6964.20                   | 1142.30                     | 182.90         | 27                       | 27                 | 10                  | 11/ 6/1986 | 1      |
| 150    | AGU020   | ddh  | 9188.70                    | 6964.10                   | 1142.30                     | 74.70          | 9                        | 9                  | 7                   | 11/ 6/1986 | 1      |
| 151    | AGU207   | ddh  | 9331.00                    | 6930.40                   | 1139.80                     | 45.70          | 12                       | 12                 | 4                   | 11/ 6/1986 | 1      |
| 152    | AGU208   | ddh  | 9330.00                    | 6930.80                   | 1138.70                     | 140.10         | 20                       | 20                 | 8                   | 11/ 6/1986 | 1      |
| 153    | AGU209   | ddh  | 9329.40                    | 6930.10                   | 1138.60                     | 98.90          | 24                       | 24                 | 8                   | 11/ 6/1986 | 1      |
| 154    | AGU210   | ddh  | 9327.70                    | 6929.90                   | 1139.10                     | 120.10         | 24                       | 24                 | 4                   | 11/ 6/1986 | 1      |
| 155    | AGU211   | ddh  | 9236.20                    | 6930.30                   | 1138.90                     | 114.10         | 34                       | 34                 | 7                   | 11/ 6/1986 | 1      |
| 156    | AGU212   | ddh  | 9237.40                    | 6930.10                   | 1138.90                     | 70.20          | 34                       | 34                 | 8                   | 11/ 6/1986 | 1      |
| 157    | AGU213   | ddh  | 9238.80                    | 6930.30                   | 1138.90                     | 121.80         | 27                       | 27                 | 3                   | 11/ 6/1986 | 1      |
| 158    | AGA011   | ddh  | 9143.00                    | 6899.40                   | 1281.40                     | 249.70         | 25                       | 25                 | 13                  | 11/ 6/1986 | 1      |
| 159    | AGA065   | ddh  | 9202.60                    | 6895.40                   | 1288.70                     | 167.40         | 16                       | 16                 | 4                   | 11/ 6/1986 | 1      |
| 160    | AGA071   | ddh  | 9265.10                    | 6901.10                   | 1297.00                     | 176.70         | 27                       | 27                 | 7                   | 11/ 6/1986 | 1      |
| 161    | AGA088   | ddh  | 9326.40                    | 6901.70                   | 1303.40                     | 337.30         | 71                       | 71                 | 25                  | 11/ 6/1986 | 1      |
| 162    | AGA215   | ddh  | 9353.90                    | 6899.30                   | 1302.80                     | 394.10         | 69                       | 69                 | 16                  | 11/ 6/1986 | 1      |
| 163    | AGA090   | ddh  | 9389.30                    | 6899.90                   | 1302.10                     | 315.70         | 58                       | 58                 | 11                  | 11/ 6/1986 | 1      |
| 164    | AGA141   | ddh  | 9417.60                    | 6900.90                   | 1301.70                     | 93.20          | 41                       | 41                 | 5                   | 11/ 6/1986 | 1      |

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| RECORD | BOREHOLE | TYPE | NORTHING<br>CO-ORD<br>[m ] | EASTING<br>CO-ORD<br>[m ] | COLLAR<br>ELEVATION<br>[m ] | LENGTH<br>[m ] | GEOLOGICAL<br>INTERSECTS | ASSAY<br>INTERVALS | SURVEY<br>INTERVALS | DATE       | STATUS |
|--------|----------|------|----------------------------|---------------------------|-----------------------------|----------------|--------------------------|--------------------|---------------------|------------|--------|
| 165    | AGA092   | ddh  | 9449.00                    | 6901.30                   | 1300.90                     | 287.60         | 12                       | 12                 | 5                   | 11/ 6/1986 | 1      |
| 166    | AGU033   | ddh  | 9151.90                    | 6903.30                   | 1158.80                     | 21.80          | 6                        | 6                  | 3                   | 11/ 6/1986 | 1      |
| 167    | AGU030   | ddh  | 9163.50                    | 6903.20                   | 1159.00                     | 36.60          | 9                        | 9                  | 5                   | 11/ 6/1986 | 1      |
| 168    | AGU029   | ddh  | 9163.80                    | 6903.30                   | 1156.70                     | 68.50          | 10                       | 10                 | 4                   | 11/ 6/1986 | 1      |
| 169    | AGU028   | ddh  | 9163.60                    | 6903.80                   | 1155.90                     | 83.70          | 13                       | 13                 | 5                   | 11/ 6/1986 | 1      |
| 170    | AGU015   | ddh  | 9155.20                    | 6901.60                   | 1155.60                     | 185.50         | 34                       | 34                 | 8                   | 11/ 6/1986 | 1      |
| 171    | AGU032   | ddh  | 9155.40                    | 6903.30                   | 1155.80                     | 121.80         | 8                        | 8                  | 8                   | 11/ 6/1986 | 1      |
| 172    | AGU044   | ddh  | 9239.90                    | 6898.10                   | 1138.20                     | 45.70          | 12                       | 12                 | 2                   | 11/ 6/1986 | 1      |
| 173    | AGU043   | ddh  | 9241.00                    | 6899.90                   | 1138.20                     | 45.70          | 13                       | 13                 | 3                   | 11/ 6/1986 | 1      |
| 174    | AGU042   | ddh  | 9241.70                    | 6900.10                   | 1138.00                     | 53.20          | 16                       | 16                 | 2                   | 11/ 6/1986 | 1      |
| 175    | AGU041   | ddh  | 9243.10                    | 6899.60                   | 1134.00                     | 96.80          | 12                       | 12                 | 5                   | 11/ 6/1986 | 1      |
| 176    | AGU035   | ddh  | 9241.50                    | 6899.30                   | 1134.00                     | 147.40         | 29                       | 29                 | 8                   | 11/ 6/1986 | 1      |
| 177    | AGU034   | ddh  | 9240.90                    | 6899.60                   | 1134.00                     | 126.50         | 45                       | 45                 | 4                   | 11/ 6/1986 | 1      |
| 178    | AGU039   | ddh  | 9240.30                    | 6899.10                   | 1134.00                     | 110.20         | 51                       | 51                 | 12                  | 11/ 6/1986 | 1      |
| 179    | AGU040   | ddh  | 9240.00                    | 6899.30                   | 1134.00                     | 108.70         | 45                       | 45                 | 10                  | 11/ 6/1986 | 1      |
| 180    | AGU049   | ddh  | 9320.40                    | 6898.00                   | 1133.90                     | 82.20          | 9                        | 9                  | 2                   | 11/ 6/1986 | 1      |
| 181    | AGU055   | ddh  | 9319.20                    | 6896.50                   | 1134.50                     | 36.40          | 1                        | 1                  | 1                   | 11/ 6/1986 | 1      |
| 182    | AGU056   | ddh  | 9320.50                    | 6898.00                   | 1135.50                     | 61.00          | 17                       | 17                 | 4                   | 11/ 6/1986 | 1      |
| 183    | AGU051   | ddh  | 9320.50                    | 6897.90                   | 1136.10                     | 70.00          | 19                       | 19                 | 4                   | 11/ 6/1986 | 1      |
| 184    | AGU052   | ddh  | 9320.90                    | 6897.70                   | 1136.70                     | 57.80          | 22                       | 22                 | 8                   | 11/ 6/1986 | 1      |
| 185    | AGU053   | ddh  | 9321.60                    | 6897.70                   | 1136.90                     | 60.80          | 23                       | 23                 | 4                   | 11/ 6/1986 | 1      |
| 186    | AGU054   | ddh  | 9324.60                    | 6897.20                   | 1137.50                     | 150.80         | 57                       | 57                 | 8                   | 11/ 6/1986 | 1      |
| 187    | AGU117   | ddh  | 9330.90                    | 6899.60                   | 1133.20                     | 61.00          | 15                       | 15                 | 4                   | 11/ 6/1986 | 1      |
| 188    | AGU046   | ddh  | 9327.30                    | 6896.70                   | 1132.60                     | 83.70          | 26                       | 26                 | 8                   | 11/ 6/1986 | 1      |
| 189    | AGU045   | ddh  | 9326.80                    | 6897.40                   | 1132.60                     | 62.50          | 25                       | 25                 | 6                   | 11/ 6/1986 | 1      |
| 190    | AGU047   | ddh  | 9326.70                    | 6897.30                   | 1132.60                     | 80.70          | 26                       | 26                 | 10                  | 11/ 6/1986 | 1      |
| 191    | AGU048   | ddh  | 9322.40                    | 6899.20                   | 1132.70                     | 120.60         | 37                       | 37                 | 10                  | 11/ 6/1986 | 1      |
| 192    | AGU057   | ddh  | 9320.40                    | 6898.00                   | 1133.20                     | 53.20          | 28                       | 28                 | 3                   | 11/ 6/1986 | 1      |
| 193    | AGU192   | ddh  | 9238.10                    | 6869.90                   | 1129.60                     | 121.40         | 42                       | 42                 | 6                   | 11/ 6/1986 | 1      |
| 194    | AGU194   | ddh  | 9237.20                    | 6869.80                   | 1130.80                     | 127.90         | 47                       | 47                 | 9                   | 11/ 6/1986 | 1      |
| 195    | AGU196   | ddh  | 9236.00                    | 6869.70                   | 1129.60                     | 129.30         | 36                       | 36                 | 8                   | 11/ 6/1986 | 1      |
| 196    | AGU198   | ddh  | 9116.10                    | 6853.50                   | 1162.20                     | 153.70         | 9                        | 9                  | 5                   | 11/ 6/1986 | 1      |
| 197    | AGU214   | ddh  | 9341.20                    | 6869.80                   | 1128.60                     | 30.50          | 7                        | 7                  | 3                   | 11/ 6/1986 | 1      |

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| RECORD | BOREHOLE | TYPE | NORTHING<br>CO-ORD<br>[m ] | EASTING<br>CO-ORD<br>[m ] | COLLAR<br>ELEVATION<br>[m ] | LENGTH<br>[m ] | GEOLOGICAL<br>INTERSECTS | ASSAY<br>INTERVALS | SURVEY<br>INTERVALS | DATE       | STATUS |
|--------|----------|------|----------------------------|---------------------------|-----------------------------|----------------|--------------------------|--------------------|---------------------|------------|--------|
| 198    | AGU215   | ddh  | 9339.30                    | 6869.70                   | 1127.30                     | 138.40         | 17                       | 17                 | 11                  | 11/ 6/1986 | 1      |
| 199    | AGU216   | ddh  | 9337.10                    | 6868.60                   | 1127.40                     | 138.50         | 29                       | 29                 | 12                  | 11/ 6/1986 | 1      |
| 200    | AGA001   | ddh  | 8921.20                    | 6837.80                   | 1296.80                     | 312.10         | 5                        | 5                  | 3                   | 11/ 6/1986 | 1      |
| 201    | AGA014   | ddh  | 9051.90                    | 6839.00                   | 1290.20                     | 334.20         | 12                       | 12                 | 7                   | 11/ 6/1986 | 1      |
| 202    | AGA004   | ddh  | 9127.20                    | 6850.40                   | 1286.80                     | 314.50         | 16                       | 16                 | 7                   | 11/ 6/1986 | 1      |
| 203    | AGA005   | ddh  | 9207.50                    | 6837.10                   | 1293.20                     | 180.50         | 20                       | 20                 | 7                   | 11/ 6/1986 | 1      |
| 204    | AGA053   | ddh  | 9248.00                    | 6839.50                   | 1297.90                     | 357.10         | 38                       | 38                 | 7                   | 11/ 6/1986 | 1      |
| 205    | AGA030   | ddh  | 9286.40                    | 6841.00                   | 1303.30                     | 388.90         | 59                       | 59                 | 11                  | 11/ 6/1986 | 1      |
| 206    | AGA068   | ddh  | 9327.60                    | 6841.40                   | 1304.10                     | 388.10         | 80                       | 80                 | 17                  | 11/ 6/1986 | 1      |
| 207    | AGA009   | ddh  | 9363.50                    | 6841.70                   | 1302.30                     | 231.70         | 20                       | 20                 | 5                   | 11/ 6/1986 | 1      |
| 208    | AGA073   | ddh  | 9426.30                    | 6842.00                   | 1302.20                     | 362.10         | 38                       | 38                 | 13                  | 11/ 6/1986 | 1      |
| 209    | AGA155   | ddh  | 9456.80                    | 6842.70                   | 1300.40                     | 94.50          | 31                       | 31                 | 7                   | 11/ 6/1986 | 1      |
| 210    | AGA239   | ddh  | 9486.10                    | 6842.50                   | 1299.70                     | 108.90         | 7                        | 7                  | 3                   | 11/ 6/1986 | 1      |
| 211    | AGA006   | ddh  | 9571.10                    | 6842.90                   | 1298.60                     | 145.40         | 3                        | 3                  | 3                   | 11/ 6/1986 | 1      |
| 212    | AGU058   | ddh  | 9225.00                    | 6839.10                   | 1125.70                     | 106.40         | 26                       | 26                 | 4                   | 11/ 6/1986 | 1      |
| 213    | AGU063   | ddh  | 9225.30                    | 6839.20                   | 1126.80                     | 106.50         | 18                       | 18                 | 7                   | 11/ 6/1986 | 1      |
| 214    | AGU064   | ddh  | 9228.00                    | 6839.80                   | 1128.20                     | 57.80          | 13                       | 13                 | 5                   | 11/ 6/1986 | 1      |
| 215    | AGU065   | ddh  | 9227.30                    | 6839.00                   | 1128.40                     | 59.30          | 18                       | 18                 | 4                   | 11/ 6/1986 | 1      |
| 216    | AGU060   | ddh  | 9227.10                    | 6838.90                   | 1124.40                     | 122.00         | 35                       | 35                 | 11                  | 11/ 6/1986 | 1      |
| 217    | AGU061   | ddh  | 9226.80                    | 6839.00                   | 1124.40                     | 121.70         | 34                       | 34                 | 12                  | 11/ 6/1986 | 1      |
| 218    | AGU059   | ddh  | 9225.60                    | 6839.10                   | 1124.80                     | 126.90         | 37                       | 37                 | 4                   | 11/ 6/1986 | 1      |
| 219    | AGU062   | ddh  | 9225.30                    | 6839.20                   | 1124.90                     | 109.30         | 15                       | 15                 | 4                   | 11/ 6/1986 | 1      |
| 220    | AGU134   | ddh  | 9239.50                    | 6839.00                   | 1123.50                     | 99.00          | 27                       | 27                 | 7                   | 11/ 6/1986 | 1      |
| 221    | AGU138   | ddh  | 9239.30                    | 6839.40                   | 1123.30                     | 122.10         | 31                       | 31                 | 7                   | 11/ 6/1986 | 1      |
| 222    | AGU089   | ddh  | 9258.50                    | 6840.80                   | 1130.70                     | 55.00          | 20                       | 20                 | 2                   | 11/ 6/1986 | 1      |
| 223    | AGU085   | ddh  | 9275.80                    | 6839.80                   | 1131.60                     | 44.20          | 12                       | 12                 | 3                   | 11/ 6/1986 | 1      |
| 224    | AGU083   | ddh  | 9277.10                    | 6839.30                   | 1131.50                     | 38.10          | 12                       | 12                 | 3                   | 11/ 6/1986 | 1      |
| 225    | AGU130   | ddh  | 9315.40                    | 6839.30                   | 1132.10                     | 45.70          | 19                       | 19                 | 6                   | 11/ 6/1986 | 1      |
| 226    | AGU128   | ddh  | 9316.20                    | 6839.60                   | 1127.40                     | 83.70          | 24                       | 24                 | 5                   | 11/ 6/1986 | 1      |
| 227    | AGU124   | ddh  | 9316.10                    | 6839.20                   | 1127.40                     | 91.40          | 30                       | 30                 | 8                   | 11/ 6/1986 | 1      |
| 228    | AGU126   | ddh  | 9315.00                    | 6839.40                   | 1127.40                     | 144.60         | 64                       | 64                 | 6                   | 11/ 6/1986 | 1      |
| 229    | AGU129   | ddh  | 9297.50                    | 6839.20                   | 1126.90                     | 142.20         | 43                       | 43                 | 9                   | 11/ 6/1986 | 1      |
| 230    | AGU081   | ddh  | 9276.60                    | 6839.20                   | 1127.20                     | 38.10          | 13                       | 13                 | 3                   | 11/ 6/1986 | 1      |

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| RECORD | BOREHOLE | TYPE | NORTHING<br>CO-ORD<br>[m ] | EASTING<br>CO-ORD<br>[m ] | COLLAR<br>ELEVATION<br>[m ] | LENGTH<br>[m ] | GEOLOGICAL<br>INTERSECTS | ASSAY<br>INTERVALS | SURVEY<br>INTERVALS | DATE       | STATUS |
|--------|----------|------|----------------------------|---------------------------|-----------------------------|----------------|--------------------------|--------------------|---------------------|------------|--------|
| 231    | AGU087   | ddh  | 9274.00                    | 6838.90                   | 1127.20                     | 61.00          | 3                        | 3                  | 3                   | 11/ 6/1986 | 1      |
| 232    | AGU114   | ddh  | 9355.70                    | 6839.20                   | 1123.60                     | 45.70          | 21                       | 21                 | 3                   | 11/ 6/1986 | 1      |
| 233    | AGU116   | ddh  | 9355.50                    | 6839.40                   | 1125.90                     | 68.50          | 26                       | 26                 | 14                  | 11/ 6/1986 | 1      |
| 234    | AGU118   | ddh  | 9357.20                    | 6839.80                   | 1127.60                     | 76.20          | 27                       | 27                 | 9                   | 11/ 6/1986 | 1      |
| 235    | AGU132   | ddh  | 9360.60                    | 6839.60                   | 1127.40                     | 134.10         | 31                       | 31                 | 13                  | 11/ 6/1986 | 1      |
| 236    | AGU120   | ddh  | 9359.30                    | 6837.60                   | 1123.60                     | 61.00          | 1                        | 1                  | 1                   | 11/ 6/1986 | 1      |
| 237    | AGU122   | ddh  | 9359.20                    | 6837.60                   | 1122.40                     | 91.40          | 1                        | 1                  | 1                   | 11/ 6/1986 | 1      |
| 238    | AGU110   | ddh  | 9359.10                    | 6839.20                   | 1122.40                     | 90.70          | 6                        | 6                  | 3                   | 11/ 6/1986 | 1      |
| 239    | AGU112   | ddh  | 9359.30                    | 6837.60                   | 1122.40                     | 45.70          | 1                        | 1                  | 1                   | 11/ 6/1986 | 1      |
| 240    | AGA084   | ddh  | 9145.20                    | 6778.00                   | 1297.30                     | 456.30         | 23                       | 23                 | 11                  | 11/ 6/1986 | 1      |
| 241    | AGA010   | ddh  | 9209.90                    | 6782.10                   | 1298.90                     | 264.40         | 56                       | 56                 | 11                  | 11/ 6/1986 | 1      |
| 242    | AGA072   | ddh  | 9269.30                    | 6782.20                   | 1304.40                     | 194.60         | 32                       | 32                 | 5                   | 11/ 6/1986 | 1      |
| 243    | AGA067   | ddh  | 9327.20                    | 6779.00                   | 1303.30                     | 406.50         | 76                       | 76                 | 33                  | 11/ 6/1986 | 1      |
| 244    | AGA082   | ddh  | 9392.80                    | 6778.20                   | 1301.70                     | 363.80         | 27                       | 27                 | 17                  | 11/ 6/1986 | 1      |
| 245    | AGA158   | ddh  | 9419.00                    | 6781.70                   | 1302.00                     | 135.50         | 30                       | 30                 | 19                  | 11/ 6/1986 | 1      |
| 246    | AGA161   | ddh  | 9420.70                    | 6781.10                   | 1301.90                     | 121.00         | 21                       | 21                 | 11                  | 11/ 6/1986 | 1      |
| 247    | AGA075   | ddh  | 9445.20                    | 6775.60                   | 1301.20                     | 347.50         | 63                       | 63                 | 15                  | 11/ 6/1986 | 1      |
| 248    | AGA238   | ddh  | 9477.30                    | 6782.60                   | 1300.70                     | 132.00         | 11                       | 11                 | 7                   | 11/ 6/1986 | 1      |
| 249    | AGA078   | ddh  | 9511.90                    | 6779.10                   | 1301.10                     | 308.90         | 29                       | 29                 | 13                  | 11/ 6/1986 | 1      |
| 250    | AGA080   | ddh  | 9573.90                    | 6780.80                   | 1300.00                     | 343.20         | 5                        | 5                  | 3                   | 11/ 6/1986 | 1      |
| 251    | AGU073   | ddh  | 9228.80                    | 6780.50                   | 1115.40                     | 121.90         | 19                       | 19                 | 2                   | 11/ 6/1986 | 1      |
| 252    | AGU067   | ddh  | 9229.20                    | 6778.60                   | 1115.90                     | 76.20          | 19                       | 19                 | 2                   | 11/ 6/1986 | 1      |
| 253    | AGU068   | ddh  | 9228.30                    | 6779.10                   | 1117.20                     | 53.20          | 12                       | 12                 | 3                   | 11/ 6/1986 | 1      |
| 254    | AGU069   | ddh  | 9229.80                    | 6778.90                   | 1119.60                     | 38.10          | 18                       | 18                 | 3                   | 11/ 6/1986 | 1      |
| 255    | AGU070   | ddh  | 9231.30                    | 6778.90                   | 1119.40                     | 39.60          | 14                       | 14                 | 3                   | 11/ 6/1986 | 1      |
| 256    | AGU071   | ddh  | 9231.60                    | 6778.80                   | 1119.30                     | 45.70          | 19                       | 19                 | 3                   | 11/ 6/1986 | 1      |
| 257    | AGU148   | ddh  | 9238.00                    | 6778.80                   | 1114.30                     | 68.50          | 26                       | 26                 | 9                   | 11/ 6/1986 | 1      |
| 258    | AGU077   | ddh  | 9232.40                    | 6779.30                   | 1114.30                     | 166.90         | 29                       | 29                 | 11                  | 11/ 6/1986 | 1      |
| 259    | AGU075   | ddh  | 9230.90                    | 6779.20                   | 1113.90                     | 170.30         | 28                       | 28                 | 12                  | 11/ 6/1986 | 1      |
| 260    | AGU072   | ddh  | 9230.00                    | 6779.50                   | 1114.00                     | 136.80         | 38                       | 38                 | 12                  | 11/ 6/1986 | 1      |
| 261    | AGU079   | ddh  | 9229.10                    | 6779.50                   | 1114.50                     | 97.30          | 29                       | 29                 | 6                   | 11/ 6/1986 | 1      |
| 262    | AGU091   | ddh  | 9344.00                    | 6776.40                   | 1114.70                     | 97.20          | 25                       | 25                 | 6                   | 11/ 6/1986 | 1      |
| 263    | AGU093   | ddh  | 9343.70                    | 6778.40                   | 1116.30                     | 76.20          | 26                       | 26                 | 6                   | 11/ 6/1986 | 1      |

PRINTOUT OF BOREHOLE INFORMATION

SUMMARY PRINTOUT

| RECORD | BOREHOLE | TYPE | NORTHING<br>CO-ORD<br>[m ] | EASTING<br>CO-ORD<br>[m ] | COLLAR<br>ELEVATION<br>[m ] | LENGTH<br>[m ] | GEOLOGICAL<br>INTERSECTS | ASSAY<br>INTERVALS | SURVEY<br>INTERVALS | DATE       | STATUS |
|--------|----------|------|----------------------------|---------------------------|-----------------------------|----------------|--------------------------|--------------------|---------------------|------------|--------|
| 264    | AGU107   | ddh  | 9359.10                    | 6778.40                   | 1116.90                     | 70.00          | 24                       | 24                 | 7                   | 11/ 6/1986 | 1      |
| 265    | AGU109   | ddh  | 9360.40                    | 6779.60                   | 1117.50                     | 116.60         | 20                       | 20                 | 8                   | 11/ 6/1986 | 1      |
| 266    | AGU105   | ddh  | 9360.20                    | 6780.00                   | 1115.10                     | 38.10          | 3                        | 3                  | 2                   | 11/ 6/1986 | 1      |
| 267    | AGU103   | ddh  | 9359.10                    | 6778.80                   | 1113.80                     | 128.40         | 3                        | 3                  | 2                   | 11/ 6/1986 | 1      |
| 268    | AGU101   | ddh  | 9359.10                    | 6778.40                   | 1113.30                     | 175.00         | 29                       | 29                 | 12                  | 11/ 6/1986 | 1      |
| 269    | AGU099   | ddh  | 9357.90                    | 6779.10                   | 1113.80                     | 184.10         | 13                       | 13                 | 6                   | 11/ 6/1986 | 1      |
| 270    | AGU095   | ddh  | 9344.20                    | 6777.40                   | 1113.90                     | 121.80         | 28                       | 28                 | 8                   | 11/ 6/1986 | 1      |
| 271    | AGU097   | ddh  | 9344.20                    | 6777.80                   | 1114.10                     | 62.50          | 24                       | 24                 | 2                   | 11/ 6/1986 | 1      |
| 272    | AGA041   | ddh  | 8961.70                    | 6721.60                   | 1308.00                     | 383.80         | 24                       | 24                 | 7                   | 11/ 6/1986 | 1      |
| 273    | AGA038   | ddh  | 9021.80                    | 6719.40                   | 1301.90                     | 363.20         | 44                       | 44                 | 13                  | 11/ 6/1986 | 1      |
| 274    | AGA035   | ddh  | 9082.20                    | 6719.00                   | 1303.10                     | 389.60         | 27                       | 27                 | 15                  | 11/ 6/1986 | 1      |
| 275    | AGA032   | ddh  | 9142.90                    | 6717.40                   | 1304.40                     | 358.90         | 21                       | 21                 | 9                   | 11/ 6/1986 | 1      |
| 276    | AGA024   | ddh  | 9203.10                    | 6718.80                   | 1303.90                     | 356.10         | 55                       | 55                 | 11                  | 11/ 6/1986 | 1      |
| 277    | AGA027   | ddh  | 9267.70                    | 6718.80                   | 1303.60                     | 349.20         | 71                       | 71                 | 13                  | 11/ 6/1986 | 1      |
| 278    | AGA069   | ddh  | 9326.80                    | 6717.90                   | 1302.20                     | 409.90         | 81                       | 81                 | 21                  | 11/ 6/1986 | 1      |
| 279    | AGA076   | ddh  | 9387.30                    | 6718.20                   | 1301.80                     | 406.60         | 42                       | 42                 | 19                  | 11/ 6/1986 | 1      |
| 280    | AGA160   | ddh  | 9414.80                    | 6714.20                   | 1301.70                     | 145.10         | 34                       | 34                 | 19                  | 11/ 6/1986 | 1      |
| 281    | AGA079   | ddh  | 9447.20                    | 6712.60                   | 1301.50                     | 418.90         | 42                       | 42                 | 19                  | 11/ 6/1986 | 1      |
| 282    | AGA227   | ddh  | 9478.10                    | 6712.10                   | 1301.30                     | 205.00         | 15                       | 15                 | 9                   | 11/ 6/1986 | 1      |
| 283    | AGA163   | ddh  | 9512.20                    | 6713.20                   | 1302.10                     | 119.40         | 38                       | 38                 | 13                  | 11/ 6/1986 | 1      |
| 284    | AGA214   | ddh  | 9540.30                    | 6711.40                   | 1302.00                     | 492.30         | 37                       | 37                 | 19                  | 11/ 6/1986 | 1      |
| 285    | AGA164   | ddh  | 9577.00                    | 6709.40                   | 1302.20                     | 110.10         | 3                        | 3                  | 3                   | 11/ 6/1986 | 1      |
| 286    | AGU151   | ddh  | 9220.80                    | 6716.80                   | 1105.20                     | 76.20          | 21                       | 21                 | 6                   | 11/ 6/1986 | 1      |
| 287    | AGU150   | ddh  | 9222.80                    | 6717.50                   | 1102.00                     | 152.30         | 28                       | 28                 | 8                   | 11/ 6/1986 | 1      |
| 288    | AGU153   | ddh  | 9220.80                    | 6717.20                   | 1102.60                     | 61.00          | 26                       | 26                 | 2                   | 11/ 6/1986 | 1      |
| 289    | AGU154   | ddh  | 9247.00                    | 6718.60                   | 1109.30                     | 61.00          | 18                       | 18                 | 3                   | 11/ 6/1986 | 1      |
| 290    | AGU152   | ddh  | 9304.80                    | 6718.10                   | 1111.00                     | 61.00          | 16                       | 16                 | 5                   | 11/ 6/1986 | 1      |
| 291    | AGU149   | ddh  | 9305.30                    | 6718.00                   | 1106.30                     | 182.80         | 46                       | 46                 | 17                  | 11/ 6/1986 | 1      |
| 292    | AGU156   | ddh  | 9247.60                    | 6718.50                   | 1105.60                     | 76.20          | 16                       | 16                 | 7                   | 11/ 6/1986 | 1      |
| 293    | AGU146   | ddh  | 9358.40                    | 6718.60                   | 1105.00                     | 73.70          | 17                       | 17                 | 7                   | 11/ 6/1986 | 1      |
| 294    | AGU144   | ddh  | 9360.10                    | 6718.90                   | 1103.70                     | 73.20          | 8                        | 8                  | 5                   | 11/ 6/1986 | 1      |
| 295    | AGU140   | ddh  | 9359.60                    | 6718.50                   | 1100.30                     | 123.40         | 13                       | 13                 | 10                  | 11/ 6/1986 | 1      |
| 296    | AGU135   | ddh  | 9359.60                    | 6718.50                   | 1100.30                     | 190.40         | 43                       | 43                 | 16                  | 11/ 6/1986 | 1      |

PRINTOUT OF BOREHOLE INFORMATION

SUMMARY PRINTOUT

| RECORD | BOREHOLE | TYPE | NORTHING<br>CO-ORD<br>[m ] | EASTING<br>CO-ORD<br>[m ] | COLLAR<br>ELEVATION<br>[m ] | LENGTH<br>[m ] | GEOLOGICAL<br>INTERSECTS | ASSAY<br>INTERVALS | SURVEY<br>INTERVALS | DATE       | STATUS |
|--------|----------|------|----------------------------|---------------------------|-----------------------------|----------------|--------------------------|--------------------|---------------------|------------|--------|
| 297    | AGU142   | ddh  | 9356.40                    | 6718.00                   | 1100.60                     | 152.00         | 52                       | 52                 | 14                  | 11/ 6/1986 | 1      |
| 298    | AGA085   | ddh  | 9265.80                    | 6657.20                   | 1307.60                     | 430.70         | 53                       | 53                 | 21                  | 11/ 6/1986 | 1      |
| 299    | AGA087   | ddh  | 9326.20                    | 6657.80                   | 1305.00                     | 425.80         | 62                       | 62                 | 30                  | 11/ 6/1986 | 1      |
| 300    | AGA089   | ddh  | 9391.20                    | 6653.00                   | 1304.80                     | 377.80         | 51                       | 51                 | 30                  | 11/ 6/1986 | 1      |
| 301    | AGA236   | ddh  | 9420.00                    | 6660.00                   | 1304.00                     | 438.80         | 64                       | 64                 | 34                  | 11/ 6/1986 | 1      |
| 302    | AGA093   | ddh  | 9449.20                    | 6657.80                   | 1302.80                     | 349.80         | 29                       | 29                 | 19                  | 11/ 6/1986 | 1      |
| 303    | AGA235   | ddh  | 9478.50                    | 6661.90                   | 1303.20                     | 175.70         | 22                       | 22                 | 12                  | 11/ 6/1986 | 1      |
| 304    | AGA228   | ddh  | 9508.80                    | 6660.90                   | 1303.20                     | 194.70         | 36                       | 36                 | 19                  | 11/ 6/1986 | 1      |
| 305    | AGA234   | ddh  | 9538.80                    | 6662.70                   | 1302.90                     | 164.60         | 17                       | 17                 | 15                  | 11/ 6/1986 | 1      |
| 306    | AGA229   | ddh  | 9569.60                    | 6660.90                   | 1304.00                     | 159.40         | 6                        | 6                  | 3                   | 11/ 6/1986 | 1      |
| 307    | AGU158   | ddh  | 9235.40                    | 6656.10                   | 1098.00                     | 74.30          | 16                       | 16                 | 9                   | 11/ 6/1986 | 1      |
| 308    | AGU164   | ddh  | 9235.50                    | 6656.90                   | 1099.20                     | 50.00          | 10                       | 10                 | 6                   | 11/ 6/1986 | 1      |
| 309    | AGU188   | ddh  | 9239.10                    | 6657.10                   | 1095.60                     | 83.70          | 15                       | 15                 | 9                   | 11/ 6/1986 | 1      |
| 310    | AGU190   | ddh  | 9237.60                    | 6657.00                   | 1094.40                     | 106.30         | 36                       | 36                 | 7                   | 11/ 6/1986 | 1      |
| 311    | AGU162   | ddh  | 9234.20                    | 6657.00                   | 1094.40                     | 153.80         | 32                       | 32                 | 15                  | 11/ 6/1986 | 1      |
| 312    | AGU160   | ddh  | 9233.90                    | 6656.90                   | 1095.30                     | 73.20          | 43                       | 43                 | 13                  | 11/ 6/1986 | 1      |
| 313    | AGU174   | ddh  | 9358.70                    | 6656.80                   | 1098.70                     | 28.00          | 5                        | 5                  | 4                   | 11/ 6/1986 | 1      |
| 314    | AGU166   | ddh  | 9358.50                    | 6657.00                   | 1094.90                     | 182.80         | 24                       | 24                 | 17                  | 11/ 6/1986 | 1      |
| 315    | AGU168   | ddh  | 9356.90                    | 6658.30                   | 1094.90                     | 166.10         | 28                       | 28                 | 12                  | 11/ 6/1986 | 1      |
| 316    | AGU172   | ddh  | 9356.10                    | 6658.50                   | 1095.20                     | 121.70         | 45                       | 45                 | 13                  | 11/ 6/1986 | 1      |
| 317    | AGU218   | ddh  | 9232.00                    | 6618.20                   | 1089.90                     | 45.70          | 19                       | 19                 | 1                   | 11/ 6/1986 | 1      |
| 318    | AGA051   | ddh  | 9143.30                    | 6597.30                   | 1312.40                     | 366.60         | 21                       | 21                 | 16                  | 11/ 6/1986 | 1      |
| 319    | AGA022   | ddh  | 9204.00                    | 6598.00                   | 1311.50                     | 383.90         | 37                       | 37                 | 16                  | 11/ 6/1986 | 1      |
| 320    | AGA012   | ddh  | 9270.00                    | 6597.20                   | 1312.70                     | 364.10         | 36                       | 36                 | 18                  | 11/ 6/1986 | 1      |
| 321    | AGA020   | ddh  | 9328.40                    | 6598.70                   | 1311.10                     | 406.50         | 55                       | 55                 | 37                  | 11/ 6/1986 | 1      |
| 322    | AGA104   | ddh  | 9388.10                    | 6598.10                   | 1309.60                     | 420.00         | 48                       | 48                 | 19                  | 11/ 6/1986 | 1      |
| 323    | AGA156   | ddh  | 9416.70                    | 6596.10                   | 1308.80                     | 206.20         | 50                       | 50                 | 20                  | 11/ 6/1986 | 1      |
| 324    | AGA237   | ddh  | 9447.10                    | 6598.30                   | 1308.20                     | 215.40         | 36                       | 36                 | 17                  | 11/ 6/1986 | 1      |
| 325    | AGA008   | ddh  | 9477.20                    | 6601.00                   | 1308.90                     | 232.50         | 13                       | 13                 | 7                   | 11/ 6/1986 | 1      |
| 326    | AGA233   | ddh  | 9508.50                    | 6601.90                   | 1306.90                     | 197.60         | 31                       | 31                 | 23                  | 11/ 6/1986 | 1      |
| 327    | AGA230   | ddh  | 9539.30                    | 6600.90                   | 1307.00                     | 221.30         | 33                       | 33                 | 25                  | 11/ 6/1986 | 1      |
| 328    | AGA140   | ddh  | 9576.90                    | 6595.60                   | 1306.70                     | 169.60         | 4                        | 4                  | 3                   | 11/ 6/1986 | 1      |
| 329    | AGU186   | ddh  | 9249.80                    | 6600.90                   | 1092.50                     | 61.00          | 3                        | 3                  | 3                   | 11/ 6/1986 | 1      |

PRINTOUT OF BOREHOLE INFORMATION

SUMMARY PRINTOUT

| RECORD | BOREHOLE | TYPE | NORTHING<br>CO-ORD<br>[m ] | EASTING<br>CO-ORD<br>[m ] | COLLAR<br>ELEVATION<br>[m ] | LENGTH<br>[m ] | GEOLOGICAL<br>INTERSECTS | ASSAY<br>INTERVALS | SURVEY<br>INTERVALS | DATE       | STATUS |
|--------|----------|------|----------------------------|---------------------------|-----------------------------|----------------|--------------------------|--------------------|---------------------|------------|--------|
| 330    | AGU180   | ddh  | 9302.20                    | 6596.10                   | 1093.40                     | 30.50          | 6                        | 6                  | 3                   | 11/ 6/1986 | 1      |
| 331    | AGU178   | ddh  | 9348.10                    | 6598.60                   | 1094.30                     | 79.50          | 23                       | 23                 | 10                  | 11/ 6/1986 | 1      |
| 332    | AGU176   | ddh  | 9347.50                    | 6598.40                   | 1090.10                     | 169.80         | 15                       | 15                 | 9                   | 11/ 6/1986 | 1      |
| 333    | AGU170   | ddh  | 9302.10                    | 6596.00                   | 1089.30                     | 96.20          | 29                       | 29                 | 9                   | 11/ 6/1986 | 1      |
| 334    | AGU182   | ddh  | 9250.80                    | 6600.90                   | 1088.20                     | 153.40         | 22                       | 22                 | 14                  | 11/ 6/1986 | 1      |
| 335    | AGU184   | ddh  | 9247.20                    | 6601.00                   | 1088.20                     | 167.10         | 36                       | 36                 | 28                  | 11/ 6/1986 | 1      |
| 336    | AGA115   | ddh  | 9143.90                    | 6537.30                   | 1316.20                     | 447.80         | 28                       | 28                 | 18                  | 11/ 6/1986 | 1      |
| 337    | AGA111   | ddh  | 9206.40                    | 6537.60                   | 1315.60                     | 393.40         | 38                       | 38                 | 21                  | 11/ 6/1986 | 1      |
| 338    | AGA113   | ddh  | 9267.30                    | 6537.30                   | 1315.90                     | 473.90         | 23                       | 23                 | 12                  | 11/ 6/1986 | 1      |
| 339    | AGA118   | ddh  | 9325.40                    | 6540.70                   | 1314.70                     | 467.90         | 48                       | 48                 | 23                  | 11/ 6/1986 | 1      |
| 340    | AGA120   | ddh  | 9382.30                    | 6539.60                   | 1314.10                     | 452.90         | 82                       | 82                 | 50                  | 11/ 6/1986 | 1      |
| 341    | AGA124   | ddh  | 9443.30                    | 6540.50                   | 1312.40                     | 422.60         | 39                       | 39                 | 13                  | 11/ 6/1986 | 1      |
| 342    | AGA154   | ddh  | 9509.60                    | 6541.20                   | 1310.70                     | 139.40         | 12                       | 12                 | 10                  | 11/ 6/1986 | 1      |
| 343    | AGA232   | ddh  | 9539.20                    | 6540.70                   | 1310.00                     | 206.10         | 52                       | 52                 | 19                  | 11/ 6/1986 | 1      |
| 344    | AGA231   | ddh  | 9570.90                    | 6542.60                   | 1308.90                     | 185.50         | 20                       | 20                 | 9                   | 11/ 6/1986 | 1      |

PRINTOUT OF COMPOSITE INFORMATION FOR BOREHOLE RECORD [ 1 ]

COMPOSITE PRINTOUT FOR RECORD [ 1 ]

BOREHOLE NAME : AGA201      BOREHOLE TYPE : ddh  
BOREHOLE NORTHING : 9144.50      BOREHOLE EASTING : 7296.70  
COLLAR ELEVATION : 1269.00      BOREHOLE LENGTH : 243.00

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COMPOSITE DESCRIPTION : GRUM BENCH-TYPE COMPOSITES WITH CORRECTED GEOLOGY CODES 1-10

BENCH COMPOSITE

BACKGROUND VALUES USED FOR COMPOSITE CALCULATION  
NUMBER OF COMPOSITES : 55

| COMP | COMPOSITE TOP |         | COMPOSITE BOTTOM |         | SG     | Pb %   |        | Zn %   |        | Ag g/m |        | Au g/m |        |
|------|---------------|---------|------------------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|      | FROM          | ELEV    | TO               | ELEV    | LENGTH | VALUE  | LENGTH | VALUE  | LENGTH | VALUE  | LENGTH | VALUE  | LENGTH |
| 1    | .00           | 1269.00 | .50              | 1268.50 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 2    | .50           | 1268.50 | 5.00             | 1264.00 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 3    | 5.00          | 1264.00 | 9.50             | 1259.50 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 4    | 9.50          | 1259.50 | 14.00            | 1255.00 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 5    | 14.00         | 1255.00 | 18.50            | 1250.50 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 6    | 18.50         | 1250.50 | 23.00            | 1246.00 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 7    | 23.00         | 1246.00 | 27.50            | 1241.50 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 8    | 27.50         | 1241.50 | 32.00            | 1237.00 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 9    | 32.00         | 1237.00 | 36.51            | 1232.50 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 10   | 36.51         | 1232.50 | 41.01            | 1228.00 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 11   | 41.01         | 1228.00 | 45.51            | 1223.50 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 12   | 45.51         | 1223.50 | 50.01            | 1219.00 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 13   | 50.01         | 1219.00 | 54.51            | 1214.50 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 14   | 54.51         | 1214.50 | 59.01            | 1210.00 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 15   | 59.01         | 1210.00 | 63.51            | 1205.50 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 16   | 63.51         | 1205.50 | 68.01            | 1201.00 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 17   | 68.01         | 1201.00 | 72.51            | 1196.49 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 18   | 72.51         | 1196.49 | 77.01            | 1192.00 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 19   | 77.01         | 1192.00 | 81.51            | 1187.49 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 20   | 81.51         | 1187.49 | 86.01            | 1182.99 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 21   | 86.01         | 1182.99 | 90.51            | 1178.49 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 22   | 90.51         | 1178.49 | 95.02            | 1173.99 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 23   | 95.02         | 1173.99 | 99.52            | 1169.49 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 24   | 99.52         | 1169.49 | 104.02           | 1164.99 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 25   | 104.02        | 1164.99 | 108.52           | 1160.49 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 26   | 108.52        | 1160.49 | 113.02           | 1155.99 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |

|    |        |         |        |         |      |        |      |        |      |        |      |        |      |        |
|----|--------|---------|--------|---------|------|--------|------|--------|------|--------|------|--------|------|--------|
| 27 | 113.02 | 1155.99 | 117.52 | 1151.49 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 28 | 117.52 | 1151.49 | 122.02 | 1146.99 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 29 | 122.02 | 1146.99 | 126.52 | 1142.49 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 30 | 126.52 | 1142.49 | 131.02 | 1137.99 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 31 | 131.02 | 1137.99 | 135.52 | 1133.49 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 32 | 135.52 | 1133.49 | 140.03 | 1128.99 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 33 | 140.03 | 1128.99 | 144.53 | 1124.49 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 34 | 144.53 | 1124.49 | 149.04 | 1119.99 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 35 | 149.04 | 1119.99 | 153.54 | 1115.50 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 36 | 153.54 | 1115.50 | 158.05 | 1111.00 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 37 | 158.05 | 1111.00 | 162.56 | 1106.50 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 38 | 162.56 | 1106.50 | 167.07 | 1102.00 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 39 | 167.07 | 1102.00 | 171.59 | 1097.49 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 40 | 171.59 | 1097.49 | 176.11 | 1093.00 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 41 | 176.11 | 1093.00 | 180.63 | 1088.50 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 42 | 180.63 | 1088.50 | 185.15 | 1084.00 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 43 | 185.15 | 1084.00 | 189.67 | 1079.50 | 3.70 | 7.150  | 3.70 | 3.610  | 3.70 | 3.540  | 3.70 | 53.000 | 3.70 | .810   |
| 44 | 189.67 | 1079.50 | 194.19 | 1075.00 | 4.50 | 3.190  | 4.50 | 1.870  | 4.50 | 1.320  | 4.50 | 39.000 | 4.50 | .720   |
| 45 | 194.19 | 1075.00 | 198.72 | 1070.50 | 4.50 | 3.300  | 4.50 | 1.900  | 4.50 | 1.400  | 4.50 | 36.000 | 4.50 | .630   |
| 46 | 198.72 | 1070.50 | 203.24 | 1066.00 | 3.40 | 2.740  | 3.40 | 1.720  | 3.40 | 1.020  | 3.40 | 35.000 | 3.40 | .980   |
| 47 | 203.24 | 1066.00 | 207.76 | 1061.51 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 48 | 207.76 | 1061.51 | 212.29 | 1057.00 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 49 | 212.29 | 1057.00 | 216.81 | 1052.50 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 50 | 216.81 | 1052.50 | 221.34 | 1048.00 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 51 | 221.34 | 1048.00 | 225.86 | 1043.50 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 52 | 225.86 | 1043.50 | 230.39 | 1039.00 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 53 | 230.39 | 1039.00 | 234.91 | 1034.50 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 54 | 234.91 | 1034.50 | 239.44 | 1030.00 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 55 | 239.44 | 1030.00 | 243.00 | 1026.46 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |

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|                            |        |        |        |        |        |
|----------------------------|--------|--------|--------|--------|--------|
| TOTAL SAMPLED LENGTH :     | 16.10  | 16.10  | 16.10  | 16.10  | 16.10  |
| TOTAL COMPOSITE LENGTH :   | 243.00 | 243.00 | 243.00 | 243.00 | 243.00 |
| COMPOSITE AVERAGE VALUE :  | .000   | .000   | .000   | .000   | .000   |
| COMPOSITE LENGTH*AVERAGE : | .000   | .000   | .000   | .000   | .000   |

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PRINTOUT OF BOREHOLE INFORMATION

DETAILED PRINTOUT FOR RECORD [ 1 ]

DATE CAPTURED : 11/ 6/1986

BOREHOLE NAME : AGA201 BOREHOLE TYPE : ddh

BOREHOLE NORTHING : 9144.50 BOREHOLE EASTING : 7296.70

COLLAR ELEVATION : 1269.00 BOREHOLE LENGTH : 243.00

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GEOLOGICAL INTERSECTIONS : 55

FROM: TO: CODE: DESCRIPTION:

REMARKS:

|        |        |    |            |                     |
|--------|--------|----|------------|---------------------|
| .00    | .50    | 10 | WASTE ROCK | Composite lithology |
| .50    | 5.00   | 10 | WASTE ROCK | Composite lithology |
| 5.00   | 9.50   | 10 | WASTE ROCK | Composite lithology |
| 9.50   | 14.00  | 10 | WASTE ROCK | Composite lithology |
| 14.00  | 18.50  | 10 | WASTE ROCK | Composite lithology |
| 18.50  | 23.00  | 10 | WASTE ROCK | Composite lithology |
| 23.00  | 27.50  | 10 | WASTE ROCK | Composite lithology |
| 27.50  | 32.00  | 10 | WASTE ROCK | Composite lithology |
| 32.00  | 36.51  | 10 | WASTE ROCK | Composite lithology |
| 36.51  | 41.01  | 10 | WASTE ROCK | Composite lithology |
| 41.01  | 45.51  | 10 | WASTE ROCK | Composite lithology |
| 45.51  | 50.01  | 10 | WASTE ROCK | Composite lithology |
| 50.01  | 54.51  | 10 | WASTE ROCK | Composite lithology |
| 54.51  | 59.01  | 10 | WASTE ROCK | Composite lithology |
| 59.01  | 63.51  | 10 | WASTE ROCK | Composite lithology |
| 63.51  | 68.01  | 10 | WASTE ROCK | Composite lithology |
| 68.01  | 72.51  | 10 | WASTE ROCK | Composite lithology |
| 72.51  | 77.01  | 10 | WASTE ROCK | Composite lithology |
| 77.01  | 81.51  | 10 | WASTE ROCK | Composite lithology |
| 81.51  | 86.01  | 10 | WASTE ROCK | Composite lithology |
| 86.01  | 90.51  | 10 | WASTE ROCK | Composite lithology |
| 90.51  | 95.02  | 10 | WASTE ROCK | Composite lithology |
| 95.02  | 99.52  | 10 | WASTE ROCK | Composite lithology |
| 99.52  | 104.02 | 10 | WASTE ROCK | Composite lithology |
| 104.02 | 108.52 | 10 | WASTE ROCK | Composite lithology |
| 108.52 | 113.02 | 10 | WASTE ROCK | Composite lithology |
| 113.02 | 117.52 | 10 | WASTE ROCK | Composite lithology |
| 117.52 | 122.02 | 10 | WASTE ROCK | Composite lithology |
| 122.02 | 126.52 | 10 | WASTE ROCK | Composite lithology |
| 126.52 | 131.02 | 10 | WASTE ROCK | Composite lithology |
| 131.02 | 135.52 | 10 | WASTE ROCK | Composite lithology |
| 135.52 | 140.03 | 10 | WASTE ROCK | Composite lithology |
| 140.03 | 144.53 | 10 | WASTE ROCK | Composite lithology |
| 144.53 | 149.04 | 10 | WASTE ROCK | Composite lithology |
| 149.04 | 153.54 | 10 | WASTE ROCK | Composite lithology |
| 153.54 | 158.05 | 10 | WASTE ROCK | Composite lithology |

|        |        |    |                                                                  |                     |
|--------|--------|----|------------------------------------------------------------------|---------------------|
| 153.05 | 158.05 | 10 | WASTE ROCK                                                       | Composite lithology |
| 158.05 | 162.56 | 10 | WASTE ROCK                                                       | Composite lithology |
| 162.56 | 167.07 | 10 | WASTE ROCK                                                       | Composite lithology |
| 167.07 | 171.59 | 10 | WASTE ROCK                                                       | Composite lithology |
| 171.59 | 176.11 | 10 | WASTE ROCK                                                       | Composite lithology |
| 176.11 | 180.63 | 10 | WASTE ROCK                                                       | Composite lithology |
| 180.63 | 185.15 | 10 | WASTE ROCK                                                       | Composite lithology |
| 185.15 | 189.67 | 6  | E4 TYPE / 2ND CODE A, A4, C, D, E, E4, G, H, L & ED, EE4, EG, EH | Composite lithology |
| 189.67 | 194.19 | 3  | C TYPE / 2ND CODE A, C, E, L                                     | Composite lithology |
| 194.19 | 198.72 | 3  | C TYPE / 2ND CODE A, C, E, L                                     | Composite lithology |
| 198.72 | 203.24 | 3  | C TYPE / 2ND CODE A, C, E, L                                     | Composite lithology |
| 203.24 | 207.76 | 10 | WASTE ROCK                                                       | Composite lithology |
| 207.76 | 212.29 | 10 | WASTE ROCK                                                       | Composite lithology |
| 212.29 | 216.81 | 10 | WASTE ROCK                                                       | Composite lithology |
| 216.81 | 221.34 | 10 | WASTE ROCK                                                       | Composite lithology |
| 221.34 | 225.86 | 10 | WASTE ROCK                                                       | Composite lithology |
| 225.86 | 230.39 | 10 | WASTE ROCK                                                       | Composite lithology |
| 230.39 | 234.91 | 10 | WASTE ROCK                                                       | Composite lithology |
| 234.91 | 239.44 | 10 | WASTE ROCK                                                       | Composite lithology |
| 239.44 | 243.00 | 10 | WASTE ROCK                                                       | Composite lithology |

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ASSAY INTERVALS : 19

| FROM:  | TO:    | SG     | Pb %   | Zn %   | Ag g/m | Au g/m |
|--------|--------|--------|--------|--------|--------|--------|
| .00    | 130.90 | -1.000 | -1.000 | -1.000 | -1.000 | -1.000 |
| 130.90 | 153.70 | -1.000 | -1.000 | -1.000 | -1.000 | -1.000 |
| 153.70 | 172.40 | -1.000 | -1.000 | -1.000 | -1.000 | -1.000 |
| 172.40 | 174.60 | -1.000 | -1.000 | -1.000 | -1.000 | -1.000 |
| 174.60 | 186.00 | -1.000 | -1.000 | -1.000 | -1.000 | -1.000 |
| 186.00 | 187.10 | 4.100  | 5.030  | 4.870  | 80.000 | .820   |
| 187.10 | 188.20 | 3.440  | 2.540  | 2.770  | 36.000 | .410   |
| 188.20 | 189.20 | 3.700  | 3.160  | 2.880  | 43.000 | 1.370  |
| 189.20 | 190.10 | 3.540  | 3.210  | 3.150  | 41.000 | .480   |
| 190.10 | 191.60 | 3.690  | 1.680  | 1.090  | 39.000 | .480   |
| 191.60 | 193.10 | 4.250  | 1.940  | 1.290  | 41.000 | .750   |
| 193.10 | 194.60 | 4.250  | 1.560  | 1.020  | 35.000 | 1.030  |
| 194.60 | 196.10 | 4.150  | 3.480  | 2.900  | 60.000 | .890   |
| 196.10 | 197.60 | 3.580  | 1.060  | .690   | 21.000 | .270   |
| 197.60 | 199.10 | 3.710  | .740   | .240   | 19.000 | .550   |
| 199.10 | 200.60 | 4.170  | 1.760  | .950   | 33.000 | .890   |
| 200.60 | 202.10 | 4.150  | 1.910  | 1.260  | 40.000 | 1.170  |
| 202.10 | 207.60 | -1.000 | -1.000 | -1.000 | -1.000 | -1.000 |
| 207.60 | 243.00 | -1.000 | -1.000 | -1.000 | -1.000 | -1.000 |

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SURVEY INTERVALS : 8

FROM: TO: AZIMUTH: DIP:

|        |        |        |       |
|--------|--------|--------|-------|
| .00    | 130.90 | 183.40 | 89.20 |
| 130.90 | 153.70 | 89.90  | 87.60 |
| 153.70 | 172.40 | 68.60  | 85.60 |
| 172.40 | 174.60 | 63.20  | 84.60 |
| 174.60 | 186.00 | 61.40  | 84.40 |
| 186.00 | 202.10 | 58.10  | 84.10 |
| 202.10 | 207.60 | 55.30  | 83.90 |
| 207.60 | 243.00 | 33.20  | 84.10 |

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PRINTOUT OF COMPOSITE INFORMATION FOR BOREHOLE RECORD [344]

COMPOSITE PRINTOUT FOR RECORD [ 344]

BOREHOLE NAME : AGA231      BOREHOLE TYPE : ddh  
BOREHOLE NORTHING : 9570.90      BOREHOLE EASTING : 6542.60  
COLLAR ELEVATION : 1308.90      BOREHOLE LENGTH : 185.50

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COMPOSITE DESCRIPTION : GRUM BENCH-TYPE COMPOSITES WITH CORRECTED GEOLOGY CODES 1-10

BENCH COMPOSITE

BACKGROUND VALUES USED FOR COMPOSITE CALCULATION  
NUMBER OF COMPOSITES : 40

| COMP | COMPOSITE TOP |         | COMPOSITE BOTTOM |         | SG     | Pb %   |        | Zn %   |        | Ag g/m |        | Au g/m |        |
|------|---------------|---------|------------------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|      | FROM          | ELEV    | TO               | ELEV    | LENGTH | VALUE  | LENGTH | VALUE  | LENGTH | VALUE  | LENGTH | VALUE  | LENGTH |
| 1    | .00           | 1308.90 | 8.91             | 1300.02 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 2    | 8.91          | 1300.02 | 13.43            | 1295.51 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 3    | 13.43         | 1295.51 | 17.95            | 1291.00 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 4    | 17.95         | 1291.00 | 22.46            | 1286.50 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 5    | 22.46         | 1286.50 | 26.98            | 1282.00 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 6    | 26.98         | 1282.00 | 31.49            | 1277.50 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 7    | 31.49         | 1277.50 | 36.00            | 1273.00 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 8    | 36.00         | 1273.00 | 40.52            | 1268.50 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 9    | 40.52         | 1268.50 | 45.03            | 1264.00 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 10   | 45.03         | 1264.00 | 49.55            | 1259.50 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 11   | 49.55         | 1259.50 | 54.06            | 1255.00 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 12   | 54.06         | 1255.00 | 58.58            | 1250.49 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 13   | 58.58         | 1250.49 | 63.09            | 1246.00 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 14   | 63.09         | 1246.00 | 67.60            | 1241.50 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 15   | 67.60         | 1241.50 | 72.12            | 1236.99 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 16   | 72.12         | 1236.99 | 76.63            | 1232.50 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 17   | 76.63         | 1232.50 | 81.15            | 1227.99 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 18   | 81.15         | 1227.99 | 85.66            | 1223.49 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 19   | 85.66         | 1223.49 | 90.17            | 1219.00 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 20   | 90.17         | 1219.00 | 94.69            | 1214.49 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 21   | 94.69         | 1214.49 | 99.20            | 1209.99 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 22   | 99.20         | 1209.99 | 103.72           | 1205.49 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 23   | 103.72        | 1205.49 | 108.23           | 1200.99 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 24   | 108.23        | 1200.99 | 112.74           | 1196.49 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 25   | 112.74        | 1196.49 | 117.26           | 1191.99 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 26   | 117.26        | 1191.99 | 121.80           | 1187.55 | 4.40   | 12.580 | 4.40   | 3.720  | 4.40   | 8.860  | 4.40   | 79.000 | 4.40   |
| 27   | 121.80        | 1187.55 | 126.41           | 1183.04 | 1.60   | 7.660  | 1.60   | 2.180  | 1.60   | 5.480  | 1.60   | 51.000 | 1.60   |
| 28   | 126.41        | 1183.04 | 131.02           | 1178.53 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 29   | 131.02        | 1178.53 | 135.63           | 1174.02 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 30   | 135.63        | 1174.02 | 140.24           | 1169.51 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 31   | 140.24        | 1169.51 | 144.85           | 1165.00 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 32   | 144.85        | 1165.00 | 149.46           | 1160.49 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 33   | 149.46        | 1160.49 | 154.07           | 1155.98 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 34   | 154.07        | 1155.98 | 158.68           | 1151.47 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 35   | 158.68        | 1151.47 | 163.29           | 1146.96 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 36   | 163.29        | 1146.96 | 167.90           | 1142.45 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 37   | 167.90        | 1142.45 | 172.51           | 1137.94 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 38   | 172.51        | 1137.94 | 177.12           | 1133.43 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 39   | 177.12        | 1133.43 | 181.73           | 1128.92 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |
| 40   | 181.73        | 1128.92 | 185.50           | 1124.41 | .00    | -2.000 | .00    | -1.000 | .00    | -1.000 | .00    | -1.000 | .00    |

|    |        |         |        |         |      |        |      |        |      |        |      |        |      |        |
|----|--------|---------|--------|---------|------|--------|------|--------|------|--------|------|--------|------|--------|
| 27 | 121.58 | 1157.55 | 120.71 | 1155.87 | 1.00 | -2.000 | 1.00 | -1.000 | 1.00 | -1.000 | 1.00 | -1.000 | 1.00 | -1.000 |
| 28 | 126.41 | 1183.04 | 131.02 | 1178.55 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 29 | 131.02 | 1178.55 | 135.63 | 1174.06 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 30 | 135.63 | 1174.06 | 140.24 | 1169.56 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 31 | 140.24 | 1169.56 | 144.87 | 1165.04 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 32 | 144.87 | 1165.04 | 149.48 | 1160.55 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 33 | 149.48 | 1160.55 | 154.10 | 1156.06 | 2.30 | 11.800 | 2.30 | 2.900  | 2.30 | 8.900  | 2.30 | 59.000 | 2.30 | -1.000 |
| 34 | 154.10 | 1156.06 | 158.73 | 1151.56 | 4.50 | 8.310  | 4.50 | 2.080  | 4.50 | 6.230  | 4.50 | 46.000 | 4.50 | -1.000 |
| 35 | 158.73 | 1151.56 | 163.36 | 1147.07 | 1.90 | 7.850  | 1.90 | 1.590  | 1.90 | 6.260  | 1.90 | 39.000 | 1.90 | -1.000 |
| 36 | 163.36 | 1147.07 | 168.02 | 1142.55 | 3.30 | 5.440  | 3.30 | 1.690  | 3.30 | 3.750  | 3.30 | 35.000 | 3.30 | -1.000 |
| 37 | 168.02 | 1142.55 | 172.66 | 1138.06 | .70  | 4.140  | .70  | 1.120  | .70  | 3.020  | .70  | 34.000 | .70  | -1.000 |
| 38 | 172.66 | 1138.06 | 177.32 | 1133.56 | 1.70 | 7.090  | 1.70 | 1.550  | 1.70 | 5.540  | 1.70 | 42.000 | 1.70 | -1.000 |
| 39 | 177.32 | 1133.56 | 181.96 | 1129.08 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |
| 40 | 181.96 | 1129.08 | 185.50 | 1125.65 | .00  | -2.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 | .00  | -1.000 |

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|                            |        |        |        |        |        |
|----------------------------|--------|--------|--------|--------|--------|
| TOTAL SAMPLED LENGTH :     | 20.40  | 20.40  | 20.40  | 20.40  | 20.40  |
| TOTAL COMPOSITE LENGTH :   | 185.50 | 185.50 | 185.50 | 185.50 | 185.50 |
| COMPOSITE AVERAGE VALUE :  | .000   | .000   | .000   | .000   | .000   |
| COMPOSITE LENGTH*AVERAGE : | .000   | .000   | .000   | .000   | .000   |

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PRINTOUT OF BOREHOLE INFORMATION

DETAILED PRINTOUT FOR RECORD [344]

DATE CAPTURED : 11/ 6/1986  
BOREHOLE NAME : AGA231 BOREHOLE TYPE : ddh  
BOREHOLE NORTHING : 9570.90 BOREHOLE EASTING : 6542.60  
COLLAR ELEVATION : 1308.90 BOREHOLE LENGTH : 185.50

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GEOLOGICAL INTERSECTIONS : 40

| FROM:  | TO:    | CODE: | DESCRIPTION:                                                     | REMARKS:            |
|--------|--------|-------|------------------------------------------------------------------|---------------------|
| .00    | 8.91   | 10    | WASTE ROCK                                                       | Composite lithology |
| 8.91   | 13.43  | 10    | WASTE ROCK                                                       | Composite lithology |
| 13.43  | 17.95  | 10    | WASTE ROCK                                                       | Composite lithology |
| 17.95  | 22.46  | 10    | WASTE ROCK                                                       | Composite lithology |
| 22.46  | 26.98  | 10    | WASTE ROCK                                                       | Composite lithology |
| 26.98  | 31.49  | 10    | WASTE ROCK                                                       | Composite lithology |
| 31.49  | 36.00  | 10    | WASTE ROCK                                                       | Composite lithology |
| 36.00  | 40.52  | 10    | WASTE ROCK                                                       | Composite lithology |
| 40.52  | 45.03  | 10    | WASTE ROCK                                                       | Composite lithology |
| 45.03  | 49.55  | 10    | WASTE ROCK                                                       | Composite lithology |
| 49.55  | 54.06  | 10    | WASTE ROCK                                                       | Composite lithology |
| 54.06  | 58.58  | 10    | WASTE ROCK                                                       | Composite lithology |
| 58.58  | 63.09  | 10    | WASTE ROCK                                                       | Composite lithology |
| 63.09  | 67.60  | 10    | WASTE ROCK                                                       | Composite lithology |
| 67.60  | 72.12  | 10    | WASTE ROCK                                                       | Composite lithology |
| 72.12  | 76.63  | 10    | WASTE ROCK                                                       | Composite lithology |
| 76.63  | 81.15  | 10    | WASTE ROCK                                                       | Composite lithology |
| 81.15  | 85.66  | 10    | WASTE ROCK                                                       | Composite lithology |
| 85.66  | 90.17  | 10    | WASTE ROCK                                                       | Composite lithology |
| 90.17  | 94.69  | 10    | WASTE ROCK                                                       | Composite lithology |
| 94.69  | 99.20  | 10    | WASTE ROCK                                                       | Composite lithology |
| 99.20  | 103.72 | 10    | WASTE ROCK                                                       | Composite lithology |
| 103.72 | 108.23 | 10    | WASTE ROCK                                                       | Composite lithology |
| 108.23 | 112.74 | 10    | WASTE ROCK                                                       | Composite lithology |
| 112.74 | 117.26 | 10    | WASTE ROCK                                                       | Composite lithology |
| 117.26 | 121.80 | 2     | A4 TYPE / 2ND CODE A, A4, C, D, E, E4, G, H, L & AD, AE4, AG, AH | Composite lithology |
| 121.80 | 126.41 | 2     | A4 TYPE / 2ND CODE A, A4, C, D, E, E4, G, H, L & AD, AE4, AG, AH | Composite lithology |
| 126.41 | 131.02 | 10    | WASTE ROCK                                                       | Composite lithology |
| 131.02 | 135.63 | 10    | WASTE ROCK                                                       | Composite lithology |
| 135.63 | 140.24 | 10    | WASTE ROCK                                                       | Composite lithology |
| 140.24 | 144.87 | 10    | WASTE ROCK                                                       | Composite lithology |
| 144.87 | 149.48 | 10    | WASTE ROCK                                                       | Composite lithology |
| 149.48 | 154.10 | 2     | A4 TYPE / 2ND CODE A, A4, C, D, E, E4, G, H, L & AD, AE4, AG, AH | Composite lithology |
| 154.10 | 158.73 | 2     | A4 TYPE / 2ND CODE A, A4, C, D, E, E4, G, H, L & AD, AE4, AG, AH | Composite lithology |
| 158.73 | 163.36 | 2     | A4 TYPE / 2ND CODE A, A4, C, D, E, E4, G, H, L & AD, AE4, AG, AH | Composite lithology |
| 163.36 | 167.98 | 2     | A4 TYPE / 2ND CODE A, A4, C, D, E, E4, G, H, L & AD, AE4, AG, AH | Composite lithology |

|        |        |    |                                                                  |                     |
|--------|--------|----|------------------------------------------------------------------|---------------------|
| 168.02 | 172.66 | 2  | A4 TYPE / 2ND CODE A, A4, C, D, E, E4, G, H, L & AD, AE4, AG, AH | Composite lithology |
| 172.66 | 177.32 | 2  | A4 TYPE / 2ND CODE A, A4, C, D, E, E4, G, H, L & AD, AE4, AG, AH | Composite lithology |
| 177.32 | 181.96 | 10 | WASTE ROCK                                                       | Composite lithology |
| 181.96 | 185.50 | 10 | WASTE ROCK                                                       | Composite lithology |

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ASSAY INTERVALS : 20

| FROM:  | TO:    | SG     | Pb %   | Zn %   | Ag g/m  | Au g/m |
|--------|--------|--------|--------|--------|---------|--------|
| .00    | 117.40 | -1.000 | -1.000 | -1.000 | -1.000  | -1.000 |
| 117.40 | 118.90 | 3.310  | 3.120  | 7.880  | 56.000  | -1.000 |
| 118.90 | 120.30 | 3.310  | 5.130  | 11.850 | 116.000 | -1.000 |
| 120.30 | 120.60 | 2.800  | .000   | .000   | .000    | .000   |
| 120.60 | 122.30 | 3.310  | 3.600  | 8.480  | 81.000  | -1.000 |
| 122.30 | 122.90 | 2.800  | .000   | .000   | .000    | .000   |
| 122.90 | 123.50 | 3.230  | 2.960  | 7.880  | 71.000  | -1.000 |
| 123.50 | 151.80 | -1.000 | -1.000 | -1.000 | -1.000  | -1.000 |
| 151.80 | 153.60 | 3.310  | 2.850  | 9.620  | 59.000  | -1.000 |
| 153.60 | 155.20 | 3.310  | 3.040  | 6.590  | 60.000  | -1.000 |
| 155.20 | 156.90 | 3.310  | 2.080  | 6.650  | 46.000  | -1.000 |
| 156.90 | 158.90 | 3.310  | 1.560  | 5.660  | 38.000  | -1.000 |
| 158.90 | 160.70 | 3.310  | 1.590  | 6.290  | 39.000  | -1.000 |
| 160.70 | 163.80 | -1.000 | -1.000 | -1.000 | -1.000  | -1.000 |
| 163.80 | 165.00 | 3.230  | .820   | 3.550  | 16.000  | -1.000 |
| 165.00 | 167.20 | 3.310  | 2.160  | 3.850  | 45.000  | -1.000 |
| 167.20 | 172.00 | -1.000 | -1.000 | -1.000 | -1.000  | -1.000 |
| 172.00 | 173.30 | 3.230  | 1.120  | 3.020  | 34.000  | -1.000 |
| 173.30 | 174.50 | 3.310  | 1.750  | 6.710  | 46.000  | -1.000 |
| 174.50 | 185.50 | -1.000 | -1.000 | -1.000 | -1.000  | -1.000 |

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SURVEY INTERVALS : 9

| FROM:  | TO:    | AZIMUTH: | DIP:  |
|--------|--------|----------|-------|
| .00    | 117.40 | 79.70    | 85.60 |
| 117.40 | 123.50 | 86.60    | 78.00 |
| 123.50 | 151.80 | 84.70    | 77.10 |
| 151.80 | 160.70 | 82.80    | 76.20 |
| 160.70 | 163.80 | 82.30    | 75.90 |
| 163.80 | 167.20 | 82.00    | 75.70 |
| 167.20 | 172.00 | 81.70    | 75.50 |
| 172.00 | 174.50 | 81.30    | 75.40 |
| 174.50 | 185.50 | 80.90    | 75.10 |

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## DOWN-THE-HOLE VARIOGRAM - SAMPLE DATA

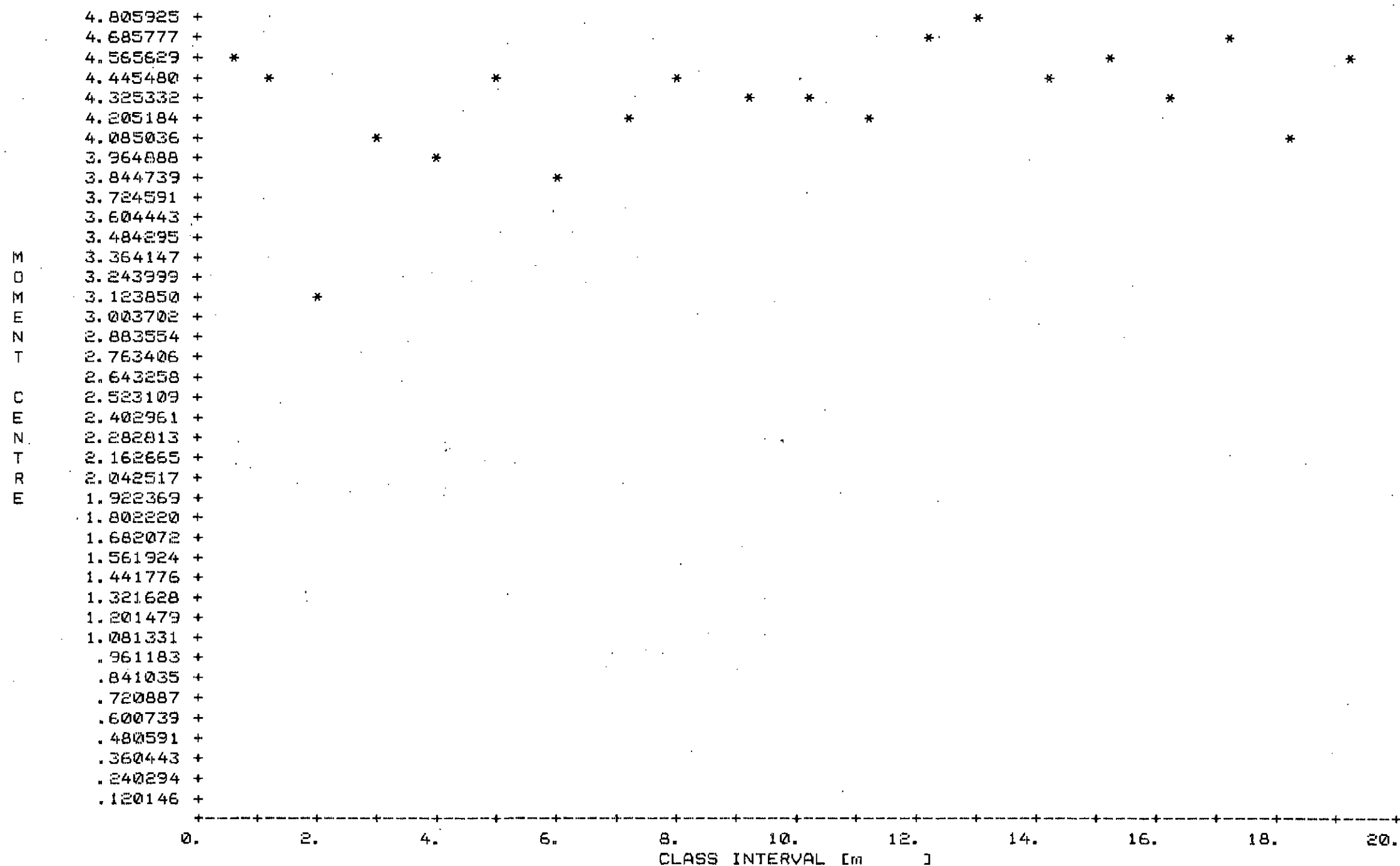
BOREHOLE USED : AVERAGE FOR ALL SELECTED HOLES FOR LABEL NO : 2 Pb %

CLASS INTERVAL : 1.00 [m ]  
 MAXIMUM DISTANCE : 20.00 [m ]  
 OFFSET : .00 [m ]  
 TOP ELEVATION : 1308.90 [m ]  
 BOTTOM ELEVATION : 1125.65 [m ]  
 TRANSFORMATION OF DATA : NONE  
 NORMALIZATION OF DATA : NONE  
 VALUE POSITION : CENTRE OF SAMPLE  
 MEAN : 3.065233  
 VARIANCE : 5.434525  
 STANDARD DEVIATION : 2.331207  
 NUMBER OF SAMPLES : 3163

| CLASS | CLASS INTERVAL<br>FROM TO<br>[m ] [m ] | NO OF SAMPLES | DRIFT    | GAMMA [H] | MOMENT CENTRE | AVERAGE DISTANCE<br>[m ] |
|-------|----------------------------------------|---------------|----------|-----------|---------------|--------------------------|
| 1     | .00 1.00                               | 30            | .187333  | 4.936270  | 4.540396      | .44                      |
| 2     | 1.00 2.00                              | 1158          | .031598  | 4.543466  | 4.331508      | 1.17                     |
| 3     | 2.00 3.00                              | 1735          | .123418  | 2.981120  | 3.051008      | 1.92                     |
| 4     | 3.00 4.00                              | 1282          | .151529  | 4.079046  | 4.027692      | 3.00                     |
| 5     | 4.00 5.00                              | 1241          | .111281  | 3.881293  | 3.910516      | 3.98                     |
| 6     | 5.00 6.00                              | 1090          | .284982  | 4.315691  | 4.330553      | 4.99                     |
| 7     | 6.00 7.00                              | 1065          | .024300  | 3.811321  | 3.817903      | 5.97                     |
| 8     | 7.00 8.00                              | 968           | .330331  | 4.214449  | 4.194212      | 7.02                     |
| 9     | 8.00 9.00                              | 914           | .070525  | 4.353006  | 4.372650      | 8.00                     |
| 10    | 9.00 10.00                             | 825           | .127455  | 4.301612  | 4.303061      | 9.01                     |
| 11    | 10.00 11.00                            | 800           | .255288  | 4.258738  | 4.262437      | 10.01                    |
| 12    | 11.00 12.00                            | 750           | -.000667 | 4.111717  | 4.112464      | 11.01                    |
| 13    | 12.00 13.00                            | 723           | .102697  | 4.640357  | 4.641772      | 12.00                    |
| 14    | 13.00 14.00                            | 685           | -.086861 | 4.795557  | 4.805925      | 13.00                    |
| 15    | 14.00 15.00                            | 660           | -.057348 | 4.442557  | 4.441946      | 14.02                    |
| 16    | 15.00 16.00                            | 611           | -.007349 | 4.524735  | 4.522115      | 15.02                    |
| 17    | 16.00 17.00                            | 600           | -.162683 | 4.307517  | 4.295535      | 16.02                    |
| 18    | 17.00 18.00                            | 577           | -.102721 | 4.589027  | 4.590567      | 17.01                    |
| 19    | 18.00 19.00                            | 566           | .006961  | 3.967461  | 3.967617      | 18.00                    |
| 20    | 19.00 20.00                            | 554           | -.129134 | 4.458292  | 4.450516      | 19.01                    |

DOWN-THE-HOLE VARIOGRAM - SAMPLE DATA

BOREHOLE USED : AVERAGE FOR ALL SELECTED HOLES FOR LABEL NO : 2 Pb %



THE SYMBOL "\*" INDICATES LESS THAN 30 SAMPLES IN THAT CLASS

TWO DIMENSIONAL VARIOGRAM

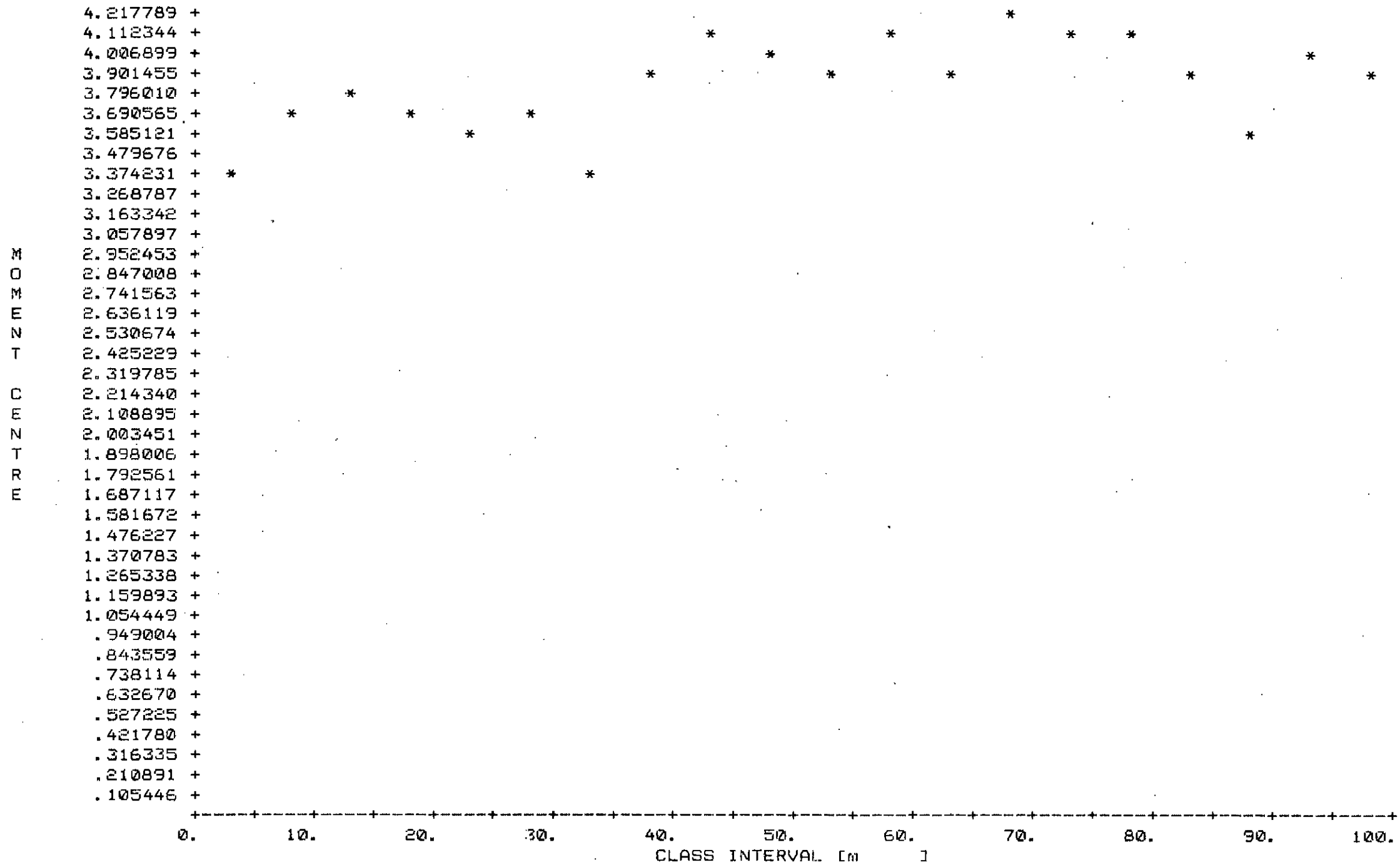
EXTRACTION DATA USED : ALL GEOLOGY 1-9 PB >.01

DIRECTION : .00 [DEGREES]  
ANGLE OF SPREAD : 15.00 [DEGREES]  
CLASS INTERVAL : 5.00 [m ]  
MAXIMUM DISTANCE : 100.00 [m ]  
OFFSET : .00 [m ]  
TOP ELEVATION : 1336.00 [m ]  
BOTTOM ELEVATION : 1000.00 [m ]  
TRANSFORMATION OF DATA : NONE  
NORMALIZATION OF DATA : NONE  
MEAN : 3.203278  
VARIANCE : 4.054440  
STANDARD DEVIATION : 2.013564  
NUMBER OF SAMPLES : 2914

| CLASS | CLASS INTERVAL          | NO OF SAMPLES | DRIFT    | GAMMA [H] | MOMENT CENTRE | AVERAGE DISTANCE |
|-------|-------------------------|---------------|----------|-----------|---------------|------------------|
|       | FROM<br>[m ] TO<br>[m ] |               |          |           |               | [m ]             |
| 1     | .00 5.00                | 3372          | -.377400 | 3.261280  | 3.313838      | 2.67             |
| 2     | 5.00 10.00              | 3986          | -.061934 | 3.664917  | 3.669541      | 7.50             |
| 3     | 10.00 15.00             | 3917          | .166124  | 3.757754  | 3.759052      | 12.46            |
| 4     | 15.00 20.00             | 4265          | .027683  | 3.604795  | 3.596727      | 17.42            |
| 5     | 20.00 25.00             | 5062          | .067780  | 3.549737  | 3.546087      | 22.67            |
| 6     | 25.00 30.00             | 6575          | -.277344 | 3.617278  | 3.621161      | 27.58            |
| 7     | 30.00 35.00             | 7375          | -.414871 | 3.351721  | 3.351887      | 32.38            |
| 8     | 35.00 40.00             | 6882          | -.387685 | 3.799552  | 3.799667      | 37.53            |
| 9     | 40.00 45.00             | 5807          | -.467679 | 4.056728  | 4.058282      | 42.55            |
| 10    | 45.00 50.00             | 6719          | -.594045 | 3.948641  | 3.940382      | 47.63            |
| 11    | 50.00 55.00             | 7242          | -.389972 | 3.835647  | 3.837758      | 52.53            |
| 12    | 55.00 60.00             | 8755          | -.864597 | 4.089938  | 4.089097      | 57.68            |
| 13    | 60.00 65.00             | 8646          | -.895586 | 3.864882  | 3.860168      | 62.32            |
| 14    | 65.00 70.00             | 7088          | -.772472 | 4.217464  | 4.217789      | 67.49            |
| 15    | 70.00 75.00             | 6247          | -.670092 | 4.034747  | 4.035213      | 72.49            |
| 16    | 75.00 80.00             | 6415          | -.807141 | 4.052251  | 4.047653      | 77.56            |
| 17    | 80.00 85.00             | 7326          | -.664882 | 3.855036  | 3.856183      | 82.39            |
| 18    | 85.00 90.00             | 9583          | -.587328 | 3.540960  | 3.543730      | 87.62            |
| 19    | 90.00 95.00             | 8218          | -.722472 | 3.999329  | 4.004837      | 92.29            |
| 20    | 95.00 100.00            | 7664          | -.727172 | 3.843830  | 3.843849      | 97.51            |

TWO DIMENSIONAL VARIOGRAM

EXTRACTION DATA USED :



THE SYMBOL "\*" INDICATES LESS THAN 30 SAMPLES IN THAT CLASS

TWO DIMENSIONAL VARIOGRAM

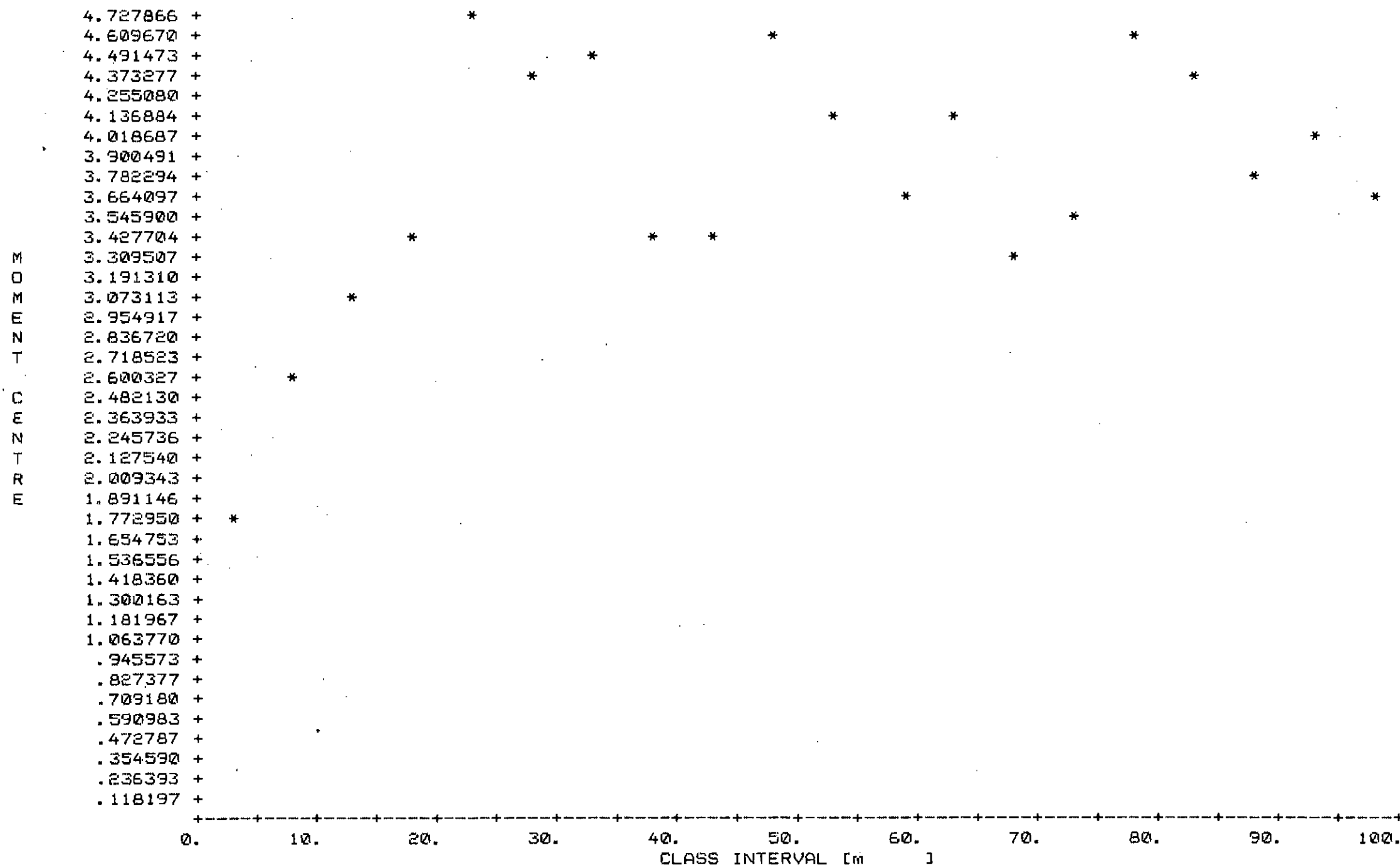
EXTRACTION DATA USED : ALL GEOLOGY 1-9 PG>:01

DIRECTION : 90.00 [DEGREES]  
 ANGLE OF SPREAD : 15.00 [DEGREES]  
 CLASS INTERVAL : 5.00 [m ]  
 MAXIMUM DISTANCE : 100.00 [m ]  
 OFFSET : .00 [m ]  
 TOP ELEVATION : 1336.00 [m ]  
 BOTTOM ELEVATION : 1000.00 [m ]  
 TRANSFORMATION OF DATA : NONE  
 NORMALIZATION OF DATA : NONE  
 MEAN : 3.141692  
 VARIANCE : 4.244536  
 STANDARD DEVIATION : 2.060227  
 NUMBER OF SAMPLES : 2914

| CLASS | CLASS INTERVAL<br>FROM TO<br>[m ] [m ] | NO OF SAMPLES | DRIFT    | GAMMA [H] | MOMENT CENTRE | AVERAGE DISTANCE<br>[m ] |
|-------|----------------------------------------|---------------|----------|-----------|---------------|--------------------------|
| 1     | .00 5.00                               | 2238          | -.905330 | 1.747051  | 1.735649      | 2.16                     |
| 2     | 5.00 10.00                             | 1413          | -.150708 | 2.400084  | 2.516249      | 7.33                     |
| 3     | 10.00 15.00                            | 896           | .678203  | 3.117754  | 3.072597      | 12.49                    |
| 4     | 15.00 20.00                            | 665           | 1.438828 | 3.340712  | 3.339455      | 17.27                    |
| 5     | 20.00 25.00                            | 1300          | 2.277100 | 4.806685  | 4.727866      | 22.78                    |
| 6     | 25.00 30.00                            | 3773          | 2.258379 | 4.312743  | 4.319505      | 27.95                    |
| 7     | 30.00 35.00                            | 6115          | 2.334460 | 4.422714  | 4.412256      | 32.47                    |
| 8     | 35.00 40.00                            | 3199          | 1.986495 | 3.348426  | 3.328999      | 37.28                    |
| 9     | 40.00 45.00                            | 2923          | 1.969804 | 3.373385  | 3.395254      | 42.52                    |
| 10    | 45.00 50.00                            | 4429          | 2.335149 | 4.523267  | 4.514878      | 47.45                    |
| 11    | 50.00 55.00                            | 4778          | 2.251839 | 4.129684  | 4.123123      | 52.73                    |
| 12    | 55.00 60.00                            | 12500         | 2.061250 | 3.618765  | 3.623164      | 58.11                    |
| 13    | 60.00 65.00                            | 19211         | 2.226230 | 4.107386  | 4.099988      | 62.19                    |
| 14    | 65.00 70.00                            | 9816          | 1.970914 | 3.254948  | 3.256903      | 67.24                    |
| 15    | 70.00 75.00                            | 5709          | 2.039905 | 3.477268  | 3.480188      | 72.22                    |
| 16    | 75.00 80.00                            | 4677          | 2.383975 | 4.580217  | 4.584654      | 77.48                    |
| 17    | 80.00 85.00                            | 3906          | 2.301290 | 4.276367  | 4.276376      | 82.70                    |
| 18    | 85.00 90.00                            | 4862          | 2.145275 | 3.781871  | 3.780342      | 87.69                    |
| 19    | 90.00 95.00                            | 13393         | 2.210327 | 4.006868  | 4.005542      | 92.55                    |
| 20    | 95.00 100.00                           | 8222          | 2.100943 | 3.630323  | 3.630423      | 97.17                    |

# TWO DIMENSIONAL VARIOGRAM

EXTRACTION DATA USED :



TWO DIMENSIONAL VARIOGRAM

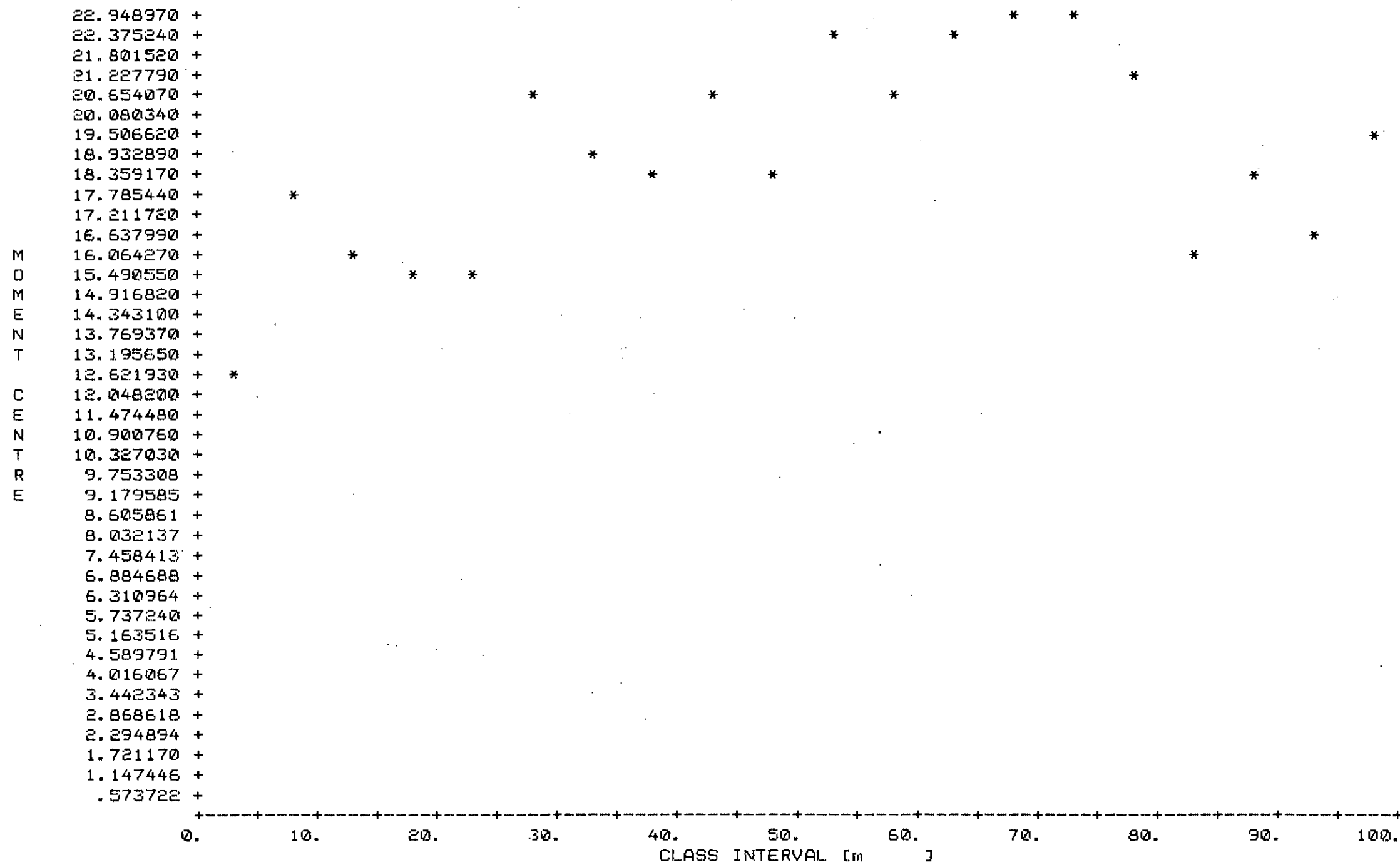
EXTRACTION DATA USED : *GEOLOGY 5/6 2ND.01*

DIRECTION : .00 [DEGREES]  
ANGLE OF SPREAD : 15.00 [DEGREES]  
CLASS INTERVAL : 5.00 [m ]  
MAXIMUM DISTANCE : 100.00 [m ]  
OFFSET : .00 [m ]  
TOP ELEVATION : 1336.00 [m ]  
BOTTOM ELEVATION : 1000.00 [m ]  
TRANSFORMATION OF DATA : NONE  
NORMALIZATION OF DATA : NONE  
MEAN : 7.111305  
VARIANCE : 20.571130  
STANDARD DEVIATION : 4.535541  
NUMBER OF SAMPLES : 650

| CLASS | CLASS INTERVAL | NO OF SAMPLES | DRIFT     | GAMMA [H] | MOMENT CENTRE | AVERAGE DISTANCE |
|-------|----------------|---------------|-----------|-----------|---------------|------------------|
|       | FROM TO        |               |           |           |               |                  |
|       | [m ] [m ]      |               |           |           |               | [m ]             |
| 1     | .00 5.00       | 403           | -1.349106 | 12.160880 | 12.263770     | 2.58             |
| 2     | 5.00 10.00     | 408           | -.058995  | 17.992440 | 17.593130     | 7.41             |
| 3     | 10.00 15.00    | 315           | .980508   | 15.980370 | 16.023650     | 12.48            |
| 4     | 15.00 20.00    | 321           | .263022   | 15.316580 | 15.326230     | 17.25            |
| 5     | 20.00 25.00    | 359           | -.120362  | 15.192220 | 15.051630     | 22.48            |
| 6     | 25.00 30.00    | 406           | -1.489879 | 20.113410 | 20.286190     | 27.85            |
| 7     | 30.00 35.00    | 339           | -.317404  | 18.336190 | 18.450990     | 32.44            |
| 8     | 35.00 40.00    | 379           | -.486992  | 18.425060 | 18.352210     | 37.60            |
| 9     | 40.00 45.00    | 429           | -1.993893 | 20.195080 | 20.164730     | 42.55            |
| 10    | 45.00 50.00    | 410           | -1.358099 | 18.066890 | 18.045640     | 47.47            |
| 11    | 50.00 55.00    | 407           | -1.161819 | 22.059250 | 22.056720     | 52.67            |
| 12    | 55.00 60.00    | 449           | -1.098329 | 20.460740 | 20.445150     | 57.61            |
| 13    | 60.00 65.00    | 396           | -.496490  | 22.041530 | 21.958410     | 62.44            |
| 14    | 65.00 70.00    | 395           | -1.861445 | 22.921460 | 22.948970     | 67.58            |
| 15    | 70.00 75.00    | 341           | -2.276041 | 22.779200 | 22.836680     | 72.54            |
| 16    | 75.00 80.00    | 315           | -1.177524 | 21.044360 | 21.072950     | 77.38            |
| 17    | 80.00 85.00    | 365           | -1.274439 | 15.933330 | 15.885260     | 82.56            |
| 18    | 85.00 90.00    | 457           | -1.686083 | 18.251900 | 18.210440     | 87.66            |
| 19    | 90.00 95.00    | 347           | -1.650606 | 16.595160 | 16.590360     | 92.53            |
| 20    | 95.00 100.00   | 389           | -2.130384 | 19.076380 | 19.061850     | 97.46            |

TWO DIMENSIONAL VARIOGRAM

EXTRACTION DATA USED :



THE SYMBOL "\*" INDICATES LESS THAN 30 SAMPLES IN THAT CLASS

TWO DIMENSIONAL VARIOGRAM

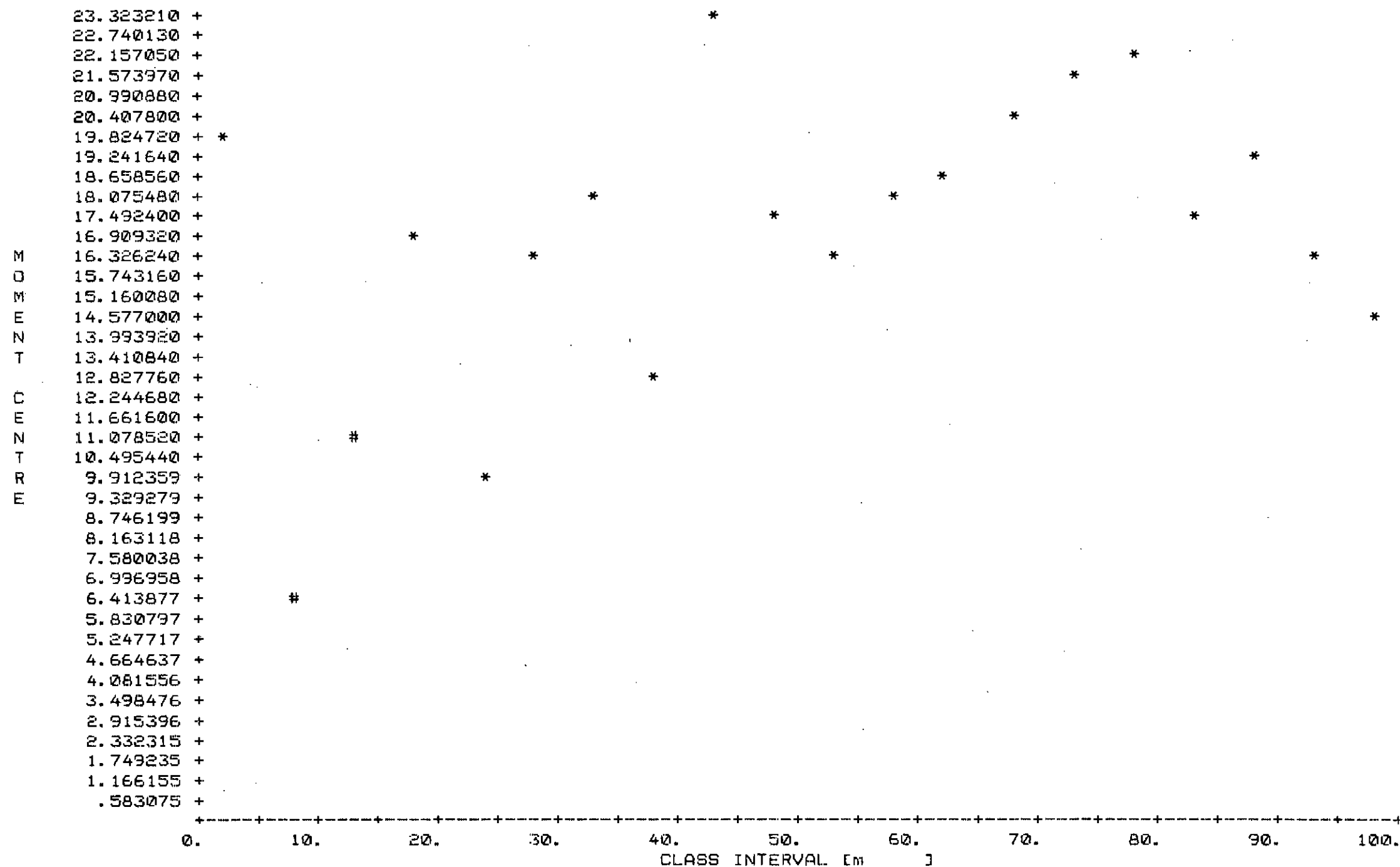
EXTRACTION DATA USED : *GEOLOGY 5/6 ZN > .01*

DIRECTION : 90.00 [DEGREES]  
ANGLE OF SPREAD : 15.00 [DEGREES]  
CLASS INTERVAL : 5.00 [m ]  
MAXIMUM DISTANCE : 100.00 [m ]  
OFFSET : .00 [m ]  
TOP ELEVATION : 1336.00 [m ]  
BOTTOM ELEVATION : 1000.00 [m ]  
TRANSFORMATION OF DATA : NONE  
NORMALIZATION OF DATA : NONE  
MEAN : 7.122381  
VARIANCE : 21.785460  
STANDARD DEVIATION : 4.667490  
NUMBER OF SAMPLES : 650

| CLASS | CLASS INTERVAL<br>FROM TO<br>[m ] [m ] | NO OF SAMPLES | DRIFT     | GAMMA [H] | MOMENT CENTRE | AVERAGE DISTANCE<br>[m ] |
|-------|----------------------------------------|---------------|-----------|-----------|---------------|--------------------------|
| 1     | .00 5.00                               | 31            | -1.937097 | 20.810670 | 19.434330     | 1.35                     |
| 2     | 5.00 10.00                             | 19            | 1.936842  | 6.724600  | 6.287096      | 7.59                     |
| 3     | 10.00 15.00                            | 24            | 4.044166  | 10.342620 | 10.597700     | 12.09                    |
| 4     | 15.00 20.00                            | 61            | 4.764917  | 16.658580 | 16.722610     | 17.48                    |
| 5     | 20.00 25.00                            | 96            | 3.591563  | 9.855686  | 9.840706      | 23.61                    |
| 6     | 25.00 30.00                            | 252           | 4.368254  | 16.009800 | 16.166690     | 27.98                    |
| 7     | 30.00 35.00                            | 542           | 4.852805  | 18.005500 | 17.977650     | 32.23                    |
| 8     | 35.00 40.00                            | 143           | 3.795106  | 12.601710 | 12.719190     | 37.21                    |
| 9     | 40.00 45.00                            | 64            | 5.364532  | 23.299490 | 23.323210     | 42.62                    |
| 10    | 45.00 50.00                            | 246           | 4.701503  | 17.201270 | 17.301350     | 47.68                    |
| 11    | 50.00 55.00                            | 414           | 4.657294  | 16.263950 | 16.316320     | 52.92                    |
| 12    | 55.00 60.00                            | 713           | 4.635833  | 17.495300 | 17.524730     | 57.84                    |
| 13    | 60.00 65.00                            | 1057          | 4.934948  | 18.549530 | 18.528220     | 61.97                    |
| 14    | 65.00 70.00                            | 375           | 4.874641  | 19.933060 | 19.898260     | 67.19                    |
| 15    | 70.00 75.00                            | 346           | 5.097398  | 20.944080 | 21.043030     | 72.40                    |
| 16    | 75.00 80.00                            | 394           | 5.312970  | 21.632810 | 21.658220     | 77.46                    |
| 17    | 80.00 85.00                            | 375           | 5.017868  | 17.354380 | 17.326170     | 82.66                    |
| 18    | 85.00 90.00                            | 337           | 5.037864  | 18.780400 | 18.842930     | 87.57                    |
| 19    | 90.00 95.00                            | 916           | 4.510929  | 15.817800 | 15.802270     | 92.53                    |
| 20    | 95.00 100.00                           | 472           | 4.159492  | 14.494220 | 14.531500     | 97.03                    |

TWO DIMENSIONAL VARIOGRAM

EXTRACTION DATA USED :



THE SYMBOL "#" INDICATES LESS THAN 30 SAMPLES IN THAT CLASS

TWO DIMENSIONAL VARIOGRAM

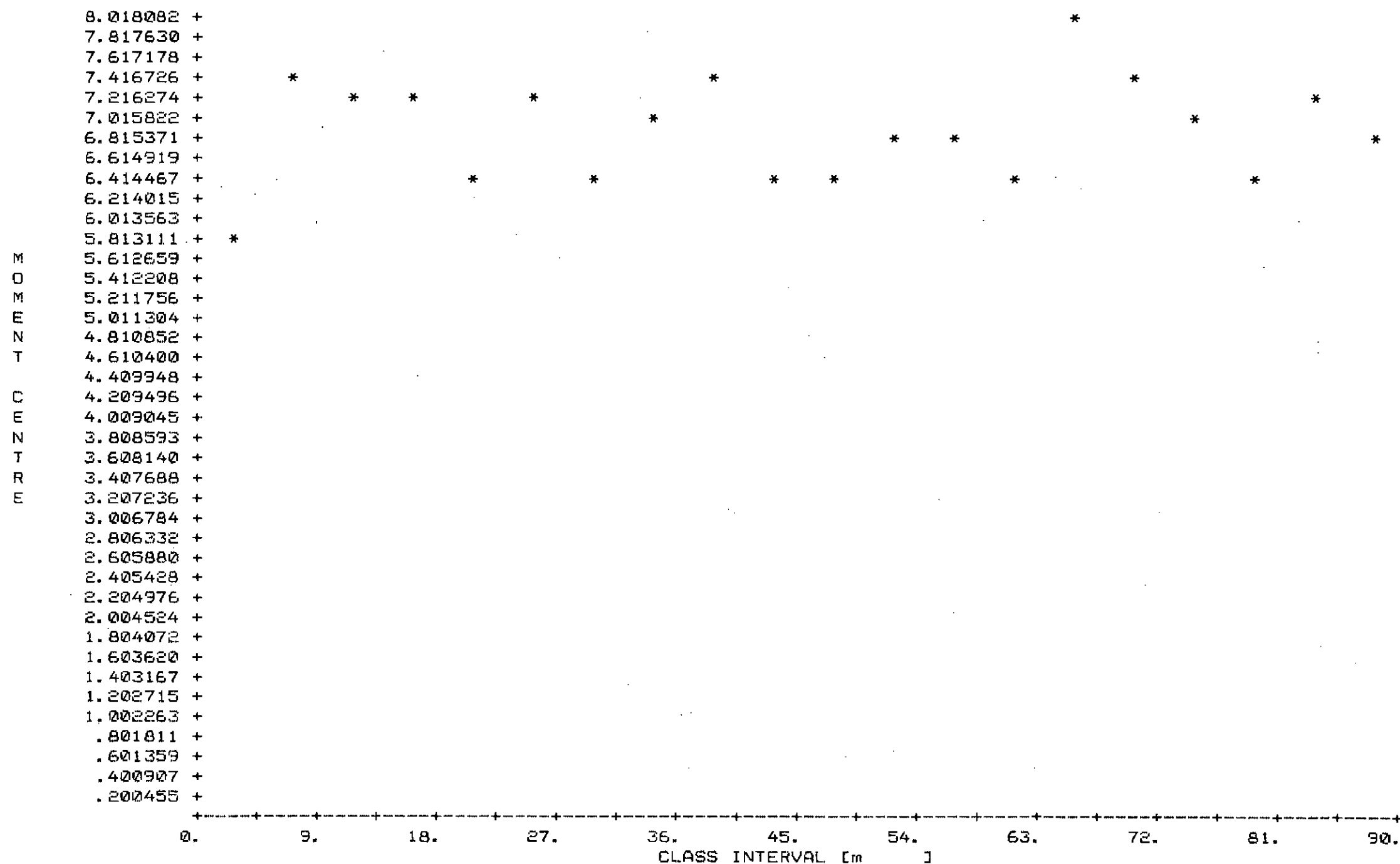
EXTRACTION DATA USED :

DIRECTION : .00 [DEGREES]  
ANGLE OF SPREAD : 15.00 [DEGREES]  
CLASS INTERVAL : 4.50 [m ]  
MAXIMUM DISTANCE : 90.00 [m ]  
OFFSET : .00 [m ]  
TOP ELEVATION : 1336.00 [m ]  
BOTTOM ELEVATION : 1000.00 [m ]  
TRANSFORMATION OF DATA : NONE  
NORMALIZATION OF DATA : NONE  
MEAN : 4.296904  
VARIANCE : 7.150269  
STANDARD DEVIATION : 2.673999  
NUMBER OF SAMPLES : 1301

| CLASS | CLASS INTERVAL |       | NO OF SAMPLES | DRIFT     | GAMMA [H] | MOMENT CENTRE | AVERAGE DISTANCE |
|-------|----------------|-------|---------------|-----------|-----------|---------------|------------------|
|       | FROM           | TO    |               |           |           |               |                  |
|       | [m             | ] [m  |               |           |           |               | [m ]             |
| 1     | .00            | 4.50  | 729           | -.360535  | 6.084325  | 5.804179      | 2.42             |
| 2     | 4.50           | 9.00  | 936           | -.254904  | 7.213868  | 7.237378      | 6.48             |
| 3     | 9.00           | 13.50 | 919           | -.006572  | 6.869651  | 7.048582      | 11.19            |
| 4     | 13.50          | 18.00 | 941           | .234293   | 7.165401  | 7.173653      | 15.78            |
| 5     | 18.00          | 22.50 | 947           | .185069   | 6.302551  | 6.332652      | 20.36            |
| 6     | 22.50          | 27.00 | 1151          | -.402936  | 7.120001  | 7.140801      | 24.87            |
| 7     | 27.00          | 31.50 | 1652          | -.734328  | 6.252818  | 6.240157      | 29.37            |
| 8     | 31.50          | 36.00 | 1674          | -.914564  | 6.877843  | 6.877081      | 33.73            |
| 9     | 36.00          | 40.50 | 1438          | -.620528  | 7.238616  | 7.268468      | 38.18            |
| 10    | 40.50          | 45.00 | 1117          | -.211343  | 6.375490  | 6.370045      | 42.76            |
| 11    | 45.00          | 49.50 | 1427          | -.307975  | 6.280555  | 6.251115      | 47.48            |
| 12    | 49.50          | 54.00 | 1503          | -.332268  | 6.605963  | 6.616332      | 51.69            |
| 13    | 54.00          | 58.50 | 1721          | -.686026  | 6.687902  | 6.680594      | 56.52            |
| 14    | 58.50          | 63.00 | 1904          | -1.191393 | 6.256451  | 6.268412      | 60.64            |
| 15    | 63.00          | 67.50 | 1394          | -.758688  | 8.017623  | 8.018082      | 65.10            |
| 16    | 67.50          | 72.00 | 1201          | -.863938  | 7.211477  | 7.219972      | 69.52            |
| 17    | 72.00          | 76.50 | 1014          | -.150069  | 6.996066  | 7.001281      | 74.26            |
| 18    | 76.50          | 81.00 | 1462          | -.373536  | 6.248952  | 6.239367      | 79.04            |
| 19    | 81.00          | 85.50 | 1627          | -.121253  | 7.171700  | 7.156196      | 83.17            |
| 20    | 85.50          | 90.00 | 2143          | -.488759  | 6.737073  | 6.728962      | 87.70            |

TWO DIMENSIONAL VARIOGRAM

EXTRACTION DATA USED : GEOLOGY 1,2 2N>.01



THE SYMBOL "\*" INDICATES LESS THAN 30 SAMPLES IN THAT CLASS

TWO DIMENSIONAL VARIOGRAM

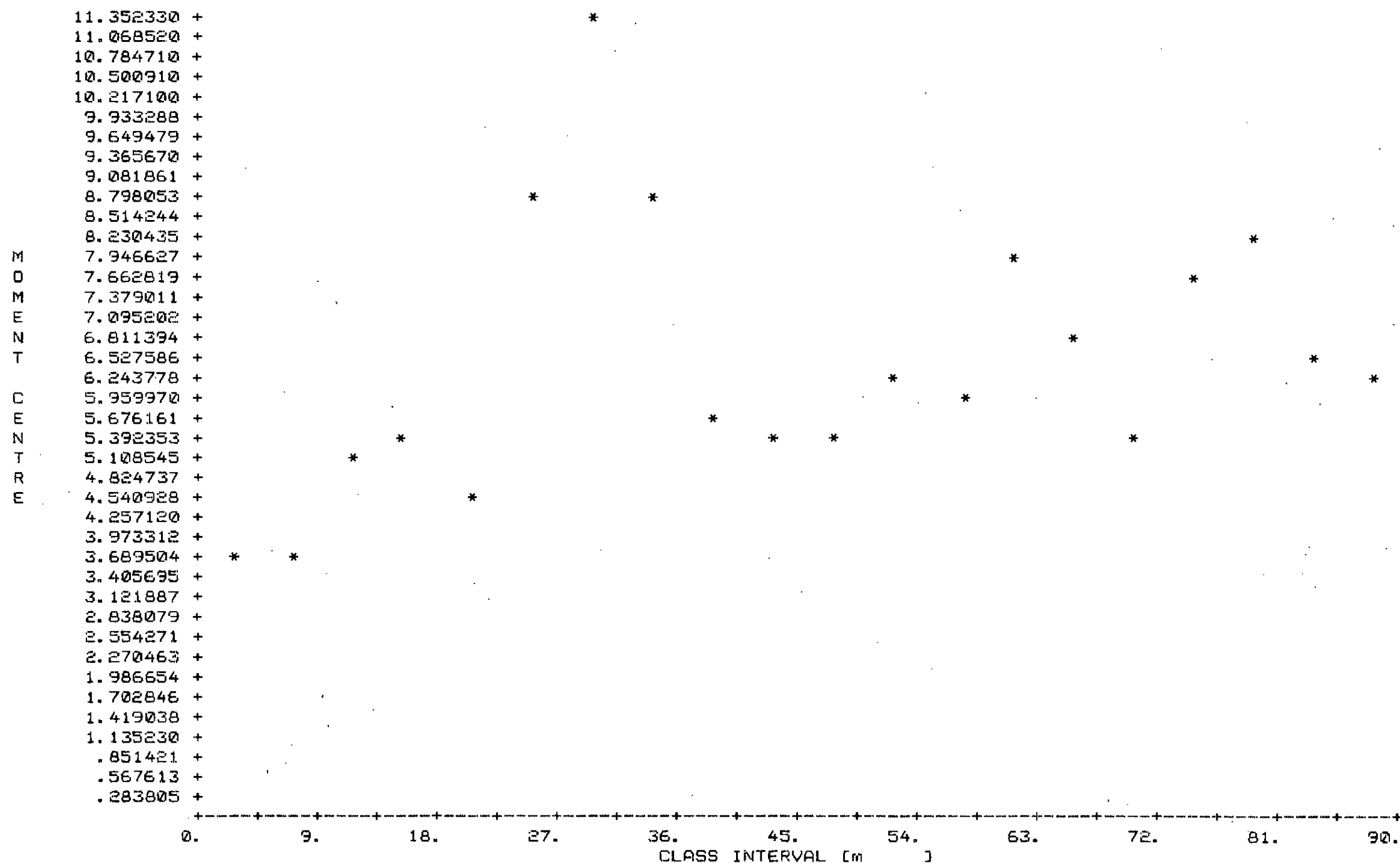
EXTRACTION DATA USED :

DIRECTION : 90.00 [DEGREES]  
 ANGLE OF SPREAD : 15.00 [DEGREES]  
 CLASS INTERVAL : 4.50 [m ]  
 MAXIMUM DISTANCE : 90.00 [m ]  
 OFFSET : .00 [m ]  
 TOP ELEVATION : 1336.00 [m ]  
 BOTTOM ELEVATION : 1000.00 [m ]  
 TRANSFORMATION OF DATA : NONE  
 NORMALIZATION OF DATA : NONE  
 MEAN : 4.246473  
 VARIANCE : 7.493086  
 STANDARD DEVIATION : 2.737350  
 NUMBER OF SAMPLES : 1301

| CLASS | CLASS INTERVAL<br>FROM TO<br>[m ] [m ] | NO OF SAMPLES | DRIFT     | GAMMA [H] | MOMENT CENTRE | AVERAGE DISTANCE<br>[m ] |
|-------|----------------------------------------|---------------|-----------|-----------|---------------|--------------------------|
| 1     | .00 4.50                               | 821           | -1.089902 | 3.567578  | 3.494836      | 1.85                     |
| 2     | 4.50 9.00                              | 476           | -.785714  | 3.390385  | 3.492248      | 6.60                     |
| 3     | 9.00 13.50                             | 301           | .040499   | 4.932462  | 4.903041      | 11.09                    |
| 4     | 13.50 18.00                            | 147           | .284626   | 5.151568  | 5.259610      | 15.27                    |
| 5     | 18.00 22.50                            | 139           | 1.668921  | 4.390900  | 4.409163      | 20.56                    |
| 6     | 22.50 27.00                            | 328           | 3.050641  | 8.632268  | 8.766617      | 25.12                    |
| 7     | 27.00 31.50                            | 852           | 3.401692  | 11.309110 | 11.352330     | 29.50                    |
| 8     | 31.50 36.00                            | 932           | 3.083583  | 8.703078  | 8.611743      | 33.55                    |
| 9     | 36.00 40.50                            | 624           | 2.484599  | 5.653222  | 5.655720      | 38.49                    |
| 10    | 40.50 45.00                            | 679           | 2.250854  | 5.131185  | 5.117967      | 42.69                    |
| 11    | 45.00 49.50                            | 775           | 2.373989  | 5.347963  | 5.345285      | 47.26                    |
| 12    | 49.50 54.00                            | 818           | 2.539475  | 6.024624  | 6.029989      | 51.87                    |
| 13    | 54.00 58.50                            | 1856          | 2.578911  | 5.867644  | 5.863728      | 56.91                    |
| 14    | 58.50 63.00                            | 4978          | 2.874496  | 7.885381  | 7.888516      | 60.71                    |
| 15    | 63.00 67.50                            | 2625          | 2.693595  | 6.629502  | 6.610692      | 65.00                    |
| 16    | 67.50 72.00                            | 1517          | 2.479111  | 5.235057  | 5.243279      | 69.71                    |
| 17    | 72.00 76.50                            | 977           | 2.955732  | 7.528258  | 7.552234      | 74.12                    |
| 18    | 76.50 81.00                            | 629           | 2.936580  | 8.082568  | 8.043331      | 78.65                    |
| 19    | 81.00 85.50                            | 641           | 2.751670  | 6.521248  | 6.518273      | 83.16                    |
| 20    | 85.50 90.00                            | 770           | 2.369026  | 6.081688  | 6.111702      | 87.92                    |

TWO DIMENSIONAL VARIOGRAM

EXTRACTION DATA USED : GEOLOGY 1,2 >.01 2N



THE SYMBOL "\*" INDICATES LESS THAN 30 SAMPLES IN THAT CLASS

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|                                             |                   |            |                  |                                           |
|---------------------------------------------|-------------------|------------|------------------|-------------------------------------------|
| PC-MINE VERSION 1.10                        | CURRAGH RESOURCES | 14/ 6/1986 | SERIAL NO: 20320 | BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC |
| Orebody Modelling and Pit Evaluation System |                   |            |                  | Module : 2.09                             |
| GRUM DEPOSIT (MODEL DATA)                   |                   |            |                  | Page : 2                                  |

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TWO DIMENSIONAL VARIOGRAM

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EXTRACTION DATA USED : *ALL GEOLOGY 2N3.01*

DIRECTION : .00 [DEGREES]  
 ANGLE OF SPREAD : 15.00 [DEGREES]  
 CLASS INTERVAL : 4.50 [m]  
 MAXIMUM DISTANCE : 90.00 [m]  
 OFFSET : .00 [m]  
 TOP ELEVATION : 1336.00 [m]  
 BOTTOM ELEVATION : 1000.00 [m]  
 TRANSFORMATION OF DATA : NONE  
 NORMALIZATION OF DATA : NONE  
 MEAN : 5.299311  
 VARIANCE : 13.070980  
 STANDARD DEVIATION : 3.615381  
 NUMBER OF SAMPLES : 2939

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| CLASS | CLASS INTERVAL | NO OF SAMPLES | DRIFT | GAMMA [H] | MOMENT CENTRE | AVERAGE DISTANCE |
|-------|----------------|---------------|-------|-----------|---------------|------------------|
| FROM  | TO             |               |       |           |               |                  |

---



C 7.693704 +  
 E 7.343990 +  
 E 6.994277 +  
 N 6.644563 +  
 T 6.294849 +  
 R 5.945135 +  
 E 5.595421 +  
 5.245708 +  
 4.895994 +  
 4.546280 +  
 4.196566 +  
 3.846853 +  
 3.497139 +  
 3.147425 +  
 2.797712 +  
 2.447998 +  
 2.098285 +  
 1.748571 +  
 1.398858 +  
 1.049144 +  
 .699430 +  
 ..349717 +



THE SYMBOL "#" INDICATES LESS THAN 30 SAMPLES IN THAT CLASS

-----  
PC-MINE VERSION 1.10      CURRAGH RESOURCES      13/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System      Module : 4.09  
GRUM DEPOSIT (MODEL DATA)      Page : 1  
-----

SURFACE ELEVATION GRID MODEL  
-----

SUMMARY PRINTOUT

FROM RECORD [ 1 ] TO RECORD [ 2 ]

| RECORD | STATUS | TYPE  | DESCRIPTION     | DATE       |
|--------|--------|-------|-----------------|------------|
| -----  | -----  | ----- | -----           | -----      |
| 1      | 1      | USER  | TOPOGRAPHY      | 13/ 6/1986 |
| 2      | 1      | USER  | OVERBURDEN BASE | 13/ 6/1986 |

64W - gum section

PC-MINE VERSION 1.10      CURRAGH RESOURCES      21/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System      Module : 3.09  
GRUM DEPOSIT (MODEL DATA)      Page : 1

## GEOLOGICAL ROCK-TYPE MODEL

DESCRIPTION : GRUM GEOLOGY AND SET CORRECTIONS

CREATED ON : 21/ 6/1986

SECTION ALONG COLUMN : 60 FROM ROW [ 1] TO ROW [ 25] TOP ELEVATION : 1336.00 m BOTTOM ELEVATION : 1088.50 m

[illegible]

[illegible]

## GEOLOGICAL ROCK-TYPE MODEL

DESCRIPTION : GRUM GEOLOGY 2ND SET CORRECTIONS

CREATED ON : 21/ 6/1986

SECTION ALONG COLUMN : 60 FROM ROW [ 51] TO ROW [ 75] TOP ELEVATION : 1336.00 m BOTTOM ELEVATION : 1088.50 m

|    | 51  | 52  | 53  | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70  | 71  | 72  | 73 | 74 | 75 |
|----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|----|----|----|
| 1  | 12  | 12  | 12  | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12  | 12  | 12  | 12 | 12 | 12 |
| 2  | 12  | 12  | 12  | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12  | 12  | 12  | 12 | 12 | 12 |
| 3  | 12  | 12  | 12  | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12  | 12  | 12  | 12 | 12 | 12 |
| 4  | 12  | 12  | 12  | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12  | 12  | 12  | 12 | 12 | 12 |
| 5  | 12  | 12  | 12  | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12  | 12  | 12  | 12 | 12 | 12 |
| 6  | 12  | 12  | 12  | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12  | 12  | 12  | 12 | 12 | 12 |
| 7  | 12  | 12  | 12  | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12  | 12  | 12  | 12 | 12 | 12 |
| 8  | 11  | 11  | 11  | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12  | 12  | 12  | 12 | 12 | 12 |
| 9  | 11  | 11  | 11  | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 12✓ | 12  | 12  | 12 | 12 | 12 |
| 10 | 11  | 11  | 11  | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11  | 11  | 11  | 11 | 11 | 11 |
| 11 | 11  | 11  | 11  | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11  | 11  | 11  | 11 | 11 | 11 |
| 12 | 11  | 11  | 11  | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11  | 11  | 11  | 11 | 11 | 11 |
| 13 | 11  | 11  | 11  | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11  | 11  | 11  | 11 | 11 | 11 |
| 14 | 11  | 11  | 11  | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11  | 11  | 11  | 11 | 11 | 11 |
| 15 | 11  | 11  | 11  | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11  | 11  | 11  | 11 | 11 | 11 |
| 16 | 11  | 11  | 11  | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11  | 11  | 11  | 11 | 11 | 11 |
| 17 | 11  | 11  | 11  | 11 | 11 | 10 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11  | 11  | 11  | 11 | 11 | 11 |
| 18 | 11  | 11  | 11  | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11  | 11  | 11  | 11 | 11 | 11 |
| 19 | 11  | 10  | 10  | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 1  | 6  | 1  | 11 | 11 | 11 | 11  | 11  | 11  | 11 | 11 | 11 |
| 20 | 10  | 10  | 10  | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 1  | 6  | 1  | 11 | 11 | 11 | 11  | 11  | 11  | 11 | 10 | 10 |
| 21 | 10  | 10  | 10  | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 6  | 6  | 10 | 10 | 10 | X7X | 10  | 10  | 10 | 10 | 10 |
| 22 | 10  | 10  | 10  | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 1  | 6  | 6  | 10 | 10 | 10  | 10  | 10  | 10 | 10 | 4  |
| 23 | 10  | 10  | 10  | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 1  | 1  | 6  | 6  | 10 | 10 | 10  | X7X | 10  | 10 | 10 | 10 |
| 24 | 10  | 10  | 10  | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 6  | 6  | 5  | 1  | 10 | 10 | 10  | X7X | 10  | 10 | 10 | 10 |
| 25 | 10  | 10  | 10  | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 1  | 5  | 1  | 10 | 10 | 10 | X7X | 10  | 10  | 10 | 10 | 10 |
| 26 | 10  | 10  | 10  | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 4  | 4  | 10 | 10 | 10 | 10  | X7X | 10  | 10 | 10 | 10 |
| 27 | 10  | 10  | 10  | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 4  | 4  | 4  | 10 | 10 | 10  | 10  | X7X | 10 | 10 | 10 |
| 28 | 10  | 10  | 10  | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 2  | 4  | 10 | 10 | 10 | 10  | 10  | X7X | 10 | 10 | 10 |
| 29 | 10  | 10  | 10  | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 2  | 10 | 10 | 10 | 10  | 10  | 2   | 2  | 10 | 10 |
| 30 | 10  | 10  | 10  | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 1  | 3  | 10 | 10 | 10  | 10  | 10  | 10 | 10 | 10 |
| 31 | 10  | 10  | 10  | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 1  | 3  | 10 | 10 | 10  | 10  | 10  | 10 | 10 | 10 |
| 32 | 10  | 10  | 10  | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 1  | 3  | 10 | 10 | 10  | 10  | 10  | 10 | 10 | 10 |
| 33 | 10  | 10  | 10  | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 3  | 10 | 10 | 10  | 10  | 10  | 10 | 10 | 10 |
| 34 | 10  | 10  | 10  | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 1  | 10 | 10 | 10  | 10  | 10  | 10 | 10 | 10 |
| 35 | 10  | 10  | 10  | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 1  | 1  | 3  | 10  | 10  | 10  | 1  | 10 | 10 |
| 36 | 10  | 10  | 10  | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 1  | 1  | 5  | 10  | 10  | 10  | 10 | 10 | 10 |
| 37 | 10  | 10  | 10  | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 1  | 1  | 5  | 10  | 10  | 10  | 10 | 5  | 10 |
| 38 | 10  | 10  | 10  | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 1  | 5  | 5  | 10 | 10 | 10  | 10  | 10  | 10 | 10 | 10 |
| 39 | 10  | 10  | 10  | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 1  | 5  | 10 | 10 | 10 | 10  | 10  | 10  | 10 | 10 | 10 |
| 40 | X7X | 10  | 10  | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 1  | 1  | 5  | 10 | 10 | 10 | 10  | 10  | 10  | 10 | 10 | 10 |
| 41 | 3   | 10  | 10  | 10 | 10 | 10 | 10 | 10 | 10 | 1  | 1  | 1  | 1  | 1  | 5  | 10 | 10 | 10 | 10 | 10  | 10  | 10  | 10 | 10 | 10 |
| 42 | 2   | 2   | 2   | 1  | 1  | 2  | 1  | 2  | 2  | 10 | 10 | 10 | 1  | 1  | 10 | 10 | 10 | 10 | 10 | 10  | 10  | 10  | 10 | 10 | 10 |
| 43 | 3   | X7X | X7X | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10  | 10  | 10  | 10 | 10 | 10 |

## GEOLOGICAL ROCK-TYPE MODEL

DESCRIPTION : GRUM GEOLOGY AND SET CORRECTIONS

CREATED ON : 21/ 6/1986

SECTION ALONG COLUMN : 60 FROM ROW [ 26] TO ROW [ 50] TOP ELEVATION : 1336.00 m BOTTOM ELEVATION : 1088.50 m

[illegible]

[illegible]



PC-MINE VERSION 1.10      CURRAGH RESOURCES      21/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (EC) INC  
Orebody Modelling and Pit Evaluation System      Module : 3.09  
GRUM DEPOSIT (MODEL DATA)      Page : 6

DESCRIPTION : GRUM GEOLOGY 2ND SET CORRECTIONS

CREATED ON : 21/ 6/1986

SECTION ALONG COLUMN : 60 FROM ROW [ 1 ] TO ROW [ 25 ] TOP ELEVATION : 1336.00 m BOTTOM ELEVATION : 1088.50 m

[illegible]

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PC-MINE VERSION 1.10      CURRAGH RESOURCES      21/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System  
GRUM DEPOSIT (MODEL DATA)  
  
Module : 3.09  
Page : 7
```

## GEOLOGICAL ROCK-TYPE MODEL

DESCRIPTION : GRUM GEOLOGY 2ND SET CORRECTIONS

CREATED ON : 21/ 6/1986

SECTION ALONG COLUMN : 60 FROM ROW [ 26] TO ROW [ 50] TOP ELEVATION : 1336.00 m BOTTOM ELEVATION : 1088.50 m

[illegible]

PC-MINE VERSION 1.10      CURRAGH RESOURCES      21/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Drebody Modelling and Pit Evaluation System      Module : 3.09  
GRUM DEPOSIT (MODEL DATA)      Page : 8

## GEOLOGICAL ROCK-TYPE MODEL

DESCRIPTION : GRUM GEOLOGY 2ND SET CORRECTIONS

CREATED ON : 21/ 6/1986

SECTION ALONG COLUMN : 60 FROM ROW [ 51] TO ROW [ 75] TOP ELEVATION : 1336.00 m BOTTOM ELEVATION : 1088.50 m

[illegible]

9C-MINE VERSION 1.10      CURRAGH RESOURCES      21/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System      Module : 3.09  
GRUM DEPOSIT (MODEL DATA)      Page : 9

## GEOLOGICAL ROCK-TYPE MODEL

DESCRIPTION : GRUM GEOLOGY 2ND SET CORRECTIONS

CREATED ON : 21/ 6/1986

SECTION ALONG COLUMN : 60 FROM ROW [ 76] TO ROW [100] TOP ELEVATION : 1336.00 m BOTTOM ELEVATION : 1088.50 m

[illegible]

PC-MINE VERSION 1.10      CURRAGH RESOURCES      21/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System      Module : 3.09  
GRUM DEPOSIT (MODEL DATA)      Page : 10

## GEOLOGICAL ROCK-TYPE MODEL

DESCRIPTION : GRUM GEOLOGY AND SET CORRECTIONS

CREATED ON : 21/ 6/1986

SECTION ALONG COLUMN : 60 FROM ROW [101] TO ROW [110] TOP ELEVATION : 1336.00 m BOTTOM ELEVATION : 1088.50 m

101 102 103 104 105 106 107 108 109 110

[illegible]

-----  
PC-MINE VERSION 1.10      CURRAGH RESOURCES      22/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System      Module : 3.03  
GRUM DEPOSIT (MODEL DATA)      Page : 1  
-----

INVERSE DISTANCE MODELLING  
-----

DESCRIPTION : ZN INTERPOLATION

OVERWRITING AN EXISTING MODEL

GRADE MODEL FOR LABEL 3 (Zn % )

FROM COLUMN [ 1 ] TO COLUMN [ 80 ] FROM ROW [ 1 ] TO ROW [110]

ROCK-TYPES USED FOR MODELLING :

ROCK-TYPE MODELLED:      RESTRICTING ROCK-TYPE:  
-----

|   |   |
|---|---|
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |
| 8 | 8 |
| 9 | 9 |

MAXIMUM RANGE FOR INCLUSION OF SAMPLES : 75.00 [m ]  
MINIMUM NUMBER OF SAMPLES TO BE USED TO INTERPOLATE ONE BLOCK : 2  
MAXIMUM NUMBER OF SAMPLES TO BE USED TO INTERPOLATE ONE BLOCK : 8

WEIGHTING BY INVERSE DISTANCE SQUARED

HORIZONTAL ANGLE OF ANISOTROPY : 180.00 [DEGREES]  
VERTICAL ANGLE OF ANISOTROPY : -11.00 [DEGREES]  
HORIZONTAL ANISOTROPY FACTOR : 1.41

---

|                                             |                   |            |                  |                                           |
|---------------------------------------------|-------------------|------------|------------------|-------------------------------------------|
| PC-MINE VERSION 1.10                        | CURRAGH RESOURCES | 21/ 6/1986 | SERIAL NO: 20320 | BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC |
| Orebody Modelling and Pit Evaluation System |                   |            |                  | Module : 3.03                             |
| GRUM DEPOSIT (MODEL DATA)                   |                   |            |                  | Page : 1                                  |

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# INVERSE DISTANCE MODELLING

DESCRIPTION : sg interpolation

OVERWRITING AN EXISTING MODEL

DENSITY MODEL

FROM COLUMN [ 1 ] TO COLUMN [ 80 ] FROM ROW [ 1 ] TO ROW [110]

ROCK-TYPES USED FOR MODELLING :

|                     |                        |
|---------------------|------------------------|
| ROCK-TYPE MODELLED: | RESTRICTING ROCK-TYPE: |
|---------------------|------------------------|

|   |   |
|---|---|
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |
| 8 | 8 |
| 9 | 9 |

|                                                               |   |            |
|---------------------------------------------------------------|---|------------|
| MAXIMUM RANGE FOR INCLUSION OF SAMPLES                        | : | 75.00 [m ] |
| MINIMUM NUMBER OF SAMPLES TO BE USED TO INTERPOLATE ONE BLOCK | : | 2          |
| MAXIMUM NUMBER OF SAMPLES TO BE USED TO INTERPOLATE ONE BLOCK | : | 8          |

WEIGHTING BY INVERSE DISTANCE SQUARED

|                                |   |                  |
|--------------------------------|---|------------------|
| HORIZONTAL ANGLE OF ANISOTROPY | : | 180.00 [DEGREES] |
| VERTICAL ANGLE OF ANISOTROPY   | : | -11.00 [DEGREES] |
| HORIZONTAL ANISOTROPY FACTOR   | : | 1.41             |
| VERTICAL ANISOTROPY FACTOR     | : | 1.41             |

-----  
PC-MINE VERSION 1.10      CURRAGH RESOURCES      22/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System      Module : 3.03  
GRUM DEPOSIT (MODEL DATA)      Page : 1  
-----

INVERSE DISTANCE MODELLING  
-----

DESCRIPTION : PB INTERPOLATION

OVERWRITING AN EXISTING MODEL

GRADE MODEL FOR LABEL 2 (Pb % )

FROM COLUMN [ 1 ] TO COLUMN [ 80 ] FROM ROW [ 1 ] TO ROW [110]

ROCK-TYPES USED FOR MODELLING :

ROCK-TYPE MODELLED:      RESTRICTING ROCK-TYPE:  
-----

|   |   |
|---|---|
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |
| 8 | 8 |
| 9 | 9 |

MAXIMUM RANGE FOR INCLUSION OF SAMPLES : 75.00 [m ]  
MINIMUM NUMBER OF SAMPLES TO BE USED TO INTERPOLATE ONE BLOCK : 2  
MAXIMUM NUMBER OF SAMPLES TO BE USED TO INTERPOLATE ONE BLOCK : 8

WEIGHTING BY INVERSE DISTANCE SQUARED

HORIZONTAL ANGLE OF ANISOTROPY : 180.00 [DEGREES]  
VERTICAL ANGLE OF ANISOTROPY : -11.00 [DEGREES]  
HORIZONTAL ANISOTROPY FACTOR : 1.41  
VERTICAL ANISOTROPY FACTOR : 1.41

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PC-MINE VERSION 1.10      CURRAGH RESOURCES      22/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
 Orebody Modelling and Pit Evaluation System      Module : 3.03  
 GRUM DEPOSIT (MODEL DATA)      Page : 1

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INVERSE DISTANCE MODELLING

---

DESCRIPTION : SG INTERPOLATION

OVERWRITING AN EXISTING MODEL

DENSITY MODEL

FROM COLUMN [ 1 ] TO COLUMN [ 80 ] FROM ROW [ 1 ] TO ROW [ 110 ]

ROCK-TYPES USED FOR MODELLING :

ROCK-TYPE MODELLED:      RESTRICTING ROCK-TYPE:

---

03  
 180  
 170

|   |   |
|---|---|
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |
| 8 | 8 |
| 9 | 9 |

MAXIMUM RANGE FOR INCLUSION OF SAMPLES : 75.00 [m ]  
 MINIMUM NUMBER OF SAMPLES TO BE USED TO INTERPOLATE ONE BLOCK : 2  
 MAXIMUM NUMBER OF SAMPLES TO BE USED TO INTERPOLATE ONE BLOCK : 8

WEIGHTING BY INVERSE DISTANCE SQUARED

HORIZONTAL ANGLE OF ANISOTROPY : 180.00 [DEGREES]  
 VERTICAL ANGLE OF ANISOTROPY : -11.00 [DEGREES]  
 HORIZONTAL ANISOTROPY FACTOR : 1.41  
 VERTICAL ANISOTROPY FACTOR : 1.41

[illegible]







GRADE MODEL FOR LABEL 5 [Au g/m]

DESCRIPTION : NUL MODEL

CREATED ON : 21/ 6/1986

BENCH : 43 CREST ELEVATION : 1124.50 m TOE ELEVATION : 1120.00 m COLUMN [ 25] TO COLUMN [ 40] ROW [ 55] TO ROW [ 70]

[illegible]







PRINTOUT OF ROCK-TYPE INFORMATION FOR RECORDS [ 1 ] TO [ 13 ]

GEOLOGICAL AND COST DATA

| REC STAT ROCK DESCRIPTION |   |                                                                        | COST DATA [CDN \$ PER bcm ] |          |         |                  |                    |
|---------------------------|---|------------------------------------------------------------------------|-----------------------------|----------|---------|------------------|--------------------|
| CODE                      |   |                                                                        | DRILLING                    | BLASTING | LOADING | FIXED<br>HAULAGE | MINING<br>SERVICES |
| 1                         | 1 | 0 AIR                                                                  | .0000                       | .0000    | .0000   | .0000            | .0000              |
| 2                         | 1 | 1 A TYPE / 2ND CODE A, A4, C, E, L                                     | .2510                       | .3380    | .1790   | .0000            | .0000              |
| 3                         | 1 | 2 A4 TYPE / 2ND CODE A, A4, C, D, E, E4, G, H, L & AD, AE4, AG, AH     | .2510                       | .3380    | .1790   | .0000            | .0000              |
| 4                         | 1 | 3 C TYPE / 2ND CODE A, C, E, L                                         | .2510                       | .3380    | .1790   | .0000            | .0000              |
| 5                         | 1 | 4 D TYPE / 2ND CODE A, A4, C, D, E, E4, G, H, L & CA4, CD, CE4, CG, CH | .2510                       | .3380    | .1790   | .0000            | .0000              |
| 6                         | 1 | 5 E TYPE / 2ND CODE A, A4, C, AE, AL                                   | .2510                       | .3380    | .1790   | .0000            | .0000              |
| 7                         | 1 | 6 E4 TYPE / 2ND CODE A, A4, C, D, E, E4, G, H, L & ED, EE4, EG, EH     | .2510                       | .3380    | .1790   | .0000            | .0000              |
| 8                         | 1 | 7 G TYPE / 2ND CODE A, A4, C, D, E, E4, G, H, L                        | .2510                       | .3380    | .1790   | .0000            | .0000              |
| 9                         | 1 | 8 H TYPE / 2ND CODE A, A4, C, D, E, E4, G, H, L                        | .2510                       | .3380    | .1790   | .0000            | .0000              |
| 10                        | 1 | 9 L TYPE / 2ND CODE A, A4, C, D, E, E4, G, H, L                        | .2510                       | .3380    | .1790   | .0000            | .0000              |
| 11                        | 1 | 10 WASTE ROCK                                                          | .2830                       | .3380    | .1790   | .0000            | .0000              |
| 12                        | 1 | 11 OVERBURDEN                                                          | .0000                       | .0000    | .1790   | .0000            | .0000              |
| 13                        | 1 | 12 OVERBURDEN / ABOVE TOPOGRAPHY CODE                                  | .0000                       | .0000    | .1790   | .0000            | .0000              |

PRINTOUT OF COSTS INFORMATION FOR RECORDS [ 2] to [ 2]

DETAILED PRINTOUT FOR RECORD [ 2]

DATE CAPTURED : 23/ 6/1986

RECORD DESCRIPTION : Mining and revenue -- June 17/86 metal prices

GENERAL COST INFORMATION

MINE CALL FACTOR : 90.00 PERCENT  
 ORE/STOCKPILE CUT-OFF GRADE : 6.000  
 STOCKPILE/WASTE CUT-OFF GRADE : 4.000  
 ORE PROCESSING COST : 5.08  
 MINE ADMIN COST : 1.47  
 HEAD OFFICE ADMIN COST : 1.50  
 SPARE COST # 1 : 7.69  
 SPARE COST # 2 : 20.42

HAULAGE INFORMATION

|           | PIT EXIT<br>ELEVATIONS<br>[m ] | AVERAGE<br>IN-PIT HAULAGE<br>[m ] | AVERAGE<br>SURFACE HAULAGE<br>[m ] | HORIZONTAL<br>HAULAGE COST<br>[CDN \$ /bcm/100 m ] | UPWARDS VERTICAL<br>HAULAGE COST<br>[CDN \$ /bcm/10 m ] | DOWNWARDS VERTICAL<br>HAULAGE COST<br>[CDN \$ /bcm/10 m ] |
|-----------|--------------------------------|-----------------------------------|------------------------------------|----------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------------|
| ORE       | 1260.00                        | 800.00                            | 14700.00                           | .0100                                              | .0290                                                   | .0120                                                     |
| STOCKPILE | 1260.00                        | 800.00                            | 1000.00                            | .0100                                              | .0290                                                   | .0120                                                     |
| WASTE     | 1260.00                        | 800.00                            | 1000.00                            | .0080                                              | .0240                                                   | .0100                                                     |

PRINTOUT OF COSTS INFORMATION FOR RECORDS [ 2] to [ 2]

DETAILED PRINTOUT FOR RECORD [ 2]

REVENUE / HEAD GRADE INFORMATION

NO OF REVENUE / HEAD GRADE CURVES : 5

DESCRIPTION : Pb + Zn (combined) -- ZERO reven DESCRIPTION : Revenue for Pb

| POINT | HEAD GRADE<br>[Pb+Zn %] | REVENUE<br>[CDN \$ /Pb+Zn %] |
|-------|-------------------------|------------------------------|
| 1     | .000                    | .000                         |
| 2     | 60.000                  | .000                         |

| POINT | HEAD GRADE<br>[Pb %] | REVENUE<br>[CDN \$ /Pb %] |
|-------|----------------------|---------------------------|
| 1     | .000                 | .000                      |
| 2     | 20.000               | 114.552                   |

DESCRIPTION : Revenue for Zn

| POINT | HEAD GRADE<br>[Zn %] | REVENUE<br>[CDN \$ /Zn %] |
|-------|----------------------|---------------------------|
| 1     | .000                 | .000                      |
| 2     | 20.000               | 196.692                   |

DESCRIPTION : Revenue for Ag

| POINT | HEAD GRADE<br>[Ag g/m] | REVENUE<br>[CDN \$ /Ag g/m] |
|-------|------------------------|-----------------------------|
| 1     | .000                   | .000                        |
| 2     | 300.000                | 64.638                      |

PRINTOUT OF COSTS INFORMATION FOR RECORDS [ 2] to [ 2]

DETAILED PRINTOUT FOR RECORD [ 2]

DESCRIPTION : Revenue for Au

| POINT | HEAD GRADE<br>[Au g/m] | REVENUE<br>[CDN \$ /Au g/m] |
|-------|------------------------|-----------------------------|
| 1     | .000                   | .000                        |
| 2     | 10.000                 | 142.967                     |

CONSTRUCTION OF THE ECONOMIC MODEL

COST DATA USED :

PRINTOUT OF ROCK-TYPE INFORMATION FOR RECORDS [ 1 ] TO [ 13 ]

GEOLOGICAL AND COST DATA

| REC STAT ROCK DESCRIPTION |   |                                                                        | COST DATA [CDN \$ PER bcm ] |          |         |                  |                    |
|---------------------------|---|------------------------------------------------------------------------|-----------------------------|----------|---------|------------------|--------------------|
| CODE                      |   |                                                                        | DRILLING                    | BLASTING | LOADING | FIXED<br>HAULAGE | MINING<br>SERVICES |
| 1                         | 1 | 0 AIR                                                                  | .0000                       | .0000    | .0000   | .0000            | .0000              |
| 2                         | 1 | 1 A TYPE / 2ND CODE A, A4, C, E, L                                     | .2510                       | .3380    | .1790   | .0000            | .0000              |
| 3                         | 1 | 2 A4 TYPE / 2ND CODE A, A4, C, D, E, E4, G, H, L & AD, AE4, AG, AH     | .2510                       | .3380    | .1790   | .0000            | .0000              |
| 4                         | 1 | 3 C TYPE / 2ND CODE A, C, E, L                                         | .2510                       | .3380    | .1790   | .0000            | .0000              |
| 5                         | 1 | 4 D TYPE / 2ND CODE A, A4, C, D, E, E4, G, H, L & CA4, CD, CE4, CG, CH | .2510                       | .3380    | .1790   | .0000            | .0000              |
| 6                         | 1 | 5 E TYPE / 2ND CODE A, A4, C, AE, AL                                   | .2510                       | .3380    | .1790   | .0000            | .0000              |
| 7                         | 1 | 6 E4 TYPE / 2ND CODE A, A4, C, D, E, E4, G, H, L & ED, EE4, EG, EH     | .2510                       | .3380    | .1790   | .0000            | .0000              |
| 8                         | 1 | 7 G TYPE / 2ND CODE A, A4, C, D, E, E4, G, H, L                        | .2510                       | .3380    | .1790   | .0000            | .0000              |
| 9                         | 1 | 8 H TYPE / 2ND CODE A, A4, C, D, E, E4, G, H, L                        | .2510                       | .3380    | .1790   | .0000            | .0000              |
| 10                        | 1 | 9 L TYPE / 2ND CODE A, A4, C, D, E, E4, G, H, L                        | .2510                       | .3380    | .1790   | .0000            | .0000              |
| 11                        | 1 | 10 WASTE ROCK                                                          | .2830                       | .3380    | .1790   | .0000            | .0000              |
| 12                        | 1 | 11 OVERBURDEN                                                          | .0000                       | .0000    | .1790   | .0000            | .0000              |
| 13                        | 1 | 12 OVERBURDEN / ABOVE TOPOGRAPHY CODE                                  | .0000                       | .0000    | .1790   | .0000            | .0000              |

# CONSTRUCTION OF THE ECONOMIC MODEL

## COST DATA USED :

DETAILED PRINTOUT FOR RECORD [ 2 ]

DATE CAPTURED : 23/ 6/1986

RECORD DESCRIPTION : Mining and revenue -- June 17/86 metal prices

## GENERAL COST INFORMATION

MINE CALL FACTOR : 90.00 PERCENT  
ORE/STOCKPILE CUT-OFF GRADE : 6.000  
STOCKPILE/WASTE CUT-OFF GRADE : 4.000  
ORE PROCESSING COST : 5.08  
MINE ADMIN COST : 1.47  
HEAD OFFICE ADMIN COST : 1.50  
SPARE COST # 1 : 7.69  
SPARE COST # 2 : 20.42

## HAULAGE INFORMATION

|           | PIT EXIT<br>ELEVATIONS<br>[m ] | AVERAGE<br>IN-PIT HAULAGE<br>[m ] | AVERAGE<br>SURFACE HAULAGE<br>[m ] | HORIZONTAL<br>HAULAGE COST<br>[CDN \$ /bcm/100 m ] | UPWARDS VERTICAL<br>HAULAGE COST<br>[CDN \$ /bcm/10 m ] | DOWNWARDS VERTICAL<br>HAULAGE COST<br>[CDN \$ /bcm/10 m ] |
|-----------|--------------------------------|-----------------------------------|------------------------------------|----------------------------------------------------|---------------------------------------------------------|-----------------------------------------------------------|
| ORE       | 1260.00                        | 800.00                            | 14700.00                           | .0100                                              | .0290                                                   | .0120                                                     |
| STOCKPILE | 1260.00                        | 800.00                            | 1000.00                            | .0100                                              | .0290                                                   | .0120                                                     |
| WASTE     | 1260.00                        | 800.00                            | 1000.00                            | .0080                                              | .0240                                                   | .0100                                                     |

CONSTRUCTION OF THE ECONOMIC MODEL

COST DATA USED :

DETAILED PRINTOUT FOR RECORD [ 2 ]

REVENUE / HEAD GRADE INFORMATION

NO OF REVENUE / HEAD GRADE CURVES : 5

DESCRIPTION : Pb + Zn (combined) -- ZERO revenue DESCRIPTION : Revenue for Pb

| POINT | HEAD GRADE<br>[Pb+Zn %] | REVENUE<br>[CDN \$ /Pb+Zn %] |
|-------|-------------------------|------------------------------|
| 1     | .000                    | .000                         |
| 2     | 60.000                  | .000                         |

| POINT | HEAD GRADE<br>[Pb %] | REVENUE<br>[CDN \$ /Pb %] |
|-------|----------------------|---------------------------|
| 1     | .000                 | .000                      |
| 2     | 20.000               | 114.552                   |

DESCRIPTION : Revenue for Zn

| POINT | HEAD GRADE<br>[Zn %] | REVENUE<br>[CDN \$ /Zn %] |
|-------|----------------------|---------------------------|
| 1     | .000                 | .000                      |
| 2     | 20.000               | 196.632                   |

DESCRIPTION : Revenue for Ag

| POINT | HEAD GRADE<br>[Ag g/m] | REVENUE<br>[CDN \$ /Ag g/m] |
|-------|------------------------|-----------------------------|
| 1     | .000                   | .000                        |
| 2     | 300.000                | 64.638                      |

CONSTRUCTION OF THE ECONOMIC MODEL

---

COST DATA USED :

DETAILED PRINTOUT FOR RECORD [ 2]

DESCRIPTION : Revenue for Au

| POINT | HEAD GRADE<br>[Au g/m] | REVENUE<br>[CDN \$ /Au g/m] |
|-------|------------------------|-----------------------------|
| 1     | .000                   | .000                        |
| 2     | 10.000                 | 142.967                     |

TRACE BLOCK IN COLUMN [ 25] ROW [ 55] LEVEL [ 43] ROCK-TYPE CODE : 10 PRIMARY GRADE : .000 [Pb+Zn ]  
 DENSITY : 2.70 [tn/bcm]  
 BLOCK VOLUME : 540.00 [bcm ]  
 BLOCK TONNAGE : 1458.00

ORE-STOCKPILE CUT-OFF GRADE : 6.000 [Pb+Zn ]  
 STOCKPILE-WASTE CUT-OFF GRADE : 4.000 [Pb+Zn ]

VOLUMETRIC MINING COSTS :

|                      |   |      |                       |   |          |
|----------------------|---|------|-----------------------|---|----------|
| UNIT DRILLING COST   | : | .283 | BLOCK DRILLING COST   | : | 152.82 ✓ |
| UNIT BLASTING COST   | : | .338 | BLOCK BLASTING COST   | : | 182.52   |
| UNIT LOADING COST    | : | .179 | BLOCK LOADING COST    | : | 96.66    |
| UNIT SERVICES COST   | : | .000 | BLOCK SERVICES COST   | : | .00      |
| UNIT FIXED HAUL COST | : | .000 | BLOCK FIXED HAUL COST | : | .00      |

VARIABLE HAULAGE COSTS :

|                              |   |      |                             |   |         |                               |   |        |
|------------------------------|---|------|-----------------------------|---|---------|-------------------------------|---|--------|
| UNIT VERTICAL HAULAGE COST   | : | .024 | VERTICAL HAULAGE DISTANCE   | : | 140.00  | BLOCK VERTICAL HAULAGE COST   | : | 181.44 |
| UNIT HORIZONTAL HAULAGE COST | : | .008 | HORIZONTAL HAULAGE DISTANCE | : | 1800.00 | BLOCK HORIZONTAL HAULAGE COST | : | 77.76  |

|                              |   |        |
|------------------------------|---|--------|
| TOTAL BLOCK REVENUE          | : | .00    |
| TOTAL VOLUMETRIC MINING COST | : | 691.20 |
| TOTAL ORE BASED MINING COST  | : | .00    |

|                         |   |        |
|-------------------------|---|--------|
| TOTAL BLOCK MINING COST | : | 691.20 |
|-------------------------|---|--------|

|                       |   |         |
|-----------------------|---|---------|
| BLOCK ECONOMIC VALUE  | : | -691.20 |
| INTEGER STORAGE VALUE | : | -69     |

BLOCK IS CATEGORIZED AS WASTE

TRACE BLOCK IN COLUMN [ 31] ROW [ 56] LEVEL [ 43] ROCK-TYPE CODE : 1 PRIMARY GRADE : 3.451 [Pb+Zn ]  
DENSITY : 3.04 [tn/bcm]  
BLOCK VOLUME : 540.00 [bcm ]  
BLOCK TONNAGE : 1638.90

ORE-STOCKPILE CUT-OFF GRADE : 6.000 [Pb+Zn ]  
STOCKPILE-WASTE CUT-OFF GRADE : 4.000 [Pb+Zn ]

VOLUMETRIC MINING COSTS :

|                      |   |      |                       |   |        |
|----------------------|---|------|-----------------------|---|--------|
| UNIT DRILLING COST   | : | .251 | BLOCK DRILLING COST   | : | 135.54 |
| UNIT BLASTING COST   | : | .338 | BLOCK BLASTING COST   | : | 182.52 |
| UNIT LOADING COST    | : | .179 | BLOCK LOADING COST    | : | 96.66  |
| UNIT SERVICES COST   | : | .000 | BLOCK SERVICES COST   | : | .00    |
| UNIT FIXED HAUL COST | : | .000 | BLOCK FIXED HAUL COST | : | .00    |

VARIABLE HAULAGE COSTS :

|                              |   |      |                             |   |         |                               |   |        |
|------------------------------|---|------|-----------------------------|---|---------|-------------------------------|---|--------|
| UNIT VERTICAL HAULAGE COST   | : | .024 | VERTICAL HAULAGE DISTANCE   | : | 140.00  | BLOCK VERTICAL HAULAGE COST   | : | 181.44 |
| UNIT HORIZONTAL HAULAGE COST | : | .008 | HORIZONTAL HAULAGE DISTANCE | : | 1800.00 | BLOCK HORIZONTAL HAULAGE COST | : | 77.76  |

|                              |   |        |
|------------------------------|---|--------|
| TOTAL BLOCK REVENUE          | : | .00    |
| TOTAL VOLUMETRIC MINING COST | : | 673.92 |
| TOTAL ORE BASED MINING COST  | : | .00    |

|                         |   |        |
|-------------------------|---|--------|
| TOTAL BLOCK MINING COST | : | 673.92 |
|-------------------------|---|--------|

|                       |   |         |
|-----------------------|---|---------|
| BLOCK ECONOMIC VALUE  | : | -673.92 |
| INTEGER STORAGE VALUE | : | -67     |

BLOCK IS CATEGORIZED AS WASTE

TRACE BLOCK IN COLUMN [ 31] ROW [ 61] LEVEL [ 43] ROCK-TYPE CODE : 2 PRIMARY GRADE : 6.125 [Pb+Zn ]  
 DENSITY : 3.13 [tn/bcm]  
 BLOCK VOLUME : 540.00 [bcm ]  
 BLOCK TONNAGE : 1689.12

ORE-STOCKPILE CUT-OFF GRADE : 6.000 [Pb+Zn ]  
 STOCKPILE-WASTE CUT-OFF GRADE : 4.000 [Pb+Zn ]

| LABEL: | UNITS: | GRADE: | REVENUE: | RECOVERY: | BLOCK REVENUE: | CUM. REVENUE: |
|--------|--------|--------|----------|-----------|----------------|---------------|
| 1      | Pb+Zn  | 6.13   | .00      | 90.00     | .00            | .00           |
| 2      | Pb %   | 2.72   | 11.86    | 90.00     | 18032.49       | 18032.49      |
| 3      | Zn %   | 3.40   | 23.71    | 90.00     | 36040.01       | 54072.50      |
| 4      | Ag g/m | 40.00  | 5.60     | 90.00     | 8516.14        | 62588.64      |
| 5      | Au g/m | 1.01   | 4.77     | 90.00     | 7251.10        | 69839.74      |

VOLUMETRIC MINING COSTS :

|                        |      |                         |        |
|------------------------|------|-------------------------|--------|
| UNIT DRILLING COST :   | .251 | BLOCK DRILLING COST :   | 135.54 |
| UNIT BLASTING COST :   | .338 | BLOCK BLASTING COST :   | 182.52 |
| UNIT LOADING COST :    | .179 | BLOCK LOADING COST :    | 96.66  |
| UNIT SERVICES COST :   | .000 | BLOCK SERVICES COST :   | .00    |
| UNIT FIXED HAUL COST : | .000 | BLOCK FIXED HAUL COST : | .00    |

VARIABLE HAULAGE COSTS :

|                                |      |                               |          |                                 |        |
|--------------------------------|------|-------------------------------|----------|---------------------------------|--------|
| UNIT VERTICAL HAULAGE COST :   | .029 | VERTICAL HAULAGE DISTANCE :   | 140.00   | BLOCK VERTICAL HAULAGE COST :   | 219.24 |
| UNIT HORIZONTAL HAULAGE COST : | .010 | HORIZONTAL HAULAGE DISTANCE : | 15500.00 | BLOCK HORIZONTAL HAULAGE COST : | 837.00 |

ORE BASED MINING COSTS :

|                               |        |                                |          |
|-------------------------------|--------|--------------------------------|----------|
| UNIT PROCESSING COST :        | 5.079  | BLOCK PROCESSING COST :        | 8579.04  |
| UNIT MINE ADMIN COST :        | 1.469  | BLOCK MINE ADMIN COST :        | 2481.32  |
| UNIT HEAD OFFICE ADMIN COST : | 1.503  | BLOCK HEAD OFFICE ADMIN COST : | 2538.75  |
| UNIT SPARE COST # 1 :         | 7.691  | BLOCK SPARE COST # 1 :         | 12991.02 |
| UNIT SPARE COST # 2 :         | 20.420 | BLOCK SPARE COST # 2 :         | 34491.83 |

TOTAL BLOCK REVENUE : 69839.74  
 TOTAL VOLUMETRIC MINING COST : 1470.96  
 TOTAL ORE BASED MINING COST : 61081.96

TOTAL BLOCK MINING COST : 62552.92

BLOCK ECONOMIC VALUE : 7286.82  
 INTEGER STORAGE VALUE : 729

BLOCK IS CATEGORIZED AS ORE

TRACE BLOCK IN COLUMN [ 34] ROW [ 63] LEVEL [ 43] ROCK-TYPE CODE : 2 PRIMARY GRADE : 7.362 [Pb+Zn]  
DENSITY : 3.16 [tn/bcm]  
BLOCK VOLUME : 540.00 [bcm]  
BLOCK TONNAGE : 1705.32

ORE-STOCKPILE CUT-OFF GRADE : 6.000 [Pb+Zn]  
STOCKPILE-WASTE CUT-OFF GRADE : 4.000 [Pb+Zn]

| LABEL: | UNITS: | GRADE: | REVENUE: | RECOVERY: | BLOCK REVENUE: | CUM. REVENUE: |
|--------|--------|--------|----------|-----------|----------------|---------------|
| 1      | Pb+Zn  | 7.36   | .00      | 90.00     | .00            | .00           |
| 2      | Pb %   | 3.27   | 14.21    | 90.00     | 21813.13       | 21813.13      |
| 3      | Zn %   | 4.10   | 28.57    | 90.00     | 43844.72       | 65657.84      |
| 4      | Ag g/m | 43.00  | 6.02     | 90.00     | 9242.66        | 74900.50      |
| 5      | Au g/m | .94    | 4.44     | 90.00     | 6821.02        | 81721.52      |

#### VOLUMETRIC MINING COSTS :

|                        |      |                         |        |
|------------------------|------|-------------------------|--------|
| UNIT DRILLING COST :   | .251 | BLOCK DRILLING COST :   | 135.54 |
| UNIT BLASTING COST :   | .338 | BLOCK BLASTING COST :   | 182.52 |
| UNIT LOADING COST :    | .179 | BLOCK LOADING COST :    | 96.66  |
| UNIT SERVICES COST :   | .000 | BLOCK SERVICES COST :   | .00    |
| UNIT FIXED HAUL COST : | .000 | BLOCK FIXED HAUL COST : | .00    |

#### VARIABLE HAULAGE COSTS :

|                                |      |                               |          |                                 |        |
|--------------------------------|------|-------------------------------|----------|---------------------------------|--------|
| UNIT VERTICAL HAULAGE COST :   | .029 | VERTICAL HAULAGE DISTANCE :   | 140.00   | BLOCK VERTICAL HAULAGE COST :   | 219.24 |
| UNIT HORIZONTAL HAULAGE COST : | .010 | HORIZONTAL HAULAGE DISTANCE : | 15500.00 | BLOCK HORIZONTAL HAULAGE COST : | 837.00 |

#### ORE BASED MINING COSTS :

|                               |        |                                |          |
|-------------------------------|--------|--------------------------------|----------|
| UNIT PROCESSING COST :        | 5.079  | BLOCK PROCESSING COST :        | 8661.32  |
| UNIT MINE ADMIN COST :        | 1.459  | BLOCK MINE ADMIN COST :        | 2505.11  |
| UNIT HEAD OFFICE ADMIN COST : | 1.503  | BLOCK HEAD OFFICE ADMIN COST : | 2563.10  |
| UNIT SPARE COST # 1 :         | 7.691  | BLOCK SPARE COST # 1 :         | 13115.62 |
| UNIT SPARE COST # 2 :         | 20.420 | BLOCK SPARE COST # 2 :         | 34822.63 |

TOTAL BLOCK REVENUE : 81721.52  
TOTAL VOLUMETRIC MINING COST : 1470.96  
TOTAL ORE BASED MINING COST : 61667.78

TOTAL BLOCK MINING COST : 63138.74

BLOCK ECONOMIC VALUE : 18582.77  
INTEGER STORAGE VALUE : 1858

BLOCK IS CATEGORIZED AS ORE

TRACE BLOCK IN COLUMN [ 32] ROW [ 67] LEVEL [ 43] ROCK-TYPE CODE : 6 PRIMARY GRADE : 19.737 [Pb+Zn]  
DENSITY : 4.44 [tn/bcm]  
BLOCK VOLUME : 540.00 [bcm]  
BLOCK TONNAGE : 2395.98

ORE-STOCKPILE CUT-OFF GRADE : 6.000 [Pb+Zn]  
STOCKPILE-WASTE CUT-OFF GRADE : 4.000 [Pb+Zn]

| LABEL: | UNITS: | GRADE: | REVENUE: | RECOVERY: | BLOCK REVENUE: | CUM. REVENUE: |
|--------|--------|--------|----------|-----------|----------------|---------------|
| 1      | Pb+Zn  | 19.74  | .00      | 90.00     | .00            | .00           |
| 2      | Pb %   | 5.52   | 24.04    | 90.00     | 51833.24       | 51833.24      |
| 3      | Zn %   | 14.22  | 99.12    | 90.00     | 213734.90      | 265568.20     |
| 4      | Ag g/m | 97.00  | 13.58    | 90.00     | 29293.91       | 294862.10     |
| 5      | Au g/m | 1.12   | 5.30     | 90.00     | 11424.97       | 306287.00     |

VOLUMETRIC MINING COSTS :

|                        |      |                         |        |
|------------------------|------|-------------------------|--------|
| UNIT DRILLING COST :   | .251 | BLOCK DRILLING COST :   | 135.54 |
| UNIT BLASTING COST :   | .338 | BLOCK BLASTING COST :   | 182.52 |
| UNIT LOADING COST :    | .179 | BLOCK LOADING COST :    | 96.66  |
| UNIT SERVICES COST :   | .000 | BLOCK SERVICES COST :   | .00    |
| UNIT FIXED HAUL COST : | .000 | BLOCK FIXED HAUL COST : | .00    |

VARIABLE HAULAGE COSTS :

|                                |      |                               |          |                                 |        |
|--------------------------------|------|-------------------------------|----------|---------------------------------|--------|
| UNIT VERTICAL HAULAGE COST :   | .029 | VERTICAL HAULAGE DISTANCE :   | 140.00   | BLOCK VERTICAL HAULAGE COST :   | 219.24 |
| UNIT HORIZONTAL HAULAGE COST : | .010 | HORIZONTAL HAULAGE DISTANCE : | 15500.00 | BLOCK HORIZONTAL HAULAGE COST : | 837.00 |

ORE BASED MINING COSTS :

|                               |        |                                |          |
|-------------------------------|--------|--------------------------------|----------|
| UNIT PROCESSING COST :        | 5.079  | BLOCK PROCESSING COST :        | 12169.18 |
| UNIT MINE ADMIN COST :        | 1.469  | BLOCK MINE ADMIN COST :        | 3519.69  |
| UNIT HEAD OFFICE ADMIN COST : | 1.503  | BLOCK HEAD OFFICE ADMIN COST : | 3601.16  |
| UNIT SPARE COST # 1 :         | 7.691  | BLOCK SPARE COST # 1 :         | 18427.48 |
| UNIT SPARE COST # 2 :         | 20.420 | BLOCK SPARE COST # 2 :         | 48925.91 |

TOTAL BLOCK REVENUE : 306287.00  
TOTAL VOLUMETRIC MINING COST : 1470.96  
TOTAL ORE BASED MINING COST : 86643.42

TOTAL BLOCK MINING COST : 88114.38

BLOCK ECONOMIC VALUE : 218172.70  
INTEGER STORAGE VALUE : 21817

BLOCK IS CATEGORIZED AS ORE

PC-MINE VERSION 1.10 CURRAGH RESOURCES  
Orebody Modelling and Pit Evaluation System  
GRUM DEPOSIT (MODEL DATA)

8/ 7/1986

SERIAL NO: 20320

BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Module : 4.12  
Page :

# MINING RESERVE EVALUATION

DESCRIPTION : Grum 8606 Pit 2 Reserve:

TOP SURFACE GRID RECORD : 1 TOPOGRAPHY  
BOTTOM SURFACE GRID RECORD : 26 Grum Pit #2

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

| BENCH | CREST   | TOE     | VOLUME      | DENSITY  | TONNAGE       | A V E R A G E G R A D E S |         |         |          |          | ECONOMIC<br>FACTOR |
|-------|---------|---------|-------------|----------|---------------|---------------------------|---------|---------|----------|----------|--------------------|
|       | [m ]    | [m ]    | [bcm x1000] | [tn/bcm] | [ TONS x1000] | [Pb+Zn ]                  | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] | [CDN \$ x1000]     |
| 1     | 1336.00 | 1324.00 | .00         | .000     | .00           | .000                      | .000    | .000    | .000     | .000     | .00                |
| 2     | 1324.00 | 1312.00 | 117.68      | 2.100    | 247.14        | .000                      | .000    | .000    | .000     | .000     | -44.13             |
| 3     | 1312.00 | 1300.00 | 1058.00     | 2.388    | 2526.05       | .000                      | .000    | .000    | .000     | .000     | -698.98            |
| 4     | 1300.00 | 1295.50 | 906.78      | 2.367    | 2146.52       | .000                      | .000    | .000    | .000     | .000     | -573.30            |
| 5     | 1295.50 | 1291.00 | 1008.91     | 2.421    | 2442.69       | .000                      | .000    | .000    | .000     | .000     | -694.96            |
| 6     | 1291.00 | 1286.50 | 1128.66     | 2.458    | 2774.75       | .000                      | .000    | .000    | .000     | .000     | -809.18            |
| 7     | 1286.50 | 1282.00 | 1254.46     | 2.470    | 3098.07       | .000                      | .000    | .000    | .000     | .000     | -913.69            |
| 8     | 1282.00 | 1277.50 | 1356.70     | 2.485    | 3371.54       | .000                      | .000    | .000    | .000     | .000     | -1000.52           |
| 9     | 1277.50 | 1273.00 | 1508.02     | 2.461    | 3711.09       | .000                      | .000    | .000    | .000     | .000     | -1073.80           |
| 10    | 1273.00 | 1268.50 | 1577.20     | 2.463    | 3883.92       | .000                      | .000    | .000    | .000     | .000     | -1108.13           |
| 11    | 1268.50 | 1264.00 | 1597.25     | 2.478    | 3957.87       | .000                      | .000    | .000    | .000     | .000     | -1147.24           |
| 12    | 1264.00 | 1259.50 | 1625.27     | 2.495    | 4055.49       | .000                      | .000    | .000    | .000     | .000     | -1196.08           |

|    |         |         |         |       |         |      |      |      |       |      |          |
|----|---------|---------|---------|-------|---------|------|------|------|-------|------|----------|
| 13 | 1259.50 | 1255.00 | 1513.19 | 2.540 | 3842.78 | .004 | .001 | .002 | .023  | .001 | -1201.70 |
| 14 | 1255.00 | 1250.50 | 1430.88 | 2.561 | 3663.80 | .007 | .002 | .005 | .049  | .002 | -1173.37 |
| 15 | 1250.50 | 1246.00 | 1358.53 | 2.603 | 3535.77 | .012 | .004 | .008 | .085  | .003 | -1192.01 |
| 16 | 1246.00 | 1241.50 | 1300.58 | 2.625 | 3413.67 | .018 | .006 | .011 | .128  | .004 | -1173.14 |
| 17 | 1241.50 | 1237.00 | 1226.39 | 2.651 | 3251.51 | .017 | .006 | .011 | .121  | .004 | -1160.09 |
| 18 | 1237.00 | 1232.50 | 1172.76 | 2.662 | 3122.35 | .017 | .006 | .012 | .113  | .003 | -1145.82 |
| 19 | 1232.50 | 1228.00 | 1122.13 | 2.683 | 3010.41 | .034 | .012 | .022 | .236  | .005 | -1117.14 |
| 20 | 1228.00 | 1223.50 | 1056.20 | 2.699 | 2850.65 | .025 | .009 | .016 | .167  | .003 | -1088.72 |
| 21 | 1223.50 | 1219.00 | 1012.04 | 2.706 | 2738.88 | .032 | .012 | .020 | .234  | .005 | -1049.25 |
| 22 | 1219.00 | 1214.50 | 986.92  | 2.711 | 2675.76 | .074 | .028 | .046 | .535  | .011 | -1040.91 |
| 23 | 1214.50 | 1210.00 | 956.98  | 2.711 | 2594.15 | .072 | .026 | .046 | .518  | .012 | -1009.75 |
| 24 | 1210.00 | 1205.50 | 914.15  | 2.709 | 2476.55 | .046 | .018 | .028 | .359  | .009 | -981.30  |
| 25 | 1205.50 | 1201.00 | 873.95  | 2.707 | 2365.77 | .037 | .015 | .022 | .289  | .006 | -954.45  |
| 26 | 1201.00 | 1196.50 | 822.11  | 2.710 | 2228.09 | .053 | .022 | .031 | .421  | .009 | -897.66  |
| 27 | 1196.50 | 1192.00 | 779.77  | 2.711 | 2114.17 | .056 | .022 | .033 | .435  | .011 | -865.79  |
| 28 | 1192.00 | 1187.50 | 730.96  | 2.711 | 1981.81 | .070 | .025 | .045 | .487  | .013 | -811.84  |
| 29 | 1187.50 | 1183.00 | 685.62  | 2.711 | 1858.50 | .060 | .020 | .040 | .420  | .014 | -773.55  |
| 30 | 1183.00 | 1178.50 | 635.71  | 2.715 | 1725.89 | .078 | .026 | .052 | .574  | .018 | -728.49  |
| 31 | 1178.50 | 1174.00 | 600.70  | 2.715 | 1630.78 | .089 | .030 | .059 | .621  | .017 | -688.58  |
| 32 | 1174.00 | 1169.50 | 564.83  | 2.709 | 1530.16 | .060 | .022 | .038 | .416  | .010 | -658.47  |
| 33 | 1169.50 | 1165.00 | 506.84  | 2.709 | 1373.28 | .083 | .030 | .052 | .578  | .014 | -591.09  |
| 34 | 1165.00 | 1160.50 | 458.03  | 2.712 | 1242.07 | .080 | .030 | .050 | .615  | .016 | -540.63  |
| 35 | 1160.50 | 1156.00 | 424.93  | 2.713 | 1152.71 | .094 | .036 | .058 | .700  | .019 | -500.08  |
| 36 | 1156.00 | 1151.50 | 395.12  | 2.710 | 1070.74 | .080 | .031 | .049 | .549  | .016 | -473.58  |
| 37 | 1151.50 | 1147.00 | 353.41  | 2.713 | 958.68  | .104 | .040 | .064 | .665  | .017 | -431.49  |
| 38 | 1147.00 | 1142.50 | 319.54  | 2.719 | 868.73  | .170 | .067 | .103 | 1.153 | .030 | -389.96  |
| 39 | 1142.50 | 1138.00 | 292.24  | 2.728 | 797.34  | .262 | .104 | .158 | 1.785 | .047 | -361.87  |
| 40 | 1138.00 | 1133.50 | 263.51  | 2.746 | 723.57  | .409 | .168 | .240 | 2.806 | .073 | -326.42  |
| 41 | 1133.50 | 1129.00 | 236.11  | 2.765 | 652.78  | .576 | .241 | .335 | 3.880 | .104 | -296.01  |
| 42 | 1129.00 | 1124.50 | 198.89  | 2.769 | 550.81  | .670 | .287 | .382 | 4.579 | .119 | -252.86  |
| 43 | 1124.50 | 1120.00 | 167.88  | 2.760 | 463.32  | .621 | .261 | .360 | 4.254 | .112 | -213.52  |
| 44 | 1120.00 | 1115.50 | 142.88  | 2.751 | 393.10  | .583 | .253 | .330 | 4.081 | .115 | -184.40  |
| 45 | 1115.50 | 1111.00 | 128.28  | 2.759 | 353.95  | .693 | .307 | .386 | 4.940 | .148 | -165.84  |
| 46 | 1111.00 | 1106.50 | 100.80  | 2.776 | 279.82  | .911 | .410 | .500 | 6.471 | .197 | -131.59  |
| 47 | 1106.50 | 1102.00 | 86.88   | 2.793 | 242.63  | .948 | .423 | .525 | 6.939 | .219 | -113.81  |
| 48 | 1102.00 | 1097.50 | 37.27   | 2.760 | 102.88  | .627 | .292 | .335 | 4.697 | .169 | -49.46   |
| 49 | 1097.50 | 1093.00 | 2.16    | 2.749 | 5.94    | .758 | .310 | .449 | 5.532 | .192 | -2.90    |
| 50 | 1093.00 | 1088.50 | 2.66    | 2.700 | 7.19    | .000 | .000 | .000 | .000  | .000 | -3.60    |

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|                       |          |       |          |      |      |      |      |  |     |
|-----------------------|----------|-------|----------|------|------|------|------|--|-----|
| TOTAL FOR ALL BENCHES | 37000.75 | 2.596 | 96066.12 | .054 | .021 | .032 | .381 |  | .01 |
|-----------------------|----------|-------|----------|------|------|------|------|--|-----|

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PC-MINE VERSION 1.10 CURRAGH RESOURCES 8/ 7/1986 SERIAL NO: 20320 BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
 Orebody Modelling and Pit Evaluation System Module : 4.12  
 GRUM DEPOSIT (MODEL DATA) Page : 2

# MINING RESERVE EVALUATION

DESCRIPTION : Grum 8606 Pit 2 Reserves

TOP SURFACE GRID RECORD : 1 TOPOGRAPHY  
 BOTTOM SURFACE GRID RECORD : 26 Grum Pit #2

BENCH TOTALS FOR STOCKPILE FROM 4.0000 [Pb+Zn ] TO 6.0000 [Pb+Zn ]

| BENCH | CREST   | TOE     | VOLUME        | DENSITY  | TONNAGE       | A V E R A G E G R A D E S |         |         |          |          | ECONOMIC       |
|-------|---------|---------|---------------|----------|---------------|---------------------------|---------|---------|----------|----------|----------------|
|       | [m      | ] [m    | ] [bcm x1000] | [tn/bcm] | [ TONS x1000] | [Pb+Zn ]                  | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] | FACTOR         |
|       |         |         |               |          |               |                           |         |         |          |          | [CDN \$ x1000] |
| 1     | 1336.00 | 1324.00 | .00           | .000     | .00           | .000                      | .000    | .000    | .000     | .000     | .00            |
| 2     | 1324.00 | 1312.00 | .00           | .000     | .00           | .000                      | .000    | .000    | .000     | .000     | .00            |
| 3     | 1312.00 | 1300.00 | .00           | .000     | .00           | .000                      | .000    | .000    | .000     | .000     | .00            |
| 4     | 1300.00 | 1295.50 | .00           | .000     | .00           | .000                      | .000    | .000    | .000     | .000     | .00            |
| 5     | 1295.50 | 1291.00 | .54           | 3.046    | 1.64          | 5.864                     | 2.198   | 3.666   | 34.000   | .494     | -1.53          |
| 6     | 1291.00 | 1286.50 | 1.62          | 3.048    | 4.94          | 5.874                     | 2.222   | 3.652   | 34.667   | .490     | -1.59          |
| 7     | 1286.50 | 1282.00 | 2.70          | 3.060    | 8.26          | 5.754                     | 2.156   | 3.598   | 33.994   | .493     | -2.65          |
| 8     | 1282.00 | 1277.50 | 4.75          | 3.060    | 14.54         | 5.808                     | 2.197   | 3.612   | 34.634   | .507     | -4.58          |
| 9     | 1277.50 | 1273.00 | 6.12          | 3.064    | 18.75         | 5.795                     | 2.217   | 3.579   | 35.381   | .516     | -5.89          |
| 10    | 1273.00 | 1268.50 | 9.49          | 3.110    | 29.52         | 5.593                     | 2.003   | 3.590   | 33.136   | .857     | -9.14          |
| 11    | 1268.50 | 1264.00 | 9.55          | 3.126    | 29.86         | 5.381                     | 1.860   | 3.520   | 31.415   | .976     | -9.02          |
| 12    | 1264.00 | 1259.50 | 13.61         | 3.153    | 42.90         | 4.914                     | 1.688   | 3.226   | 29.161   | .890     | -12.85         |

|    |         |         |       |       |        |       |       |       |        |       |        |
|----|---------|---------|-------|-------|--------|-------|-------|-------|--------|-------|--------|
| 13 | 1259.50 | 1255.00 | 13.80 | 3.132 | 43.22  | 4.961 | 1.670 | 3.291 | 29.584 | .931  | -13.29 |
| 14 | 1255.00 | 1250.50 | 16.00 | 3.092 | 49.46  | 5.055 | 1.680 | 3.375 | 30.414 | .828  | -15.70 |
| 15 | 1250.50 | 1246.00 | 18.02 | 3.111 | 56.07  | 4.819 | 1.571 | 3.248 | 29.140 | .826  | -17.69 |
| 16 | 1246.00 | 1241.50 | 28.26 | 3.140 | 88.75  | 5.069 | 1.649 | 3.420 | 30.737 | .769  | -28.26 |
| 17 | 1241.50 | 1237.00 | 25.38 | 3.125 | 79.32  | 4.757 | 1.548 | 3.209 | 30.286 | .627  | -25.85 |
| 18 | 1237.00 | 1232.50 | 26.78 | 3.139 | 84.07  | 4.731 | 1.533 | 3.198 | 30.511 | .560  | -27.28 |
| 19 | 1232.50 | 1228.00 | 21.32 | 3.149 | 67.16  | 4.702 | 1.521 | 3.181 | 28.988 | .503  | -22.11 |
| 20 | 1228.00 | 1223.50 | 23.77 | 3.201 | 76.10  | 4.809 | 1.562 | 3.247 | 29.740 | .506  | -25.09 |
| 21 | 1223.50 | 1219.00 | 35.41 | 3.164 | 112.05 | 4.751 | 1.555 | 3.195 | 29.518 | .521  | -38.04 |
| 22 | 1219.00 | 1214.50 | 37.15 | 3.178 | 118.08 | 4.835 | 1.629 | 3.206 | 30.069 | .521  | -39.90 |
| 23 | 1214.50 | 1210.00 | 30.35 | 3.204 | 97.23  | 4.767 | 1.642 | 3.124 | 29.449 | .501  | -33.16 |
| 24 | 1210.00 | 1205.50 | 25.92 | 3.203 | 83.01  | 4.868 | 1.703 | 3.164 | 29.546 | .540  | -28.80 |
| 25 | 1205.50 | 1201.00 | 28.91 | 3.212 | 92.84  | 4.903 | 1.687 | 3.216 | 29.939 | .564  | -32.12 |
| 26 | 1201.00 | 1196.50 | 24.30 | 3.231 | 78.52  | 4.922 | 1.685 | 3.237 | 30.881 | .595  | -27.45 |
| 27 | 1196.50 | 1192.00 | 23.05 | 3.299 | 76.04  | 4.960 | 1.717 | 3.244 | 32.069 | .640  | -26.47 |
| 28 | 1192.00 | 1187.50 | 18.88 | 3.343 | 63.10  | 4.923 | 1.717 | 3.206 | 31.150 | .689  | -22.02 |
| 29 | 1187.50 | 1183.00 | 23.15 | 3.286 | 76.07  | 4.927 | 1.711 | 3.216 | 29.205 | .686  | -27.01 |
| 30 | 1183.00 | 1178.50 | 22.14 | 3.266 | 72.31  | 4.988 | 1.794 | 3.194 | 30.275 | .761  | -26.24 |
| 31 | 1178.50 | 1174.00 | 18.36 | 3.362 | 61.73  | 5.145 | 1.946 | 3.198 | 32.824 | .892  | -22.10 |
| 32 | 1174.00 | 1169.50 | 18.76 | 3.243 | 60.83  | 5.099 | 1.861 | 3.238 | 31.703 | .753  | -22.58 |
| 33 | 1169.50 | 1165.00 | 24.30 | 3.255 | 79.09  | 4.997 | 1.882 | 3.115 | 32.236 | .752  | -29.70 |
| 34 | 1165.00 | 1160.50 | 36.18 | 3.264 | 118.08 | 5.024 | 1.937 | 3.087 | 33.465 | .803  | -44.89 |
| 35 | 1160.50 | 1156.00 | 35.64 | 3.250 | 115.84 | 5.180 | 2.044 | 3.136 | 34.524 | .784  | -44.22 |
| 36 | 1156.00 | 1151.50 | 34.56 | 3.217 | 111.17 | 5.151 | 1.925 | 3.227 | 33.398 | .853  | -43.52 |
| 37 | 1151.50 | 1147.00 | 35.11 | 3.235 | 113.59 | 5.093 | 1.919 | 3.174 | 34.249 | .872  | -44.87 |
| 38 | 1147.00 | 1142.50 | 40.45 | 3.217 | 130.15 | 4.985 | 1.870 | 3.114 | 34.124 | .812  | -52.44 |
| 39 | 1142.50 | 1138.00 | 48.06 | 3.204 | 154.00 | 4.912 | 1.857 | 3.055 | 33.458 | .801  | -62.30 |
| 40 | 1138.00 | 1133.50 | 41.04 | 3.216 | 131.98 | 4.836 | 1.839 | 2.997 | 32.956 | .819  | -53.96 |
| 41 | 1133.50 | 1129.00 | 36.18 | 3.196 | 115.62 | 4.892 | 1.943 | 2.949 | 32.984 | .829  | -48.24 |
| 42 | 1129.00 | 1124.50 | 37.87 | 3.166 | 119.89 | 4.935 | 1.994 | 2.942 | 33.319 | .825  | -50.50 |
| 43 | 1124.50 | 1120.00 | 37.91 | 3.143 | 119.14 | 4.882 | 2.025 | 2.857 | 33.027 | .810  | -51.25 |
| 44 | 1120.00 | 1115.50 | 31.85 | 3.115 | 99.20  | 4.865 | 2.009 | 2.856 | 32.477 | .822  | -43.64 |
| 45 | 1115.50 | 1111.00 | 28.61 | 3.102 | 88.74  | 4.763 | 1.931 | 2.832 | 31.750 | .764  | -39.73 |
| 46 | 1111.00 | 1106.50 | 30.08 | 3.176 | 95.54  | 4.737 | 1.966 | 2.770 | 32.522 | .872  | -41.78 |
| 47 | 1106.50 | 1102.00 | 18.70 | 3.162 | 59.12  | 4.790 | 1.961 | 2.828 | 33.016 | .916  | -26.31 |
| 48 | 1102.00 | 1097.50 | 7.26  | 3.238 | 23.51  | 4.767 | 1.865 | 2.902 | 33.983 | .903  | -10.35 |
| 49 | 1097.50 | 1093.00 | .54   | 3.388 | 1.83   | 5.638 | 2.536 | 3.102 | 45.000 | 1.162 | -.77   |
| 50 | 1093.00 | 1088.50 | .00   | .000  | .00    | .000  | .000  | .000  | .000   | .000  | .00    |

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|                       |         |       |         |       |       |       |        |     |
|-----------------------|---------|-------|---------|-------|-------|-------|--------|-----|
| TOTAL FOR ALL BENCHES | 1052.44 | 3.195 | 3362.87 | 4.938 | 1.811 | 3.127 | 31.842 | .74 |
|-----------------------|---------|-------|---------|-------|-------|-------|--------|-----|

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3303 (499)  
8913 (10.78)

12.276 at 9.18

PC-MINE VERSION 1.10 CURRAGH RESOURCES  
Orebody Modelling and Pit Evaluation System  
GRUM DEPOSIT (MODEL DATA)

8/ 7/1986

SERIAL NO: 20320

BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Module : 4.12  
Page : 3

# MINING RESERVE EVALUATION

DESCRIPTION : Grum 8606 Pit 2 Reserves

TOP SURFACE GRID RECORD : 1 TOPOGRAPHY  
BOTTOM SURFACE GRID RECORD : 26 Grum Pit #2

BENCH TOTALS FOR ORE ABOVE 6.0000 [Pb+Zn ]

| BENCH | CREST   | TOE     | VOLUME | DENSITY | TONNAGE  | A V E R A G E G R A D E S |          |         |         |          |          | ECONOMIC<br>FACTOR |
|-------|---------|---------|--------|---------|----------|---------------------------|----------|---------|---------|----------|----------|--------------------|
|       | [m      | ] [m    | ] [bcm | x1000]  | [tn/bcm] | [ TONS x1000]             | [Pb+Zn ] | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] | [CDN \$ x1000]     |
| 1     | 1336.00 | 1324.00 | .00    | .000    | .00      | .000                      | .000     | .000    | .000    | .000     | .000     | .00                |
| 2     | 1324.00 | 1312.00 | .00    | .000    | .00      | .000                      | .000     | .000    | .000    | .000     | .000     | .00                |
| 3     | 1312.00 | 1300.00 | .00    | .000    | .00      | .000                      | .000     | .000    | .000    | .000     | .000     | .00                |
| 4     | 1300.00 | 1295.50 | .00    | .000    | .00      | .000                      | .000     | .000    | .000    | .000     | .000     | .00                |
| 5     | 1295.50 | 1291.00 | .00    | .000    | .00      | .000                      | .000     | .000    | .000    | .000     | .000     | .00                |
| 6     | 1291.00 | 1286.50 | .00    | .000    | .00      | .000                      | .000     | .000    | .000    | .000     | .000     | .00                |
| 7     | 1286.50 | 1282.00 | .00    | .000    | .00      | .000                      | .000     | .000    | .000    | .000     | .000     | .00                |
| 8     | 1282.00 | 1277.50 | 1.08   | 3.563   | 3.85     | 12.405                    | 4.572    | 7.834   | 84.071  | .791     |          | 170.08             |
| 9     | 1277.50 | 1273.00 | 2.70   | 3.375   | 9.11     | 10.386                    | 3.788    | 6.598   | 68.804  | .729     |          | 283.91             |
| 10    | 1273.00 | 1268.50 | 1.62   | 3.222   | 5.22     | 9.624                     | 3.069    | 6.555   | 61.629  | .820     |          | 143.68             |
| 11    | 1268.50 | 1264.00 | 2.16   | 3.066   | 6.62     | 8.187                     | 2.391    | 5.796   | 50.000  | .816     |          | 123.10             |
| 12    | 1264.00 | 1259.50 | 3.24   | 3.101   | 10.05    | 7.913                     | 2.421    | 5.492   | 47.627  | 1.064    |          | 176.38             |

|    |         |         |       |       |        |        |       |       |        |       |          |
|----|---------|---------|-------|-------|--------|--------|-------|-------|--------|-------|----------|
| 13 | 1259.50 | 1255.00 | 8.64  | 3.118 | 26.94  | 7.690  | 2.493 | 5.196 | 45.303 | .800  | 392.60   |
| 14 | 1255.00 | 1250.50 | 17.89 | 3.146 | 56.29  | 8.192  | 2.828 | 5.364 | 49.186 | .817  | 985.32   |
| 15 | 1250.50 | 1246.00 | 30.24 | 3.256 | 98.46  | 9.203  | 3.449 | 5.754 | 58.917 | .813  | 2324.91  |
| 16 | 1246.00 | 1241.50 | 34.04 | 3.328 | 113.28 | 9.961  | 3.840 | 6.121 | 63.691 | .820  | 3182.35  |
| 17 | 1241.50 | 1237.00 | 52.58 | 3.330 | 175.09 | 9.709  | 3.665 | 6.044 | 59.539 | .839  | 4635.17  |
| 18 | 1237.00 | 1232.50 | 63.64 | 3.333 | 212.08 | 9.993  | 3.719 | 6.274 | 58.802 | .819  | 5927.51  |
| 19 | 1232.50 | 1228.00 | 74.50 | 3.337 | 248.56 | 9.354  | 3.405 | 5.948 | 54.230 | .790  | 5959.35  |
| 20 | 1228.00 | 1223.50 | 86.29 | 3.391 | 292.65 | 9.222  | 3.373 | 5.850 | 53.686 | .789  | 6778.99  |
| 21 | 1223.50 | 1219.00 | 72.31 | 3.496 | 252.77 | 9.675  | 3.643 | 6.032 | 57.573 | .832  | 6586.28  |
| 22 | 1219.00 | 1214.50 | 49.70 | 3.493 | 173.60 | 9.974  | 3.636 | 6.337 | 58.465 | .861  | 4891.35  |
| 23 | 1214.50 | 1210.00 | 51.26 | 3.389 | 173.72 | 9.287  | 3.278 | 6.009 | 53.845 | .834  | 4240.42  |
| 24 | 1210.00 | 1205.50 | 60.73 | 3.372 | 204.77 | 8.984  | 3.188 | 5.796 | 52.599 | .840  | 4798.32  |
| 25 | 1205.50 | 1201.00 | 67.27 | 3.414 | 229.69 | 9.364  | 3.404 | 5.960 | 54.841 | .858  | 6171.94  |
| 26 | 1201.00 | 1196.50 | 76.75 | 3.490 | 267.85 | 10.036 | 3.722 | 6.314 | 59.348 | .926  | 8549.30  |
| 27 | 1196.50 | 1192.00 | 76.85 | 3.615 | 277.78 | 10.658 | 4.031 | 6.627 | 65.124 | .969  | 9973.41  |
| 28 | 1192.00 | 1187.50 | 73.30 | 3.649 | 267.44 | 10.458 | 3.988 | 6.471 | 65.058 | .954  | 9268.49  |
| 29 | 1187.50 | 1183.00 | 65.41 | 3.572 | 233.68 | 10.024 | 3.853 | 6.171 | 64.217 | .921  | 7623.86  |
| 30 | 1183.00 | 1178.50 | 76.04 | 3.493 | 265.66 | 9.646  | 3.681 | 5.965 | 61.904 | .907  | 7897.21  |
| 31 | 1178.50 | 1174.00 | 85.07 | 3.515 | 299.04 | 9.654  | 3.681 | 5.974 | 61.531 | .919  | 8888.19  |
| 32 | 1174.00 | 1169.50 | 86.75 | 3.576 | 310.19 | 10.079 | 3.857 | 6.222 | 63.889 | .983  | 9918.41  |
| 33 | 1169.50 | 1165.00 | 89.64 | 3.642 | 326.50 | 11.139 | 4.262 | 6.876 | 70.161 | .979  | 12079.84 |
| 34 | 1165.00 | 1160.50 | 92.84 | 3.648 | 338.72 | 11.321 | 4.343 | 6.978 | 70.455 | 1.006 | 12858.16 |
| 35 | 1160.50 | 1156.00 | 94.62 | 3.617 | 342.26 | 11.229 | 4.207 | 7.023 | 69.438 | 1.130 | 13521.84 |
| 36 | 1156.00 | 1151.50 | 95.50 | 3.638 | 347.44 | 11.685 | 4.253 | 7.431 | 71.870 | 1.183 | 14828.17 |
| 37 | 1151.50 | 1147.00 | 95.23 | 3.656 | 348.17 | 11.800 | 4.313 | 7.487 | 72.836 | 1.170 | 14773.22 |
| 38 | 1147.00 | 1142.50 | 87.25 | 3.639 | 317.48 | 11.284 | 4.144 | 7.140 | 69.960 | 1.164 | 12236.68 |
| 39 | 1142.50 | 1138.00 | 77.51 | 3.662 | 283.80 | 11.311 | 4.140 | 7.172 | 69.689 | 1.189 | 10874.12 |
| 40 | 1138.00 | 1133.50 | 75.43 | 3.735 | 281.72 | 12.235 | 4.506 | 7.728 | 75.261 | 1.233 | 12393.03 |
| 41 | 1133.50 | 1129.00 | 75.47 | 3.747 | 282.75 | 12.778 | 4.633 | 8.144 | 77.738 | 1.207 | 13374.58 |
| 42 | 1129.00 | 1124.50 | 78.38 | 3.688 | 289.08 | 12.403 | 4.454 | 7.949 | 75.326 | 1.188 | 13001.77 |
| 43 | 1124.50 | 1120.00 | 85.96 | 3.618 | 310.97 | 11.692 | 4.186 | 7.506 | 71.457 | 1.129 | 12560.44 |
| 44 | 1120.00 | 1115.50 | 85.40 | 3.606 | 307.95 | 11.479 | 4.130 | 7.350 | 70.133 | 1.106 | 12017.11 |
| 45 | 1115.50 | 1111.00 | 77.86 | 3.657 | 284.73 | 12.022 | 4.310 | 7.712 | 73.845 | 1.147 | 12114.09 |
| 46 | 1111.00 | 1106.50 | 71.17 | 3.730 | 265.50 | 11.798 | 4.210 | 7.588 | 73.718 | 1.148 | 11020.17 |
| 47 | 1106.50 | 1102.00 | 67.80 | 3.748 | 254.12 | 12.111 | 4.273 | 7.838 | 74.635 | 1.206 | 11067.70 |
| 48 | 1102.00 | 1097.50 | 28.09 | 3.677 | 103.30 | 11.345 | 4.019 | 7.326 | 70.352 | 1.245 | 4023.56  |
| 49 | 1097.50 | 1093.00 | 2.16  | 3.360 | 7.26   | 9.703  | 3.454 | 6.249 | 59.475 | 1.182 | 205.18   |
| 50 | 1093.00 | 1088.50 | 1.92  | 3.383 | 6.49   | 9.079  | 3.209 | 5.870 | 56.669 | 1.183 | 159.65   |

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|                       |         |       |         |        |       |       |        |      |
|-----------------------|---------|-------|---------|--------|-------|-------|--------|------|
| TOTAL FOR ALL BENCHES | 2502.31 | 3.562 | 8912.65 | 10.776 | 3.971 | 6.805 | 66.077 | 1.02 |
|-----------------------|---------|-------|---------|--------|-------|-------|--------|------|

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PC-MINE VERSION 1.10 CURRAGH RESOURCES  
Orebody Modelling and Pit Evaluation System  
GRUM DEPOSIT (MODEL DATA)

8/ 7/1986

SERIAL NO: 20320

BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Module : 4.12  
Page : 4

# MINING RESERVE EVALUATION

DESCRIPTION : Grum 8606 Pit 2 Reserves

TOP SURFACE GRID RECORD : 1 TOPOGRAPHY  
BOTTOM SURFACE GRID RECORD : 26 Grum Pit #2

BENCH TOTALS FOR ALL MATERIAL

| BENCH | CREST   | TOE     | VOLUME        | DENSITY  | TONNAGE       | A V E R A G E G R A D E S |         |         |          |          | ECONOMIC FACTOR |
|-------|---------|---------|---------------|----------|---------------|---------------------------|---------|---------|----------|----------|-----------------|
|       | [m      | ] [m    | ] [bcm x1000] | [tn/bcm] | [ TONS x1000] | [Pb+Zn ]                  | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] | [CDN \$ x1000]  |
| 1     | 1336.00 | 1324.00 | .00           | .000     | .00           | .000                      | .000    | .000    | .000     | .000     | .00             |
| 2     | 1324.00 | 1312.00 | 117.68        | 2.100    | 247.14        | .000                      | .000    | .000    | .000     | .000     | -44.13          |
| 3     | 1312.00 | 1300.00 | 1058.00       | 2.388    | 2526.05       | .000                      | .000    | .000    | .000     | .000     | -698.98         |
| 4     | 1300.00 | 1295.50 | 906.78        | 2.367    | 2146.52       | .000                      | .000    | .000    | .000     | .000     | -573.30         |
| 5     | 1295.50 | 1291.00 | 1009.45       | 2.421    | 2444.34       | .004                      | .001    | .002    | .023     | .000     | -695.49         |
| 6     | 1291.00 | 1286.50 | 1130.28       | 2.459    | 2779.69       | .010                      | .004    | .006    | .062     | .001     | -810.77         |
| 7     | 1286.50 | 1282.00 | 1257.16       | 2.471    | 3106.33       | .015                      | .006    | .010    | .090     | .001     | -916.34         |
| 8     | 1282.00 | 1277.50 | 1362.53       | 2.488    | 3389.93       | .039                      | .015    | .024    | .244     | .003     | -835.01         |
| 9     | 1277.50 | 1273.00 | 1516.84       | 2.465    | 3738.95       | .054                      | .020    | .034    | .345     | .004     | -795.79         |
| 10    | 1273.00 | 1268.50 | 1588.31       | 2.467    | 3918.66       | .055                      | .019    | .036    | .332     | .008     | -973.59         |
| 11    | 1268.50 | 1264.00 | 1608.96       | 2.483    | 3994.35       | .054                      | .018    | .036    | .318     | .009     | -1033.16        |
| 12    | 1264.00 | 1259.50 | 1642.12       | 2.502    | 4108.44       | .071                      | .024    | .047    | .421     | .012     | -1032.55        |

|    |         |         |         |       |         |       |       |       |        |      |          |
|----|---------|---------|---------|-------|---------|-------|-------|-------|--------|------|----------|
| 13 | 1259.50 | 1255.00 | 1535.63 | 2.548 | 3912.94 | .111  | .037  | .074  | .662   | .016 | -822.39  |
| 14 | 1255.00 | 1250.50 | 1464.77 | 2.573 | 3769.55 | .196  | .067  | .129  | 1.182  | .025 | -203.74  |
| 15 | 1250.50 | 1246.00 | 1406.80 | 2.623 | 3690.30 | .330  | .120  | .210  | 2.096  | .037 | 1115.21  |
| 16 | 1246.00 | 1241.50 | 1362.89 | 2.653 | 3615.70 | .453  | .167  | .287  | 2.871  | .048 | 1980.96  |
| 17 | 1241.50 | 1237.00 | 1304.35 | 2.688 | 3505.91 | .609  | .224  | .385  | 3.771  | .059 | 3449.24  |
| 18 | 1237.00 | 1232.50 | 1263.18 | 2.706 | 3418.50 | .752  | .274  | .479  | 4.502  | .067 | 4754.41  |
| 19 | 1232.50 | 1228.00 | 1217.95 | 2.731 | 3326.13 | .825  | .296  | .529  | 4.852  | .073 | 4820.09  |
| 20 | 1228.00 | 1223.50 | 1166.27 | 2.760 | 3219.40 | .974  | .351  | .623  | 5.731  | .087 | 5665.17  |
| 21 | 1223.50 | 1219.00 | 1119.77 | 2.772 | 3103.71 | .988  | .364  | .624  | 5.961  | .091 | 5499.00  |
| 22 | 1219.00 | 1214.50 | 1073.77 | 2.764 | 2967.43 | .842  | .303  | .540  | 5.099  | .081 | 3810.54  |
| 23 | 1214.50 | 1210.00 | 1038.59 | 2.759 | 2865.11 | .790  | .278  | .512  | 4.733  | .078 | 3197.51  |
| 24 | 1210.00 | 1205.50 | 1000.80 | 2.762 | 2764.33 | .853  | .304  | .549  | 5.105  | .086 | 3788.22  |
| 25 | 1205.50 | 1201.00 | 970.13  | 2.771 | 2688.30 | 1.001 | .362  | .639  | 5.974  | .098 | 5185.37  |
| 26 | 1201.00 | 1196.50 | 923.16  | 2.789 | 2574.46 | 1.240 | .458  | .782  | 7.481  | .123 | 7624.19  |
| 27 | 1196.50 | 1192.00 | 879.67  | 2.806 | 2467.99 | 1.400 | .526  | .874  | 8.691  | .138 | 9081.16  |
| 28 | 1192.00 | 1187.50 | 823.13  | 2.809 | 2312.35 | 1.404 | .529  | .875  | 8.792  | .140 | 8434.63  |
| 29 | 1187.50 | 1183.00 | 774.18  | 2.801 | 2168.25 | 1.304 | .492  | .812  | 8.306  | .135 | 6823.31  |
| 30 | 1183.00 | 1178.50 | 733.90  | 2.812 | 2063.86 | 1.482 | .559  | .923  | 9.509  | .158 | 7142.48  |
| 31 | 1178.50 | 1174.00 | 704.12  | 2.828 | 1991.55 | 1.682 | .638  | 1.044 | 10.765 | .179 | 8177.51  |
| 32 | 1174.00 | 1169.50 | 670.33  | 2.836 | 1901.18 | 1.856 | .706  | 1.150 | 11.773 | .193 | 9237.36  |
| 33 | 1169.50 | 1165.00 | 620.78  | 2.866 | 1778.87 | 2.330 | .889  | 1.441 | 14.757 | .224 | 11459.05 |
| 34 | 1165.00 | 1160.50 | 587.05  | 2.894 | 1698.87 | 2.665 | 1.022 | 1.642 | 16.823 | .268 | 12272.64 |
| 35 | 1160.50 | 1156.00 | 555.19  | 2.901 | 1610.81 | 2.826 | 1.067 | 1.759 | 17.738 | .310 | 12977.54 |
| 36 | 1156.00 | 1151.50 | 525.18  | 2.912 | 1529.35 | 3.085 | 1.128 | 1.957 | 19.139 | .342 | 14311.08 |
| 37 | 1151.50 | 1147.00 | 483.76  | 2.936 | 1420.45 | 3.370 | 1.237 | 2.132 | 21.041 | .368 | 14296.87 |
| 38 | 1147.00 | 1142.50 | 447.24  | 2.943 | 1316.36 | 3.327 | 1.229 | 2.098 | 21.008 | .381 | 11794.29 |
| 39 | 1142.50 | 1138.00 | 417.80  | 2.956 | 1235.14 | 3.381 | 1.250 | 2.131 | 21.336 | .403 | 10449.96 |
| 40 | 1138.00 | 1133.50 | 379.98  | 2.993 | 1137.27 | 3.852 | 1.437 | 2.415 | 24.253 | .447 | 12012.66 |
| 41 | 1133.50 | 1129.00 | 347.76  | 3.023 | 1051.15 | 4.333 | 1.610 | 2.723 | 26.948 | .480 | 13030.33 |
| 42 | 1129.00 | 1124.50 | 315.14  | 3.046 | 959.78  | 4.736 | 1.756 | 2.981 | 29.478 | .530 | 12698.41 |
| 43 | 1124.50 | 1120.00 | 291.74  | 3.062 | 893.44  | 5.043 | 1.863 | 3.180 | 31.482 | .559 | 12295.67 |
| 44 | 1120.00 | 1115.50 | 260.14  | 3.076 | 800.25  | 5.307 | 1.962 | 3.345 | 33.019 | .584 | 11789.07 |
| 45 | 1115.50 | 1111.00 | 234.74  | 3.099 | 727.43  | 5.624 | 2.072 | 3.552 | 35.182 | .614 | 11908.51 |
| 46 | 1111.00 | 1106.50 | 202.06  | 3.172 | 640.87  | 5.992 | 2.216 | 3.775 | 38.214 | .691 | 10846.79 |
| 47 | 1106.50 | 1102.00 | 173.38  | 3.206 | 555.87  | 6.460 | 2.347 | 4.113 | 40.660 | .745 | 10927.58 |
| 48 | 1102.00 | 1097.50 | 72.62   | 3.163 | 229.69  | 5.871 | 2.129 | 3.742 | 37.222 | .728 | 3963.75  |
| 49 | 1097.50 | 1093.00 | 4.86    | 3.092 | 15.03   | 5.673 | 2.100 | 3.574 | 36.394 | .788 | 201.51   |
| 50 | 1093.00 | 1088.50 | 4.58    | 2.986 | 13.69   | 4.308 | 1.523 | 2.785 | 26.890 | .561 | 156.05   |

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|                       |          |       |           |       |      |      |       |     |
|-----------------------|----------|-------|-----------|-------|------|------|-------|-----|
| TOTAL FOR ALL BENCHES | 40555.50 | 2.671 | 108341.60 | 1.088 | .402 | .686 | 6.762 | .12 |
|-----------------------|----------|-------|-----------|-------|------|------|-------|-----|

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Reserves for bench # 1

| ROCK            | ORE<br>TONNES | GRADE<br>%Pb+Zn | %Pb | %Zn | Ag g/t | Au g/t | CONCENTRATE<br>TONNES | GRADE<br>%Pb+Zn | %Pb | %Zn | Ag g/t | Au g/t |
|-----------------|---------------|-----------------|-----|-----|--------|--------|-----------------------|-----------------|-----|-----|--------|--------|
| WASTE<br>TONNES |               | 0.              |     |     |        |        |                       |                 |     |     |        |        |

Reserves for bench # 2

| ROCK            | ORE<br>TONNES | GRADE<br>%Pb+Zn | %Pb | %Zn | Ag g/t | Au g/t | CONCENTRATE<br>TONNES | GRADE<br>%Pb+Zn | %Pb | %Zn | Ag g/t | Au g/t |
|-----------------|---------------|-----------------|-----|-----|--------|--------|-----------------------|-----------------|-----|-----|--------|--------|
| WASTE<br>TONNES | 534441.       |                 |     |     |        |        |                       |                 |     |     |        |        |

Reserves for bench # 3

| ROCK            | ORE<br>TONNES | GRADE<br>%Pb+Zn | %Pb | %Zn | Ag g/t | Au g/t | CONCENTRATE<br>TONNES | GRADE<br>%Pb+Zn | %Pb | %Zn | Ag g/t | Au g/t |
|-----------------|---------------|-----------------|-----|-----|--------|--------|-----------------------|-----------------|-----|-----|--------|--------|
| WASTE<br>TONNES | 3102008.      |                 |     |     |        |        |                       |                 |     |     |        |        |

Reserves for bench # 4

| ROCK            | ORE<br>TONNES | GRADE<br>%Pb+Zn | %Pb | %Zn | Ag g/t | Au g/t | CONCENTRATE<br>TONNES | GRADE<br>%Pb+Zn | %Pb | %Zn | Ag g/t | Au g/t |
|-----------------|---------------|-----------------|-----|-----|--------|--------|-----------------------|-----------------|-----|-----|--------|--------|
| WASTE<br>TONNES | 2444128.      |                 |     |     |        |        |                       |                 |     |     |        |        |

Reserves for bench # 5

| ROCK            | ORE<br>TONNES | GRADE<br>%Pb+Zn | %Pb | %Zn | Ag g/t | Au g/t | CONCENTRATE<br>TONNES | GRADE<br>%Pb+Zn | %Pb | %Zn | Ag g/t | Au g/t |
|-----------------|---------------|-----------------|-----|-----|--------|--------|-----------------------|-----------------|-----|-----|--------|--------|
| WASTE<br>TONNES | 2701256.      |                 |     |     |        |        |                       |                 |     |     |        |        |

Reserves for bench # 6

| ROCK            | ORE<br>TONNES | GRADE<br>%Pb+Zn | %Pb | %Zn | Ag g/t | Au g/t | CONCENTRATE<br>TONNES | GRADE<br>%Pb+Zn | %Pb | %Zn | Ag g/t | Au g/t |
|-----------------|---------------|-----------------|-----|-----|--------|--------|-----------------------|-----------------|-----|-----|--------|--------|
| WASTE<br>TONNES | 2955653.      |                 |     |     |        |        |                       |                 |     |     |        |        |

Reserves for bench # 7

| ROCK            | ORE<br>TONNES | GRADE<br>%Pb+Zn | %Pb | %Zn | Ag g/t | Au g/t |  | CONCENTRATE<br>TONNES | GRADE<br>%Pb+Zn | %Pb | %Zn | Ag g/t | Au g/t |
|-----------------|---------------|-----------------|-----|-----|--------|--------|--|-----------------------|-----------------|-----|-----|--------|--------|
| WASTE<br>TONNES | 3211320.      |                 |     |     |        |        |  |                       |                 |     |     |        |        |

Reserves for bench # 8

| ROCK            | ORE<br>TONNES | GRADE<br>%Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |    | CONCENTRATE<br>TONNES | GRADE<br>%Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |
|-----------------|---------------|-----------------|------|------|--------|--------|----|-----------------------|-----------------|------|------|--------|--------|
| 6               | 3848.         | 12.41           | 4.57 | 7.83 | 84.07  | .79    | Pb | 235.                  | .0              | 60.0 | .0   | 750.0  | 3.5    |
|                 |               |                 |      |      |        |        | Zn | 455.                  | .0              | .0   | 55.0 | .0     | .0     |
| Total           | 3848.         | 12.41           | 4.57 | 7.83 | 84.07  | .79    | Pb | 235.                  | .0              | 60.0 | .0   | 750.0  | 3.5    |
|                 |               |                 |      |      |        |        | Zn | 455.                  | .0              | .0   | 55.0 | .0     | .0     |
| WASTE<br>TONNES | 3445735.      |                 |      |      |        |        |    |                       |                 |      |      |        |        |

Reserves for bench # 9

| ROCK            | ORE<br>TONNES | GRADE<br>%Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |    | CONCENTRATE<br>TONNES | GRADE<br>%Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |
|-----------------|---------------|-----------------|------|------|--------|--------|----|-----------------------|-----------------|------|------|--------|--------|
| 1               | 1671.         | 6.03            | 2.75 | 3.28 | 38.00  | .43    | Pb | 61.                   | .0              | 60.0 | .0   | 750.0  | 3.5    |
|                 |               |                 |      |      |        |        | Zn | 83.                   | .0              | .0   | 55.0 | .0     | .0     |
| 4               | 1650.         | 7.87            | 2.31 | 5.57 | 49.00  | .78    | Pb | 51.                   | .0              | 60.0 | .0   | 750.0  | 3.5    |
|                 |               |                 |      |      |        |        | Zn | 139.                  | .0              | .0   | 55.0 | .0     | .0     |
| 6               | 5791.         | 12.36           | 4.51 | 7.85 | 83.34  | .80    | Pb | 348.                  | .0              | 60.0 | .0   | 750.0  | 3.5    |
|                 |               |                 |      |      |        |        | Zn | 686.                  | .0              | .0   | 55.0 | .0     | .0     |
| Total           | 9113.         | 10.39           | 3.79 | 6.60 | 68.80  | .73    | Pb | 460.                  | .0              | 60.0 | .0   | 750.0  | 3.5    |
|                 |               |                 |      |      |        |        | Zn | 907.                  | .0              | .0   | 55.0 | .0     | .0     |
| WASTE<br>TONNES | 3897105.      |                 |      |      |        |        |    |                       |                 |      |      |        |        |

Reserves for bench # 10

| ROCK            | ORE<br>TONNES | GRADE<br>%Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |    | CONCENTRATE<br>TONNES | GRADE<br>%Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |
|-----------------|---------------|-----------------|------|------|--------|--------|----|-----------------------|-----------------|------|------|--------|--------|
| 4               | 3307.         | 8.26            | 2.36 | 5.90 | 51.00  | .83    | Pb | 104.                  | .0              | 60.0 | .0   | 750.0  | 3.5    |
|                 |               |                 |      |      |        |        | Zn | 295.                  | .0              | .0   | 55.0 | .0     | .0     |
| 6               | 1913.         | 11.98           | 4.29 | 7.68 | 80.00  | .80    | Pb | 110.                  | .0              | 60.0 | .0   | 750.0  | 3.5    |
|                 |               |                 |      |      |        |        | Zn | 222.                  | .0              | .0   | 55.0 | .0     | .0     |
| Total           | 5220.         | 9.62            | 3.07 | 6.56 | 61.63  | .82    | Pb | 275.                  | .0              | 60.0 | .0   | 750.0  | 3.5    |
|                 |               |                 |      |      |        |        | Zn | 599.                  | .0              | .0   | 55.0 | .0     | .0     |
| WASTE<br>TONNES | 4104023.      |                 |      |      |        |        |    |                       |                 |      |      |        |        |

Reserves for bench # 11

| ROCK | ORE<br>TONNES | GRADE<br>%Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |    | CONCENTRATE<br>TONNES | GRADE<br>%Pb+Zn | %Pb  | %Zn | Ag g/t | Au g/t |
|------|---------------|-----------------|------|------|--------|--------|----|-----------------------|-----------------|------|-----|--------|--------|
| 4    | 6623.         | 8.19            | 2.39 | 5.80 | 50.00  | .82    | Pb | 211.                  | .0              | 60.0 | .0  | 750.0  | 3.5    |

[illegible]

## Reserves for bench # 12

[illegible]

## Reserves for bench # 13

[illegible]

## Reserves for bench # 1.4

| ROCK   | ORE      |       |        |      |       |        |        | CONCENTRATE |       |        |      |       |        |        |
|--------|----------|-------|--------|------|-------|--------|--------|-------------|-------|--------|------|-------|--------|--------|
|        | TONNES   | GRADE | %Pb+Zn | %Pb  | %Zn   | Ag g/t | Au g/t | TONNES      | GRADE | %Pb+Zn | %Pb  | %Zn   | Ag g/t | Au g/t |
| 1      | 10159.   | 7.43  | 2.54   | 4.88 | 45.37 | .76    | Pb     | 345.        | .0    | 60.0   | .0   | 750.0 | 3.5    |        |
|        |          |       |        |      |       |        | Zn     | 749.        | .0    | .0     | 55.0 | .0    | .0     |        |
| 2      | 48507.   | 7.73  | 2.72   | 5.01 | 46.11 | .80    | Pb     | 1761.       | .0    | 60.0   | .0   | 750.0 | 3.5    |        |
|        |          |       |        |      |       |        | Zn     | 3667.       | .0    | .0     | 55.0 | .0    | .0     |        |
| 4      | 22805.   | 9.40  | 3.18   | 6.22 | 55.59 | .60    | Pb     | 967.        | .0    | 60.0   | .0   | 750.0 | 3.5    |        |
|        |          |       |        |      |       |        | Zn     | 2141.       | .0    | .0     | 55.0 | .0    | .0     |        |
| <hr/>  |          |       |        |      |       |        |        |             |       |        |      |       |        |        |
| Total  | 81471.   | 8.16  | 2.83   | 5.33 | 48.68 | .74    | Pb     | 3182.       | .0    | 60.0   | .0   | 750.0 | 3.5    |        |
|        |          |       |        |      |       |        | Zn     | 6779.       | .0    | .0     | 55.0 | .0    | .0     |        |
| <hr/>  |          |       |        |      |       |        |        |             |       |        |      |       |        |        |
| WASTE  |          |       |        |      |       |        |        |             |       |        |      |       |        |        |
| TONNES | 3996650. |       |        |      |       |        |        |             |       |        |      |       |        |        |

## Reserves for bench # 15

| ROCK  | ORE<br>TONNES | GRADE  |      |      |        |        |    |  | CONCENTRATE<br>TONNES | GRADE  |      |      |        |        |
|-------|---------------|--------|------|------|--------|--------|----|--|-----------------------|--------|------|------|--------|--------|
|       |               | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |    |  |                       | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |
| 1     | 22111.        | 7.64   | 2.59 | 5.04 | 45.92  | .78    | Pb |  | 764.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 1683.                 | .0     | .0   | 55.0 | .0     | .0     |
| 2     | 58350.        | 7.67   | 2.73 | 4.94 | 45.83  | .84    | Pb |  | 2125.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 4346.                 | .0     | .0   | 55.0 | .0     | .0     |
| 4     | 32627.        | 9.97   | 3.58 | 6.40 | 59.52  | .70    | Pb |  | 1557.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 3149.                 | .0     | .0   | 55.0 | .0     | .0     |
| 5     | 11172.        | 8.74   | 3.48 | 5.26 | 64.54  | .61    | Pb |  | 519.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 887.                  | .0     | .0   | 55.0 | .0     | .0     |
| 6     | 6672.         | 18.20  | 8.40 | 9.80 | *****  | 1.00   | Pb |  | 747.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 987.                  | .0     | .0   | 55.0 | .0     | .0     |
| <hr/> |               |        |      |      |        |        |    |  |                       |        |      |      |        |        |
| Total | 130932.       | 8.87   | 3.27 | 5.59 | 55.60  | .78    | Pb |  | 5712.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 11052.                | .0     | .0   | 55.0 | .0     | .0     |

WASTE  
TONNES 3767866.

## Reserves for bench # 16

| ROCK  | ORE<br>TONNES | GRADE  |      |      |        |        |    |  | CONCENTRATE<br>TONNES | GRADE  |      |      |        |        |
|-------|---------------|--------|------|------|--------|--------|----|--|-----------------------|--------|------|------|--------|--------|
|       |               | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |    |  |                       | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |
| 1     | 14074.        | 9.03   | 3.11 | 5.92 | 52.56  | .88    | Pb |  | 583.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 1258.                 | .0     | .0   | 55.0 | .0     | .0     |
| 2     | 68675.        | 7.56   | 2.66 | 4.91 | 43.69  | .83    | Pb |  | 2432.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 5084.                 | .0     | .0   | 55.0 | .0     | .0     |
| 4     | 37807.        | 10.48  | 3.90 | 6.58 | 62.57  | .74    | Pb |  | 1966.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 3754.                 | .0     | .0   | 55.0 | .0     | .0     |
| 5     | 15035.        | 9.38   | 3.97 | 5.41 | 69.86  | .62    | Pb |  | 796.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 1227.                 | .0     | .0   | 55.0 | .0     | .0     |
| 6     | 13313.        | 18.22  | 8.40 | 9.82 | *****  | .99    | Pb |  | 1490.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 1973.                 | .0     | .0   | 55.0 | .0     | .0     |
| <hr/> |               |        |      |      |        |        |    |  |                       |        |      |      |        |        |
| Total | 148904.       | 9.58   | 3.66 | 5.92 | 60.47  | .81    | Pb |  | 7267.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 13297.                | .0     | .0   | 55.0 | .0     | .0     |

WASTE  
TONNES 3604296.

## Reserves for bench # 17

| ROCK  | ORE<br>TONNES | GRADE  |      |      |        |        |    |  | CONCENTRATE<br>TONNES | GRADE  |      |      |        |        |
|-------|---------------|--------|------|------|--------|--------|----|--|-----------------------|--------|------|------|--------|--------|
|       |               | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |    |  |                       | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |
| 1     | 16079.        | 8.74   | 3.02 | 5.72 | 50.98  | .87    | Pb |  | 648.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 1388.                 | .0     | .0   | 55.0 | .0     | .0     |
| 2     | 114384.       | 7.45   | 2.55 | 4.90 | 41.62  | .83    | Pb |  | 3891.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 8462.                 | .0     | .0   | 55.0 | .0     | .0     |
| 4     | 40678.        | 11.97  | 4.56 | 7.40 | 71.08  | .80    | Pb |  | 2475.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 4545.                 | .0     | .0   | 55.0 | .0     | .0     |
| 5     | 13278.        | 10.32  | 4.09 | 6.22 | 70.17  | .67    | Pb |  | 725.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 1247.                 | .0     | .0   | 55.0 | .0     | .0     |
| 6     | 19976.        | 17.52  | 8.21 | 9.31 | *****  | .99    | Pb |  | 2187.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 2805.                 | .0     | .0   | 55.0 | .0     | .0     |
| <hr/> |               |        |      |      |        |        |    |  |                       |        |      |      |        |        |
| Total | 204395.       | 9.62   | 3.64 | 5.98 | 59.08  | .83    | Pb |  | 9926.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 18447.                | .0     | .0   | 55.0 | .0     | .0     |

WASTE  
TONNES 3409631.

Reserves for bench # 18

| ROCK   | ORE<br>TONNES | GRADE    |      |       |        |        |    |  | CONCENTRATE<br>TONNES | GRADE  |      |      |        |        |
|--------|---------------|----------|------|-------|--------|--------|----|--|-----------------------|--------|------|------|--------|--------|
|        |               | %Pb+Zn   | %Pb  | %Zn   | Ag g/t | Au g/t |    |  |                       | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |
| 1      | 18146.        | 9.86     | 3.43 | 6.44  | 57.07  | .96    | Pb |  | 829.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|        |               |          |      |       |        |        | Zn |  | 1762.                 | .0     | .0   | 55.0 | .0     | .0     |
| 2      | 132841.       | 7.65     | 2.57 | 5.08  | 42.43  | .77    | Pb |  | 4557.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|        |               |          |      |       |        |        | Zn |  | 10185.                | .0     | .0   | 55.0 | .0     | .0     |
| 4      | 38632.        | 11.91    | 4.53 | 7.38  | 69.39  | .83    | Pb |  | 2335.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|        |               |          |      |       |        |        | Zn |  | 4301.                 | .0     | .0   | 55.0 | .0     | .0     |
| 5      | 14406.        | 17.21    | 6.70 | 10.51 | 91.20  | .95    | Pb |  | 1287.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|        |               |          |      |       |        |        | Zn |  | 2285.                 | .0     | .0   | 55.0 | .0     | .0     |
| 6      | 23535.        | 15.98    | 7.33 | 8.65  | *****  | .93    | Pb |  | 2300.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|        |               |          |      |       |        |        | Zn |  | 3073.                 | .0     | .0   | 55.0 | .0     | .0     |
| Total  | 227560.       | 10.02    | 3.73 | 6.29  | 59.17  | .82    | Pb |  | 11308.                | .0     | 60.0 | .0   | 750.0  | 3.5    |
|        |               |          |      |       |        |        | Zn |  | 21606.                | .0     | .0   | 55.0 | .0     | .0     |
| WASTE  |               |          |      |       |        |        |    |  |                       |        |      |      |        |        |
| TONNES |               | 3264942. |      |       |        |        |    |  |                       |        |      |      |        |        |

Reserves for bench # 19

| ROCK   | ORE<br>TONNES | GRADE    |      |      |        |        |    |  | CONCENTRATE<br>TONNES | GRADE  |      |      |        |        |
|--------|---------------|----------|------|------|--------|--------|----|--|-----------------------|--------|------|------|--------|--------|
|        |               | %Pb+Zn   | %Pb  | %Zn  | Ag g/t | Au g/t |    |  |                       | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |
| 1      | 33168.        | 7.60     | 2.61 | 4.99 | 41.43  | .84    | Pb |  | 1154.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|        |               |          |      |      |        |        | Zn |  | 2497.                 | .0     | .0   | 55.0 | .0     | .0     |
| 2      | 142320.       | 7.81     | 2.65 | 5.16 | 44.56  | .73    | Pb |  | 5025.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|        |               |          |      |      |        |        | Zn |  | 11087.                | .0     | .0   | 55.0 | .0     | .0     |
| 4      | 42434.        | 10.76    | 4.05 | 6.71 | 62.20  | .79    | Pb |  | 2290.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|        |               |          |      |      |        |        | Zn |  | 4297.                 | .0     | .0   | 55.0 | .0     | .0     |
| 5      | 25538.        | 13.88    | 5.67 | 8.21 | 79.15  | .88    | Pb |  | 1932.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|        |               |          |      |      |        |        | Zn |  | 3164.                 | .0     | .0   | 55.0 | .0     | .0     |
| 6      | 25031.        | 14.86    | 5.94 | 8.92 | *****  | .96    | Pb |  | 1983.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|        |               |          |      |      |        |        | Zn |  | 3368.                 | .0     | .0   | 55.0 | .0     | .0     |
| Total  | 268490.       | 9.48     | 3.46 | 6.03 | 55.43  | .79    | Pb |  | 12384.                | .0     | 60.0 | .0   | 750.0  | 3.5    |
|        |               |          |      |      |        |        | Zn |  | 24413.                | .0     | .0   | 55.0 | .0     | .0     |
| WASTE  |               |          |      |      |        |        |    |  |                       |        |      |      |        |        |
| TONNES |               | 3128309. |      |      |        |        |    |  |                       |        |      |      |        |        |

Reserves for bench # 20

| ROCK  | ORE<br>TONNES | GRADE  |      |      |        |        |    |  | CONCENTRATE<br>TONNES | GRADE  |      |      |        |        |
|-------|---------------|--------|------|------|--------|--------|----|--|-----------------------|--------|------|------|--------|--------|
|       |               | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |    |  |                       | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |
| 1     | 48574.        | 8.09   | 2.74 | 5.35 | 43.32  | .80    | Pb |  | 1774.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 3921.                 | .0     | .0   | 55.0 | .0     | .0     |
| 2     | 143172.       | 7.73   | 2.63 | 5.10 | 44.64  | .72    | Pb |  | 5025.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 11011.                | .0     | .0   | 55.0 | .0     | .0     |
| 4     | 56333.        | 10.54  | 3.83 | 6.71 | 59.69  | .72    | Pb |  | 2876.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 5704.                 | .0     | .0   | 55.0 | .0     | .0     |
| 5     | 39671.        | 11.13  | 4.98 | 6.16 | 68.78  | .91    | Pb |  | 2633.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 3686.                 | .0     | .0   | 55.0 | .0     | .0     |
| 6     | 27985.        | 14.89  | 5.87 | 9.02 | 98.27  | 1.02   | Pb |  | 2189.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 3810.                 | .0     | .0   | 55.0 | .0     | .0     |
| Total | 315735.       | 9.35   | 3.44 | 5.90 | 54.91  | .78    | Pb |  | 14498.                | .0     | 60.0 | .0   | 750.0  | 3.5    |

WASTE  
TONNES 2972138.

Zn 28132. .0 .0 55.0 .0 .0

Reserves for bench # 21

| ROCK  | ORE<br>TONNES | GRADE  |      |      |        |        |    |  | CONCENTRATE<br>TONNES | GRADE  |      |      |        |        |
|-------|---------------|--------|------|------|--------|--------|----|--|-----------------------|--------|------|------|--------|--------|
|       |               | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |    |  |                       | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |
| 1     | 40922.        | 9.44   | 3.33 | 6.11 | 53.43  | .90    | Pb |  | 1815.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 3774.                 | .0     | .0   | 55.0 | .0     | .0     |
| 2     | 102295.       | 7.65   | 2.60 | 5.05 | 44.02  | .72    | Pb |  | 3553.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 7789.                 | .0     | .0   | 55.0 | .0     | .0     |
| 3     | 1815.         | 6.22   | 2.33 | 3.89 | 41.00  | .63    | Pb |  | 56.                   | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 106.                  | .0     | .0   | 55.0 | .0     | .0     |
| 4     | 61499.        | 10.88  | 3.88 | 7.01 | 59.79  | .74    | Pb |  | 3179.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 6504.                 | .0     | .0   | 55.0 | .0     | .0     |
| 5     | 37772.        | 10.74  | 4.92 | 5.82 | 67.80  | .96    | Pb |  | 2476.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 3319.                 | .0     | .0   | 55.0 | .0     | .0     |
| 6     | 43137.        | 13.70  | 5.43 | 8.27 | 90.40  | 1.03   | Pb |  | 3123.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 5383.                 | .0     | .0   | 55.0 | .0     | .0     |
| 7     | 4818.         | 14.13  | 5.27 | 8.85 | 88.00  | 1.28   | Pb |  | 339.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 0.                    | .0     | .0   | .0   | .0     | .0     |
| Total | 292259.       | 9.97   | 3.73 | 6.24 | 59.28  | .83    | Pb |  | 14541.                | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn |  | 26876.                | .0     | .0   | 55.0 | .0     | .0     |

WASTE  
TONNES 2901363.

Reserves for bench # 22

| ROCK  | ORE<br>TONNES | GRADE  |      |       |        |        |    |  | CONCENTRATE<br>TONNES | GRADE  |      |      |        |        |
|-------|---------------|--------|------|-------|--------|--------|----|--|-----------------------|--------|------|------|--------|--------|
|       |               | %Pb+Zn | %Pb  | %Zn   | Ag g/t | Au g/t |    |  |                       | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |
| 1     | 39227.        | 9.49   | 3.36 | 6.14  | 54.60  | .88    | Pb |  | 1755.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn |  | 3632.                 | .0     | .0   | 55.0 | .0     | .0     |
| 2     | 72894.        | 7.95   | 2.72 | 5.23  | 44.59  | .76    | Pb |  | 2640.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn |  | 5756.                 | .0     | .0   | 55.0 | .0     | .0     |
| 4     | 40550.        | 10.89  | 3.86 | 7.03  | 58.60  | .71    | Pb |  | 2089.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn |  | 4300.                 | .0     | .0   | 55.0 | .0     | .0     |
| 5     | 15253.        | 10.45  | 4.68 | 5.77  | 67.73  | .95    | Pb |  | 951.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn |  | 1328.                 | .0     | .0   | 55.0 | .0     | .0     |
| 6     | 39061.        | 13.89  | 5.25 | 8.64  | 89.39  | 1.06   | Pb |  | 2735.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn |  | 5093.                 | .0     | .0   | 55.0 | .0     | .0     |
| 7     | 4721.         | 18.34  | 6.50 | 11.84 | *****  | 1.21   | Pb |  | 409.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn |  | 0.                    | .0     | .0   | .0   | .0     | .0     |
| Total | 211705.       | 10.31  | 3.75 | 6.56  | 60.42  | .85    | Pb |  | 10636.                | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn |  | 20216.                | .0     | .0   | 55.0 | .0     | .0     |

WASTE  
TONNES 2849065.

Reserves for bench # 23

| ROCK | ORE<br>TONNES | GRADE  |      |      |        |        |    |  | CONCENTRATE<br>TONNES | GRADE  |      |      |        |        |
|------|---------------|--------|------|------|--------|--------|----|--|-----------------------|--------|------|------|--------|--------|
|      |               | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |    |  |                       | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |
| 1    | 38927.        | 8.65   | 3.01 | 5.63 | 49.23  | .82    | Pb |  | 1563.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|      |               |        |      |      |        |        | Zn |  | 3310.                 | .0     | .0   | 55.0 | .0     | .0     |
| 2    | 108949.       | 7.76   | 2.71 | 5.06 | 44.14  | .75    | Pb |  | 3931.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |

[illegible][illegible]

| ROCK | ORE     |        |      |       |        |        | CONCENTRATE |        |     |      |        |        |     |
|------|---------|--------|------|-------|--------|--------|-------------|--------|-----|------|--------|--------|-----|
|      | TONNES  | GRADE  |      |       |        |        | TONNES      | GRADE  |     |      |        |        |     |
|      |         | %Pb+Zn | %Pb  | %Zn   | Ag g/t | Au g/t |             | %Pb+Zn | %Pb | %Zn  | Ag g/t | Au g/t |     |
| 1    | 44988.  | 8.09   | 2.84 | 5.25  | 44.37  | .85    | Pb          | 1706.  | .0  | 60.0 | .0     | 750.0  | 3.5 |
|      |         |        |      |       |        |        | Zn          | 3562.  | .0  | .0   | 55.0   | .0     | .0  |
| 2    | 129109. | 8.22   | 2.88 | 5.34  | 47.28  | .81    | Pb          | 4958.  | .0  | 60.0 | .0     | 750.0  | 3.5 |
|      |         |        |      |       |        |        | Zn          | 10398. | .0  | .0   | 55.0   | .0     | .0  |
| 4    | 13972.  | 7.17   | 2.36 | 4.82  | 40.20  | .60    | Pb          | 439.   | .0  | 60.0 | .0     | 750.0  | 3.5 |
|      |         |        |      |       |        |        | Zn          | 1015.  | .0  | .0   | 55.0   | .0     | .0  |
| 5    | 25004.  | 13.24  | 4.99 | 8.25  | 78.91  | 1.02   | Pb          | 1665.  | .0  | 60.0 | .0     | 750.0  | 3.5 |
|      |         |        |      |       |        |        | Zn          | 3112.  | .0  | .0   | 55.0   | .0     | .0  |
| 6    | 15888.  | 15.21  | 6.09 | 9.12  | 92.64  | 1.18   | Pb          | 1290.  | .0  | 60.0 | .0     | 750.0  | 3.5 |
|      |         |        |      |       |        |        | Zn          | 2187.  | .0  | .0   | 55.0   | .0     | .0  |
| 7    | 4858.   | 18.32  | 6.61 | 11.71 | *****  | 1.15   | Pb          | 428.   | .0  | 60.0 | .0     | 750.0  | 3.5 |
|      |         |        |      |       |        |        | Zn          | 0.     | .0  | .0   | .0     | .0     | .0  |
| 9    | 23378.  | 7.85   | 2.85 | 5.00  | 44.32  | .56    | Pb          | 887.   | .0  | 60.0 | .0     | 750.0  | 3.5 |
|      |         |        |      |       |        |        | Zn          | 0.     | .0  | .0   | .0     | .0     | .0  |

|       |         |      |      |      |       |     |    |        |    |      |      |       |     |
|-------|---------|------|------|------|-------|-----|----|--------|----|------|------|-------|-----|
| Total | 257196. | 9.22 | 3.32 | 5.90 | 53.10 | .83 | Pb | 11430. | .0 | 60.0 | .0   | 750.0 | 3.5 |
|       |         |      |      |      |       |     | Zn | 20382. | .0 | .0   | 55.0 | .0    | .0  |

WASTE  
TONNES 2423668.

Reserves for bench # 26

| ROCK  | ORE<br>TONNES | GRADE  |      |      |        |        |    | CONCENTRATE<br>TONNES | GRADE  |      |      |        |        |
|-------|---------------|--------|------|------|--------|--------|----|-----------------------|--------|------|------|--------|--------|
|       |               | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |    |                       | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |
| 1     | 44099.        | 7.87   | 2.76 | 5.10 | 42.29  | .81    | Pb | 1626.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn | 3397.                 | .0     | .0   | 55.0 | .0     | .0     |
| 2     | 126994.       | 8.00   | 2.90 | 5.10 | 46.70  | .87    | Pb | 4909.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn | 9782.                 | .0     | .0   | 55.0 | .0     | .0     |
| 4     | 16701.        | 9.64   | 3.06 | 6.58 | 53.15  | .93    | Pb | 682.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn | 1659.                 | .0     | .0   | 55.0 | .0     | .0     |
| 5     | 26966.        | 14.85  | 5.54 | 9.31 | 88.20  | 1.00   | Pb | 1991.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn | 3788.                 | .0     | .0   | 55.0 | .0     | .0     |
| 6     | 33972.        | 16.51  | 6.74 | 9.78 | *****  | 1.20   | Pb | 3051.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn | 5012.                 | .0     | .0   | 55.0 | .0     | .0     |
| 7     | 7139.         | 14.63  | 5.69 | 8.94 | 91.33  | 1.21   | Pb | 542.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn | 0.                    | .0     | .0   | .0   | .0     | .0     |
| 9     | 34048.        | 8.11   | 2.97 | 5.14 | 46.21  | .57    | Pb | 1350.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn | 0.                    | .0     | .0   | .0   | .0     | .0     |
| Total | 289918.       | 9.89   | 3.66 | 6.23 | 57.99  | .89    | Pb | 14206.                | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn | 23744.                | .0     | .0   | 55.0 | .0     | .0     |

WASTE  
TONNES 2239330.

Reserves for bench # 27

| ROCK  | ORE<br>TONNES | GRADE  |      |      |        |        |    | CONCENTRATE<br>TONNES | GRADE  |      |      |        |        |
|-------|---------------|--------|------|------|--------|--------|----|-----------------------|--------|------|------|--------|--------|
|       |               | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |    |                       | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |
| 1     | 26002.        | 6.76   | 2.39 | 4.37 | 38.32  | .79    | Pb | 828.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn | 1716.                 | .0     | .0   | 55.0 | .0     | .0     |
| 2     | 108814.       | 7.49   | 2.77 | 4.72 | 44.10  | .88    | Pb | 4018.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn | 7758.                 | .0     | .0   | 55.0 | .0     | .0     |
| 3     | 7382.         | 7.96   | 2.86 | 5.10 | 46.96  | .47    | Pb | 281.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn | 568.                  | .0     | .0   | 55.0 | .0     | .0     |
| 4     | 28127.        | 9.60   | 2.99 | 6.61 | 52.82  | .93    | Pb | 1121.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn | 2804.                 | .0     | .0   | 55.0 | .0     | .0     |
| 5     | 16623.        | 15.08  | 5.66 | 9.42 | 90.73  | 1.02   | Pb | 1254.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn | 2363.                 | .0     | .0   | 55.0 | .0     | .0     |
| 6     | 45521.        | 15.47  | 6.33 | 9.14 | 99.41  | 1.10   | Pb | 3843.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn | 6279.                 | .0     | .0   | 55.0 | .0     | .0     |
| 7     | 35673.        | 14.40  | 5.86 | 8.54 | 93.26  | 1.17   | Pb | 2786.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn | 0.                    | .0     | .0   | .0   | .0     | .0     |
| 9     | 31782.        | 8.72   | 3.22 | 5.49 | 52.40  | .59    | Pb | 1367.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn | 0.                    | .0     | .0   | .0   | .0     | .0     |
| Total | 299925.       | 10.22  | 3.88 | 6.35 | 62.19  | .91    | Pb | 15499.                | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |      |        |        | Zn | 21488.                | .0     | .0   | 55.0 | .0     | .0     |

WASTE  
TONNES 2153764.

Reserves for bench # 28

| ORE | CONCENTRATE |
|-----|-------------|
|-----|-------------|

| ROCK  | TONNES  | GRADE  |      |      |        |        |        |        | TONNES | GRADE |      |        |        |  |  |
|-------|---------|--------|------|------|--------|--------|--------|--------|--------|-------|------|--------|--------|--|--|
|       |         | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t | %Pb+Zn |        |        | %Pb   | %Zn  | Ag g/t | Au g/t |  |  |
| 1     | 26221.  | 6.84   | 2.36 | 4.48 | 37.45  | .81    | Pb     | 824.   | .0     | 60.0  | .0   | 750.0  | 3.5    |  |  |
|       |         |        |      |      |        |        | Zn     | 1773.  | .0     | .0    | 55.0 | .0     | .0     |  |  |
| 2     | 83880.  | 7.42   | 2.64 | 4.78 | 44.27  | .86    | Pb     | 2948.  | .0     | 60.0  | .0   | 750.0  | 3.5    |  |  |
|       |         |        |      |      |        |        | Zn     | 6051.  | .0     | .0    | 55.0 | .0     | .0     |  |  |
| 3     | 15179.  | 9.84   | 3.48 | 6.36 | 57.85  | .47    | Pb     | 705.   | .0     | 60.0  | .0   | 750.0  | 3.5    |  |  |
|       |         |        |      |      |        |        | Zn     | 1457.  | .0     | .0    | 55.0 | .0     | .0     |  |  |
| 4     | 28127.  | 8.60   | 2.75 | 5.84 | 48.20  | .78    | Pb     | 1033.  | .0     | 60.0  | .0   | 750.0  | 3.5    |  |  |
|       |         |        |      |      |        |        | Zn     | 2481.  | .0     | .0    | 55.0 | .0     | .0     |  |  |
| 5     | 10349.  | 13.42  | 5.16 | 8.26 | 80.97  | 1.19   | Pb     | 711.   | .0     | 60.0  | .0   | 750.0  | 3.5    |  |  |
|       |         |        |      |      |        |        | Zn     | 1290.  | .0     | .0    | 55.0 | .0     | .0     |  |  |
| 6     | 38131.  | 14.34  | 5.37 | 8.98 | 84.01  | 1.09   | Pb     | 2728.  | .0     | 60.0  | .0   | 750.0  | 3.5    |  |  |
|       |         |        |      |      |        |        | Zn     | 5166.  | .0     | .0    | 55.0 | .0     | .0     |  |  |
| 7     | 57099.  | 13.85  | 5.96 | 7.89 | 93.28  | 1.15   | Pb     | 4538.  | .0     | 60.0  | .0   | 750.0  | 3.5    |  |  |
|       |         |        |      |      |        |        | Zn     | 0.     | .0     | .0    | .0   | .0     | .0     |  |  |
| 9     | 31079.  | 8.33   | 3.06 | 5.26 | 52.76  | .60    | Pb     | 1270.  | .0     | 60.0  | .0   | 750.0  | 3.5    |  |  |
|       |         |        |      |      |        |        | Zn     | 0.     | .0     | .0    | .0   | .0     | .0     |  |  |
| <hr/> |         |        |      |      |        |        |        |        |        |       |      |        |        |  |  |
| Total | 290065. | 10.09  | 3.82 | 6.28 | 61.84  | .90    | Pb     | 14756. | .0     | 60.0  | .0   | 750.0  | 3.5    |  |  |
|       |         |        |      |      |        |        | Zn     | 18218. | .0     | .0    | 55.0 | .0     | .0     |  |  |

WASTE  
TONNES 2076470.

Reserves for bench # 29

| ROCK  | ORE     | GRADE  |      |      |        |        |        |        | CONCENTRATE | GRADE |      |        |        |  |  |
|-------|---------|--------|------|------|--------|--------|--------|--------|-------------|-------|------|--------|--------|--|--|
|       | TONNES  | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t | TONNES |        | %Pb+Zn      | %Pb   | %Zn  | Ag g/t | Au g/t |  |  |
| 1     | 22969.  | 6.68   | 2.28 | 4.40 | 36.53  | .89    | Pb     | 698.   | .0          | 60.0  | .0   | 750.0  | 3.5    |  |  |
|       |         |        |      |      |        |        | Zn     | 1526.  | .0          | .0    | 55.0 | .0     | .0     |  |  |
| 2     | 89241.  | 7.86   | 2.80 | 5.06 | 50.42  | .88    | Pb     | 3328.  | .0          | 60.0  | .0   | 750.0  | 3.5    |  |  |
|       |         |        |      |      |        |        | Zn     | 6815.  | .0          | .0    | 55.0 | .0     | .0     |  |  |
| 3     | 7334.   | 8.31   | 2.94 | 5.37 | 48.71  | .45    | Pb     | 287.   | .0          | 60.0  | .0   | 750.0  | 3.5    |  |  |
|       |         |        |      |      |        |        | Zn     | 594.   | .0          | .0    | 55.0 | .0     | .0     |  |  |
| 4     | 19024.  | 7.89   | 2.70 | 5.19 | 49.33  | .76    | Pb     | 685.   | .0          | 60.0  | .0   | 750.0  | 3.5    |  |  |
|       |         |        |      |      |        |        | Zn     | 1490.  | .0          | .0    | 55.0 | .0     | .0     |  |  |
| 5     | 10258.  | 12.70  | 4.64 | 8.06 | 71.88  | 1.16   | Pb     | 635.   | .0          | 60.0  | .0   | 750.0  | 3.5    |  |  |
|       |         |        |      |      |        |        | Zn     | 1248.  | .0          | .0    | 55.0 | .0     | .0     |  |  |
| 6     | 31483.  | 14.20  | 5.10 | 9.10 | 78.90  | 1.04   | Pb     | 2140.  | .0          | 60.0  | .0   | 750.0  | 3.5    |  |  |
|       |         |        |      |      |        |        | Zn     | 4322.  | .0          | .0    | 55.0 | .0     | .0     |  |  |
| 7     | 42470.  | 13.32  | 6.19 | 7.14 | 95.21  | 1.08   | Pb     | 3503.  | .0          | 60.0  | .0   | 750.0  | 3.5    |  |  |
|       |         |        |      |      |        |        | Zn     | 0.     | .0          | .0    | .0   | .0     | .0     |  |  |
| 9     | 32275.  | 8.45   | 3.09 | 5.36 | 56.52  | .59    | Pb     | 1329.  | .0          | 60.0  | .0   | 750.0  | 3.5    |  |  |
|       |         |        |      |      |        |        | Zn     | 0.     | .0          | .0    | .0   | .0     | .0     |  |  |
| <hr/> |         |        |      |      |        |        |        |        |             |       |      |        |        |  |  |
| Total | 255054. | 9.73   | 3.71 | 6.02 | 61.65  | .89    | Pb     | 12606. | .0          | 60.0  | .0   | 750.0  | 3.5    |  |  |
|       |         |        |      |      |        |        | Zn     | 15995. | .0          | .0    | 55.0 | .0     | .0     |  |  |

WASTE  
TONNES 1995545.

Reserves for bench # 30

| ROCK | ORE<br>TONNES | GRADE  |      |      |        |        |        |       | CONCENTRATE<br>TONNES | GRADE |      |        |        |  |  |
|------|---------------|--------|------|------|--------|--------|--------|-------|-----------------------|-------|------|--------|--------|--|--|
|      |               | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t | %Pb+Zn |       |                       | %Pb   | %Zn  | Ag g/t | Au g/t |  |  |
| 1    | 21170.        | 6.99   | 2.40 | 4.59 | 39.47  | .89    | Pb     | 678.  | .0                    | 60.0  | .0   | 750.0  | 3.5    |  |  |
|      |               |        |      |      |        |        | Zn     | 1468. | .0                    | .0    | 55.0 | .0     | .0     |  |  |
| 2    | 121037.       | 8.43   | 3.05 | 5.38 | 54.38  | .88    | Pb     | 4915. | .0                    | 60.0  | .0   | 750.0  | 3.5    |  |  |
|      |               |        |      |      |        |        | Zn     | 9835. | .0                    | .0    | 55.0 | .0     | .0     |  |  |
| 3    | 8041.         | 12.62  | 4.45 | 8.16 | 73.62  | .45    | Pb     | 477.  | .0                    | 60.0  | .0   | 750.0  | 3.5    |  |  |
|      |               |        |      |      |        |        | Zn     | 991.  | .0                    | .0    | 55.0 | .0     | .0     |  |  |

|                 |         |       |      |      |       |      |    |        |    |      |      |       |     |
|-----------------|---------|-------|------|------|-------|------|----|--------|----|------|------|-------|-----|
| 4               | 26717.  | 9.24  | 3.33 | 5.91 | 57.07 | .85  | Pb | 1187.  | .0 | 60.0 | .0   | 750.0 | 3.5 |
|                 |         |       |      |      |       |      | Zn | 2382.  | .0 | .0   | 55.0 | .0    | .0  |
| 5               | 30485.  | 10.24 | 3.85 | 6.38 | 60.89 | 1.09 | Pb | 1567.  | .0 | 60.0 | .0   | 750.0 | 3.5 |
|                 |         |       |      |      |       |      | Zn | 2936.  | .0 | .0   | 55.0 | .0    | .0  |
| 6               | 29388.  | 14.84 | 5.53 | 9.31 | 88.51 | 1.05 | Pb | 2167.  | .0 | 60.0 | .0   | 750.0 | 3.5 |
|                 |         |       |      |      |       |      | Zn | 4129.  | .0 | .0   | 55.0 | .0    | .0  |
| 7               | 23501.  | 12.79 | 6.33 | 6.46 | 96.99 | 1.01 | Pb | 1985.  | .0 | 60.0 | .0   | 750.0 | 3.5 |
|                 |         |       |      |      |       |      | Zn | 0.     | .0 | .0   | .0   | .0    | .0  |
| 9               | 34085.  | 7.45  | 2.72 | 4.73 | 48.49 | .63  | Pb | 1236.  | .0 | 60.0 | .0   | 750.0 | 3.5 |
|                 |         |       |      |      |       |      | Zn | 0.     | .0 | .0   | .0   | .0    | .0  |
| <hr/>           |         |       |      |      |       |      |    |        |    |      |      |       |     |
| Total           | 294423. | 9.58  | 3.62 | 5.96 | 60.88 | .88  | Pb | 14211. | .0 | 60.0 | .0   | 750.0 | 3.5 |
|                 |         |       |      |      |       |      | Zn | 21740. | .0 | .0   | 55.0 | .0    | .0  |
| <hr/>           |         |       |      |      |       |      |    |        |    |      |      |       |     |
| WASTE           |         |       |      |      |       |      |    |        |    |      |      |       |     |
| TONNES 1854491. |         |       |      |      |       |      |    |        |    |      |      |       |     |

Reserves for bench # 31

| ROCK            | ORE<br>TONNES | GRADE  |      |      |        |        |    | CONCENTRATE<br>TONNES | GRADE  |      |      |        |        |
|-----------------|---------------|--------|------|------|--------|--------|----|-----------------------|--------|------|------|--------|--------|
|                 |               | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |    |                       | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |
| 1               | 23331.        | 7.65   | 2.65 | 5.01 | 41.49  | .93    | Pb | 823.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|                 |               |        |      |      |        |        | Zn | 1763.                 | .0     | .0   | 55.0 | .0     | .0     |
| 2               | 125500.       | 8.53   | 3.13 | 5.39 | 55.01  | .88    | Pb | 5243.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|                 |               |        |      |      |        |        | Zn | 10213.                | .0     | .0   | 55.0 | .0     | .0     |
| 3               | 1761.         | 6.28   | 2.20 | 4.08 | 35.00  | .38    | Pb | 52.                   | .0     | 60.0 | .0   | 750.0  | 3.5    |
|                 |               |        |      |      |        |        | Zn | 108.                  | .0     | .0   | 55.0 | .0     | .0     |
| 4               | 30932.        | 9.54   | 3.36 | 6.18 | 55.11  | .81    | Pb | 1386.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|                 |               |        |      |      |        |        | Zn | 2883.                 | .0     | .0   | 55.0 | .0     | .0     |
| 5               | 49472.        | 10.44  | 3.90 | 6.53 | 61.23  | 1.06   | Pb | 2575.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|                 |               |        |      |      |        |        | Zn | 4876.                 | .0     | .0   | 55.0 | .0     | .0     |
| 6               | 22941.        | 15.42  | 5.94 | 9.48 | *****  | 1.04   | Pb | 1817.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|                 |               |        |      |      |        |        | Zn | 3281.                 | .0     | .0   | 55.0 | .0     | .0     |
| 7               | 21120.        | 12.40  | 6.11 | 6.29 | 95.89  | .87    | Pb | 1720.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|                 |               |        |      |      |        |        | Zn | 0.                    | .0     | .0   | .0   | .0     | .0     |
| 9               | 37737.        | 7.09   | 2.56 | 4.53 | 44.84  | .73    | Pb | 1289.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|                 |               |        |      |      |        |        | Zn | 0.                    | .0     | .0   | .0   | .0     | .0     |
| <hr/>           |               |        |      |      |        |        |    |                       |        |      |      |        |        |
| Total           | 312795.       | 9.44   | 3.57 | 5.87 | 59.73  | .89    | Pb | 14905.                | .0     | 60.0 | .0   | 750.0  | 3.5    |
|                 |               |        |      |      |        |        | Zn | 23124.                | .0     | .0   | 55.0 | .0     | .0     |
| <hr/>           |               |        |      |      |        |        |    |                       |        |      |      |        |        |
| WASTE           |               |        |      |      |        |        |    |                       |        |      |      |        |        |
| TONNES 1720735. |               |        |      |      |        |        |    |                       |        |      |      |        |        |

Reserves for bench # 32

| ROCK | ORE<br>TONNES | GRADE  |      |       |        |        |    | CONCENTRATE<br>TONNES | GRADE  |      |      |        |        |
|------|---------------|--------|------|-------|--------|--------|----|-----------------------|--------|------|------|--------|--------|
|      |               | %Pb+Zn | %Pb  | %Zn   | Ag g/t | Au g/t |    |                       | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |
| 1    | 19410.        | 6.66   | 2.34 | 4.32  | 38.29  | .95    | Pb | 605.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|      |               |        |      |       |        |        | Zn | 1265.                 | .0     | .0   | 55.0 | .0     | .0     |
| 2    | 111755.       | 8.17   | 3.03 | 5.14  | 51.89  | .89    | Pb | 4512.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|      |               |        |      |       |        |        | Zn | 8672.                 | .0     | .0   | 55.0 | .0     | .0     |
| 3    | 5232.         | 6.32   | 2.18 | 4.14  | 33.00  | .35    | Pb | 152.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|      |               |        |      |       |        |        | Zn | 327.                  | .0     | .0   | 55.0 | .0     | .0     |
| 4    | 24715.        | 8.72   | 3.09 | 5.63  | 49.84  | .81    | Pb | 1018.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|      |               |        |      |       |        |        | Zn | 2099.                 | .0     | .0   | 55.0 | .0     | .0     |
| 5    | 55875.        | 10.90  | 4.01 | 6.89  | 64.00  | 1.16   | Pb | 2990.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|      |               |        |      |       |        |        | Zn | 5806.                 | .0     | .0   | 55.0 | .0     | .0     |
| 6    | 31326.        | 17.77  | 6.30 | 11.47 | *****  | 1.27   | Pb | 2633.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|      |               |        |      |       |        |        | Zn | 5421.                 | .0     | .0   | 55.0 | .0     | .0     |
| 7    | 35237.        | 12.11  | 5.96 | 6.15  | 94.68  | .81    | Pb | 2801.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|      |               |        |      |       |        |        | Zn | 0.                    | .0     | .0   | .0   | .0     | .0     |

[illegible][illegible][illegible]

## Reserves for bench # 35

| ROCK   | ORE<br>TONNES | GRADE    |      |       |        |        |    |  | CONCENTRATE<br>TONNES | GRADE  |      |      |        |        |
|--------|---------------|----------|------|-------|--------|--------|----|--|-----------------------|--------|------|------|--------|--------|
|        |               | %Pb+Zn   | %Pb  | %Zn   | Ag g/t | Au g/t |    |  |                       | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |
| 1      | 10917.        | 6.59     | 2.28 | 4.31  | 38.69  | .95    | Pb |  | 332.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|        |               |          |      |       |        |        | Zn |  | 710.                  | .0     | .0   | 55.0 | .0     | .0     |
| 2      | 136850.       | 8.52     | 3.07 | 5.45  | 52.40  | 1.02   | Pb |  | 5604.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|        |               |          |      |       |        |        | Zn |  | 11261.                | .0     | .0   | 55.0 | .0     | .0     |
| 4      | 51729.        | 16.13    | 5.73 | 10.40 | 92.61  | 1.12   | Pb |  | 3955.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|        |               |          |      |       |        |        | Zn |  | 8115.                 | .0     | .0   | 55.0 | .0     | .0     |
| 5      | 29236.        | 10.88    | 4.09 | 6.79  | 67.33  | 1.12   | Pb |  | 1596.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|        |               |          |      |       |        |        | Zn |  | 2994.                 | .0     | .0   | 55.0 | .0     | .0     |
| 6      | 74544.        | 16.93    | 6.43 | 10.49 | *****  | 1.57   | Pb |  | 6393.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|        |               |          |      |       |        |        | Zn |  | 11805.                | .0     | .0   | 55.0 | .0     | .0     |
| 7      | 16390.        | 13.64    | 6.31 | 7.33  | 94.86  | .94    | Pb |  | 1378.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|        |               |          |      |       |        |        | Zn |  | 0.                    | .0     | .0   | .0   | .0     | .0     |
| 9      | 30620.        | 7.27     | 2.48 | 4.79  | 45.74  | .83    | Pb |  | 1012.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|        |               |          |      |       |        |        | Zn |  | 0.                    | .0     | .0   | .0   | .0     | .0     |
| Total  | 350286.       | 11.70    | 4.34 | 7.36  | 71.77  | 1.14   | Pb |  | 20325.                | .0     | 60.0 | .0   | 750.0  | 3.5    |
|        |               |          |      |       |        |        | Zn |  | 35005.                | .0     | .0   | 55.0 | .0     | .0     |
| WASTE  |               |          |      |       |        |        |    |  |                       |        |      |      |        |        |
| TONNES |               | 1299285. |      |       |        |        |    |  |                       |        |      |      |        |        |

## Reserves for bench # 36

| ROCK   | ORE<br>TONNES | GRADE    |      |       |        |        |    |  | CONCENTRATE<br>TONNES | GRADE  |      |      |        |        |
|--------|---------------|----------|------|-------|--------|--------|----|--|-----------------------|--------|------|------|--------|--------|
|        |               | %Pb+Zn   | %Pb  | %Zn   | Ag g/t | Au g/t |    |  |                       | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |
| 1      | 7956.         | 6.91     | 2.17 | 4.74  | 39.51  | 1.39   | Pb |  | 230.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|        |               |          |      |       |        |        | Zn |  | 569.                  | .0     | .0   | 55.0 | .0     | .0     |
| 2      | 147678.       | 8.45     | 3.05 | 5.40  | 51.12  | .99    | Pb |  | 5996.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|        |               |          |      |       |        |        | Zn |  | 12042.                | .0     | .0   | 55.0 | .0     | .0     |
| 4      | 31480.        | 20.13    | 6.84 | 13.28 | *****  | 1.39   | Pb |  | 2873.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|        |               |          |      |       |        |        | Zn |  | 6310.                 | .0     | .0   | 55.0 | .0     | .0     |
| 5      | 35897.        | 11.72    | 4.25 | 7.47  | 71.98  | 1.19   | Pb |  | 2033.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|        |               |          |      |       |        |        | Zn |  | 4047.                 | .0     | .0   | 55.0 | .0     | .0     |
| 6      | 89838.        | 16.89    | 6.23 | 10.66 | *****  | 1.48   | Pb |  | 7458.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|        |               |          |      |       |        |        | Zn |  | 14453.                | .0     | .0   | 55.0 | .0     | .0     |
| 7      | 12258.        | 14.53    | 5.88 | 8.66  | 94.68  | 1.38   | Pb |  | 961.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|        |               |          |      |       |        |        | Zn |  | 0.                    | .0     | .0   | .0   | .0     | .0     |
| 9      | 27045.        | 8.21     | 2.72 | 5.49  | 53.29  | .80    | Pb |  | 979.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|        |               |          |      |       |        |        | Zn |  | 0.                    | .0     | .0   | .0   | .0     | .0     |
| Total  | 352152.       | 12.14    | 4.37 | 7.76  | 73.94  | 1.18   | Pb |  | 20587.                | .0     | 60.0 | .0   | 750.0  | 3.5    |
|        |               |          |      |       |        |        | Zn |  | 37541.                | .0     | .0   | 55.0 | .0     | .0     |
| WASTE  |               |          |      |       |        |        |    |  |                       |        |      |      |        |        |
| TONNES |               | 1201695. |      |       |        |        |    |  |                       |        |      |      |        |        |

## Reserves for bench # 37

| ROCK | ORE<br>TONNES | GRADE  |      |       |        |        |    |  | CONCENTRATE<br>TONNES | GRADE  |      |      |        |        |
|------|---------------|--------|------|-------|--------|--------|----|--|-----------------------|--------|------|------|--------|--------|
|      |               | %Pb+Zn | %Pb  | %Zn   | Ag g/t | Au g/t |    |  |                       | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |
| 1    | 23493.        | 6.67   | 2.38 | 4.30  | 41.77  | 1.06   | Pb |  | 744.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|      |               |        |      |       |        |        | Zn |  | 1524.                 | .0     | .0   | 55.0 | .0     | .0     |
| 2    | 146807.       | 8.63   | 3.07 | 5.55  | 51.65  | 1.01   | Pb |  | 6019.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|      |               |        |      |       |        |        | Zn |  | 12297.                | .0     | .0   | 55.0 | .0     | .0     |
| 4    | 20835.        | 19.01  | 6.39 | 12.62 | *****  | 1.33   | Pb |  | 1776.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|      |               |        |      |       |        |        | Zn |  | 3968.                 | .0     | .0   | 55.0 | .0     | .0     |
| 5    | 23014.        | 12.23  | 4.39 | 7.85  | 75.56  | 1.22   | Pb |  | 1346.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |

|       |         |       |      |       |       |      |    |        |    |      |      |       |     |
|-------|---------|-------|------|-------|-------|------|----|--------|----|------|------|-------|-----|
| 6     | 104501. | 17.33 | 6.35 | 10.98 | ***** | 1.46 | Pb | 2725.  | .0 | .0   | 55.0 | .0    | .0  |
|       |         |       |      |       |       |      | Zn | 8850.  | .0 | 60.0 | .0   | 750.0 | 3.5 |
| 7     | 19573.  | 14.00 | 5.71 | 8.29  | 95.55 | 1.20 | Pb | 17316. | .0 | .0   | 55.0 | .0    | .0  |
|       |         |       |      |       |       |      | Zn | 1490.  | .0 | 60.0 | .0   | 750.0 | 3.5 |
| 9     | 15034.  | 9.04  | 2.91 | 6.13  | 60.24 | .73  | Pb | 0.     | .0 | .0   | .0   | .0    | .0  |
|       |         |       |      |       |       |      | Zn | 583.   | .0 | 60.0 | .0   | 750.0 | 3.5 |
|       |         |       |      |       |       |      |    | 0.     | .0 | .0   | .0   | .0    | .0  |
| Total | 353256. | 12.23 | 4.42 | 7.82  | 74.68 | 1.18 | Pb | 20865. | .0 | 60.0 | .0   | 750.0 | 3.5 |
|       |         |       |      |       |       |      | Zn | 37950. | .0 | .0   | 55.0 | .0    | .0  |

WASTE  
TONNES 1083150.

Reserves for bench # 38

| ROCK  | ORE<br>TONNES | GRADE  |      |       |        |        |    | CONCENTRATE<br>TONNES | GRADE  |      |      |        |        |
|-------|---------------|--------|------|-------|--------|--------|----|-----------------------|--------|------|------|--------|--------|
|       |               | %Pb+Zn | %Pb  | %Zn   | Ag g/t | Au g/t |    |                       | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |
| 1     | 53285.        | 7.71   | 2.73 | 4.98  | 47.35  | 1.11   | Pb | 1939.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn | 4008.                 | .0     | .0   | 55.0 | .0     | .0     |
| 2     | 128968.       | 8.23   | 2.98 | 5.24  | 50.84  | 1.02   | Pb | 5130.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn | 10206.                | .0     | .0   | 55.0 | .0     | .0     |
| 4     | 11582.        | 13.51  | 4.91 | 8.60  | 79.58  | 1.08   | Pb | 758.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn | 1503.                 | .0     | .0   | 55.0 | .0     | .0     |
| 5     | 16440.        | 13.03  | 4.60 | 8.43  | 81.92  | 1.27   | Pb | 1009.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn | 2091.                 | .0     | .0   | 55.0 | .0     | .0     |
| 6     | 94578.        | 18.23  | 6.59 | 11.64 | *****  | 1.51   | Pb | 8305.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn | 16619.                | .0     | .0   | 55.0 | .0     | .0     |
| 7     | 24359.        | 13.68  | 5.68 | 8.00  | 93.75  | 1.15   | Pb | 1846.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn | 0.                    | .0     | .0   | .0   | .0     | .0     |
| 9     | 6687.         | 9.22   | 2.98 | 6.25  | 61.52  | .71    | Pb | 265.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn | 0.                    | .0     | .0   | .0   | .0     | .0     |
| Total | 335899.       | 11.79  | 4.30 | 7.50  | 72.30  | 1.19   | Pb | 19309.                | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn | 34546.                | .0     | .0   | 55.0 | .0     | .0     |

WASTE  
TONNES 1012005.

Reserves for bench # 39

| ROCK  | ORE<br>TONNES | GRADE  |      |       |        |        |    | CONCENTRATE<br>TONNES | GRADE  |      |      |        |        |
|-------|---------------|--------|------|-------|--------|--------|----|-----------------------|--------|------|------|--------|--------|
|       |               | %Pb+Zn | %Pb  | %Zn   | Ag g/t | Au g/t |    |                       | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |
| 1     | 67679.        | 9.70   | 3.46 | 6.25  | 57.39  | 1.21   | Pb | 3120.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn | 6380.                 | .0     | .0   | 55.0 | .0     | .0     |
| 2     | 107745.       | 7.92   | 2.93 | 4.99  | 49.93  | 1.00   | Pb | 4209.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn | 8114.                 | .0     | .0   | 55.0 | .0     | .0     |
| 4     | 5940.         | 12.74  | 4.49 | 8.25  | 76.14  | 1.03   | Pb | 355.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn | 740.                  | .0     | .0   | 55.0 | .0     | .0     |
| 5     | 12040.        | 11.72  | 4.08 | 7.64  | 71.87  | 1.14   | Pb | 655.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn | 1388.                 | .0     | .0   | 55.0 | .0     | .0     |
| 6     | 95249.        | 17.93  | 6.39 | 11.54 | *****  | 1.54   | Pb | 8110.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn | 16589.                | .0     | .0   | 55.0 | .0     | .0     |
| 7     | 19444.        | 13.59  | 5.65 | 7.93  | 93.55  | 1.11   | Pb | 1465.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn | 0.                    | .0     | .0   | .0   | .0     | .0     |
| 9     | 1672.         | 7.58   | 2.50 | 5.07  | 51.00  | .70    | Pb | 56.                   | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn | 0.                    | .0     | .0   | .0   | .0     | .0     |
| Total | 309770.       | 11.98  | 4.35 | 7.63  | 72.93  | 1.22   | Pb | 18027.                | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn | 33330.                | .0     | .0   | 55.0 | .0     | .0     |

WASTE  
TONNES 936211.

Reserves for bench # 40

| ROCK   | ORE     |        |      |       |        |        | CONCENTRATE |        |     |      |        |        |     |  |
|--------|---------|--------|------|-------|--------|--------|-------------|--------|-----|------|--------|--------|-----|--|
|        | TONNES  | GRADE  |      |       |        |        | TONNES      | GRADE  |     |      |        |        |     |  |
|        |         | %Pb+Zn | %Pb  | %Zn   | Ag g/t | Au g/t |             | %Pb+Zn | %Pb | %Zn  | Ag g/t | Au g/t |     |  |
| 1      | 60935.  | 10.91  | 3.91 | 6.99  | 64.05  | 1.26   | Pb          | 3180.  | .0  | 60.0 | .0     | 750.0  | 3.5 |  |
|        |         |        |      |       |        |        | Zn          | 6431.  | .0  | .0   | 55.0   | .0     | .0  |  |
| 2      | 93965.  | 7.85   | 2.95 | 4.89  | 49.79  | .99    | Pb          | 3700.  | .0  | 60.0 | .0     | 750.0  | 3.5 |  |
|        |         |        |      |       |        |        | Zn          | 6938.  | .0  | .0   | 55.0   | .0     | .0  |  |
| 4      | 14598.  | 12.22  | 4.37 | 7.85  | 76.61  | 1.16   | Pb          | 850.   | .0  | 60.0 | .0     | 750.0  | 3.5 |  |
|        |         |        |      |       |        |        | Zn          | 1730.  | .0  | .0   | 55.0   | .0     | .0  |  |
| 5      | 8169.   | 11.66  | 4.18 | 7.48  | 71.93  | 1.37   | Pb          | 455.   | .0  | 60.0 | .0     | 750.0  | 3.5 |  |
|        |         |        |      |       |        |        | Zn          | 922.   | .0  | .0   | 55.0   | .0     | .0  |  |
| 6      | 120135. | 17.43  | 6.32 | 11.11 | *****  | 1.48   | Pb          | 10128. | .0  | 60.0 | .0     | 750.0  | 3.5 |  |
|        |         |        |      |       |        |        | Zn          | 20144. | .0  | .0   | 55.0   | .0     | .0  |  |
| 7      | 9881.   | 12.70  | 4.96 | 7.74  | 88.71  | 1.03   | Pb          | 654.   | .0  | 60.0 | .0     | 750.0  | 3.5 |  |
|        |         |        |      |       |        |        | Zn          | 0.     | .0  | .0   | .0     | .0     | .0  |  |
| <hr/>  |         |        |      |       |        |        |             |        |     |      |        |        |     |  |
| Total  | 307683. | 12.66  | 4.62 | 8.04  | 77.64  | 1.26   | Pb          | 19078. | .0  | 60.0 | .0     | 750.0  | 3.5 |  |
|        |         |        |      |       |        |        | Zn          | 36286. | .0  | .0   | 55.0   | .0     | .0  |  |
| <hr/>  |         |        |      |       |        |        |             |        |     |      |        |        |     |  |
| WASTE  |         |        |      |       |        |        |             |        |     |      |        |        |     |  |
| TONNES | 860085. |        |      |       |        |        |             |        |     |      |        |        |     |  |

Reserves for bench # 41

| ROCK   | ORE     |        |      |       |        |        | CONCENTRATE |        |     |      |        |        |     |
|--------|---------|--------|------|-------|--------|--------|-------------|--------|-----|------|--------|--------|-----|
|        | TONNES  | GRADE  |      |       |        |        | TONNES      | GRADE  |     |      |        |        |     |
|        |         | %Pb+Zn | %Pb  | %Zn   | Ag g/t | Au g/t |             | %Pb+Zn | %Pb | %Zn  | Ag g/t | Au g/t |     |
| 1      | 49150.  | 10.51  | 3.76 | 6.75  | 61.74  | 1.25   | Pb          | 2466.  | .0  | 60.0 | .0     | 750.0  | 3.5 |
|        |         |        |      |       |        |        | Zn          | 5008.  | .0  | .0   | 55.0   | .0     | .0  |
| 2      | 84201.  | 7.90   | 2.92 | 4.98  | 49.48  | .99    | Pb          | 3274.  | .0  | 60.0 | .0     | 750.0  | 3.5 |
|        |         |        |      |       |        |        | Zn          | 6330.  | .0  | .0   | 55.0   | .0     | .0  |
| 4      | 30184.  | 13.23  | 4.63 | 8.60  | 80.09  | 1.17   | Pb          | 1863.  | .0  | 60.0 | .0     | 750.0  | 3.5 |
|        |         |        |      |       |        |        | Zn          | 3919.  | .0  | .0   | 55.0   | .0     | .0  |
| 5      | 10252.  | 12.03  | 4.37 | 7.66  | 75.27  | 1.40   | Pb          | 598.   | .0  | 60.0 | .0     | 750.0  | 3.5 |
|        |         |        |      |       |        |        | Zn          | 1185.  | .0  | .0   | 55.0   | .0     | .0  |
| 6      | 119670. | 17.64  | 6.28 | 11.36 | *****  | 1.40   | Pb          | 10015. | .0  | 60.0 | .0     | 750.0  | 3.5 |
|        |         |        |      |       |        |        | Zn          | 20519. | .0  | .0   | 55.0   | .0     | .0  |
| 7      | 9688.   | 13.47  | 4.84 | 8.63  | 86.38  | 1.09   | Pb          | 625.   | .0  | 60.0 | .0     | 750.0  | 3.5 |
|        |         |        |      |       |        |        | Zn          | 0.     | .0  | .0   | .0     | .0     | .0  |
| Total  | 303145. | 13.02  | 4.66 | 8.36  | 79.27  | 1.23   | Pb          | 18953. | .0  | 60.0 | .0     | 750.0  | 3.5 |
|        |         |        |      |       |        |        | Zn          | 37081. | .0  | .0   | 55.0   | .0     | .0  |
| WASTE  |         |        |      |       |        |        |             |        |     |      |        |        |     |
| TONNES | 791588. |        |      |       |        |        |             |        |     |      |        |        |     |

Reserves for bench # 42

| ROCK | ORE     |       |        |      |       |        |        | CONCENTRATE |       |        |      |       |        |        |
|------|---------|-------|--------|------|-------|--------|--------|-------------|-------|--------|------|-------|--------|--------|
|      | TONNES  | GRADE | %Pb+Zn | %Pb  | %Zn   | Ag g/t | Au g/t | TONNES      | GRADE | %Pb+Zn | %Pb  | %Zn   | Ag g/t | Au g/t |
| 1    | 35865.  | 8.51  | 3.10   | 5.41 | 51.09 | 1.19   | Pb     | 1484.       | .0    | 60.0   | .0   | 750.0 | 3.5    |        |
|      |         |       |        |      |       |        | Zn     | 2929.       | .0    | .0     | 55.0 | .0    | .0     |        |
| 2    | 110621. | 7.95  | 2.95   | 5.00 | 49.29 | .99    | Pb     | 4344.       | .0    | 60.0   | .0   | 750.0 | 3.5    |        |
|      |         |       |        |      |       |        | Zn     | 8349.       | .0    | .0     | 55.0 | .0    | .0     |        |
| 4    | 31324.  | 14.24 | 4.89   | 9.35 | 84.13 | 1.26   | Pb     | 2044.       | .0    | 60.0   | .0   | 750.0 | 3.5    |        |
|      |         |       |        |      |       |        | Zn     | 4418.       | .0    | .0     | 55.0 | .0    | .0     |        |
| 5    | 16255.  | 10.61 | 3.79   | 6.82 | 66.97 | 1.59   | Pb     | 821.        | .0    | 60.0   | .0   | 750.0 | 3.5    |        |
|      |         |       |        |      |       |        | Zn     | 1672.       | .0    | .0     | 55.0 | .0    | .0     |        |

|                |         |       |      |       |       |      |    |        |    |      |      |       |     |
|----------------|---------|-------|------|-------|-------|------|----|--------|----|------|------|-------|-----|
| 6              | 101312. | 17.78 | 6.21 | 11.57 | ***** | 1.37 | Pb | 8392.  | .0 | 60.0 | .0   | 750.0 | 3.5 |
|                |         |       |      |       |       |      | Zn | 17691. | .0 | .0   | 55.0 | .0    | .0  |
| 7              | 16417.  | 13.99 | 5.17 | 8.82  | 89.67 | 1.13 | Pb | 1132.  | .0 | 60.0 | .0   | 750.0 | 3.5 |
|                |         |       |      |       |       |      | Zn | 0.     | .0 | .0   | .0   | .0    | .0  |
| -----          |         |       |      |       |       |      |    |        |    |      |      |       |     |
| Total          | 311793. | 12.30 | 4.38 | 7.92  | 74.66 | 1.20 | Pb | 18330. | .0 | 60.0 | .0   | 750.0 | 3.5 |
|                |         |       |      |       |       |      | Zn | 35179. | .0 | .0   | 55.0 | .0    | .0  |
| WASTE          |         |       |      |       |       |      |    |        |    |      |      |       |     |
| TONNES 679340. |         |       |      |       |       |      |    |        |    |      |      |       |     |

Reserves for bench # 43

| ROCK           | ORE<br>TONNES | GRADE<br>%Pb+Zn | %Pb  | %Zn   | Ag g/t | Au g/t | CONCENTRATE |                 |     |      |        |        |     |
|----------------|---------------|-----------------|------|-------|--------|--------|-------------|-----------------|-----|------|--------|--------|-----|
|                |               |                 |      |       |        |        | TONNES      | GRADE<br>%Pb+Zn | %Pb | %Zn  | Ag g/t | Au g/t |     |
| 1              | 42019.        | 7.32            | 2.62 | 4.70  | 45.49  | 1.12   | Pb          | 1468.           | .0  | 60.0 | .0     | 750.0  | 3.5 |
|                |               |                 |      |       |        |        | Zn          | 2983.           | .0  | .0   | 55.0   | .0     | .0  |
| 2              | 144203.       | 8.56            | 3.13 | 5.43  | 51.90  | .95    | Pb          | 6010.           | .0  | 60.0 | .0     | 750.0  | 3.5 |
|                |               |                 |      |       |        |        | Zn          | 11819.          | .0  | .0   | 55.0   | .0     | .0  |
| 4              | 21595.        | 15.94           | 5.44 | 10.50 | 91.26  | 1.42   | Pb          | 1567.           | .0  | 60.0 | .0     | 750.0  | 3.5 |
|                |               |                 |      |       |        |        | Zn          | 3420.           | .0  | .0   | 55.0   | .0     | .0  |
| 5              | 19475.        | 11.09           | 3.95 | 7.13  | 70.41  | 1.47   | Pb          | 1027.           | .0  | 60.0 | .0     | 750.0  | 3.5 |
|                |               |                 |      |       |        |        | Zn          | 2096.           | .0  | .0   | 55.0   | .0     | .0  |
| 6              | 95399.        | 16.25           | 5.70 | 10.55 | 99.25  | 1.31   | Pb          | 7246.           | .0  | 60.0 | .0     | 750.0  | 3.5 |
|                |               |                 |      |       |        |        | Zn          | 15188.          | .0  | .0   | 55.0   | .0     | .0  |
| 7              | 11472.        | 14.29           | 5.32 | 8.97  | 93.64  | 1.10   | Pb          | 814.            | .0  | 60.0 | .0     | 750.0  | 3.5 |
|                |               |                 |      |       |        |        | Zn          | 0.              | .0  | .0   | .0     | .0     | .0  |
| -----          |               |                 |      |       |        |        |             |                 |     |      |        |        |     |
| Total          | 334163.       | 11.42           | 4.07 | 7.35  | 69.67  | 1.14   | Pb          | 18244.          | .0  | 60.0 | .0     | 750.0  | 3.5 |
|                |               |                 |      |       |        |        | Zn          | 35626.          | .0  | .0   | 55.0   | .0     | .0  |
| WASTE          |               |                 |      |       |        |        |             |                 |     |      |        |        |     |
| TONNES 582989. |               |                 |      |       |        |        |             |                 |     |      |        |        |     |

Reserves for bench # 44

| ROCK           | ORE<br>TONNES | GRADE<br>%Pb+Zn | %Pb  | %Zn   | Ag g/t | Au g/t | CONCENTRATE |                 |     |      |        |        |     |
|----------------|---------------|-----------------|------|-------|--------|--------|-------------|-----------------|-----|------|--------|--------|-----|
|                |               |                 |      |       |        |        | TONNES      | GRADE<br>%Pb+Zn | %Pb | %Zn  | Ag g/t | Au g/t |     |
| 1              | 32585.        | 8.00            | 2.95 | 5.05  | 50.35  | 1.16   | Pb          | 1282.           | .0  | 60.0 | .0     | 750.0  | 3.5 |
|                |               |                 |      |       |        |        | Zn          | 2485.           | .0  | .0   | 55.0   | .0     | .0  |
| 2              | 160163.       | 8.55            | 3.12 | 5.44  | 52.28  | .98    | Pb          | 6653.           | .0  | 60.0 | .0     | 750.0  | 3.5 |
|                |               |                 |      |       |        |        | Zn          | 13139.          | .0  | .0   | 55.0   | .0     | .0  |
| 4              | 21568.        | 15.32           | 5.28 | 10.04 | 85.99  | 1.40   | Pb          | 1519.           | .0  | 60.0 | .0     | 750.0  | 3.5 |
|                |               |                 |      |       |        |        | Zn          | 3267.           | .0  | .0   | 55.0   | .0     | .0  |
| 5              | 15645.        | 11.23           | 4.12 | 7.11  | 70.14  | 1.04   | Pb          | 859.            | .0  | 60.0 | .0     | 750.0  | 3.5 |
|                |               |                 |      |       |        |        | Zn          | 1678.           | .0  | .0   | 55.0   | .0     | .0  |
| 6              | 93671.        | 15.77           | 5.55 | 10.21 | 96.89  | 1.26   | Pb          | 6933.           | .0  | 60.0 | .0     | 750.0  | 3.5 |
|                |               |                 |      |       |        |        | Zn          | 14439.          | .0  | .0   | 55.0   | .0     | .0  |
| 9              | 1670.         | 6.05            | 2.32 | 3.72  | 41.00  | .51    | Pb          | 52.             | .0  | 60.0 | .0     | 750.0  | 3.5 |
|                |               |                 |      |       |        |        | Zn          | 0.              | .0  | .0   | .0     | .0     | .0  |
| -----          |               |                 |      |       |        |        |             |                 |     |      |        |        |     |
| Total          | 325302.       | 11.14           | 3.99 | 7.15  | 67.97  | 1.11   | Pb          | 18168.          | .0  | 60.0 | .0     | 750.0  | 3.5 |
|                |               |                 |      |       |        |        | Zn          | 35128.          | .0  | .0   | 55.0   | .0     | .0  |
| WASTE          |               |                 |      |       |        |        |             |                 |     |      |        |        |     |
| TONNES 506871. |               |                 |      |       |        |        |             |                 |     |      |        |        |     |

Reserves for bench # 45

| ROCK | ORE<br>TONNES | GRADE | CONCENTRATE |       |  |  |  |  |  |
|------|---------------|-------|-------------|-------|--|--|--|--|--|
|      |               |       | TONNES      | GRADE |  |  |  |  |  |

[illegible]

|       |         |       |      |      |       |      |    |        |    |      |      |       |     |
|-------|---------|-------|------|------|-------|------|----|--------|----|------|------|-------|-----|
| Total | 256747. | 11.78 | 4.17 | 7.60 | 72.72 | 1.18 | Pb | 14394. | .0 | 60.0 | .0   | 750.0 | 3.5 |
|       |         |       |      |      |       |      | Zn | 29363. | .0 | .0   | 55.0 | .0    | .0  |

WASTE  
TONNES 375909.

Reserves for bench # 48

| ROCK  | ORE<br>TONNES | GRADE   |      |      |        |        |    | CONCENTRATE<br>TONNES | GRADE  |      |      |        |        |
|-------|---------------|---------|------|------|--------|--------|----|-----------------------|--------|------|------|--------|--------|
|       |               | %Pb+Zn  | %Pb  | %Zn  | Ag g/t | Au g/t |    |                       | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |
| 1     | 10152.        | 8.05    | 2.93 | 5.12 | 53.59  | 1.16   | Pb | 396.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |         |      |      |        |        | Zn | 785.                  | .0     | .0   | 55.0 | .0     | .0     |
| 2     | 32661.        | 8.11    | 2.90 | 5.21 | 51.80  | 1.11   | Pb | 1263.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |         |      |      |        |        | Zn | 2570.                 | .0     | .0   | 55.0 | .0     | .0     |
| 4     | 32318.        | 14.92   | 5.15 | 9.77 | 88.83  | 1.45   | Pb | 2219.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |         |      |      |        |        | Zn | 4766.                 | .0     | .0   | 55.0 | .0     | .0     |
| 5     | 10340.        | 9.05    | 3.40 | 5.64 | 58.91  | 1.04   | Pb | 469.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |         |      |      |        |        | Zn | 881.                  | .0     | .0   | 55.0 | .0     | .0     |
| 6     | 27585.        | 13.82   | 5.11 | 8.71 | 87.83  | 1.34   | Pb | 1880.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |         |      |      |        |        | Zn | 3626.                 | .0     | .0   | 55.0 | .0     | .0     |
| 7     | 5049.         | 9.77    | 3.16 | 6.60 | 55.05  | .82    | Pb | 213.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |         |      |      |        |        | Zn | 0.                    | .0     | .0   | .0   | .0     | .0     |
| Total | 118104.       | 11.46   | 4.09 | 7.37 | 71.26  | 1.24   | Pb | 6547.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |         |      |      |        |        | Zn | 12747.                | .0     | .0   | 55.0 | .0     | .0     |
| WASTE | TONNES        | 170264. |      |      |        |        |    |                       |        |      |      |        |        |

Reserves for bench # 49

| ROCK  | ORE<br>TONNES | GRADE  |      |       |        |        |    | CONCENTRATE<br>TONNES | GRADE  |      |      |        |        |
|-------|---------------|--------|------|-------|--------|--------|----|-----------------------|--------|------|------|--------|--------|
|       |               | %Pb+Zn | %Pb  | %Zn   | Ag g/t | Au g/t |    |                       | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |
| 1     | 1876.         | 6.95   | 2.91 | 4.04  | 52.00  | 1.37   | Pb | 73.                   | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn | 114.                  | .0     | .0   | 55.0 | .0     | .0     |
| 4     | 3892.         | 16.46  | 5.65 | 10.81 | 95.06  | 1.43   | Pb | 293.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn | 635.                  | .0     | .0   | 55.0 | .0     | .0     |
| 5     | 1990.         | 8.82   | 3.19 | 5.64  | 57.00  | 1.19   | Pb | 85.                   | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn | 169.                  | .0     | .0   | 55.0 | .0     | .0     |
| 6     | 4914.         | 15.58  | 6.34 | 9.24  | *****  | 1.51   | Pb | 415.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn | 685.                  | .0     | .0   | 55.0 | .0     | .0     |
| 7     | 2333.         | 15.01  | 5.77 | 9.24  | *****  | 1.13   | Pb | 179.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn | 0.                    | .0     | .0   | .0   | .0     | .0     |
| Total | 15006.        | 13.74  | 5.23 | 8.52  | 88.98  | 1.37   | Pb | 2416.                 | .0     | 60.0 | .0   | 750.0  | 3.5    |
|       |               |        |      |       |        |        | Zn | 4293.                 | .0     | .0   | 55.0 | .0     | .0     |
| WASTE | TONNES        | 30310. |      |       |        |        |    |                       |        |      |      |        |        |

Reserves for bench # 50

| ROCK | ORE<br>TONNES | GRADE  |      |       |        |        |    | CONCENTRATE<br>TONNES | GRADE  |      |      |        |        |
|------|---------------|--------|------|-------|--------|--------|----|-----------------------|--------|------|------|--------|--------|
|      |               | %Pb+Zn | %Pb  | %Zn   | Ag g/t | Au g/t |    |                       | %Pb+Zn | %Pb  | %Zn  | Ag g/t | Au g/t |
| 4    | 1895.         | 12.85  | 4.69 | 8.16  | 79.00  | 1.42   | Pb | 119.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|      |               |        |      |       |        |        | Zn | 233.                  | .0     | .0   | 55.0 | .0     | .0     |
| 6    | 3067.         | 15.40  | 6.00 | 9.39  | *****  | 1.39   | Pb | 245.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|      |               |        |      |       |        |        | Zn | 435.                  | .0     | .0   | 55.0 | .0     | .0     |
| 7    | 3730.         | 16.24  | 6.14 | 10.10 | *****  | 1.07   | Pb | 305.                  | .0     | 60.0 | .0   | 750.0  | 3.5    |
|      |               |        |      |       |        |        | Zn | 0.                    | .0     | .0   | .0   | .0     | .0     |

|        |        |       |      |      |       |      |    |       |    |      |      |       |     |
|--------|--------|-------|------|------|-------|------|----|-------|----|------|------|-------|-----|
| Total  | 8692.  | 15.20 | 5.78 | 9.43 | 98.61 | 1.26 | Pb | 2197. | .0 | 60.0 | .0   | 750.0 | 3.5 |
|        |        |       |      |      |       |      | Zn | 3642. | .0 | .0   | 55.0 | .0    | .0  |
| WASTE  |        |       |      |      |       |      |    |       |    |      |      |       |     |
| TONNES | 26202. |       |      |      |       |      |    |       |    |      |      |       |     |

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MINING RESERVE EVALUATION

DESCRIPTION : Grum 8606 Pit 3 Reserves

TOP SURFACE GRID RECORD : 1 TOPOGRAPHY  
BOTTOM SURFACE GRID RECORD : 37 Grum 8606 Pit 3

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

| BENCH | CREST   | TOE     | VOLUME |         | DENSITY  | TONNAGE       |          | A V E R A G E G R A D E S |         |          |          |                | ECONOMIC |
|-------|---------|---------|--------|---------|----------|---------------|----------|---------------------------|---------|----------|----------|----------------|----------|
|       | [m      | ] [m    | ] [bcm | x1000]  | [tn/bcm] | [ TONS x1000] | [Pb+Zn ] | [Pb % ]                   | [Zn % ] | [Ag g/m] | [Au g/m] | FACTOR         |          |
|       |         |         |        |         |          |               |          |                           |         |          |          | [CDN \$ x1000] |          |
| 1     | 1336.00 | 1324.00 |        | .00     | .000     | .00           | .000     | .000                      | .000    | .000     | .000     | .00            |          |
| 2     | 1324.00 | 1312.00 |        | 254.62  | 2.100    | 534.69        | .000     | .000                      | .000    | .000     | .000     | -95.48         |          |
| 3     | 1312.00 | 1300.00 |        | 1275.44 | 2.444    | 3117.28       | .000     | .000                      | .000    | .000     | .000     | -917.71        |          |
| 4     | 1300.00 | 1295.50 |        | 1048.12 | 2.366    | 2479.33       | .000     | .000                      | .000    | .000     | .000     | -660.81        |          |
| 5     | 1295.50 | 1291.00 |        | 1131.46 | 2.409    | 2725.14       | .000     | .000                      | .000    | .000     | .000     | -764.42        |          |
| 6     | 1291.00 | 1286.50 |        | 1217.28 | 2.437    | 2966.67       | .000     | .000                      | .000    | .000     | .000     | -846.28        |          |
| 7     | 1286.50 | 1282.00 |        | 1313.89 | 2.444    | 3210.74       | .000     | .000                      | .000    | .000     | .000     | -922.23        |          |
| 8     | 1282.00 | 1277.50 |        | 1401.48 | 2.450    | 3433.60       | .000     | .000                      | .000    | .000     | .000     | -981.87        |          |
| 9     | 1277.50 | 1273.00 |        | 1600.86 | 2.420    | 3873.95       | .000     | .000                      | .000    | .000     | .000     | -1071.05       |          |
| 10    | 1273.00 | 1268.50 |        | 1683.86 | 2.414    | 4064.07       | .000     | .000                      | .000    | .000     | .000     | -1099.02       |          |
| 11    | 1268.50 | 1264.00 |        | 1689.07 | 2.440    | 4121.96       | .000     | .000                      | .000    | .000     | .000     | -1148.58       |          |
| 12    | 1264.00 | 1259.50 |        | 1730.34 | 2.457    | 4251.05       | .000     | .000                      | .000    | .000     | .000     | -1205.55       |          |
| 13    | 1259.50 | 1255.00 |        | 1623.90 | 2.505    | 4068.25       | .005     | .002                      | .003    | .033     | .001     | -1230.88       |          |
| 14    | 1255.00 | 1250.50 |        | 1553.82 | 2.531    | 3933.07       | .007     | .002                      | .004    | .046     | .002     | -1227.92       |          |
| 15    | 1250.50 | 1246.00 |        | 1433.05 | 2.584    | 3702.42       | .013     | .004                      | .009    | .093     | .003     | -1228.52       |          |
| 16    | 1246.00 | 1241.50 |        | 1342.76 | 2.604    | 3495.91       | .025     | .008                      | .016    | .176     | .005     | -1180.73       |          |
| 17    | 1241.50 | 1237.00 |        | 1255.92 | 2.629    | 3301.98       | .034     | .012                      | .023    | .239     | .007     | -1155.43       |          |
| 18    | 1237.00 | 1232.50 |        | 1196.63 | 2.641    | 3160.03       | .040     | .014                      | .026    | .274     | .007     | -1138.55       |          |
| 19    | 1232.50 | 1228.00 |        | 1144.81 | 2.661    | 3046.77       | .056     | .020                      | .035    | .384     | .008     | -1111.98       |          |
| 20    | 1228.00 | 1223.50 |        | 1075.25 | 2.685    | 2887.51       | .050     | .019                      | .031    | .354     | .007     | -1089.49       |          |
| 21    | 1223.50 | 1219.00 |        | 1029.72 | 2.702    | 2781.84       | .043     | .016                      | .028    | .297     | .007     | -1061.70       |          |
| 22    | 1219.00 | 1214.50 |        | 1004.64 | 2.711    | 2723.27       | .073     | .027                      | .046    | .516     | .011     | -1059.62       |          |
| 23    | 1214.50 | 1210.00 |        | 959.23  | 2.709    | 2598.50       | .066     | .023                      | .044    | .453     | .010     | -1012.15       |          |
| 24    | 1210.00 | 1205.50 |        | 901.58  | 2.706    | 2439.54       | .034     | .012                      | .022    | .236     | .006     | -967.90        |          |
| 25    | 1205.50 | 1201.00 |        | 854.14  | 2.705    | 2310.16       | .028     | .010                      | .018    | .208     | .004     | -932.86        |          |
| 26    | 1201.00 | 1196.50 |        | 792.34  | 2.708    | 2145.86       | .046     | .018                      | .028    | .354     | .008     | -865.18        |          |
| 27    | 1196.50 | 1192.00 |        | 766.42  | 2.710    | 2076.70       | .049     | .018                      | .030    | .371     | .009     | -850.97        |          |
| 28    | 1192.00 | 1187.50 |        | 744.38  | 2.711    | 2018.16       | .069     | .024                      | .044    | .479     | .013     | -826.75        |          |
| 29    | 1187.50 | 1183.00 |        | 706.03  | 2.710    | 1913.23       | .058     | .019                      | .039    | .408     | .014     | -796.65        |          |
| 30    | 1183.00 | 1178.50 |        | 659.15  | 2.713    | 1788.52       | .075     | .025                      | .050    | .554     | .017     | -755.48        |          |
| 31    | 1178.50 | 1174.00 |        | 613.82  | 2.714    | 1665.74       | .087     | .029                      | .058    | .608     | .016     | -703.71        |          |
| 32    | 1174.00 | 1169.50 |        | 575.92  | 2.708    | 1559.83       | .059     | .021                      | .038    | .408     | .010     | -671.44        |          |
| 33    | 1169.50 | 1165.00 |        | 530.45  | 2.709    | 1437.01       | .079     | .029                      | .050    | .552     | .014     | -618.63        |          |
| 34    | 1165.00 | 1160.50 |        | 484.80  | 2.711    | 1314.35       | .076     | .028                      | .047    | .581     | .015     | -572.36        |          |
| 35    | 1160.50 | 1156.00 |        | 439.84  | 2.713    | 1193.16       | .093     | .036                      | .057    | .702     | .019     | -517.74        |          |
| 36    | 1156.00 | 1151.50 |        | 404.71  | 2.710    | 1096.57       | .078     | .030                      | .048    | .536     | .016     | -485.12        |          |
| 37    | 1151.50 | 1147.00 |        | 358.36  | 2.712    | 971.76        | .102     | .039                      | .063    | .656     | .017     | -437.56        |          |

|    |         |         |        |       |        |      |      |      |       |      |         |
|----|---------|---------|--------|-------|--------|------|------|------|-------|------|---------|
| 38 | 1147.00 | 1142.50 | 325.13 | 2.717 | 883.47 | .167 | .066 | .102 | 1.133 | .029 | -396.84 |
| 39 | 1142.50 | 1138.00 | 286.63 | 2.729 | 782.21 | .267 | .106 | .161 | 1.819 | .048 | -354.92 |
| 40 | 1138.00 | 1133.50 | 265.19 | 2.746 | 728.10 | .406 | .167 | .239 | 2.788 | .073 | -328.50 |
| 41 | 1133.50 | 1129.00 | 242.38 | 2.762 | 669.55 | .557 | .232 | .324 | 3.745 | .100 | -303.91 |
| 42 | 1129.00 | 1124.50 | 199.63 | 2.769 | 552.70 | .662 | .284 | .378 | 4.526 | .118 | -253.83 |
| 43 | 1124.50 | 1120.00 | 165.25 | 2.760 | 456.15 | .625 | .263 | .362 | 4.303 | .113 | -210.18 |
| 44 | 1120.00 | 1115.50 | 145.72 | 2.754 | 401.33 | .618 | .266 | .352 | 4.320 | .121 | -188.00 |
| 45 | 1115.50 | 1111.00 | 136.43 | 2.760 | 376.52 | .712 | .311 | .401 | 5.037 | .149 | -176.37 |
| 46 | 1111.00 | 1106.50 | 118.91 | 2.765 | 328.78 | .781 | .351 | .430 | 5.551 | .169 | -155.39 |
| 47 | 1106.50 | 1102.00 | 111.01 | 2.777 | 308.30 | .810 | .358 | .452 | 5.873 | .188 | -145.52 |
| 48 | 1102.00 | 1097.50 | 50.94  | 2.764 | 140.81 | .628 | .292 | .336 | 4.752 | .172 | -67.61  |
| 49 | 1097.50 | 1093.00 | 7.56   | 2.794 | 21.12  | .610 | .267 | .342 | 5.665 | .175 | -10.18  |
| 50 | 1093.00 | 1088.50 | 7.09   | 2.773 | 19.66  | .469 | .194 | .275 | 4.221 | .123 | -9.56   |

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|                       |          |       |           |      |      |      |      |  |  |     |
|-----------------------|----------|-------|-----------|------|------|------|------|--|--|-----|
| TOTAL FOR ALL BENCHES | 38859.95 | 2.575 | 100077.30 | .055 | .022 | .033 | .387 |  |  | .01 |
|-----------------------|----------|-------|-----------|------|------|------|------|--|--|-----|

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MINING RESERVE EVALUATION

DESCRIPTION : Grum 8606 Pit 3 Reserves

TOP SURFACE GRID RECORD : 1 TOPOGRAPHY  
 BOTTOM SURFACE GRID RECORD : 37 Grum 8606 Pit 3

BENCH TOTALS FOR STOCKPILE FROM 4.0000 [Pb+Zn ] TO 6.0000 [Pb+Zn ]

| BENCH | CREST   | TOE     | VOLUME |        | DENSITY  | TONNAGE       | A V E R A G E G R A D E S |         |         |          |          | ECONOMIC FACTOR |
|-------|---------|---------|--------|--------|----------|---------------|---------------------------|---------|---------|----------|----------|-----------------|
|       | [m      | ] [m    | ] [bcm | x1000] | [tn/bcm] | [ TONS x1000] | [Pb+Zn ]                  | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] | [CDN \$ x1000]  |
| 1     | 1336.00 | 1324.00 |        | .00    | .000     | .00           | .000                      | .000    | .000    | .000     | .000     | .00             |
| 2     | 1324.00 | 1312.00 |        | .00    | .000     | .00           | .000                      | .000    | .000    | .000     | .000     | .00             |
| 3     | 1312.00 | 1300.00 |        | .00    | .000     | .00           | .000                      | .000    | .000    | .000     | .000     | .00             |
| 4     | 1300.00 | 1295.50 |        | .00    | .000     | .00           | .000                      | .000    | .000    | .000     | .000     | .00             |
| 5     | 1295.50 | 1291.00 |        | .54    | 3.046    | 1.64          | 5.864                     | 2.198   | 3.666   | 34.000   | .494     | -.53            |
| 6     | 1291.00 | 1286.50 |        | 1.62   | 3.048    | 4.94          | 5.874                     | 2.222   | 3.652   | 34.667   | .490     | -1.59           |
| 7     | 1286.50 | 1282.00 |        | 2.70   | 3.060    | 8.26          | 5.754                     | 2.156   | 3.598   | 33.994   | .493     | -2.65           |
| 8     | 1282.00 | 1277.50 |        | 4.86   | 3.060    | 14.87         | 5.810                     | 2.198   | 3.612   | 34.665   | .507     | -4.68           |
| 9     | 1277.50 | 1273.00 |        | 7.56   | 3.063    | 23.16         | 5.813                     | 2.225   | 3.588   | 35.499   | .516     | -7.28           |
| 10    | 1273.00 | 1268.50 |        | 12.96  | 3.095    | 40.11         | 5.669                     | 2.060   | 3.608   | 33.810   | .767     | -12.48          |
| 11    | 1268.50 | 1264.00 |        | 15.12  | 3.096    | 46.81         | 5.554                     | 1.962   | 3.593   | 32.753   | .810     | -14.28          |
| 12    | 1264.00 | 1259.50 |        | 17.28  | 3.133    | 54.13         | 5.096                     | 1.775   | 3.321   | 30.243   | .819     | -16.32          |
| 13    | 1259.50 | 1255.00 |        | 21.60  | 3.126    | 67.51         | 5.105                     | 1.779   | 3.325   | 30.730   | .811     | -20.80          |
| 14    | 1255.00 | 1250.50 |        | 20.52  | 3.098    | 63.58         | 5.118                     | 1.756   | 3.362   | 31.164   | .781     | -20.14          |
| 15    | 1250.50 | 1246.00 |        | 21.06  | 3.107    | 65.44         | 4.868                     | 1.611   | 3.257   | 29.590   | .795     | -20.67          |
| 16    | 1246.00 | 1241.50 |        | 34.56  | 3.136    | 108.39        | 5.014                     | 1.645   | 3.368   | 30.576   | .739     | -34.56          |
| 17    | 1241.50 | 1237.00 |        | 34.56  | 3.115    | 107.65        | 4.771                     | 1.584   | 3.188   | 30.391   | .622     | -35.20          |
| 18    | 1237.00 | 1232.50 |        | 33.48  | 3.134    | 104.91        | 4.691                     | 1.547   | 3.144   | 30.369   | .575     | -34.10          |
| 19    | 1232.50 | 1228.00 |        | 25.92  | 3.146    | 81.54         | 4.665                     | 1.533   | 3.132   | 28.973   | .499     | -26.88          |
| 20    | 1228.00 | 1223.50 |        | 26.51  | 3.192    | 84.62         | 4.774                     | 1.557   | 3.217   | 29.472   | .496     | -27.98          |
| 21    | 1223.50 | 1219.00 |        | 37.80  | 3.162    | 119.52        | 4.728                     | 1.549   | 3.179   | 29.324   | .514     | -40.60          |
| 22    | 1219.00 | 1214.50 |        | 39.62  | 3.175    | 125.80        | 4.837                     | 1.632   | 3.205   | 29.990   | .517     | -42.56          |
| 23    | 1214.50 | 1210.00 |        | 34.02  | 3.201    | 108.89        | 4.782                     | 1.646   | 3.137   | 29.278   | .497     | -37.17          |
| 24    | 1210.00 | 1205.50 |        | 30.86  | 3.195    | 98.62         | 4.939                     | 1.758   | 3.181   | 29.669   | .525     | -34.29          |
| 25    | 1205.50 | 1201.00 |        | 35.41  | 3.205    | 113.51        | 4.980                     | 1.737   | 3.243   | 29.810   | .543     | -39.35          |
| 26    | 1201.00 | 1196.50 |        | 29.30  | 3.190    | 93.47         | 5.047                     | 1.712   | 3.335   | 29.854   | .545     | -33.10          |
| 27    | 1196.50 | 1192.00 |        | 24.24  | 3.179    | 77.07         | 5.005                     | 1.626   | 3.379   | 29.915   | .549     | -27.83          |
| 28    | 1192.00 | 1187.50 |        | 18.04  | 3.233    | 58.31         | 4.920                     | 1.607   | 3.313   | 28.982   | .609     | -21.04          |
| 29    | 1187.50 | 1183.00 |        | 25.38  | 3.243    | 82.32         | 5.019                     | 1.717   | 3.302   | 28.825   | .630     | -29.61          |
| 30    | 1183.00 | 1178.50 |        | 20.63  | 3.198    | 65.97         | 5.027                     | 1.696   | 3.331   | 29.244   | .678     | -24.45          |
| 31    | 1178.50 | 1174.00 |        | 16.74  | 3.285    | 55.00         | 5.201                     | 1.841   | 3.360   | 31.860   | .807     | -20.15          |
| 32    | 1174.00 | 1169.50 |        | 17.82  | 3.192    | 56.88         | 5.150                     | 1.811   | 3.339   | 31.140   | .706     | -21.45          |
| 33    | 1169.50 | 1165.00 |        | 22.68  | 3.196    | 72.48         | 5.045                     | 1.834   | 3.211   | 31.680   | .710     | -27.72          |
| 34    | 1165.00 | 1160.50 |        | 34.02  | 3.215    | 109.39        | 5.074                     | 1.902   | 3.172   | 33.179   | .771     | -42.21          |
| 35    | 1160.50 | 1156.00 |        | 33.14  | 3.202    | 106.12        | 5.214                     | 2.000   | 3.214   | 34.141   | .756     | -41.12          |
| 36    | 1156.00 | 1151.50 |        | 32.94  | 3.191    | 105.13        | 5.166                     | 1.898   | 3.268   | 33.172   | .844     | -41.48          |
| 37    | 1151.50 | 1147.00 |        | 34.56  | 3.223    | 111.39        | 5.084                     | 1.904   | 3.180   | 34.046   | .865     | -44.16          |

|    |         |         |       |       |        |       |       |       |        |       |        |
|----|---------|---------|-------|-------|--------|-------|-------|-------|--------|-------|--------|
| 38 | 1147.00 | 1142.50 | 39.96 | 3.217 | 128.54 | 4.995 | 1.872 | 3.123 | 34.225 | .810  | -51.80 |
| 39 | 1142.50 | 1138.00 | 48.06 | 3.204 | 154.00 | 4.912 | 1.857 | 3.055 | 33.458 | .801  | -62.30 |
| 40 | 1138.00 | 1133.50 | 41.04 | 3.216 | 131.98 | 4.836 | 1.839 | 2.997 | 32.956 | .819  | -53.96 |
| 41 | 1133.50 | 1129.00 | 38.20 | 3.195 | 122.04 | 4.881 | 1.926 | 2.955 | 32.804 | .823  | -50.93 |
| 42 | 1129.00 | 1124.50 | 39.94 | 3.171 | 126.64 | 4.946 | 1.980 | 2.966 | 33.343 | .832  | -53.25 |
| 43 | 1124.50 | 1120.00 | 40.21 | 3.154 | 126.84 | 4.897 | 2.016 | 2.880 | 33.187 | .815  | -54.36 |
| 44 | 1120.00 | 1115.50 | 33.82 | 3.121 | 105.54 | 4.830 | 2.000 | 2.830 | 32.356 | .820  | -46.34 |
| 45 | 1115.50 | 1111.00 | 30.30 | 3.129 | 94.81  | 4.772 | 1.932 | 2.840 | 31.933 | .788  | -42.08 |
| 46 | 1111.00 | 1106.50 | 30.60 | 3.182 | 97.37  | 4.738 | 1.962 | 2.777 | 32.471 | .870  | -42.50 |
| 47 | 1106.50 | 1102.00 | 21.60 | 3.130 | 67.61  | 4.761 | 1.956 | 2.805 | 32.458 | .849  | -30.40 |
| 48 | 1102.00 | 1097.50 | 9.18  | 3.209 | 29.46  | 4.726 | 1.792 | 2.934 | 33.172 | .847  | -13.09 |
| 49 | 1097.50 | 1093.00 | 2.70  | 3.403 | 9.19   | 4.688 | 1.819 | 2.868 | 37.884 | 1.064 | -3.85  |
| 50 | 1093.00 | 1088.50 | 1.94  | 3.364 | 6.54   | 5.296 | 2.330 | 2.966 | 39.895 | 1.343 | -2.81  |

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|                       |         |       |         |       |       |       |        |     |
|-----------------------|---------|-------|---------|-------|-------|-------|--------|-----|
| TOTAL FOR ALL BENCHES | 1145.60 | 3.176 | 3638.00 | 4.957 | 1.800 | 3.157 | 31.591 | .71 |
|-----------------------|---------|-------|---------|-------|-------|-------|--------|-----|

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MINING RESERVE EVALUATION

DESCRIPTION : Grum 8606 Pit 3 Reserves

TOP SURFACE GRID RECORD : 1 TOPOGRAPHY  
BOTTOM SURFACE GRID RECORD : 37 Grum 8606 Pit 3

BENCH TOTALS FOR ORE ABOVE 6.0000 [Pb+Zn ]

| BENCH | CREST   | TOE     | VOLUME |        | DENSITY  | TONNAGE       |          | A V E R A G E   G R A D E S |         |          |          |                          | ECONOMIC |
|-------|---------|---------|--------|--------|----------|---------------|----------|-----------------------------|---------|----------|----------|--------------------------|----------|
|       | [m      | ] [m    | ] [bcm | x1000] | [tn/bcm] | [ TONS x1000] | [Pb+Zn ] | [Pb % ]                     | [Zn % ] | [Ag g/m] | [Au g/m] | FACTOR<br>[CDN \$ x1000] |          |
| 1     | 1336.00 | 1324.00 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000     | .000     | .00                      |          |
| 2     | 1324.00 | 1312.00 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000     | .000     | .00                      |          |
| 3     | 1312.00 | 1300.00 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000     | .000     | .00                      |          |
| 4     | 1300.00 | 1295.50 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000     | .000     | .00                      |          |
| 5     | 1295.50 | 1291.00 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000     | .000     | .00                      |          |
| 6     | 1291.00 | 1286.50 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000     | .000     | .00                      |          |
| 7     | 1286.50 | 1282.00 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000     | .000     | .00                      |          |
| 8     | 1282.00 | 1277.50 |        | 1.08   | 3.563    | 3.85          | 12.405   | 4.572                       | 7.834   | 84.071   | .791     | 170.08                   |          |
| 9     | 1277.50 | 1273.00 |        | 2.70   | 3.375    | 9.11          | 10.386   | 3.788                       | 6.598   | 68.804   | .729     | 283.91                   |          |
| 10    | 1273.00 | 1268.50 |        | 1.62   | 3.222    | 5.22          | 9.624    | 3.069                       | 6.555   | 61.629   | .820     | 143.68                   |          |
| 11    | 1268.50 | 1264.00 |        | 2.16   | 3.066    | 6.62          | 8.187    | 2.391                       | 5.796   | 50.000   | .816     | 123.10                   |          |
| 12    | 1264.00 | 1259.50 |        | 5.94   | 3.077    | 18.28         | 7.270    | 2.365                       | 4.905   | 43.127   | .839     | 221.69                   |          |
| 13    | 1259.50 | 1255.00 |        | 12.24  | 3.106    | 38.02         | 7.701    | 2.579                       | 5.121   | 45.683   | .771     | 546.19                   |          |
| 14    | 1255.00 | 1250.50 |        | 26.11  | 3.120    | 81.47         | 8.161    | 2.828                       | 5.333   | 48.675   | .739     | 1377.42                  |          |
| 15    | 1250.50 | 1246.00 |        | 40.87  | 3.203    | 130.93        | 8.865    | 3.272                       | 5.593   | 55.599   | .780     | 2794.36                  |          |
| 16    | 1246.00 | 1241.50 |        | 45.46  | 3.276    | 148.90        | 9.578    | 3.660                       | 5.917   | 60.473   | .806     | 3816.68                  |          |
| 17    | 1241.50 | 1237.00 |        | 61.75  | 3.310    | 204.39        | 9.623    | 3.642                       | 5.981   | 59.084   | .833     | 5294.70                  |          |
| 18    | 1237.00 | 1232.50 |        | 68.30  | 3.332    | 227.56        | 10.019   | 3.727                       | 6.291   | 59.174   | .822     | 6406.09                  |          |
| 19    | 1232.50 | 1228.00 |        | 80.34  | 3.342    | 268.49        | 9.485    | 3.459                       | 6.025   | 55.435   | .788     | 6662.55                  |          |
| 20    | 1228.00 | 1223.50 |        | 93.13  | 3.390    | 315.73        | 9.348    | 3.444                       | 5.904   | 54.910   | .785     | 7552.36                  |          |
| 21    | 1223.50 | 1219.00 |        | 83.69  | 3.492    | 292.26        | 9.971    | 3.732                       | 6.240   | 59.281   | .834     | 8162.14                  |          |
| 22    | 1219.00 | 1214.50 |        | 60.70  | 3.488    | 211.71        | 10.306   | 3.748                       | 6.558   | 60.415   | .852     | 6395.35                  |          |
| 23    | 1214.50 | 1210.00 |        | 61.48  | 3.410    | 209.65        | 9.656    | 3.422                       | 6.234   | 56.177   | .842     | 5586.54                  |          |
| 24    | 1210.00 | 1205.50 |        | 72.30  | 3.366    | 243.38        | 8.982    | 3.174                       | 5.808   | 52.054   | .827     | 5628.66                  |          |
| 25    | 1205.50 | 1201.00 |        | 75.92  | 3.388    | 257.20        | 9.216    | 3.317                       | 5.900   | 53.103   | .832     | 6571.41                  |          |
| 26    | 1201.00 | 1196.50 |        | 83.78  | 3.460    | 289.92        | 9.887    | 3.661                       | 6.226   | 57.985   | .890     | 8857.49                  |          |
| 27    | 1196.50 | 1192.00 |        | 83.89  | 3.575    | 299.92        | 10.221   | 3.876                       | 6.345   | 62.194   | .912     | 9802.28                  |          |
| 28    | 1192.00 | 1187.50 |        | 80.54  | 3.601    | 290.06        | 10.095   | 3.815                       | 6.279   | 61.836   | .898     | 9249.72                  |          |
| 29    | 1187.50 | 1183.00 |        | 72.12  | 3.537    | 255.05        | 9.730    | 3.707                       | 6.023   | 61.649   | .886     | 7736.15                  |          |
| 30    | 1183.00 | 1178.50 |        | 84.64  | 3.479    | 294.42        | 9.576    | 3.620                       | 5.956   | 60.877   | .884     | 8508.47                  |          |
| 31    | 1178.50 | 1174.00 |        | 89.93  | 3.478    | 312.79        | 9.444    | 3.574                       | 5.870   | 59.735   | .894     | 8815.03                  |          |
| 32    | 1174.00 | 1169.50 |        | 88.56  | 3.546    | 314.00        | 9.861    | 3.756                       | 6.106   | 62.088   | .955     | 9566.99                  |          |
| 33    | 1169.50 | 1165.00 |        | 89.23  | 3.626    | 323.60        | 10.995   | 4.200                       | 6.795   | 69.007   | .960     | 11656.36                 |          |
| 34    | 1165.00 | 1160.50 |        | 93.96  | 3.650    | 342.95        | 11.448   | 4.368                       | 7.080   | 71.080   | 1.006    | 13294.25                 |          |
| 35    | 1160.50 | 1156.00 |        | 96.60  | 3.626    | 350.29        | 11.701   | 4.340                       | 7.361   | 71.767   | 1.137    | 14861.15                 |          |
| 36    | 1156.00 | 1151.50 |        | 96.66  | 3.643    | 352.15        | 12.137   | 4.373                       | 7.765   | 73.936   | 1.181    | 16009.18                 |          |
| 37    | 1151.50 | 1147.00 |        | 96.41  | 3.664    | 353.26        | 12.234   | 4.418                       | 7.817   | 74.677   | 1.177    | 15951.07                 |          |

|    |         |         |       |       |        |        |       |       |        |       |          |
|----|---------|---------|-------|-------|--------|--------|-------|-------|--------|-------|----------|
| 38 | 1147.00 | 1142.50 | 91.56 | 3.669 | 335.90 | 11.795 | 4.299 | 7.496 | 72.296 | 1.191 | 14027.96 |
| 39 | 1142.50 | 1138.00 | 83.60 | 3.705 | 309.77 | 11.981 | 4.351 | 7.630 | 72.934 | 1.224 | 13187.61 |
| 40 | 1138.00 | 1133.50 | 81.84 | 3.760 | 307.68 | 12.661 | 4.623 | 8.038 | 77.639 | 1.256 | 14397.78 |
| 41 | 1133.50 | 1129.00 | 80.81 | 3.751 | 303.15 | 13.017 | 4.661 | 8.355 | 79.273 | 1.228 | 14860.46 |
| 42 | 1129.00 | 1124.50 | 84.78 | 3.678 | 311.79 | 12.298 | 4.382 | 7.915 | 74.664 | 1.202 | 13861.52 |
| 43 | 1124.50 | 1120.00 | 92.77 | 3.602 | 334.16 | 11.418 | 4.070 | 7.349 | 69.668 | 1.140 | 12953.57 |
| 44 | 1120.00 | 1115.50 | 91.34 | 3.561 | 325.30 | 11.139 | 3.988 | 7.150 | 67.969 | 1.106 | 12013.97 |
| 45 | 1115.50 | 1111.00 | 81.50 | 3.615 | 294.63 | 11.761 | 4.216 | 7.545 | 72.569 | 1.143 | 12062.54 |
| 46 | 1111.00 | 1106.50 | 71.28 | 3.697 | 263.52 | 11.555 | 4.158 | 7.397 | 72.692 | 1.144 | 10528.69 |
| 47 | 1106.50 | 1102.00 | 69.16 | 3.713 | 256.75 | 11.776 | 4.173 | 7.603 | 72.721 | 1.182 | 10612.27 |
| 48 | 1102.00 | 1097.50 | 32.22 | 3.666 | 118.10 | 11.456 | 4.089 | 7.367 | 71.263 | 1.243 | 4675.53  |
| 49 | 1097.50 | 1093.00 | 3.78  | 3.970 | 15.01  | 13.744 | 5.226 | 8.519 | 88.978 | 1.369 | 811.68   |
| 50 | 1093.00 | 1088.50 | 2.11  | 4.116 | 8.69   | 15.204 | 5.776 | 9.428 | 98.610 | 1.262 | 545.30   |

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|                       |         |       |         |        |       |       |        |      |
|-----------------------|---------|-------|---------|--------|-------|-------|--------|------|
| TOTAL FOR ALL BENCHES | 2718.88 | 3.544 | 9635.65 | 10.767 | 3.949 | 6.818 | 65.708 | 1.01 |
|-----------------------|---------|-------|---------|--------|-------|-------|--------|------|

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# MINING RESERVE EVALUATION

DESCRIPTION : Grum 8606 Pit 3 Reserves

TOP SURFACE GRID RECORD : 1 TOPOGRAPHY  
BOTTOM SURFACE GRID RECORD : 37 Grum 8606 Pit 3

BENCH TOTALS FOR ALL MATERIAL

| BENCH | CREST   | TOE     | VOLUME        | DENSITY  | TONNAGE       | A V E R A G E G R A D E S |         |         |          |          | ECONOMIC FACTOR |
|-------|---------|---------|---------------|----------|---------------|---------------------------|---------|---------|----------|----------|-----------------|
|       | [m      | ] [m    | ] [bcm x1000] | [tn/bcm] | [ TONS x1000] | [Pb+Zn ]                  | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] | [CDN \$ x1000]  |
| 1     | 1336.00 | 1324.00 | .00           | .000     | .00           | .000                      | .000    | .000    | .000     | .000     | .00             |
| 2     | 1324.00 | 1312.00 | 254.62        | 2.100    | 534.69        | .000                      | .000    | .000    | .000     | .000     | -95.48          |
| 3     | 1312.00 | 1300.00 | 1275.44       | 2.444    | 3117.28       | .000                      | .000    | .000    | .000     | .000     | -917.71         |
| 4     | 1300.00 | 1295.50 | 1048.12       | 2.366    | 2479.33       | .000                      | .000    | .000    | .000     | .000     | -660.81         |
| 5     | 1295.50 | 1291.00 | 1132.00       | 2.409    | 2726.78       | .004                      | .001    | .002    | .021     | .000     | -764.95         |
| 6     | 1291.00 | 1286.50 | 1218.90       | 2.438    | 2971.60       | .010                      | .004    | .006    | .058     | .001     | -847.87         |
| 7     | 1286.50 | 1282.00 | 1316.59       | 2.445    | 3219.00       | .015                      | .006    | .009    | .087     | .001     | -924.88         |
| 8     | 1282.00 | 1277.50 | 1407.42       | 2.453    | 3452.32       | .039                      | .015    | .024    | .243     | .003     | -816.47         |
| 9     | 1277.50 | 1273.00 | 1611.12       | 2.425    | 3906.22       | .059                      | .022    | .037    | .371     | .005     | -794.42         |
| 10    | 1273.00 | 1268.50 | 1698.44       | 2.420    | 4109.39       | .068                      | .024    | .044    | .408     | .009     | -967.82         |
| 11    | 1268.50 | 1264.00 | 1706.35       | 2.447    | 4175.39       | .075                      | .026    | .049    | .446     | .010     | -1039.76        |
| 12    | 1264.00 | 1259.50 | 1753.56       | 2.466    | 4323.46       | .095                      | .032    | .062    | .561     | .014     | -1000.18        |
| 13    | 1259.50 | 1255.00 | 1657.74       | 2.518    | 4173.79       | .158                      | .054    | .104    | .945     | .021     | -705.49         |
| 14    | 1255.00 | 1250.50 | 1600.45       | 2.548    | 4078.12       | .249                      | .086    | .163    | 1.503    | .028     | 129.35          |
| 15    | 1250.50 | 1246.00 | 1494.98       | 2.608    | 3898.80       | .392                      | .141    | .251    | 2.452    | .042     | 1545.17         |
| 16    | 1246.00 | 1241.50 | 1422.78       | 2.638    | 3753.20       | .548                      | .201    | .347    | 3.446    | .058     | 2601.39         |
| 17    | 1241.50 | 1237.00 | 1352.23       | 2.673    | 3614.03       | .718                      | .264    | .454    | 4.465    | .072     | 4104.07         |
| 18    | 1237.00 | 1232.50 | 1298.41       | 2.690    | 3492.50       | .830                      | .302    | .528    | 5.016    | .077     | 5233.44         |
| 19    | 1232.50 | 1228.00 | 1251.07       | 2.715    | 3396.80       | .912                      | .328    | .583    | 5.422    | .082     | 5523.70         |
| 20    | 1228.00 | 1223.50 | 1194.89       | 2.752    | 3287.87       | 1.064                     | .387    | .677    | 6.342    | .095     | 6434.89         |
| 21    | 1223.50 | 1219.00 | 1151.21       | 2.774    | 3193.62       | 1.127                     | .413    | .714    | 6.781    | .101     | 7059.84         |
| 22    | 1219.00 | 1214.50 | 1104.96       | 2.770    | 3060.77       | .977                      | .350    | .626    | 5.870    | .090     | 5293.17         |
| 23    | 1214.50 | 1210.00 | 1054.73       | 2.766    | 2917.04       | .932                      | .328    | .604    | 5.533    | .088     | 4537.21         |
| 24    | 1210.00 | 1205.50 | 1004.75       | 2.768    | 2781.54       | .991                      | .350    | .640    | 5.814    | .096     | 4626.46         |
| 25    | 1205.50 | 1201.00 | 965.47        | 2.777    | 2680.86       | 1.120                     | .401    | .719    | 6.536    | .107     | 5599.20         |
| 26    | 1201.00 | 1196.50 | 905.42        | 2.793    | 2529.25       | 1.358                     | .498    | .861    | 8.050    | .129     | 7959.22         |
| 27    | 1196.50 | 1192.00 | 874.55        | 2.806    | 2453.69       | 1.448                     | .540    | .907    | 8.856    | .136     | 8923.48         |
| 28    | 1192.00 | 1187.50 | 842.96        | 2.807    | 2366.53       | 1.417                     | .528    | .889    | 8.701    | .136     | 8401.93         |
| 29    | 1187.50 | 1183.00 | 803.53        | 2.801    | 2250.60       | 1.335                     | .499    | .836    | 8.388    | .135     | 6909.88         |
| 30    | 1183.00 | 1178.50 | 764.41        | 2.811    | 2148.91       | 1.529                     | .569    | .960    | 9.699    | .156     | 7728.54         |
| 31    | 1178.50 | 1174.00 | 720.49        | 2.822    | 2033.53       | 1.665                     | .624    | 1.041   | 10.548   | .173     | 8091.17         |
| 32    | 1174.00 | 1169.50 | 682.30        | 2.830    | 1930.71       | 1.803                     | .681    | 1.122   | 11.344   | .184     | 8874.10         |
| 33    | 1169.50 | 1165.00 | 642.36        | 2.854    | 1833.09       | 2.202                     | .837    | 1.366   | 13.867   | .208     | 11010.01        |
| 34    | 1165.00 | 1160.50 | 612.78        | 2.883    | 1766.70       | 2.593                     | .987    | 1.606   | 16.285   | .254     | 12679.68        |
| 35    | 1160.50 | 1156.00 | 569.58        | 2.896    | 1649.57       | 2.887                     | 1.076   | 1.811   | 17.944   | .304     | 14302.29        |
| 36    | 1156.00 | 1151.50 | 534.31        | 2.908    | 1553.85       | 3.155                     | 1.140   | 2.015   | 19.379   | .336     | 15482.58        |
| 37    | 1151.50 | 1147.00 | 489.32        | 2.935    | 1436.41       | 3.472                     | 1.261   | 2.211   | 21.449   | .368     | 15469.34        |

|    |         |         |        |       |         |       |       |       |        |      |          |
|----|---------|---------|--------|-------|---------|-------|-------|-------|--------|------|----------|
| 38 | 1147.00 | 1142.50 | 456.65 | 2.952 | 1347.90 | 3.525 | 1.293 | 2.232 | 22.023 | .393 | 13579.32 |
| 39 | 1142.50 | 1138.00 | 418.30 | 2.979 | 1245.98 | 3.753 | 1.378 | 2.376 | 23.410 | .433 | 12770.40 |
| 40 | 1138.00 | 1133.50 | 388.07 | 3.009 | 1167.77 | 4.136 | 1.530 | 2.605 | 25.920 | .469 | 14015.32 |
| 41 | 1133.50 | 1129.00 | 361.38 | 3.029 | 1094.73 | 4.489 | 1.648 | 2.841 | 27.899 | .493 | 14505.62 |
| 42 | 1129.00 | 1124.50 | 324.35 | 3.056 | 991.13  | 4.870 | 1.790 | 3.080 | 30.272 | .550 | 13554.45 |
| 43 | 1124.50 | 1120.00 | 298.24 | 3.075 | 917.15  | 5.148 | 1.892 | 3.256 | 32.113 | .584 | 12689.04 |
| 44 | 1120.00 | 1115.50 | 270.88 | 3.072 | 832.17  | 5.265 | 1.941 | 3.324 | 32.757 | .595 | 11779.63 |
| 45 | 1115.50 | 1111.00 | 248.23 | 3.086 | 765.96  | 5.464 | 2.014 | 3.451 | 34.343 | .610 | 11844.08 |
| 46 | 1111.00 | 1106.50 | 220.79 | 3.124 | 689.67  | 5.456 | 2.033 | 3.423 | 35.005 | .640 | 10330.80 |
| 47 | 1106.50 | 1102.00 | 201.77 | 3.136 | 632.66  | 5.683 | 2.077 | 3.605 | 35.843 | .662 | 10436.35 |
| 48 | 1102.00 | 1097.50 | 92.34  | 3.123 | 288.37  | 5.481 | 2.000 | 3.481 | 34.895 | .680 | 4594.84  |
| 49 | 1097.50 | 1093.00 | 14.04  | 3.228 | 45.32   | 5.786 | 2.224 | 3.562 | 39.786 | .751 | 797.65   |
| 50 | 1093.00 | 1088.50 | 11.15  | 3.130 | 34.89   | 5.044 | 1.985 | 3.060 | 34.419 | .635 | 532.94   |

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|                       |          |       |           |       |      |      |       |     |
|-----------------------|----------|-------|-----------|-------|------|------|-------|-----|
| TOTAL FOR ALL BENCHES | 42724.43 | 2.653 | 113351.00 | 1.123 | .413 | .710 | 6.941 | .12 |
|-----------------------|----------|-------|-----------|-------|------|------|-------|-----|

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IN-SITU ORE RESERVE EVALUATION

DESCRIPTION : GRUM 8606 Reserve Model

TOTAL FOR ALL BENCHES

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

CUMULATIVE RESULTS

| CUT-OFF GRADES   |                | VOLUME<br>[bcm x1000] | DENSITY<br>[tn/bcm] | TONNAGE<br>[ TONS x1000] | A V E R A G E   G R A D E S |         |         |          |          |
|------------------|----------------|-----------------------|---------------------|--------------------------|-----------------------------|---------|---------|----------|----------|
| FROM<br>[Pb+Zn ] | TO<br>[Pb+Zn ] |                       |                     |                          | [Pb+Zn ]                    | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] |
| .050             | 100.000        | 7257.84               | 3.442               | 24978.56                 | 8.242                       | 3.076   | 5.166   | 51.838   | .851     |
| TOTAL            |                | 7257.84               | 3.442               | 24978.56                 | 8.242                       | 3.076   | 5.166   | 51.838   | .851     |

IN-SITU ORE RESERVE EVALUATION

DESCRIPTION : GRUM 8606 Reserve Model

TOTAL FOR ALL BENCHES

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

INCREMENTAL RESULTS

| CUT-OFF GRADES   |                | VOLUME<br>[bcm x1000] | DENSITY<br>[tn/bcm] | TONNAGE<br>[ TONS x1000] | A V E R A G E   G R A D E S |         |         |          |          |
|------------------|----------------|-----------------------|---------------------|--------------------------|-----------------------------|---------|---------|----------|----------|
| FROM<br>[Pb+Zn ] | TO<br>[Pb+Zn ] |                       |                     |                          | [Pb+Zn ]                    | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] |
| .050             | 100.000        | 7257.84               | 3.442               | 24978.56                 | 8.242                       | 3.076   | 5.166   | 51.838   | .851     |
| .050             | *****          | 248927.80             | 2.530               | 629891.10                | .000                        | .000    | .000    | .000     | .000     |
| TOTAL            |                | 256185.60             | 2.556               | 654869.60                | .314                        | .117    | .197    | 1.977    | .032     |

IN-SITU ORE RESERVE EVALUATION

DESCRIPTION : Grum 8606 Model Reserves

TOTAL FOR ALL BENCHES

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

INCREMENTAL RESULTS

| CUT-OFF GRADES   |                | VOLUME<br>[bcm x1000] | DENSITY<br>[tn/bcm] | TONNAGE<br>[ TONS x1000] | A V E R A G E   G R A D E S |         |         |          |          |
|------------------|----------------|-----------------------|---------------------|--------------------------|-----------------------------|---------|---------|----------|----------|
| FROM<br>[Pb+Zn ] | TO<br>[Pb+Zn ] |                       |                     |                          | [Pb+Zn ]                    | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] |
| 3.000            | 100.000        | 7061.30               | 3.446               | 24330.06                 | 8.394                       | 3.134   | 5.260   | 52.663   | .856     |
| 3.000            | *****          | 249124.30             | 2.531               | 630539.50                | .003                        | .001    | .002    | .021     | .001     |
| TOTAL            |                | 256185.60             | 2.556               | 654869.60                | .314                        | .117    | .197    | 1.977    | .032     |

IN-SITU ORE RESERVE EVALUATION

DESCRIPTION : Grum 8606 Model Reserves

TOTAL FOR ALL BENCHES

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

CUMULATIVE RESULTS

| CUT-OFF GRADES   |                | VOLUME<br>[bcm x1000] | DENSITY<br>[tn/bcm] | TONNAGE<br>[ TONS x1000] | A V E R A G E G R A D E S |         |         |          |          |
|------------------|----------------|-----------------------|---------------------|--------------------------|---------------------------|---------|---------|----------|----------|
| FROM<br>[Pb+Zn ] | TO<br>[Pb+Zn ] |                       |                     |                          | [Pb+Zn ]                  | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] |
| 3.000            | 100.000        | 7061.30               | 3.446               | 24330.06                 | 8.394                     | 3.134   | 5.260   | 52.663   | .856     |
| TOTAL            |                | 7061.30               | 3.446               | 24330.06                 | 8.394                     | 3.134   | 5.260   | 52.663   | .856     |

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PC-MINE VERSION 1.10      CURRAGH RESOURCES      25/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System      Module : 3.11  
GRUM DEPOSIT (MODEL DATA)      Page : 1

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IN-SITU ORE RESERVE EVALUATION

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DESCRIPTION : GRUM 8606 Model Reserves

TOTAL FOR ALL BENCHES

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

INCREMENTAL RESULTS

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| CUT-OFF GRADES |          | VOLUME         | DENSITY  | TONNAGE       | A V E R A G E   G R A D E S |            |            |          |          |
|----------------|----------|----------------|----------|---------------|-----------------------------|------------|------------|----------|----------|
| FROM           | TO       |                |          |               |                             |            |            |          |          |
| [Pb+Zn ]       | [Pb+Zn ] | [bcm    x1000] | [tn/bcm] | [ TONS x1000] | [Pb+Zn ]                    | [Pb %    ] | [Zn %    ] | [Ag g/m] | [Au g/m] |
| 4.000          | 100.000  | 6428.86        | 3.466    | 22283.41      | 8.839                       | 3.287      | 5.551      | 55.151   | .875     |
| 4.000          | *****    | 249756.80      | 2.533    | 632586.30     | .014                        | .006       | .008       | .104     | .003     |
| TOTAL          |          | 256185.60      | 2.556    | 654869.70     | .314                        | .117       | .197       | 1.977    | .032     |

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PC-MINE VERSION 1.10      CURRAGH RESOURCES      25/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC
Orebody Modelling and Fit Evaluation System
GRUM DEPOSIT (MODEL DATA)
Module : 3.11
Page :      2
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# IN-SITU ORE RESERVE EVALUATION

DESCRIPTION : GRUM 8606 Model Reserves

TOTAL FOR ALL BENCHES

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

CUMULATIVE RESULTS

| CUT-OFF GRADES |          | VOLUME         | DENSITY  | TONNAGE       | A V E R A G E   G R A D E S |            |            |          |          |
|----------------|----------|----------------|----------|---------------|-----------------------------|------------|------------|----------|----------|
| FROM           | TO       |                |          |               |                             |            |            |          |          |
| [Pb+Zn ]       | [Pb+Zn ] | [bcm    x1000] | [tn/bcm] | [ TONS x1000] | [Pb+Zn ]                    | [Pb %    ] | [Zn %    ] | [Ag g/m] | [Au g/m] |
| 4.000          | 100.000  | 6428.86        | 3.466    | 22283.41      | 8.839                       | 3.287      | 5.551      | 55.151   | .875     |
| TOTAL          |          | 6428.86        | 3.466    | 22283.41      | 8.839                       | 3.287      | 5.551      | 55.151   | .875     |

IN-SITU ORE RESERVE EVALUATION

DESCRIPTION : GRUM 8606 Model Reserves

TOTAL FOR ALL BENCHES

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

INCREMENTAL RESULTS

| CUT-OFF GRADES   |                | VOLUME<br>[bcm x1000] | DENSITY<br>[tn/bcm] | TONNAGE<br>[ TONS x1000] | A V E R A G E   G R A D E S |         |         |          |          |
|------------------|----------------|-----------------------|---------------------|--------------------------|-----------------------------|---------|---------|----------|----------|
| FROM<br>[Pb+Zn ] | TO<br>[Pb+Zn ] |                       |                     |                          | [Pb+Zn ]                    | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] |
| 6.000            | 100.000        | 4536.22               | 3.543               | 16073.48                 | 10.323                      | 3.827   | 6.496   | 63.720   | .919     |
| 6.000            | *****          | 251649.40             | 2.538               | 638796.10                | .063                        | .024    | .039    | .424     | .010     |
| TOTAL            |                | 256185.60             | 2.556               | 654869.60                | .314                        | .117    | .197    | 1.977    | .032     |

IN-SITU ORE RESERVE EVALUATION

DESCRIPTION : GRUM 8606 Model Reserves

TOTAL FOR ALL BENCHES

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

CUMULATIVE RESULTS

| CUT-OFF GRADES |          | VOLUME         | DENSITY  | TONNAGE       | A V E R A G E   G R A D E S |         |         |          |          |
|----------------|----------|----------------|----------|---------------|-----------------------------|---------|---------|----------|----------|
| FROM           | TO       |                |          |               | [Pb+Zn ]                    | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] |
| [Pb+Zn ]       | [Pb+Zn ] | [bcm    x1000] | [tn/bcm] | [ TONS x1000] |                             |         |         |          |          |
| 6.000          | 100.000  | 4536.22        | 3.543    | 16073.48      | 10.323                      | 3.827   | 6.496   | 63.720   | .919     |
| TOTAL          |          | 4536.22        | 3.543    | 16073.48      | 10.323                      | 3.827   | 6.496   | 63.720   | .919     |

IN-SITU ORE RESERVE EVALUATION

DESCRIPTION : GRUM 8606 Model Reserves

TOTAL FOR ALL BENCHES

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

INCREMENTAL RESULTS

| CUT-OFF GRADES   |                | VOLUME<br>[bcm x1000] | DENSITY<br>[tn/bcm] | TONNAGE<br>[ TONS x1000] | A V E R A G E   G R A D E S |         |         |          |          |
|------------------|----------------|-----------------------|---------------------|--------------------------|-----------------------------|---------|---------|----------|----------|
| FROM<br>[Pb+Zn ] | TO<br>[Pb+Zn ] |                       |                     |                          | [Pb+Zn ]                    | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] |
| 7.000            | 100.000        | 3338.90               | 3.661               | 12222.30                 | 11.519                      | 4.303   | 7.216   | 71.391   | .996     |
| 7.000            | *****          | 252846.70             | 2.542               | 642647.30                | .101                        | .038    | .064    | .657     | .014     |
| TOTAL            |                | 256185.60             | 2.556               | 654869.50                | .314                        | .117    | .197    | 1.977    | .032     |

IN-SITU ORE RESERVE EVALUATION

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DESCRIPTION : GRUM B606 Model Reserves

TOTAL FOR ALL BENCHES

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

CUMULATIVE RESULTS

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| CUT-OFF GRADES |          | VOLUME      | DENSITY  | TONNAGE       | A V E R A G E G R A D E S |         |         |          |          |
|----------------|----------|-------------|----------|---------------|---------------------------|---------|---------|----------|----------|
| FROM           | TO       |             |          |               | [Pb+Zn ]                  | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] |
| [Pb+Zn ]       | [Pb+Zn ] | [bcm x1000] | [tn/bcm] | [ TONS x1000] |                           |         |         |          |          |
| 7.000          | 100.000  | 3338.90     | 3.661    | 12222.30      | 11.519                    | 4.303   | 7.216   | 71.391   | .996     |
| TOTAL          |          | 3338.90     | 3.661    | 12222.30      | 11.519                    | 4.303   | 7.216   | 71.391   | .996     |

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IN-SITU ORE RESERVE EVALUATION

DESCRIPTION : Grum 8606 In-situ Reserves

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

| BENCH | CREST<br>[m] | TOE<br>[m] | VOLUME<br>[bcm x1000] | DENSITY<br>[tn/bcm] | TONNAGE<br>[ TONS x1000] | AVERAGE GRADES<br>[Pb+Zn ] |
|-------|--------------|------------|-----------------------|---------------------|--------------------------|----------------------------|
| 1     | 1336.00      | 1324.00    | 12672.00              | 2.100               | 26611.20                 | .000                       |
| 2     | 1324.00      | 1312.00    | 12672.00              | 2.100               | 26611.20                 | .000                       |
| 3     | 1312.00      | 1300.00    | 12672.00              | 2.210               | 28002.24                 | .000                       |
| 4     | 1300.00      | 1295.50    | 4752.00               | 2.300               | 10927.55                 | .000                       |
| 5     | 1295.50      | 1291.00    | 4751.46               | 2.333               | 11083.23                 | .000                       |
| 6     | 1291.00      | 1286.50    | 4750.38               | 2.363               | 11225.47                 | .000                       |
| 7     | 1286.50      | 1282.00    | 4749.30               | 2.382               | 11311.00                 | .000                       |
| 8     | 1282.00      | 1277.50    | 4746.06               | 2.408               | 11428.61                 | .000                       |
| 9     | 1277.50      | 1273.00    | 4741.74               | 2.421               | 11479.16                 | .000                       |
| 10    | 1273.00      | 1268.50    | 4737.42               | 2.434               | 11528.73                 | .000                       |
| 11    | 1268.50      | 1264.00    | 4734.72               | 2.450               | 11600.82                 | .000                       |
| 12    | 1264.00      | 1259.50    | 4728.78               | 2.464               | 11649.58                 | .000                       |
| 13    | 1259.50      | 1255.00    | 4717.98               | 2.480               | 11701.97                 | .002                       |
| 14    | 1255.00      | 1250.50    | 4704.48               | 2.493               | 11726.71                 | .002                       |
| 15    | 1250.50      | 1246.00    | 4686.12               | 2.523               | 11822.49                 | .004                       |
| 16    | 1246.00      | 1241.50    | 4663.98               | 2.537               | 11831.45                 | .007                       |
| 17    | 1241.50      | 1237.00    | 4644.54               | 2.555               | 11865.33                 | .011                       |
| 18    | 1237.00      | 1232.50    | 4634.82               | 2.560               | 11865.35                 | .013                       |
| 19    | 1232.50      | 1228.00    | 4624.56               | 2.569               | 11879.12                 | .018                       |
| 20    | 1228.00      | 1223.50    | 4595.94               | 2.579               | 11852.57                 | .015                       |
| 21    | 1223.50      | 1219.00    | 4584.06               | 2.587               | 11859.25                 | .014                       |
| 22    | 1219.00      | 1214.50    | 4593.24               | 2.615               | 12012.83                 | .022                       |
| 23    | 1214.50      | 1210.00    | 4594.32               | 2.635               | 12106.11                 | .023                       |
| 24    | 1210.00      | 1205.50    | 4585.68               | 2.652               | 12160.90                 | .016                       |
| 25    | 1205.50      | 1201.00    | 4572.72               | 2.658               | 12155.05                 | .011                       |
| 26    | 1201.00      | 1196.50    | 4569.48               | 2.703               | 12350.04                 | .013                       |
| 27    | 1196.50      | 1192.00    | 4575.42               | 2.703               | 12366.72                 | .014                       |
| 28    | 1192.00      | 1187.50    | 4580.28               | 2.703               | 12379.16                 | .015                       |
| 29    | 1187.50      | 1183.00    | 4576.50               | 2.703               | 12368.32                 | .014                       |
| 30    | 1183.00      | 1178.50    | 4567.32               | 2.703               | 12346.79                 | .017                       |
| 31    | 1178.50      | 1174.00    | 4560.84               | 2.703               | 12328.08                 | .017                       |
| 32    | 1174.00      | 1169.50    | 4560.30               | 2.702               | 12322.16                 | .012                       |
| 33    | 1169.50      | 1165.00    | 4555.98               | 2.702               | 12310.68                 | .014                       |
| 34    | 1165.00      | 1160.50    | 4536.54               | 2.702               | 12259.15                 | .015                       |
| 35    | 1160.50      | 1156.00    | 4527.36               | 2.702               | 12234.60                 | .016                       |
| 36    | 1156.00      | 1151.50    | 4527.36               | 2.701               | 12229.94                 | .009                       |
| 37    | 1151.50      | 1147.00    | 4530.06               | 2.702               | 12240.97                 | .013                       |
| 38    | 1147.00      | 1142.50    | 4525.74               | 2.704               | 12235.49                 | .019                       |
| 39    | 1142.50      | 1138.00    | 4528.44               | 2.705               | 12248.17                 | .028                       |
| 40    | 1138.00      | 1133.50    | 4543.56               | 2.706               | 12296.05                 | .039                       |
| 41    | 1133.50      | 1129.00    | 4559.22               | 2.708               | 12346.99                 | .052                       |

|                       |         |         |           |       |           |      |
|-----------------------|---------|---------|-----------|-------|-----------|------|
| 42                    | 1129.00 | 1124.50 | 4550.04   | 2.707 | 12316.76  | .049 |
| 43                    | 1124.50 | 1120.00 | 4534.38   | 2.704 | 12262.12  | .033 |
| 44                    | 1120.00 | 1115.50 | 4536.54   | 2.703 | 12262.63  | .026 |
| 45                    | 1115.50 | 1111.00 | 4546.26   | 2.703 | 12290.17  | .029 |
| 46                    | 1111.00 | 1106.50 | 4550.04   | 2.704 | 12301.74  | .031 |
| 47                    | 1106.50 | 1102.00 | 4564.08   | 2.705 | 12344.16  | .033 |
| 48                    | 1102.00 | 1097.50 | 4570.02   | 2.705 | 12361.84  | .031 |
| 49                    | 1097.50 | 1093.00 | 4577.58   | 2.706 | 12387.05  | .037 |
| 50                    | 1093.00 | 1088.50 | 4575.96   | 2.705 | 12379.08  | .031 |
| <hr/>                 |         |         |           |       |           |      |
| TOTAL FOR ALL BENCHES |         |         | 254739.60 | 2.536 | 646066.90 | .014 |

IN-SITU ORE RESERVE EVALUATION

DESCRIPTION : Grum 8606 In-situ Reserves

BENCH TOTALS FOR STOCKPILE FROM 4.0000 [Pb+Zn ] TO 6.0000 [Pb+Zn ]

| BENCH | CREST<br>[m] | TOE<br>[m] | VOLUME<br>[bcm x1000] | DENSITY<br>[tn/bcm] | TONNAGE<br>[ TONS x1000] | AVERAGE GRADES<br>[Pb+Zn ] |
|-------|--------------|------------|-----------------------|---------------------|--------------------------|----------------------------|
| 1     | 1336.00      | 1324.00    | .00                   | .000                | .00                      | .000                       |
| 2     | 1324.00      | 1312.00    | .00                   | .000                | .00                      | .000                       |
| 3     | 1312.00      | 1300.00    | .00                   | .000                | .00                      | .000                       |
| 4     | 1300.00      | 1295.50    | .00                   | .000                | .00                      | .000                       |
| 5     | 1295.50      | 1291.00    | .54                   | 3.046               | 1.64                     | 5.864                      |
| 6     | 1291.00      | 1286.50    | 1.62                  | 3.048               | 4.94                     | 5.874                      |
| 7     | 1286.50      | 1282.00    | 2.70                  | 3.060               | 8.26                     | 5.754                      |
| 8     | 1282.00      | 1277.50    | 4.86                  | 3.060               | 14.87                    | 5.810                      |
| 9     | 1277.50      | 1273.00    | 7.56                  | 3.063               | 23.16                    | 5.813                      |
| 10    | 1273.00      | 1268.50    | 12.96                 | 3.095               | 40.11                    | 5.669                      |
| 11    | 1268.50      | 1264.00    | 15.12                 | 3.096               | 46.81                    | 5.554                      |
| 12    | 1264.00      | 1259.50    | 17.28                 | 3.133               | 54.13                    | 5.096                      |
| 13    | 1259.50      | 1255.00    | 21.60                 | 3.126               | 67.51                    | 5.105                      |
| 14    | 1255.00      | 1250.50    | 20.52                 | 3.098               | 63.58                    | 5.118                      |
| 15    | 1250.50      | 1246.00    | 21.06                 | 3.107               | 65.44                    | 4.868                      |
| 16    | 1246.00      | 1241.50    | 34.56                 | 3.136               | 108.39                   | 5.014                      |
| 17    | 1241.50      | 1237.00    | 35.10                 | 3.114               | 109.32                   | 4.768                      |
| 18    | 1237.00      | 1232.50    | 36.18                 | 3.128               | 113.19                   | 4.715                      |
| 19    | 1232.50      | 1228.00    | 29.70                 | 3.156               | 93.73                    | 4.734                      |
| 20    | 1228.00      | 1223.50    | 36.18                 | 3.187               | 115.31                   | 4.882                      |
| 21    | 1223.50      | 1219.00    | 44.28                 | 3.166               | 140.20                   | 4.807                      |
| 22    | 1219.00      | 1214.50    | 43.74                 | 3.171               | 138.69                   | 4.853                      |
| 23    | 1214.50      | 1210.00    | 41.04                 | 3.197               | 131.22                   | 4.797                      |
| 24    | 1210.00      | 1205.50    | 41.04                 | 3.214               | 131.90                   | 4.965                      |
| 25    | 1205.50      | 1201.00    | 51.84                 | 3.221               | 166.95                   | 5.094                      |
| 26    | 1201.00      | 1196.50    | 52.92                 | 3.204               | 169.53                   | 5.147                      |
| 27    | 1196.50      | 1192.00    | 49.68                 | 3.216               | 159.76                   | 5.059                      |
| 28    | 1192.00      | 1187.50    | 42.66                 | 3.240               | 138.21                   | 4.971                      |
| 29    | 1187.50      | 1183.00    | 49.68                 | 3.229               | 160.40                   | 5.035                      |
| 30    | 1183.00      | 1178.50    | 43.74                 | 3.231               | 141.31                   | 4.996                      |
| 31    | 1178.50      | 1174.00    | 37.80                 | 3.263               | 123.34                   | 4.950                      |
| 32    | 1174.00      | 1169.50    | 37.80                 | 3.197               | 120.84                   | 4.919                      |
| 33    | 1169.50      | 1165.00    | 41.58                 | 3.224               | 134.04                   | 4.915                      |
| 34    | 1165.00      | 1160.50    | 58.32                 | 3.253               | 189.70                   | 5.006                      |
| 35    | 1160.50      | 1156.00    | 65.88                 | 3.308               | 217.92                   | 5.156                      |
| 36    | 1156.00      | 1151.50    | 68.04                 | 3.354               | 228.21                   | 5.118                      |
| 37    | 1151.50      | 1147.00    | 65.88                 | 3.420               | 225.30                   | 5.139                      |
| 38    | 1147.00      | 1142.50    | 74.52                 | 3.455               | 257.49                   | 5.164                      |
| 39    | 1142.50      | 1138.00    | 80.46                 | 3.419               | 275.12                   | 5.089                      |
| 40    | 1138.00      | 1133.50    | 75.06                 | 3.372               | 253.08                   | 5.038                      |
| 41    | 1133.50      | 1129.00    | 69.66                 | 3.313               | 230.81                   | 5.036                      |

|                       |         |         |         |       |         |       |
|-----------------------|---------|---------|---------|-------|---------|-------|
| 42                    | 1129.00 | 1124.50 | 80.46   | 3.294 | 265.04  | 5.056 |
| 43                    | 1124.50 | 1120.00 | 78.30   | 3.291 | 257.70  | 4.913 |
| 44                    | 1120.00 | 1115.50 | 65.34   | 3.321 | 217.00  | 4.830 |
| 45                    | 1115.50 | 1111.00 | 56.70   | 3.373 | 191.27  | 4.843 |
| 46                    | 1111.00 | 1106.50 | 49.68   | 3.394 | 168.60  | 4.885 |
| 47                    | 1106.50 | 1102.00 | 44.28   | 3.413 | 151.14  | 4.936 |
| 48                    | 1102.00 | 1097.50 | 45.36   | 3.463 | 157.07  | 4.815 |
| 49                    | 1097.50 | 1093.00 | 43.20   | 3.498 | 151.12  | 4.828 |
| 50                    | 1093.00 | 1088.50 | 46.44   | 3.487 | 161.92  | 4.874 |
| -----                 |         |         |         |       |         |       |
| TOTAL FOR ALL BENCHES |         |         | 1942.92 | 3.286 | 6385.28 | 4.993 |

IN-SITU ORE RESERVE EVALUATION

DESCRIPTION : Grum B606 In-situ Reserves

BENCH TOTALS FOR ORE ABOVE 6.0000 [Pb+Zn ]

| BENCH | CREST<br>[m ] | TOE<br>[m ] | VOLUME<br>[bcm x1000] | DENSITY<br>[tn/bcm] | TONNAGE<br>[ TONS x1000] | AVERAGE GRADES<br>[Pb+Zn ] |
|-------|---------------|-------------|-----------------------|---------------------|--------------------------|----------------------------|
| 1     | 1336.00       | 1324.00     | .00                   | .000                | .00                      | .000                       |
| 2     | 1324.00       | 1312.00     | .00                   | .000                | .00                      | .000                       |
| 3     | 1312.00       | 1300.00     | .00                   | .000                | .00                      | .000                       |
| 4     | 1300.00       | 1295.50     | .00                   | .000                | .00                      | .000                       |
| 5     | 1295.50       | 1291.00     | .00                   | .000                | .00                      | .000                       |
| 6     | 1291.00       | 1286.50     | .00                   | .000                | .00                      | .000                       |
| 7     | 1286.50       | 1282.00     | .00                   | .000                | .00                      | .000                       |
| 8     | 1282.00       | 1277.50     | 1.08                  | 3.563               | 3.85                     | 12.405                     |
| 9     | 1277.50       | 1273.00     | 2.70                  | 3.375               | 9.11 <sup>13</sup>       | 10.386                     |
| 10    | 1273.00       | 1268.50     | 1.62                  | 3.222               | 5.22 <sup>18</sup>       | 9.624                      |
| 11    | 1268.50       | 1264.00     | 2.16                  | 3.066               | 6.62 <sup>25</sup>       | 8.187                      |
| 12    | 1264.00       | 1259.50     | 5.94                  | 3.077               | 18.28 <sup>43</sup>      | 7.270                      |
| 13    | 1259.50       | 1255.00     | 12.42                 | 3.106               | 38.58 <sup>82</sup>      | 7.678                      |
| 14    | 1255.00       | 1250.50     | 27.00                 | 3.117               | 84.16 <sup>106</sup>     | 8.140                      |
| 15    | 1250.50       | 1246.00     | 44.82                 | 3.182               | 142.60 <sup>308</sup>    | 8.766                      |
| 16    | 1246.00       | 1241.50     | 53.46                 | 3.230               | 172.68 <sup>401</sup>    | 9.291                      |
| 17    | 1241.50       | 1237.00     | 72.36                 | 3.266               | 236.30 <sup>717</sup>    | 9.326                      |
| 18    | 1237.00       | 1232.50     | 81.00                 | 3.291               | 266.54 <sup>984</sup>    | 9.638                      |
| 19    | 1232.50       | 1228.00     | 97.74                 | 3.307               | 323.18 <sup>1307</sup>   | 9.143                      |
| 20    | 1228.00       | 1223.50     | 119.88                | 3.346               | 401.11 <sup>1708</sup>   | 9.023                      |
| 21    | 1223.50       | 1219.00     | 123.66                | 3.391               | 419.35 <sup>2128</sup>   | 9.314                      |
| 22    | 1219.00       | 1214.50     | 115.02                | 3.389               | 389.81 <sup>2517</sup>   | 9.627                      |
| 23    | 1214.50       | 1210.00     | 116.64                | 3.349               | 390.67 <sup>2908</sup>   | 9.359                      |
| 24    | 1210.00       | 1205.50     | 125.28                | 3.325               | 416.50 <sup>3325</sup>   | 8.908                      |
| 25    | 1205.50       | 1201.00     | 127.44                | 3.346               | 426.46 <sup>3757</sup>   | 9.056                      |
| 26    | 1201.00       | 1196.50     | 129.60                | 3.421               | 443.35 <sup>4194</sup>   | 9.760                      |
| 27    | 1196.50       | 1192.00     | 126.90                | 3.512               | 445.62 <sup>4640</sup>   | 10.189                     |
| 28    | 1192.00       | 1187.50     | 129.06                | 3.505               | 452.31 <sup>5092</sup>   | 9.783                      |
| 29    | 1187.50       | 1183.00     | 125.82                | 3.429               | 431.47 <sup>5524</sup>   | 9.196                      |
| 30    | 1183.00       | 1178.50     | 140.94                | 3.402               | 479.47 <sup>6003</sup>   | 9.053                      |
| 31    | 1178.50       | 1174.00     | 153.36                | 3.445               | 528.38 <sup>6532</sup>   | 9.263                      |
| 32    | 1174.00       | 1169.50     | 153.90                | 3.503               | 539.18 <sup>7071</sup>   | 9.512                      |
| 33    | 1169.50       | 1165.00     | 154.44                | 3.552               | 548.60 <sup>7619</sup>   | 9.942                      |
| 34    | 1165.00       | 1160.50     | 157.14                | 3.567               | 560.55 <sup>8180</sup>   | 10.135                     |
| 35    | 1160.50       | 1156.00     | 158.76                | 3.572               | 8747 567.15              | 10.394                     |
| 36    | 1156.00       | 1151.50     | 156.60                | 3.625               | 9315 567.66              | 10.900                     |
| 37    | 1151.50       | 1147.00     | 156.06                | 3.696               | 9892 576.86              | 11.244                     |
| 38    | 1147.00       | 1142.50     | 151.74                | 3.732               | 10458 566.29             | 11.164                     |
| 39    | 1142.50       | 1138.00     | 143.10                | 3.754               | 10995 537.27             | 11.123                     |
| 40    | 1138.00       | 1133.50     | 133.38                | 3.793               | 11501 505.87             | 11.509                     |
| 41    | 1133.50       | 1129.00     | 123.12                | 3.792               | 11968 466.82             | 11.764                     |

|                       |         |         |         |       |          |        |        |
|-----------------------|---------|---------|---------|-------|----------|--------|--------|
| 42                    | 1129.00 | 1124.50 | 121.50  | 3.759 | 12 025   | 456.76 | 11.576 |
| 43                    | 1124.50 | 1120.00 | 139.32  | 3.708 | 12 941   | 516.59 | 11.063 |
| 44                    | 1120.00 | 1115.50 | 150.12  | 3.635 | 13 487   | 545.69 | 10.609 |
| 45                    | 1115.50 | 1111.00 | 149.04  | 3.632 | 14 028   | 541.33 | 10.986 |
| 46                    | 1111.00 | 1106.50 | 152.28  | 3.686 | 14 590   | 561.34 | 11.419 |
| 47                    | 1106.50 | 1102.00 | 143.64  | 3.738 | 15 126   | 536.88 | 12.162 |
| 48                    | 1102.00 | 1097.50 | 136.62  | 3.708 | 15 633   | 506.54 | 11.799 |
| 49                    | 1097.50 | 1093.00 | 131.22  | 3.684 | 16 216   | 483.43 | 11.081 |
| 50                    | 1093.00 | 1088.50 | 129.60  | 3.694 | 16 595   | 478.70 | 10.827 |
| <hr/>                 |         |         |         |       |          |        |        |
| TOTAL FOR ALL BENCHES |         |         | 4677.48 | 3.548 | 16595.15 |        | 10.339 |

# MINING RESERVE EVALUATION

DESCRIPTION : Ultimate Pit

TOP SURFACE GRID RECORD : 1 TOPOGRAPHY  
BOTTOM SURFACE GRID RECORD : 117 Stage 3 pit

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

| BENCH | CREST   | TOE     | VOLUME      | DENSITY  | TONNAGE       | AVERAGE GRADES |         |         |          |          | ECONOMIC FACTOR |
|-------|---------|---------|-------------|----------|---------------|----------------|---------|---------|----------|----------|-----------------|
|       | [m]     | [m]     | [bcm x1000] | [tn/bcm] | [ TONS x1000] | [Pb+Zn ]       | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] | [CDN \$ x1000]  |
| 1     | 1336.00 | 1324.00 | 11.16       | 2.100    | 23.44         | .000           | .000    | .000    | .000     | .000     | -4.34           |
| 2     | 1324.00 | 1312.00 | 770.48      | 2.100    | 1618.02       | .000           | .000    | .000    | .000     | .000     | -288.93         |
| 3     | 1312.00 | 1300.00 | 2316.34     | 2.480    | 5744.78       | .000           | .000    | .000    | .000     | .000     | -1753.61        |
| 4     | 1300.00 | 1295.50 | 1629.30     | 2.400    | 3910.37       | .000           | .000    | .000    | .000     | .000     | -1086.26        |
| 5     | 1295.50 | 1291.00 | 1747.20     | 2.433    | 4251.72       | .000           | .000    | .000    | .000     | .000     | -1226.13        |
| 6     | 1291.00 | 1286.50 | 1859.90     | 2.457    | 4569.09       | .000           | .000    | .000    | .000     | .000     | -1329.99        |
| 7     | 1286.50 | 1282.00 | 1975.45     | 2.455    | 4850.28       | .000           | .000    | .000    | .000     | .000     | -1409.90        |
| 8     | 1282.00 | 1277.50 | 2066.47     | 2.477    | 5119.13       | .000           | .000    | .000    | .000     | .000     | -1506.86        |
| 9     | 1277.50 | 1273.00 | 2253.66     | 2.455    | 5533.84       | .000           | .000    | .000    | .000     | .000     | -1591.93        |
| 10    | 1273.00 | 1268.50 | 2307.89     | 2.452    | 5658.27       | .000           | .000    | .000    | .000     | .000     | -1596.03        |
| 11    | 1268.50 | 1264.00 | 2302.07     | 2.466    | 5677.77       | .000           | .000    | .000    | .000     | .000     | -1626.40        |
| 12    | 1264.00 | 1259.50 | 2310.84     | 2.480    | 5730.06       | .000           | .000    | .000    | .000     | .000     | -1663.82        |
| 13    | 1259.50 | 1255.00 | 2208.36     | 2.514    | 5551.59       | .004           | .001    | .002    | .024     | .001     | -1694.32        |
| 14    | 1255.00 | 1250.50 | 2094.95     | 2.527    | 5293.98       | .005           | .002    | .003    | .034     | .001     | -1647.02        |
| 15    | 1250.50 | 1246.00 | 1991.83     | 2.578    | 5135.60       | .009           | .003    | .006    | .067     | .002     | -1697.69        |
| 16    | 1246.00 | 1241.50 | 1916.09     | 2.600    | 4982.39       | .017           | .006    | .011    | .124     | .004     | -1680.80        |
| 17    | 1241.50 | 1237.00 | 1826.76     | 2.624    | 4794.05       | .026           | .009    | .017    | .180     | .005     | -1674.13        |
| 18    | 1237.00 | 1232.50 | 1748.51     | 2.636    | 4609.10       | .033           | .012    | .022    | .223     | .005     | -1656.16        |
| 19    | 1232.50 | 1228.00 | 1672.28     | 2.658    | 4445.34       | .049           | .018    | .031    | .329     | .007     | -1621.06        |
| 20    | 1228.00 | 1223.50 | 1576.60     | 2.680    | 4225.59       | .039           | .014    | .025    | .270     | .005     | -1592.26        |
| 21    | 1223.50 | 1219.00 | 1503.22     | 2.692    | 4047.39       | .034           | .013    | .021    | .242     | .006     | -1538.13        |
| 22    | 1219.00 | 1214.50 | 1458.23     | 2.703    | 3941.03       | .059           | .023    | .037    | .428     | .009     | -1528.90        |
| 23    | 1214.50 | 1210.00 | 1405.14     | 2.706    | 3802.30       | .062           | .023    | .040    | .431     | .009     | -1479.26        |
| 24    | 1210.00 | 1205.50 | 1337.17     | 2.707    | 3619.41       | .043           | .017    | .026    | .311     | .007     | -1435.10        |
| 25    | 1205.50 | 1201.00 | 1271.54     | 2.704    | 3438.82       | .027           | .010    | .016    | .199     | .004     | -1388.84        |
| 26    | 1201.00 | 1196.50 | 1210.07     | 2.706    | 3274.46       | .032           | .013    | .019    | .254     | .006     | -1321.57        |
| 27    | 1196.50 | 1192.00 | 1163.30     | 2.707    | 3148.88       | .034           | .013    | .021    | .263     | .006     | -1291.94        |
| 28    | 1192.00 | 1187.50 | 1104.79     | 2.708    | 2991.61       | .048           | .017    | .031    | .336     | .009     | -1227.19        |
| 29    | 1187.50 | 1183.00 | 1054.96     | 2.707    | 2855.65       | .039           | .013    | .026    | .273     | .009     | -1190.77        |
| 30    | 1183.00 | 1178.50 | 985.14      | 2.710    | 2669.86       | .053           | .018    | .036    | .402     | .013     | -1129.69        |
| 31    | 1178.50 | 1174.00 | 926.77      | 2.710    | 2511.77       | .061           | .021    | .041    | .438     | .012     | -1062.96        |
| 32    | 1174.00 | 1169.50 | 880.55      | 2.707    | 2383.49       | .045           | .016    | .029    | .322     | .009     | -1026.79        |
| 33    | 1169.50 | 1165.00 | 829.91      | 2.707    | 2246.95       | .059           | .021    | .038    | .426     | .011     | -967.95         |
| 34    | 1165.00 | 1160.50 | 769.58      | 2.709    | 2084.48       | .055           | .020    | .035    | .423     | .011     | -909.80         |
| 35    | 1160.50 | 1156.00 | 721.24      | 2.710    | 1954.63       | .073           | .028    | .045    | .536     | .015     | -851.18         |
| 36    | 1156.00 | 1151.50 | 674.94      | 2.708    | 1827.54       | .056           | .021    | .035    | .390     | .012     | -810.36         |
| 37    | 1151.50 | 1147.00 | 634.50      | 2.710    | 1724.84       | .070           | .024    | .044    | .445     | .012     | -777.34         |

|    |         |         |        |       |         |      |      |      |       |      |         |
|----|---------|---------|--------|-------|---------|------|------|------|-------|------|---------|
| 37 | 1131.50 | 1147.50 | 533.55 | 2.715 | 1724.74 | .075 | .025 | .044 | .753  | .012 | -777.35 |
| 38 | 1147.00 | 1142.50 | 596.18 | 2.715 | 1618.44 | .110 | .042 | .068 | .766  | .020 | -727.98 |
| 39 | 1142.50 | 1138.00 | 548.23 | 2.724 | 1493.31 | .172 | .066 | .107 | 1.214 | .030 | -679.32 |
| 40 | 1138.00 | 1133.50 | 529.07 | 2.740 | 1449.59 | .266 | .104 | .162 | 1.911 | .044 | -655.74 |
| 41 | 1133.50 | 1129.00 | 494.70 | 2.749 | 1360.04 | .344 | .137 | .207 | 2.418 | .059 | -621.30 |
| 42 | 1129.00 | 1124.50 | 386.47 | 2.739 | 1058.56 | .349 | .150 | .199 | 2.405 | .060 | -492.57 |
| 43 | 1124.50 | 1120.00 | 350.95 | 2.730 | 957.98  | .292 | .124 | .168 | 2.034 | .055 | -447.48 |
| 44 | 1120.00 | 1115.50 | 305.99 | 2.730 | 835.39  | .328 | .141 | .187 | 2.305 | .064 | -395.66 |
| 45 | 1115.50 | 1111.00 | 277.70 | 2.733 | 759.06  | .388 | .170 | .218 | 2.746 | .080 | -359.45 |
| 46 | 1111.00 | 1106.50 | 253.39 | 2.731 | 691.99  | .388 | .175 | .213 | 2.715 | .083 | -332.19 |
| 47 | 1106.50 | 1102.00 | 225.88 | 2.743 | 619.58  | .437 | .195 | .242 | 3.164 | .103 | -296.49 |
| 48 | 1102.00 | 1097.50 | 207.13 | 2.738 | 567.12  | .342 | .158 | .184 | 2.554 | .093 | -275.48 |
| 49 | 1097.50 | 1093.00 | 197.42 | 2.743 | 541.59  | .420 | .192 | .227 | 3.179 | .110 | -265.72 |
| 50 | 1093.00 | 1088.50 | 178.62 | 2.737 | 488.85  | .383 | .179 | .204 | 2.813 | .095 | -240.10 |

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|                       |          |       |           |      |      |      |      |     |
|-----------------------|----------|-------|-----------|------|------|------|------|-----|
| TOTAL FOR ALL BENCHES | 59070.94 | 2.585 | 152689.10 | .045 | .018 | .027 | .319 | .01 |
|-----------------------|----------|-------|-----------|------|------|------|------|-----|

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# MINING RESERVE EVALUATION

DESCRIPTION : Ultimate Pit

TOP SURFACE GRID RECORD : 1 TOPOGRAPHY  
BOTTOM SURFACE GRID RECORD : 117 Stage 3 pit

BENCH TOTALS FOR STOCKPILE FROM 4.0000 [Pb+Zn ] TO 6.0000 [Pb+Zn ]

| BENCH | CREST   | TOE     | VOLUME      | DENSITY  | TONNAGE       | AVERAGE GRADES |         |         |          |          | ECONOMIC FACTOR |
|-------|---------|---------|-------------|----------|---------------|----------------|---------|---------|----------|----------|-----------------|
|       | [m ]    | [m ]    | [bcm x1000] | [tn/bcm] | [ TONS x1000] | [Pb+Zn ]       | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] | [CDN \$ x1000]  |
| 1     | 1336.00 | 1324.00 | .00         | .000     | .00           | .000           | .000    | .000    | .000     | .000     | .00             |
| 2     | 1324.00 | 1312.00 | .00         | .000     | .00           | .000           | .000    | .000    | .000     | .000     | .00             |
| 3     | 1312.00 | 1300.00 | .00         | .000     | .00           | .000           | .000    | .000    | .000     | .000     | .00             |
| 4     | 1300.00 | 1295.50 | .00         | .000     | .00           | .000           | .000    | .000    | .000     | .000     | .00             |
| 5     | 1295.50 | 1291.00 | .54         | 3.046    | 1.64          | 5.864          | 2.198   | 3.666   | 34.000   | .494     | -1.53           |
| 6     | 1291.00 | 1286.50 | 1.62        | 3.048    | 4.94          | 5.874          | 2.222   | 3.652   | 34.667   | .490     | -1.59           |
| 7     | 1286.50 | 1282.00 | 2.70        | 3.060    | 8.26          | 5.754          | 2.156   | 3.598   | 33.994   | .493     | -2.65           |
| 8     | 1282.00 | 1277.50 | 4.86        | 3.060    | 14.87         | 5.810          | 2.198   | 3.612   | 34.665   | .507     | -4.68           |
| 9     | 1277.50 | 1273.00 | 7.56        | 3.063    | 23.16         | 5.813          | 2.225   | 3.588   | 35.499   | .516     | -7.28           |
| 10    | 1273.00 | 1268.50 | 12.96       | 3.095    | 40.11         | 5.669          | 2.060   | 3.608   | 33.810   | .767     | -12.48          |
| 11    | 1268.50 | 1264.00 | 15.12       | 3.096    | 46.81         | 5.554          | 1.962   | 3.593   | 32.753   | .810     | -14.28          |
| 12    | 1264.00 | 1259.50 | 17.28       | 3.133    | 54.13         | 5.096          | 1.775   | 3.321   | 30.243   | .819     | -16.32          |
| 13    | 1259.50 | 1255.00 | 21.60       | 3.126    | 67.51         | 5.105          | 1.779   | 3.325   | 30.730   | .811     | -20.80          |
| 14    | 1255.00 | 1250.50 | 20.52       | 3.098    | 63.58         | 5.118          | 1.756   | 3.362   | 31.164   | .781     | -20.14          |
| 15    | 1250.50 | 1246.00 | 21.06       | 3.107    | 65.44         | 4.868          | 1.611   | 3.257   | 29.590   | .795     | -20.67          |
| 16    | 1246.00 | 1241.50 | 34.56       | 3.136    | 108.39        | 5.014          | 1.645   | 3.368   | 30.576   | .739     | -34.56          |
| 17    | 1241.50 | 1237.00 | 35.10       | 3.114    | 109.32        | 4.768          | 1.583   | 3.184   | 30.324   | .618     | -35.75          |
| 18    | 1237.00 | 1232.50 | 36.18       | 3.128    | 113.19        | 4.715          | 1.557   | 3.158   | 30.181   | .558     | -36.85          |
| 19    | 1232.50 | 1228.00 | 29.70       | 3.156    | 93.73         | 4.734          | 1.541   | 3.193   | 28.707   | .484     | -30.80          |
| 20    | 1228.00 | 1223.50 | 35.38       | 3.164    | 111.94        | 4.864          | 1.581   | 3.282   | 29.084   | .458     | -37.34          |
| 21    | 1223.50 | 1219.00 | 43.20       | 3.149    | 136.05        | 4.783          | 1.570   | 3.213   | 29.249   | .496     | -46.40          |
| 22    | 1219.00 | 1214.50 | 43.20       | 3.167    | 136.80        | 4.856          | 1.644   | 3.212   | 30.153   | .510     | -46.40          |
| 23    | 1214.50 | 1210.00 | 39.42       | 3.185    | 125.55        | 4.807          | 1.658   | 3.149   | 29.553   | .520     | -43.07          |
| 24    | 1210.00 | 1205.50 | 37.99       | 3.185    | 120.99        | 4.967          | 1.755   | 3.212   | 30.114   | .555     | -42.21          |
| 25    | 1205.50 | 1201.00 | 45.42       | 3.186    | 144.71        | 5.103          | 1.779   | 3.324   | 30.696   | .571     | -50.47          |
| 26    | 1201.00 | 1196.50 | 45.90       | 3.182    | 146.04        | 5.182          | 1.790   | 3.392   | 31.104   | .559     | -51.85          |
| 27    | 1196.50 | 1192.00 | 45.50       | 3.191    | 145.20        | 5.067          | 1.736   | 3.331   | 30.882   | .555     | -52.25          |
| 28    | 1192.00 | 1187.50 | 35.64       | 3.204    | 114.20        | 4.944          | 1.703   | 3.241   | 30.028   | .564     | -41.58          |
| 29    | 1187.50 | 1183.00 | 38.88       | 3.200    | 124.42        | 5.050          | 1.764   | 3.286   | 29.546   | .576     | -45.36          |
| 30    | 1183.00 | 1178.50 | 32.87       | 3.213    | 105.62        | 5.040          | 1.795   | 3.245   | 30.202   | .660     | -38.95          |
| 31    | 1178.50 | 1174.00 | 29.70       | 3.272    | 97.16         | 5.084          | 1.879   | 3.205   | 31.975   | .755     | -35.75          |
| 32    | 1174.00 | 1169.50 | 30.76       | 3.203    | 98.52         | 5.001          | 1.811   | 3.191   | 31.303   | .668     | -37.02          |
| 33    | 1169.50 | 1165.00 | 34.08       | 3.231    | 110.13        | 4.958          | 1.830   | 3.128   | 32.078   | .673     | -41.65          |
| 34    | 1165.00 | 1160.50 | 48.10       | 3.249    | 156.29        | 5.068          | 1.902   | 3.166   | 33.462   | .726     | -59.67          |
| 35    | 1160.50 | 1156.00 | 44.71       | 3.248    | 145.24        | 5.203          | 2.010   | 3.193   | 34.559   | .728     | -55.48          |
| 36    | 1156.00 | 1151.50 | 41.68       | 3.217    | 134.07        | 5.146          | 1.910   | 3.236   | 33.366   | .802     | -52.48          |
| 37    | 1151.50 | 1147.00 | 34.72       | 3.231    | 112.20        | 5.088          | 1.900   | 3.188   | 33.370   | .845     | -46.82          |

|    |         |         |       |       |        |       |       |       |        |      |        |
|----|---------|---------|-------|-------|--------|-------|-------|-------|--------|------|--------|
| 37 | 1131.50 | 1147.00 | 38.72 | 3.221 | 115.28 | 5.087 | 1.788 | 3.155 | 33.870 | .845 | -48.72 |
| 38 | 1147.00 | 1142.50 | 41.58 | 3.216 | 133.72 | 5.006 | 1.875 | 3.132 | 34.111 | .806 | -53.90 |
| 39 | 1142.50 | 1138.00 | 49.28 | 3.216 | 158.49 | 4.891 | 1.850 | 3.041 | 33.330 | .793 | -63.89 |
| 40 | 1138.00 | 1133.50 | 45.68 | 3.211 | 146.70 | 4.861 | 1.843 | 3.019 | 32.810 | .817 | -60.07 |
| 41 | 1133.50 | 1129.00 | 45.47 | 3.218 | 146.31 | 4.972 | 1.939 | 3.033 | 33.098 | .835 | -60.62 |
| 42 | 1129.00 | 1124.50 | 52.69 | 3.189 | 168.02 | 5.008 | 1.949 | 3.059 | 33.057 | .823 | -70.26 |
| 43 | 1124.50 | 1120.00 | 53.88 | 3.147 | 169.57 | 4.853 | 1.942 | 2.911 | 32.376 | .770 | -72.84 |
| 44 | 1120.00 | 1115.50 | 43.68 | 3.107 | 135.73 | 4.747 | 1.939 | 2.808 | 31.739 | .756 | -59.86 |
| 45 | 1115.50 | 1111.00 | 36.18 | 3.102 | 112.23 | 4.759 | 1.921 | 2.838 | 31.799 | .723 | -50.25 |
| 46 | 1111.00 | 1106.50 | 32.40 | 3.173 | 102.79 | 4.710 | 1.944 | 2.766 | 33.375 | .854 | -45.00 |
| 47 | 1106.50 | 1102.00 | 28.03 | 3.175 | 89.01  | 4.815 | 1.941 | 2.874 | 32.712 | .856 | -39.45 |
| 48 | 1102.00 | 1097.50 | 22.46 | 3.137 | 70.47  | 4.719 | 1.769 | 2.950 | 30.606 | .712 | -32.03 |
| 49 | 1097.50 | 1093.00 | 20.35 | 3.195 | 65.02  | 4.918 | 1.937 | 2.982 | 33.299 | .835 | -29.02 |
| 50 | 1093.00 | 1088.50 | 18.43 | 3.241 | 59.73  | 4.866 | 2.032 | 2.834 | 34.420 | .887 | -26.62 |

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|                       |         |       |         |       |       |       |        |     |
|-----------------------|---------|-------|---------|-------|-------|-------|--------|-----|
| TOTAL FOR ALL BENCHES | 1460.63 | 3.180 | 4644.11 | 4.969 | 1.813 | 3.157 | 31.690 | .69 |
|-----------------------|---------|-------|---------|-------|-------|-------|--------|-----|

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MINING RESERVE EVALUATION

DESCRIPTION : Ultimate Pit

TOP SURFACE GRID RECORD : 1 TOPOGRAPHY  
BOTTOM SURFACE GRID RECORD : 117 Stage 3 pit

BENCH TOTALS FOR ORE ABOVE 6.0000 [Pb+Zn ]

| BENCH | CREST   |   | TOE     |   | VOLUME |        | DENSITY  | TONNAGE       | AVERAGE GRADES |         |         |          |          | ECONOMIC                 |
|-------|---------|---|---------|---|--------|--------|----------|---------------|----------------|---------|---------|----------|----------|--------------------------|
|       | [m      | ] | [m      | ] | [bcm   | x1000] | [tn/bcm] | [ TONS x1000] | [Pb+Zn ]       | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] | FACTOR<br>[CDN \$ x1000] |
| 1     | 1336.00 |   | 1324.00 |   | .00    |        | .000     | .00           | .000           | .000    | .000    | .000     | .000     | .00                      |
| 2     | 1324.00 |   | 1312.00 |   | .00    |        | .000     | .00           | .000           | .000    | .000    | .000     | .000     | .00                      |
| 3     | 1312.00 |   | 1300.00 |   | .00    |        | .000     | .00           | .000           | .000    | .000    | .000     | .000     | .00                      |
| 4     | 1300.00 |   | 1295.50 |   | .00    |        | .000     | .00           | .000           | .000    | .000    | .000     | .000     | .00                      |
| 5     | 1295.50 |   | 1291.00 |   | .00    |        | .000     | .00           | .000           | .000    | .000    | .000     | .000     | .00                      |
| 6     | 1291.00 |   | 1286.50 |   | .00    |        | .000     | .00           | .000           | .000    | .000    | .000     | .000     | .00                      |
| 7     | 1286.50 |   | 1282.00 |   | .00    |        | .000     | .00           | .000           | .000    | .000    | .000     | .000     | .00                      |
| 8     | 1282.00 |   | 1277.50 |   | 1.08   |        | 3.563    | 3.85          | 12.405         | 4.572   | 7.834   | 84.071   | .791     | 170.08                   |
| 9     | 1277.50 |   | 1273.00 |   | 2.70   |        | 3.375    | 9.11          | 10.386         | 3.788   | 6.598   | 68.804   | .729     | 283.91                   |
| 10    | 1273.00 |   | 1268.50 |   | 1.62   |        | 3.222    | 5.22          | 9.624          | 3.069   | 6.555   | 61.629   | .820     | 143.68                   |
| 11    | 1268.50 |   | 1264.00 |   | 2.16   |        | 3.066    | 6.62          | 8.187          | 2.391   | 5.796   | 50.000   | .816     | 123.10                   |
| 12    | 1264.00 |   | 1259.50 |   | 5.94   |        | 3.077    | 18.28         | 7.270          | 2.365   | 4.905   | 43.127   | .839     | 221.69                   |
| 13    | 1259.50 |   | 1255.00 |   | 12.42  |        | 3.106    | 38.58         | 7.678          | 2.574   | 5.103   | 45.558   | .768     | 547.91                   |
| 14    | 1255.00 |   | 1250.50 |   | 27.00  |        | 3.117    | 84.16         | 8.140          | 2.821   | 5.319   | 48.549   | .733     | 1409.50                  |
| 15    | 1250.50 |   | 1246.00 |   | 44.82  |        | 3.182    | 142.60        | 8.766          | 3.210   | 5.556   | 54.584   | .757     | 2942.12                  |
| 16    | 1246.00 |   | 1241.50 |   | 53.46  |        | 3.230    | 172.68        | 9.291          | 3.506   | 5.785   | 57.939   | .765     | 4091.45                  |
| 17    | 1241.50 |   | 1237.00 |   | 72.36  |        | 3.266    | 236.30        | 9.326          | 3.492   | 5.834   | 56.690   | .794     | 5651.15                  |
| 18    | 1237.00 |   | 1232.50 |   | 81.00  |        | 3.291    | 266.54        | 9.638          | 3.549   | 6.089   | 56.632   | .783     | 6846.01                  |
| 19    | 1232.50 |   | 1228.00 |   | 97.74  |        | 3.307    | 323.18        | 9.143          | 3.286   | 5.858   | 53.253   | .739     | 7301.03                  |
| 20    | 1228.00 |   | 1223.50 |   | 119.88 |        | 3.346    | 401.11        | 9.023          | 3.253   | 5.769   | 52.796   | .733     | 8756.48                  |
| 21    | 1223.50 |   | 1219.00 |   | 121.50 |        | 3.382    | 410.89        | 9.204          | 3.368   | 5.836   | 54.449   | .758     | 9457.00                  |
| 22    | 1219.00 |   | 1214.50 |   | 106.30 |        | 3.343    | 355.39        | 9.111          | 3.254   | 5.857   | 53.372   | .748     | 8001.10                  |
| 23    | 1214.50 |   | 1210.00 |   | 106.00 |        | 3.292    | 348.96        | 8.640          | 3.042   | 5.598   | 50.449   | .734     | 6916.66                  |
| 24    | 1210.00 |   | 1205.50 |   | 114.52 |        | 3.280    | 375.66        | 8.413          | 2.974   | 5.439   | 48.948   | .745     | 7096.23                  |
| 25    | 1205.50 |   | 1201.00 |   | 114.76 |        | 3.317    | 380.64        | 8.803          | 3.173   | 5.630   | 51.262   | .753     | 8374.09                  |
| 26    | 1201.00 |   | 1196.50 |   | 116.10 |        | 3.411    | 396.05        | 9.752          | 3.588   | 6.164   | 57.691   | .842     | 11421.74                 |
| 27    | 1196.50 |   | 1192.00 |   | 110.96 |        | 3.519    | 390.50        | 10.266         | 3.830   | 6.436   | 62.263   | .896     | 12630.64                 |
| 28    | 1192.00 |   | 1187.50 |   | 108.04 |        | 3.518    | 380.03        | 9.772          | 3.655   | 6.117   | 59.790   | .853     | 11065.03                 |
| 29    | 1187.50 |   | 1183.00 |   | 104.11 |        | 3.428    | 356.90        | 9.088          | 3.407   | 5.681   | 56.649   | .793     | 8923.77                  |
| 30    | 1183.00 |   | 1178.50 |   | 120.71 |        | 3.383    | 408.35        | 8.900          | 3.320   | 5.580   | 55.320   | .776     | 9554.49                  |
| 31    | 1178.50 |   | 1174.00 |   | 115.25 |        | 3.435    | 395.88        | 9.156          | 3.428   | 5.729   | 57.182   | .830     | 10097.50                 |
| 32    | 1174.00 |   | 1169.50 |   | 110.64 |        | 3.509    | 388.24        | 9.639          | 3.646   | 5.993   | 60.292   | .899     | 11022.46                 |
| 33    | 1169.50 |   | 1165.00 |   | 110.56 |        | 3.573    | 395.05        | 10.636         | 4.037   | 6.599   | 66.342   | .911     | 13198.79                 |
| 34    | 1165.00 |   | 1160.50 |   | 114.37 |        | 3.602    | 411.93        | 10.985         | 4.184   | 6.802   | 67.981   | .952     | 14633.87                 |
| 35    | 1160.50 |   | 1156.00 |   | 121.87 |        | 3.601    | 438.87        | 11.059         | 4.131   | 6.928   | 68.429   | 1.078    | 16573.75                 |
| 36    | 1156.00 |   | 1151.50 |   | 125.33 |        | 3.641    | 456.34        | 11.476         | 4.217   | 7.260   | 71.264   | 1.112    | 18508.96                 |
| 37    | 1151.50 |   | 1147.00 |   | 123.93 |        | 3.688    | 451.77        | 11.478         | 4.334   | 7.345   | 72.875   | 1.111    | 18317.14                 |

|    |         |         |        |       |        |        |       |       |        |       |          |
|----|---------|---------|--------|-------|--------|--------|-------|-------|--------|-------|----------|
| 37 | 1131.50 | 1147.00 | 127.75 | 3.588 | 471.77 | 11.577 | 4.334 | 7.343 | 72.873 | 1.111 | 17383.84 |
| 38 | 1147.00 | 1142.50 | 124.97 | 3.722 | 465.15 | 11.544 | 4.349 | 7.195 | 72.575 | 1.118 | 18438.64 |
| 39 | 1142.50 | 1138.00 | 116.50 | 3.754 | 437.30 | 11.710 | 4.404 | 7.306 | 73.255 | 1.129 | 17646.60 |
| 40 | 1138.00 | 1133.50 | 110.09 | 3.805 | 418.93 | 12.157 | 4.607 | 7.550 | 76.470 | 1.163 | 18072.15 |
| 41 | 1133.50 | 1129.00 | 99.29  | 3.792 | 376.49 | 12.576 | 4.669 | 7.908 | 77.622 | 1.152 | 17211.54 |
| 42 | 1129.00 | 1124.50 | 93.10  | 3.705 | 344.92 | 12.192 | 4.432 | 7.760 | 74.569 | 1.159 | 14999.87 |
| 43 | 1124.50 | 1120.00 | 103.08 | 3.624 | 373.54 | 11.389 | 4.119 | 7.270 | 70.078 | 1.116 | 14350.43 |
| 44 | 1120.00 | 1115.50 | 108.47 | 3.568 | 387.07 | 10.956 | 3.968 | 6.988 | 67.788 | 1.080 | 13812.57 |
| 45 | 1115.50 | 1111.00 | 109.63 | 3.630 | 397.92 | 11.549 | 4.192 | 7.357 | 72.189 | 1.130 | 15744.77 |
| 46 | 1111.00 | 1106.50 | 110.82 | 3.701 | 410.19 | 11.622 | 4.217 | 7.405 | 72.791 | 1.127 | 16459.39 |
| 47 | 1106.50 | 1102.00 | 101.03 | 3.731 | 376.89 | 11.665 | 4.201 | 7.465 | 72.847 | 1.174 | 15286.80 |
| 48 | 1102.00 | 1097.50 | 92.99  | 3.670 | 341.29 | 11.410 | 4.111 | 7.299 | 71.078 | 1.193 | 13314.78 |
| 49 | 1097.50 | 1093.00 | 80.48  | 3.606 | 290.26 | 10.569 | 3.857 | 6.712 | 66.863 | 1.107 | 9740.90  |
| 50 | 1093.00 | 1088.50 | 61.54  | 3.563 | 219.26 | 9.915  | 3.592 | 6.323 | 63.939 | 1.027 | 6560.43  |

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|                       |         |       |          |        |       |       |        |     |
|-----------------------|---------|-------|----------|--------|-------|-------|--------|-----|
| TOTAL FOR ALL BENCHES | 3783.08 | 3.518 | 13308.90 | 10.382 | 3.822 | 6.560 | 63.757 | .96 |
|-----------------------|---------|-------|----------|--------|-------|-------|--------|-----|

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MINING RESERVE EVALUATION

DESCRIPTION : Ultimate Pit

TOP SURFACE GRID RECORD : 1 TOPOGRAPHY  
 BOTTOM SURFACE GRID RECORD : 117 Stage 3 pit

BENCH TOTALS FOR ALL MATERIAL

| BENCH | CREST   | TOE     | VOLUME      | DENSITY  | TONNAGE       | AVERAGE GRADES |        |        |          |          | ECONOMIC FACTOR |
|-------|---------|---------|-------------|----------|---------------|----------------|--------|--------|----------|----------|-----------------|
|       | [m]     | [m]     | [bcm x1000] | [tn/bcm] | [ TONS x1000] | [Pb+Zn]        | [Pb %] | [Zn %] | [Ag g/m] | [Au g/m] | [CDN \$ x1000]  |
| 1     | 1336.00 | 1324.00 | 11.16       | 2.100    | 23.44         | .000           | .000   | .000   | .000     | .000     | -4.34           |
| 2     | 1324.00 | 1312.00 | 770.48      | 2.100    | 1618.02       | .000           | .000   | .000   | .000     | .000     | -288.93         |
| 3     | 1312.00 | 1300.00 | 2316.34     | 2.480    | 5744.78       | .000           | .000   | .000   | .000     | .000     | -1753.61        |
| 4     | 1300.00 | 1295.50 | 1629.30     | 2.400    | 3910.37       | .000           | .000   | .000   | .000     | .000     | -1086.26        |
| 5     | 1295.50 | 1291.00 | 1747.74     | 2.434    | 4253.37       | .002           | .001   | .001   | .013     | .000     | -1226.66        |
| 6     | 1291.00 | 1286.50 | 1861.52     | 2.457    | 4574.03       | .006           | .002   | .004   | .037     | .001     | -1331.58        |
| 7     | 1286.50 | 1282.00 | 1978.15     | 2.456    | 4858.54       | .010           | .004   | .006   | .058     | .001     | -1412.55        |
| 8     | 1282.00 | 1277.50 | 2072.41     | 2.479    | 5137.85       | .026           | .010   | .016   | .163     | .002     | -1341.46        |
| 9     | 1277.50 | 1273.00 | 2263.92     | 2.459    | 5566.10       | .041           | .015   | .026   | .260     | .003     | -1315.30        |
| 10    | 1273.00 | 1268.50 | 2322.47     | 2.456    | 5703.60       | .049           | .017   | .031   | .294     | .006     | -1464.83        |
| 11    | 1268.50 | 1264.00 | 2319.35     | 2.471    | 5731.20       | .055           | .019   | .036   | .325     | .008     | -1517.58        |
| 12    | 1264.00 | 1259.50 | 2334.06     | 2.486    | 5802.47       | .070           | .024   | .046   | .418     | .010     | -1458.45        |
| 13    | 1259.50 | 1255.00 | 2242.38     | 2.523    | 5657.68       | .117           | .040   | .077   | .701     | .016     | -1167.21        |
| 14    | 1255.00 | 1250.50 | 2142.47     | 2.540    | 5441.72       | .190           | .066   | .125   | 1.148    | .022     | -257.66         |
| 15    | 1250.50 | 1246.00 | 2057.71     | 2.597    | 5343.65       | .303           | .108   | .194   | 1.883    | .032     | 1223.76         |
| 16    | 1246.00 | 1241.50 | 2004.11     | 2.626    | 5263.46       | .424           | .155   | .270   | 2.648    | .044     | 2376.09         |
| 17    | 1241.50 | 1237.00 | 1934.22     | 2.657    | 5139.67       | .554           | .203   | .352   | 3.419    | .054     | 3941.27         |
| 18    | 1237.00 | 1232.50 | 1865.69     | 2.674    | 4988.82       | .653           | .236   | .417   | 3.916    | .059     | 5152.99         |
| 19    | 1232.50 | 1228.00 | 1799.72     | 2.702    | 4862.26       | .743           | .264   | .479   | 4.394    | .065     | 5649.17         |
| 20    | 1228.00 | 1223.50 | 1731.85     | 2.736    | 4738.63       | .913           | .326   | .588   | 5.397    | .078     | 7126.87         |
| 21    | 1223.50 | 1219.00 | 1667.92     | 2.755    | 4594.33       | .995           | .359   | .636   | 5.949    | .087     | 7872.47         |
| 22    | 1219.00 | 1214.50 | 1607.72     | 2.757    | 4433.22       | .933           | .332   | .601   | 5.590    | .084     | 6425.80         |
| 23    | 1214.50 | 1210.00 | 1550.56     | 2.758    | 4276.81       | .902           | .317   | .585   | 5.367    | .084     | 5394.32         |
| 24    | 1210.00 | 1205.50 | 1489.68     | 2.763    | 4116.05       | .951           | .338   | .614   | 5.626    | .091     | 5618.92         |
| 25    | 1205.50 | 1201.00 | 1431.72     | 2.769    | 3964.17       | 1.055          | .379   | .676   | 6.216    | .097     | 6934.79         |
| 26    | 1201.00 | 1196.50 | 1372.07     | 2.782    | 3816.56       | 1.238          | .452   | .786   | 7.395    | .114     | 10048.32        |
| 27    | 1196.50 | 1192.00 | 1319.77     | 2.792    | 3684.57       | 1.317          | .486   | .831   | 8.041    | .122     | 11286.45        |
| 28    | 1192.00 | 1187.50 | 1248.47     | 2.792    | 3485.84       | 1.269          | .469   | .800   | 7.790    | .119     | 9796.27         |
| 29    | 1187.50 | 1183.00 | 1197.95     | 2.786    | 3336.97       | 1.193          | .441   | .752   | 7.394    | .114     | 7687.63         |
| 30    | 1183.00 | 1178.50 | 1138.72     | 2.796    | 3183.83       | 1.353          | .500   | .853   | 8.434    | .132     | 8385.85         |
| 31    | 1178.50 | 1174.00 | 1071.72     | 2.804    | 3004.82       | 1.422          | .530   | .892   | 8.934    | .144     | 8998.85         |
| 32    | 1174.00 | 1169.50 | 1021.94     | 2.809    | 2870.25       | 1.513          | .568   | .944   | 9.497    | .152     | 9958.65         |
| 33    | 1169.50 | 1165.00 | 974.54      | 2.824    | 2752.12       | 1.773          | .670   | 1.103  | 11.155   | .167     | 12189.19        |
| 34    | 1165.00 | 1160.50 | 932.05      | 2.846    | 2652.70       | 2.048          | .778   | 1.270  | 12.860   | .200     | 13664.40        |
| 35    | 1160.50 | 1156.00 | 887.82      | 2.860    | 2538.75       | 2.266          | .851   | 1.415  | 14.219   | .240     | 15667.10        |
| 36    | 1156.00 | 1151.50 | 841.94      | 2.872    | 2417.96       | 2.494          | .918   | 1.576  | 15.595   | .263     | 17646.12        |
| 37    | 1151.50 | 1147.00 | 801.14      | 2.880    | 2314.00       | 2.622          | 1.000  | 1.687  | 16.828   | .270     | 18572.34        |

|    |         |         |        |       |         |       |       |       |        |      |          |
|----|---------|---------|--------|-------|---------|-------|-------|-------|--------|------|----------|
| 37 | 1131.50 | 1147.50 | 691.15 | 2.878 | 2314.77 | 2.872 | 1.055 | 1.873 | 18.728 | .275 | 18337.55 |
| 38 | 1147.00 | 1142.50 | 762.73 | 2.907 | 2217.31 | 2.804 | 1.056 | 1.748 | 17.841 | .298 | 17656.75 |
| 39 | 1142.50 | 1138.00 | 714.01 | 2.926 | 2089.10 | 2.945 | 1.109 | 1.836 | 18.731 | .318 | 16903.39 |
| 40 | 1138.00 | 1133.50 | 684.84 | 2.943 | 2015.22 | 3.072 | 1.167 | 1.906 | 19.660 | .333 | 17356.35 |
| 41 | 1133.50 | 1129.00 | 639.46 | 2.944 | 1882.85 | 3.150 | 1.183 | 1.966 | 19.840 | .338 | 16529.61 |
| 42 | 1129.00 | 1124.50 | 532.26 | 2.953 | 1571.50 | 3.446 | 1.282 | 2.164 | 21.521 | .383 | 14437.05 |
| 43 | 1124.50 | 1120.00 | 507.91 | 2.955 | 1501.09 | 3.569 | 1.324 | 2.245 | 22.394 | .400 | 13830.12 |
| 44 | 1120.00 | 1115.50 | 458.14 | 2.965 | 1358.19 | 3.799 | 1.411 | 2.387 | 23.908 | .423 | 13357.05 |
| 45 | 1115.50 | 1111.00 | 423.52 | 2.997 | 1269.21 | 4.274 | 1.586 | 2.688 | 27.087 | .466 | 15335.07 |
| 46 | 1111.00 | 1106.50 | 396.61 | 3.038 | 1204.97 | 4.581 | 1.702 | 2.879 | 29.185 | .504 | 16082.20 |
| 47 | 1106.50 | 1102.00 | 354.94 | 3.058 | 1085.48 | 4.695 | 1.729 | 2.966 | 29.782 | .536 | 14950.86 |
| 48 | 1102.00 | 1097.50 | 322.58 | 3.035 | 978.88  | 4.516 | 1.652 | 2.864 | 28.465 | .521 | 13007.26 |
| 49 | 1097.50 | 1093.00 | 298.26 | 3.007 | 896.86  | 4.030 | 1.505 | 2.526 | 25.973 | .485 | 9446.16  |
| 50 | 1093.00 | 1088.50 | 258.59 | 2.969 | 767.84  | 3.453 | 1.298 | 2.156 | 22.726 | .422 | 6293.70  |

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|                       |          |       |           |      |      |      |       |     |
|-----------------------|----------|-------|-----------|------|------|------|-------|-----|
| TOTAL FOR ALL BENCHES | 64314.65 | 2.653 | 170642.10 | .985 | .363 | .622 | 6.120 | .10 |
|-----------------------|----------|-------|-----------|------|------|------|-------|-----|

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MINING RESERVE EVALUATION

DESCRIPTION : Stage 3 Mining Quantities

TOP SURFACE GRID RECORD : 110 Stage 2 Pit  
BOTTOM SURFACE GRID RECORD : 117 Stage 3 pit

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

| BENCH                 | CREST   | TOE     | VOLUME  | DENSITY | TONNAGE  | A V E R A G E   G R A D E S |          |         |         |          | ECONOMIC<br>FACTOR |                |
|-----------------------|---------|---------|---------|---------|----------|-----------------------------|----------|---------|---------|----------|--------------------|----------------|
|                       | [m      | ] [m    | ] [bcm  | x1000]  | [tn/bcm] | [ TONS x1000]               | [Pb+Zn ] | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m]           | [CDN \$ x1000] |
| 40                    | 1138.00 | 1133.50 | 17.21   | 2.700   | 46.46    | .000                        | .000     | .000    | .000    | .000     | .000               | -21.35         |
| 41                    | 1133.50 | 1129.00 | 95.12   | 2.741   | 260.72   | .314                        | .130     | .184    | 2.145   | .052     |                    | -119.50        |
| 42                    | 1129.00 | 1124.50 | 364.33  | 2.739   | 998.03   | .358                        | .155     | .203    | 2.464   | .061     |                    | -464.32        |
| 43                    | 1124.50 | 1120.00 | 333.30  | 2.730   | 909.83   | .299                        | .128     | .171    | 2.079   | .056     |                    | -424.95        |
| 44                    | 1120.00 | 1115.50 | 304.22  | 2.730   | 830.62   | .330                        | .142     | .188    | 2.318   | .065     |                    | -393.38        |
| 45                    | 1115.50 | 1111.00 | 277.70  | 2.733   | 759.06   | .388                        | .170     | .218    | 2.746   | .080     |                    | -359.45        |
| 46                    | 1111.00 | 1106.50 | 253.39  | 2.731   | 691.99   | .388                        | .175     | .213    | 2.715   | .083     |                    | -332.19        |
| 47                    | 1106.50 | 1102.00 | 225.88  | 2.743   | 619.58   | .437                        | .195     | .242    | 3.164   | .103     |                    | -296.49        |
| 48                    | 1102.00 | 1097.50 | 207.13  | 2.738   | 567.12   | .342                        | .158     | .184    | 2.554   | .093     |                    | -275.48        |
| 49                    | 1097.50 | 1093.00 | 197.42  | 2.743   | 541.59   | .420                        | .192     | .227    | 3.179   | .110     |                    | -265.72        |
| 50                    | 1093.00 | 1088.50 | 178.62  | 2.737   | 488.85   | .383                        | .179     | .204    | 2.813   | .095     |                    | -240.10        |
| TOTAL FOR ALL BENCHES |         |         |         |         |          |                             |          |         |         |          |                    |                |
|                       |         |         | 2454.34 | 2.735   | 6713.83  | .362                        | .160     | .201    | 2.577   |          |                    | .08            |

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## MINING RESERVE EVALUATION

DESCRIPTION : Stage 3 Mining Quantities

|                            |   |     |         |     |
|----------------------------|---|-----|---------|-----|
| TOP SURFACE GRID RECORD    | : | 110 | Stage 2 | Pit |
| BOTTOM SURFACE GRID RECORD | : | 117 | Stage 3 | pit |

BENCH TOTALS FOR STOCKPILE FROM 4.0000 [Pb+Zn ] TO 6.0000 [Pb+Zn ]

[illegible]

MINING RESERVE EVALUATION

DESCRIPTION : Stage 3 Mining Quantities

TOP SURFACE GRID RECORD : 110 Stage 2 Pit  
BOTTOM SURFACE GRID RECORD : 117 Stage 3 pit

BENCH TOTALS FOR ORE ABOVE 6.0000 [Pb+Zn ]

| BENCH                 | CREST   | TOE     | VOLUME |        | DENSITY  | TONNAGE       |          | A V E R A G E   G R A D E S |         |          |          | ECONOMIC<br>FACTOR |
|-----------------------|---------|---------|--------|--------|----------|---------------|----------|-----------------------------|---------|----------|----------|--------------------|
|                       | [m      | ] [m    | ] [bcm | x1000] | [tn/bcm] | [ TONS x1000] | [Pb+Zn ] | [Pb % ]                     | [Zn % ] | [Ag g/m] | [Au g/m] | [CDN \$ x1000]     |
| 40                    | 1138.00 | 1133.50 |        | 1.07   | 3.902    | 4.17          | 9.228    | 4.649                       | 4.578   | 68.436   | 1.080    | 97.13              |
| 41                    | 1133.50 | 1129.00 |        | 17.81  | 3.789    | 67.48         | 12.962   | 4.758                       | 8.204   | 79.414   | 1.181    | 3257.57            |
| 42                    | 1129.00 | 1124.50 |        | 91.48  | 3.703    | 338.71        | 12.220   | 4.434                       | 7.786   | 74.633   | 1.162    | 14794.07           |
| 43                    | 1124.50 | 1120.00 |        | 103.08 | 3.624    | 373.54        | 11.389   | 4.119                       | 7.270   | 70.078   | 1.116    | 14350.43           |
| 44                    | 1120.00 | 1115.50 |        | 108.47 | 3.568    | 387.07        | 10.956   | 3.968                       | 6.988   | 67.788   | 1.080    | 13812.57           |
| 45                    | 1115.50 | 1111.00 |        | 109.63 | 3.630    | 397.92        | 11.549   | 4.192                       | 7.357   | 72.189   | 1.130    | 15744.77           |
| 46                    | 1111.00 | 1106.50 |        | 110.82 | 3.701    | 410.19        | 11.622   | 4.217                       | 7.405   | 72.791   | 1.127    | 16459.39           |
| 47                    | 1106.50 | 1102.00 |        | 101.03 | 3.731    | 376.89        | 11.665   | 4.201                       | 7.465   | 72.847   | 1.174    | 15286.80           |
| 48                    | 1102.00 | 1097.50 |        | 92.99  | 3.670    | 341.29        | 11.410   | 4.111                       | 7.299   | 71.078   | 1.193    | 13314.78           |
| 49                    | 1097.50 | 1093.00 |        | 80.48  | 3.606    | 290.26        | 10.569   | 3.857                       | 6.712   | 66.863   | 1.107    | 9740.90            |
| 50                    | 1093.00 | 1088.50 |        | 61.54  | 3.563    | 219.26        | 9.915    | 3.592                       | 6.323   | 63.939   | 1.027    | 6560.43            |
| TOTAL FOR ALL BENCHES |         |         |        | 878.39 | 3.651    | 3206.77       | 11.364   | 4.119                       | 7.245   | 70.807   |          | 1.13               |

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MINING RESERVE EVALUATION

DESCRIPTION : Stage 3 Mining Quantities

TOP SURFACE GRID RECORD : 110 Stage 2 Pit  
BOTTOM SURFACE GRID RECORD : 117 Stage 3 pit

BENCH TOTALS FOR ALL MATERIAL

| BENCH                 | CREST   | TOE     | VOLUME  | DENSITY | TONNAGE  | A V E R A G E G R A D E S |          |         |         |          |          | ECONOMIC<br>FACTOR |
|-----------------------|---------|---------|---------|---------|----------|---------------------------|----------|---------|---------|----------|----------|--------------------|
|                       | [m      | ] [m    | ] [bcm  | x1000]  | [tn/bcm] | [ TONS x1000]             | [Pb+Zn ] | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] | [CDN \$ x1000]     |
| 40                    | 1138.00 | 1133.50 | 18.28   | 2.770   | 50.63    | .760                      | .383     | .377    | 5.633   | .089     |          | 75.78              |
| 41                    | 1133.50 | 1129.00 | 121.68  | 2.927   | 356.20   | 3.076                     | 1.149    | 1.927   | 19.198  | .327     |          | 3126.40            |
| 42                    | 1129.00 | 1124.50 | 508.50  | 2.959   | 1504.76  | 3.547                     | 1.318    | 2.229   | 22.124  | .394     |          | 14259.50           |
| 43                    | 1124.50 | 1120.00 | 489.91  | 2.963   | 1451.84  | 3.681                     | 1.366    | 2.316   | 23.096  | .412     |          | 13853.12           |
| 44                    | 1120.00 | 1115.50 | 456.37  | 2.966   | 1353.42  | 3.812                     | 1.416    | 2.396   | 23.992  | .424     |          | 13359.33           |
| 45                    | 1115.50 | 1111.00 | 423.52  | 2.997   | 1269.21  | 4.274                     | 1.586    | 2.688   | 27.087  | .466     |          | 15335.07           |
| 46                    | 1111.00 | 1106.50 | 396.61  | 3.038   | 1204.97  | 4.581                     | 1.702    | 2.879   | 29.185  | .504     |          | 16082.20           |
| 47                    | 1106.50 | 1102.00 | 354.94  | 3.058   | 1085.48  | 4.695                     | 1.729    | 2.966   | 29.782  | .536     |          | 14950.86           |
| 48                    | 1102.00 | 1097.50 | 322.58  | 3.035   | 978.88   | 4.516                     | 1.652    | 2.864   | 28.465  | .521     |          | 13007.26           |
| 49                    | 1097.50 | 1093.00 | 298.26  | 3.007   | 896.86   | 4.030                     | 1.505    | 2.526   | 25.973  | .485     |          | 9446.16            |
| 50                    | 1093.00 | 1088.50 | 258.59  | 2.969   | 767.84   | 3.453                     | 1.298    | 2.156   | 22.726  | .422     |          | 6293.70            |
| TOTAL FOR ALL BENCHES |         |         |         |         |          |                           |          |         |         |          |          |                    |
|                       |         |         | 3649.24 | 2.992   | 10920.10 | 4.002                     | 1.485    | 2.517   | 25.357  |          |          | .45                |

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MINING RESERVE EVALUATION

DESCRIPTION : Stage 2 Production Mining Quantities

TOP SURFACE GRID RECORD : 114 Stage 2 Stripped  
BOTTOM SURFACE GRID RECORD : 110 Stage 2 Pit

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

| BENCH                 | CREST   | TOE     | VOLUME  | DENSITY | TONNAGE  | A V E R A G E   G R A D E S |          |         |         |          | ECONOMIC<br>FACTOR |                |
|-----------------------|---------|---------|---------|---------|----------|-----------------------------|----------|---------|---------|----------|--------------------|----------------|
|                       | [m      | ] [m    | ] [bcm  | x1000]  | [tn/bcm] | [ TONS x1000]               | [Pb+Zn ] | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m]           | [CDN \$ x1000] |
| 30                    | 1183.00 | 1178.50 | .00     | .000    | .00      | .000                        | .000     | .000    | .000    | .000     | .000               | .00            |
| 31                    | 1178.50 | 1174.00 | 919.68  | 2.710   | 2492.62  | .062                        | .021     | .041    | .441    | .012     |                    | -1054.82       |
| 32                    | 1174.00 | 1169.50 | 878.78  | 2.707   | 2378.73  | .045                        | .016     | .029    | .323    | .009     |                    | -1024.73       |
| 33                    | 1169.50 | 1165.00 | 822.16  | 2.707   | 2225.90  | .058                        | .021     | .037    | .420    | .011     |                    | -958.92        |
| 34                    | 1165.00 | 1160.50 | 763.09  | 2.709   | 2066.95  | .055                        | .020     | .035    | .426    | .012     |                    | -902.11        |
| 35                    | 1160.50 | 1156.00 | 719.86  | 2.710   | 1950.91  | .073                        | .028     | .045    | .537    | .015     |                    | -849.55        |
| 36                    | 1156.00 | 1151.50 | 668.34  | 2.708   | 1809.72  | .057                        | .022     | .035    | .394    | .012     |                    | -802.41        |
| 37                    | 1151.50 | 1147.00 | 628.81  | 2.710   | 1703.98  | .071                        | .027     | .045    | .471    | .012     |                    | -767.98        |
| 38                    | 1147.00 | 1142.50 | 594.60  | 2.715   | 1614.13  | .110                        | .042     | .068    | .768    | .020     |                    | -726.05        |
| 39                    | 1142.50 | 1138.00 | 540.97  | 2.724   | 1473.70  | .174                        | .066     | .108    | 1.230   | .031     |                    | -670.31        |
| 40                    | 1138.00 | 1133.50 | 511.86  | 2.741   | 1403.13  | .275                        | .107     | .167    | 1.974   | .045     |                    | -634.39        |
| 41                    | 1133.50 | 1129.00 | 399.58  | 2.751   | 1099.32  | .351                        | .139     | .212    | 2.483   | .060     |                    | -501.80        |
| TOTAL FOR ALL BENCHES |         |         |         |         |          |                             |          |         |         |          |                    |                |
|                       |         |         | 7447.73 | 2.715   | 20219.08 | .103                        | .039     | .064    | .732    |          |                    | .02            |

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MINING RESERVE EVALUATION

DESCRIPTION : Stage 2 Production Mining Quantities

TOP SURFACE GRID RECORD : 114 Stage 2 Stripped  
BOTTOM SURFACE GRID RECORD : 110 Stage 2 Pit

BENCH TOTALS FOR ORE ABOVE 6.0000 [Pb+Zn ]

| BENCH                 | CREST   | TOE     | VOLUME |         | DENSITY  | TONNAGE       |          | A V E R A G E G R A D E S |         |          |          |                | ECONOMIC |
|-----------------------|---------|---------|--------|---------|----------|---------------|----------|---------------------------|---------|----------|----------|----------------|----------|
|                       | [m      | ] [m    | ] [bcm | x1000]  | [tn/bcm] | [ TONS x1000] | [Pb+Zn ] | [Pb % ]                   | [Zn % ] | [Ag g/m] | [Au g/m] | FACTOR         |          |
|                       |         |         |        |         |          |               |          |                           |         |          |          | [CDN \$ x1000] |          |
| 30                    | 1183.00 | 1178.50 |        | .00     | .000     | .00           | .000     | .000                      | .000    | .000     | .000     | .00            |          |
| 31                    | 1178.50 | 1174.00 |        | 115.25  | 3.435    | 395.88        | 9.156    | 3.428                     | 5.729   | 57.182   | .830     | 10097.56       |          |
| 32                    | 1174.00 | 1169.50 |        | 110.64  | 3.509    | 388.24        | 9.639    | 3.646                     | 5.993   | 60.292   | .899     | 11022.46       |          |
| 33                    | 1169.50 | 1165.00 |        | 110.56  | 3.573    | 395.05        | 10.636   | 4.037                     | 6.599   | 66.342   | .911     | 13198.79       |          |
| 34                    | 1165.00 | 1160.50 |        | 114.37  | 3.602    | 411.93        | 10.985   | 4.184                     | 6.802   | 67.981   | .952     | 14633.87       |          |
| 35                    | 1160.50 | 1156.00 |        | 121.80  | 3.601    | 438.64        | 11.062   | 4.132                     | 6.930   | 68.446   | 1.079    | 16573.08       |          |
| 36                    | 1156.00 | 1151.50 |        | 125.33  | 3.641    | 456.34        | 11.476   | 4.217                     | 7.260   | 71.264   | 1.112    | 18508.96       |          |
| 37                    | 1151.50 | 1147.00 |        | 127.93  | 3.688    | 471.77        | 11.679   | 4.334                     | 7.345   | 72.875   | 1.111    | 19363.64       |          |
| 38                    | 1147.00 | 1142.50 |        | 124.93  | 3.722    | 465.03        | 11.545   | 4.349                     | 7.196   | 72.583   | 1.118    | 18437.70       |          |
| 39                    | 1142.50 | 1138.00 |        | 116.50  | 3.754    | 437.30        | 11.710   | 4.404                     | 7.306   | 73.255   | 1.129    | 17646.60       |          |
| 40                    | 1138.00 | 1133.50 |        | 109.02  | 3.804    | 414.76        | 12.187   | 4.607                     | 7.580   | 76.551   | 1.164    | 17975.02       |          |
| 41                    | 1133.50 | 1129.00 |        | 81.48   | 3.792    | 309.01        | 12.492   | 4.649                     | 7.843   | 77.231   | 1.145    | 13953.96       |          |
| TOTAL FOR ALL BENCHES |         |         |        | 1257.80 | 3.644    | 4583.96       | 11.147   | 4.181                     | 6.965   | 69.500   |          | 1.04           |          |

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MINING RESERVE EVALUATION

DESCRIPTION : Stage 2 Production Mining Quantities

TOP SURFACE GRID RECORD : 114 Stage 2 Stripped  
BOTTOM SURFACE GRID RECORD : 110 Stage 2 Pit

BENCH TOTALS FOR ALL MATERIAL

| BENCH                 | CREST   | TOE     | VOLUME |         | DENSITY  | TONNAGE       |          | A V E R A G E   G R A D E S |         |          |          |                | ECONOMIC<br>FACTOR |
|-----------------------|---------|---------|--------|---------|----------|---------------|----------|-----------------------------|---------|----------|----------|----------------|--------------------|
|                       | [m      | ] [m    | ] [bcm | x1000]  | [tn/bcm] | [ TONS x1000] | [Pb+Zn ] | [Pb % ]                     | [Zn % ] | [Ag g/m] | [Au g/m] | [CDN \$ x1000] |                    |
| 30                    | 1183.00 | 1178.50 |        | .00     | .000     | .00           | .000     | .000                        | .000    | .000     | .000     | .00            |                    |
| 31                    | 1178.50 | 1174.00 |        | 1064.63 | 2.804    | 2985.67       | 1.431    | .533                        | .898    | 8.991    | .145     | 9006.99        |                    |
| 32                    | 1174.00 | 1169.50 |        | 1020.18 | 2.809    | 2865.49       | 1.515    | .569                        | .946    | 9.513    | .152     | 9960.71        |                    |
| 33                    | 1169.50 | 1165.00 |        | 966.79  | 2.825    | 2731.07       | 1.786    | .675                        | 1.111   | 11.232   | .168     | 12198.22       |                    |
| 34                    | 1165.00 | 1160.50 |        | 924.66  | 2.847    | 2632.31       | 2.058    | .782                        | 1.276   | 12.927   | .201     | 13673.21       |                    |
| 35                    | 1160.50 | 1156.00 |        | 886.14  | 2.860    | 2534.06       | 2.268    | .851                        | 1.417   | 14.233   | .240     | 15668.35       |                    |
| 36                    | 1156.00 | 1151.50 |        | 834.41  | 2.873    | 2397.16       | 2.508    | .924                        | 1.585   | 15.691   | .264     | 17655.25       |                    |
| 37                    | 1151.50 | 1147.00 |        | 793.46  | 2.891    | 2294.03       | 2.717    | 1.009                       | 1.708   | 17.083   | .281     | 18548.74       |                    |
| 38                    | 1147.00 | 1142.50 |        | 761.08  | 2.907    | 2212.77       | 2.809    | 1.058                       | 1.751   | 17.874   | .298     | 17657.79       |                    |
| 39                    | 1142.50 | 1138.00 |        | 706.75  | 2.928    | 2069.49       | 2.973    | 1.120                       | 1.854   | 18.908   | .321     | 16912.40       |                    |
| 40                    | 1138.00 | 1133.50 |        | 666.56  | 2.947    | 1964.59       | 3.132    | 1.187                       | 1.945   | 20.022   | .339     | 17280.55       |                    |
| 41                    | 1133.50 | 1129.00 |        | 517.78  | 2.948    | 1526.63       | 3.167    | 1.192                       | 1.975   | 19.989   | .340     | 13403.20       |                    |
| TOTAL FOR ALL BENCHES |         |         |        | 9142.44 | 2.867    | 26213.27      | 2.299    | .863                        | 1.436   | 14.504   |          | .24            |                    |

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MINING RESERVE EVALUATION

DESCRIPTION : North side Stage 2 stripping quantities

TOP SURFACE GRID RECORD : 105 Stage 1a  
BOTTOM SURFACE GRID RECORD : 110 Stage 2 Pit

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

| BENCH                 | CREST   | TOE     | VOLUME |         | DENSITY  | TONNAGE       | A V E R A G E   G R A D E S |         |         |          |          | ECONOMIC                 |
|-----------------------|---------|---------|--------|---------|----------|---------------|-----------------------------|---------|---------|----------|----------|--------------------------|
|                       | [m      | ] [m    | ] [bcm | x1000]  | [tn/bcm] | [ TONS x1000] | [Pb+Zn ]                    | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] | FACTOR<br>[CDN \$ x1000] |
| 1                     | 1336.00 | 1324.00 |        | .00     | .000     | .00           | .000                        | .000    | .000    | .000     | .000     | .00                      |
| 2                     | 1324.00 | 1312.00 |        | .00     | .000     | .00           | .000                        | .000    | .000    | .000     | .000     | .00                      |
| 3                     | 1312.00 | 1300.00 |        | 45.92   | 2.100    | 96.44         | .000                        | .000    | .000    | .000     | .000     | -16.58                   |
| 4                     | 1300.00 | 1295.50 |        | 181.99  | 2.113    | 384.62        | .000                        | .000    | .000    | .000     | .000     | -66.59                   |
| 5                     | 1295.50 | 1291.00 |        | 221.15  | 2.133    | 471.68        | .000                        | .000    | .000    | .000     | .000     | -85.44                   |
| 6                     | 1291.00 | 1286.50 |        | 257.94  | 2.167    | 558.86        | .000                        | .000    | .000    | .000     | .000     | -108.26                  |
| 7                     | 1286.50 | 1282.00 |        | 287.15  | 2.152    | 617.95        | .000                        | .000    | .000    | .000     | .000     | -116.25                  |
| 8                     | 1282.00 | 1277.50 |        | 310.15  | 2.264    | 702.25        | .000                        | .000    | .000    | .000     | .000     | -156.83                  |
| 9                     | 1277.50 | 1273.00 |        | 346.55  | 2.251    | 779.92        | .000                        | .000    | .000    | .000     | .000     | -170.26                  |
| 10                    | 1273.00 | 1268.50 |        | 352.62  | 2.252    | 794.27        | .000                        | .000    | .000    | .000     | .000     | -172.31                  |
| 11                    | 1268.50 | 1264.00 |        | 359.53  | 2.279    | 819.26        | .000                        | .000    | .000    | .000     | .000     | -185.27                  |
| 12                    | 1264.00 | 1259.50 |        | 363.04  | 2.281    | 828.22        | .000                        | .000    | .000    | .000     | .000     | -188.08                  |
| 13                    | 1259.50 | 1255.00 |        | 351.82  | 2.305    | 810.86        | .000                        | .000    | .000    | .000     | .000     | -192.87                  |
| 14                    | 1255.00 | 1250.50 |        | 350.44  | 2.320    | 813.11        | .000                        | .000    | .000    | .000     | .000     | -201.93                  |
| 15                    | 1250.50 | 1246.00 |        | 330.40  | 2.387    | 788.56        | .000                        | .000    | .000    | .000     | .000     | -215.66                  |
| 16                    | 1246.00 | 1241.50 |        | 320.71  | 2.429    | 779.16        | .000                        | .000    | .000    | .000     | .000     | -226.40                  |
| 17                    | 1241.50 | 1237.00 |        | 329.86  | 2.461    | 811.92        | .000                        | .000    | .000    | .000     | .000     | -247.28                  |
| 18                    | 1237.00 | 1232.50 |        | 325.63  | 2.479    | 807.25        | .000                        | .000    | .000    | .000     | .000     | -256.15                  |
| 19                    | 1232.50 | 1228.00 |        | 318.43  | 2.540    | 808.75        | .000                        | .000    | .000    | .000     | .000     | -272.29                  |
| 20                    | 1228.00 | 1223.50 |        | 310.39  | 2.599    | 806.76        | .000                        | .000    | .000    | .000     | .000     | -288.85                  |
| 21                    | 1223.50 | 1219.00 |        | 305.42  | 2.635    | 804.80        | .000                        | .000    | .000    | .000     | .000     | -296.35                  |
| 22                    | 1219.00 | 1214.50 |        | 288.48  | 2.669    | 769.97        | .000                        | .000    | .000    | .000     | .000     | -295.14                  |
| 23                    | 1214.50 | 1210.00 |        | 276.04  | 2.688    | 741.90        | .000                        | .000    | .000    | .000     | .000     | -287.91                  |
| 24                    | 1210.00 | 1205.50 |        | 276.67  | 2.698    | 746.60        | .000                        | .000    | .000    | .000     | .000     | -296.74                  |
| 25                    | 1205.50 | 1201.00 |        | 269.75  | 2.700    | 728.32        | .000                        | .000    | .000    | .000     | .000     | -294.72                  |
| 26                    | 1201.00 | 1196.50 |        | 270.46  | 2.700    | 730.23        | .000                        | .000    | .000    | .000     | .000     | -295.50                  |
| 27                    | 1196.50 | 1192.00 |        | 267.92  | 2.700    | 723.39        | .000                        | .000    | .000    | .000     | .000     | -297.69                  |
| 28                    | 1192.00 | 1187.50 |        | 262.18  | 2.701    | 708.06        | .009                        | .003    | .006    | .055     | .001     | -291.30                  |
| 29                    | 1187.50 | 1183.00 |        | 264.01  | 2.700    | 712.83        | .000                        | .000    | .000    | .000     | .000     | -298.24                  |
| 30                    | 1183.00 | 1178.50 |        | 366.18  | 2.704    | 990.13        | .013                        | .005    | .008    | .120     | .005     | -420.14                  |
| TOTAL FOR ALL BENCHES |         |         |        | 8210.82 | 2.452    | 20136.08      | .001                        | .000    | .001    | .008     |          | .00                      |

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# MINING RESERVE EVALUATION

DESCRIPTION : North side Stage 2 stripping quantities

TOP SURFACE GRID RECORD : 105 Stage 1a  
BOTTOM SURFACE GRID RECORD : 110 Stage 2 Pit

BENCH TOTALS FOR STOCKPILE FROM 4.0000 [Pb+Zn ] TO 6.0000 [Pb+Zn ]

| BENCH | CREST   |   | TOE     |   | VOLUME |        | DENSITY  | TONNAGE       |          | AVERAGE GRADES |         |          |          |  | ECONOMIC       |
|-------|---------|---|---------|---|--------|--------|----------|---------------|----------|----------------|---------|----------|----------|--|----------------|
|       | [m      | ] | [m      | ] | [bcm   | x1000] | [tn/bcm] | [ TONS x1000] | [Pb+Zn ] | [Pb % ]        | [Zn % ] | [Ag g/m] | [Au g/m] |  | FACTOR         |
|       |         |   |         |   |        |        |          |               |          |                |         |          |          |  | [CDN \$ x1000] |
| 1     | 1336.00 |   | 1324.00 |   | .00    |        | .000     | .00           | .000     | .000           | .000    | .000     | .000     |  | .00            |
| 2     | 1324.00 |   | 1312.00 |   | .00    |        | .000     | .00           | .000     | .000           | .000    | .000     | .000     |  | .00            |
| 3     | 1312.00 |   | 1300.00 |   | .00    |        | .000     | .00           | .000     | .000           | .000    | .000     | .000     |  | .00            |
| 4     | 1300.00 |   | 1295.50 |   | .00    |        | .000     | .00           | .000     | .000           | .000    | .000     | .000     |  | .00            |
| 5     | 1295.50 |   | 1291.00 |   | .00    |        | .000     | .00           | .000     | .000           | .000    | .000     | .000     |  | .00            |
| 6     | 1291.00 |   | 1286.50 |   | .00    |        | .000     | .00           | .000     | .000           | .000    | .000     | .000     |  | .00            |
| 7     | 1286.50 |   | 1282.00 |   | .00    |        | .000     | .00           | .000     | .000           | .000    | .000     | .000     |  | .00            |
| 8     | 1282.00 |   | 1277.50 |   | .00    |        | .000     | .00           | .000     | .000           | .000    | .000     | .000     |  | .00            |
| 9     | 1277.50 |   | 1273.00 |   | .00    |        | .000     | .00           | .000     | .000           | .000    | .000     | .000     |  | .00            |
| 10    | 1273.00 |   | 1268.50 |   | .00    |        | .000     | .00           | .000     | .000           | .000    | .000     | .000     |  | .00            |
| 11    | 1268.50 |   | 1264.00 |   | .00    |        | .000     | .00           | .000     | .000           | .000    | .000     | .000     |  | .00            |
| 12    | 1264.00 |   | 1259.50 |   | .00    |        | .000     | .00           | .000     | .000           | .000    | .000     | .000     |  | .00            |
| 13    | 1259.50 |   | 1255.00 |   | .00    |        | .000     | .00           | .000     | .000           | .000    | .000     | .000     |  | .00            |
| 14    | 1255.00 |   | 1250.50 |   | .00    |        | .000     | .00           | .000     | .000           | .000    | .000     | .000     |  | .00            |
| 15    | 1250.50 |   | 1246.00 |   | .00    |        | .000     | .00           | .000     | .000           | .000    | .000     | .000     |  | .00            |
| 16    | 1246.00 |   | 1241.50 |   | .00    |        | .000     | .00           | .000     | .000           | .000    | .000     | .000     |  | .00            |
| 17    | 1241.50 |   | 1237.00 |   | .00    |        | .000     | .00           | .000     | .000           | .000    | .000     | .000     |  | .00            |
| 18    | 1237.00 |   | 1232.50 |   | .00    |        | .000     | .00           | .000     | .000           | .000    | .000     | .000     |  | .00            |
| 19    | 1232.50 |   | 1228.00 |   | .54    |        | 4.194    | 2.26          | 5.717    | 1.181          | 4.536   | 23.000   | .610     |  | -.56           |
| 20    | 1228.00 |   | 1223.50 |   | .82    |        | 3.610    | 2.95          | 5.554    | 1.236          | 4.318   | 21.393   | .235     |  | -.86           |
| 21    | 1223.50 |   | 1219.00 |   | 1.08   |        | 3.299    | 3.56          | 5.746    | 1.380          | 4.366   | 21.498   | .255     |  | -1.16          |
| 22    | 1219.00 |   | 1214.50 |   | 1.08   |        | 3.187    | 3.44          | 5.800    | 2.146          | 3.654   | 42.992   | .723     |  | -1.16          |
| 23    | 1214.50 |   | 1210.00 |   | 3.24   |        | 3.195    | 10.35         | 5.133    | 1.758          | 3.376   | 33.851   | .957     |  | -3.54          |
| 24    | 1210.00 |   | 1205.50 |   | 3.97   |        | 3.183    | 12.64         | 5.069    | 1.723          | 3.345   | 33.596   | 1.007    |  | -4.41          |
| 25    | 1205.50 |   | 1201.00 |   | 3.84   |        | 3.176    | 12.20         | 5.286    | 1.806          | 3.480   | 34.954   | 1.083    |  | -4.27          |
| 26    | 1201.00 |   | 1196.50 |   | 2.16   |        | 3.182    | 6.87          | 5.706    | 1.932          | 3.774   | 37.755   | 1.171    |  | -2.44          |
| 27    | 1196.50 |   | 1192.00 |   | .28    |        | 3.108    | .86           | 4.941    | 1.632          | 3.309   | 31.402   | .817     |  | -.32           |
| 28    | 1192.00 |   | 1187.50 |   | .10    |        | 3.063    | .29           | 4.544    | 1.415          | 3.129   | 26.000   | .459     |  | -.11           |
| 29    | 1187.50 |   | 1183.00 |   | .00    |        | .000     | .00           | .000     | .000           | .000    | .000     | .000     |  | .00            |
| 30    | 1183.00 |   | 1178.50 |   | 1.51   |        | 3.162    | 4.78          | 4.908    | 1.866          | 3.042   | 28.543   | .514     |  | -1.79          |

TOTAL FOR ALL BENCHES 18.61 3.235 60.21 5.309 1.738 3.572 32.746 .87  
-20.622

# MINING RESERVE EVALUATION

DESCRIPTION : North side Stage 2 stripping quantities

TOP SURFACE GRID RECORD : 105 Stage 1a  
BOTTOM SURFACE GRID RECORD : 110 Stage 2 Pit

BENCH TOTALS FOR ORE ABOVE 6.0000 [Pb+Zn ]

| BENCH                 | CREST   | TOE     | VOLUME |        | DENSITY  | TONNAGE       |          | A V E R A G E   G R A D E S |         |          |          | ECONOMIC                 |
|-----------------------|---------|---------|--------|--------|----------|---------------|----------|-----------------------------|---------|----------|----------|--------------------------|
|                       | [m      | ] [m    | ] [bcm | x1000] | [tn/bcm] | [ TONS x1000] | [Pb+Zn ] | [Pb % ]                     | [Zn % ] | [Ag g/m] | [Au g/m] | FACTOR<br>[CDN \$ x1000] |
| 1                     | 1336.00 | 1324.00 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000     | .000     | .00                      |
| 2                     | 1324.00 | 1312.00 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000     | .000     | .00                      |
| 3                     | 1312.00 | 1300.00 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000     | .000     | .00                      |
| 4                     | 1300.00 | 1295.50 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000     | .000     | .00                      |
| 5                     | 1295.50 | 1291.00 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000     | .000     | .00                      |
| 6                     | 1291.00 | 1286.50 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000     | .000     | .00                      |
| 7                     | 1286.50 | 1282.00 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000     | .000     | .00                      |
| 8                     | 1282.00 | 1277.50 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000     | .000     | .00                      |
| 9                     | 1277.50 | 1273.00 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000     | .000     | .00                      |
| 10                    | 1273.00 | 1268.50 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000     | .000     | .00                      |
| 11                    | 1268.50 | 1264.00 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000     | .000     | .00                      |
| 12                    | 1264.00 | 1259.50 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000     | .000     | .00                      |
| 13                    | 1259.50 | 1255.00 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000     | .000     | .00                      |
| 14                    | 1255.00 | 1250.50 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000     | .000     | .00                      |
| 15                    | 1250.50 | 1246.00 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000     | .000     | .00                      |
| 16                    | 1246.00 | 1241.50 |        | 1.08   | 4.104    | 4.43          | 18.139   | 8.352                       | 9.786   | 138.000  | 1.000    | 350.27                   |
| 17                    | 1241.50 | 1237.00 |        | 2.00   | 4.120    | 8.26          | 18.029   | 8.371                       | 9.657   | 138.274  | 1.006    | 646.93                   |
| 18                    | 1237.00 | 1232.50 |        | 2.21   | 4.035    | 8.91          | 17.934   | 8.233                       | 9.702   | 135.566  | .984     | 691.68                   |
| 19                    | 1232.50 | 1228.00 |        | 4.28   | 3.631    | 15.56         | 14.237   | 5.986                       | 8.251   | 100.354  | .875     | 851.98                   |
| 20                    | 1228.00 | 1223.50 |        | 5.70   | 3.685    | 21.01         | 13.611   | 5.225                       | 8.386   | 89.872   | .851     | 1075.85                  |
| 21                    | 1223.50 | 1219.00 |        | 7.51   | 3.683    | 27.67         | 13.232   | 4.845                       | 8.386   | 82.562   | .869     | 1352.31                  |
| 22                    | 1219.00 | 1214.50 |        | 10.43  | 3.553    | 37.05         | 11.552   | 4.131                       | 7.421   | 70.879   | .815     | 1419.11                  |
| 23                    | 1214.50 | 1210.00 |        | 9.13   | 3.565    | 32.56         | 11.848   | 4.305                       | 7.542   | 73.856   | .845     | 1310.12                  |
| 24                    | 1210.00 | 1205.50 |        | 6.72   | 3.531    | 23.73         | 11.554   | 4.282                       | 7.271   | 70.861   | .905     | 909.19                   |
| 25                    | 1205.50 | 1201.00 |        | 4.40   | 3.813    | 16.79         | 15.181   | 5.867                       | 9.314   | 97.860   | 1.126    | 1036.79                  |
| 26                    | 1201.00 | 1196.50 |        | 5.08   | 3.974    | 20.17         | 18.828   | 7.289                       | 11.539  | 123.700  | 1.330    | 1722.94                  |
| 27                    | 1196.50 | 1192.00 |        | 4.33   | 3.858    | 16.71         | 17.557   | 6.691                       | 10.866  | 113.409  | 1.451    | 1304.24                  |
| 28                    | 1192.00 | 1187.50 |        | 2.38   | 3.598    | 8.55          | 13.400   | 5.177                       | 8.223   | 88.612   | 1.528    | 450.37                   |
| 29                    | 1187.50 | 1183.00 |        | 2.05   | 3.413    | 7.00          | 9.987    | 4.081                       | 5.906   | 67.916   | 1.145    | 207.09                   |
| 30                    | 1183.00 | 1178.50 |        | 6.43   | 3.736    | 24.03         | 10.660   | 4.592                       | 6.068   | 73.869   | .831     | 789.50                   |
| TOTAL FOR ALL BENCHES |         |         |        | 73.74  | 3.694    | 272.42        | 13.652   | 5.329                       | 8.323   | 89.744   |          | .98                      |

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MINING RESERVE EVALUATION

DESCRIPTION : North side Stage 2 stripping quantities

TOP SURFACE GRID RECORD : 105 Stage 1a  
BOTTOM SURFACE GRID RECORD : 110 Stage 2 Pit

BENCH TOTALS FOR ALL MATERIAL

| BENCH | CREST   | TOE     | VOLUME      | DENSITY  | TONNAGE       | AVERAGE GRADES |        |        |          |          | ECONOMIC FACTOR |
|-------|---------|---------|-------------|----------|---------------|----------------|--------|--------|----------|----------|-----------------|
|       | [m]     | [m]     | [bcm x1000] | [tn/bcm] | [ TONS x1000] | [Pb+Zn]        | [Pb %] | [Zn %] | [Ag g/m] | [Au g/m] | [CDN \$ x1000]  |
| 1     | 1336.00 | 1324.00 | .00         | .000     | .00           | .000           | .000   | .000   | .000     | .000     | .00             |
| 2     | 1324.00 | 1312.00 | .00         | .000     | .00           | .000           | .000   | .000   | .000     | .000     | .00             |
| 3     | 1312.00 | 1300.00 | 45.92       | 2.100    | 96.44         | .000           | .000   | .000   | .000     | .000     | -16.58          |
| 4     | 1300.00 | 1295.50 | 181.99      | 2.113    | 384.62        | .000           | .000   | .000   | .000     | .000     | -66.59          |
| 5     | 1295.50 | 1291.00 | 221.15      | 2.133    | 471.68        | .000           | .000   | .000   | .000     | .000     | -85.44          |
| 6     | 1291.00 | 1286.50 | 257.94      | 2.167    | 558.86        | .000           | .000   | .000   | .000     | .000     | -108.26         |
| 7     | 1286.50 | 1282.00 | 287.15      | 2.152    | 617.95        | .000           | .000   | .000   | .000     | .000     | -116.25         |
| 8     | 1282.00 | 1277.50 | 310.15      | 2.264    | 702.25        | .000           | .000   | .000   | .000     | .000     | -156.83         |
| 9     | 1277.50 | 1273.00 | 346.55      | 2.251    | 779.92        | .000           | .000   | .000   | .000     | .000     | -170.26         |
| 10    | 1273.00 | 1268.50 | 352.62      | 2.252    | 794.27        | .000           | .000   | .000   | .000     | .000     | -172.31         |
| 11    | 1268.50 | 1264.00 | 359.53      | 2.279    | 819.26        | .000           | .000   | .000   | .000     | .000     | -185.27         |
| 12    | 1264.00 | 1259.50 | 363.04      | 2.281    | 828.22        | .000           | .000   | .000   | .000     | .000     | -188.08         |
| 13    | 1259.50 | 1255.00 | 351.82      | 2.305    | 810.86        | .000           | .000   | .000   | .000     | .000     | -192.87         |
| 14    | 1255.00 | 1250.50 | 350.44      | 2.320    | 813.11        | .000           | .000   | .000   | .000     | .000     | -201.93         |
| 15    | 1250.50 | 1246.00 | 330.40      | 2.387    | 788.56        | .000           | .000   | .000   | .000     | .000     | -215.66         |
| 16    | 1246.00 | 1241.50 | 321.79      | 2.435    | 783.59        | .103           | .047   | .055   | .780     | .006     | 123.87          |
| 17    | 1241.50 | 1237.00 | 331.86      | 2.471    | 820.18        | .181           | .084   | .097   | 1.392    | .010     | 399.65          |
| 18    | 1237.00 | 1232.50 | 327.84      | 2.490    | 816.16        | .196           | .090   | .106   | 1.480    | .011     | 435.53          |
| 19    | 1232.50 | 1228.00 | 323.26      | 2.557    | 826.57        | .284           | .116   | .168   | 1.952    | .018     | 579.13          |
| 20    | 1228.00 | 1223.50 | 316.91      | 2.621    | 830.71        | .364           | .137   | .227   | 2.348    | .022     | 786.14          |
| 21    | 1223.50 | 1219.00 | 314.02      | 2.662    | 836.03        | .462           | .166   | .296   | 2.824    | .030     | 1054.80         |
| 22    | 1219.00 | 1214.50 | 299.99      | 2.702    | 810.46        | .553           | .198   | .355   | 3.423    | .040     | 1122.81         |
| 23    | 1214.50 | 1210.00 | 288.41      | 2.721    | 784.81        | .559           | .202   | .357   | 3.510    | .048     | 1018.67         |
| 24    | 1210.00 | 1205.50 | 287.36      | 2.725    | 782.97        | .432           | .158   | .274   | 2.690    | .044     | 608.03          |
| 25    | 1205.50 | 1201.00 | 277.99      | 2.724    | 757.31        | .422           | .159   | .263   | 2.733    | .042     | 737.79          |
| 26    | 1201.00 | 1196.50 | 277.69      | 2.727    | 757.28        | .553           | .212   | .342   | 3.638    | .046     | 1425.00         |
| 27    | 1196.50 | 1192.00 | 272.53      | 2.719    | 740.96        | .402           | .153   | .249   | 2.594    | .034     | 1006.23         |
| 28    | 1192.00 | 1187.50 | 264.65      | 2.709    | 716.91        | .170           | .065   | .105   | 1.121    | .019     | 158.96          |
| 29    | 1187.50 | 1183.00 | 266.06      | 2.705    | 719.84        | .097           | .040   | .057   | .661     | .011     | -91.15          |
| 30    | 1183.00 | 1178.50 | 374.12      | 2.724    | 1018.95       | .287           | .122   | .165   | 1.993    | .027     | 367.56          |

TOTAL FOR ALL BENCHES      8303.17      2.465      20468.72      .198      .076      .122      1.298      .02  
7856.692

MINING RESERVE EVALUATION

DESCRIPTION : Stage 1a Quantities

TOP SURFACE GRID RECORD : 89 pit 4, Stage 1, incl ramp  
BOTTOM SURFACE GRID RECORD : 105 Stage 1a

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

| BENCH                 | CREST   | TOE     | VOLUME |          | DENSITY  | TONNAGE       |          | A V E R A G E   G R A D E S |         |          |          |                          | ECONOMIC |
|-----------------------|---------|---------|--------|----------|----------|---------------|----------|-----------------------------|---------|----------|----------|--------------------------|----------|
|                       | [m      | ] [m    | ] [bcm | x1000]   | [tn/bcm] | [ TONS x1000] | [Pb+Zn ] | [Pb % ]                     | [Zn % ] | [Ag g/m] | [Au g/m] | FACTOR<br>[CDN \$ x1000] |          |
| 1                     | 1336.00 | 1324.00 |        | 11.16    | 2.100    | 23.44         | .000     | .000                        | .000    | .000     | .000     | -4.34                    |          |
| 2                     | 1324.00 | 1312.00 |        | 508.37   | 2.100    | 1067.57       | .000     | .000                        | .000    | .000     | .000     | -190.64                  |          |
| 3                     | 1312.00 | 1300.00 |        | 1023.13  | 2.608    | 2668.47       | .000     | .000                        | .000    | .000     | .000     | -911.02                  |          |
| 4                     | 1300.00 | 1295.50 |        | 494.32   | 2.614    | 1292.12       | .000     | .000                        | .000    | .000     | .000     | -440.52                  |          |
| 5                     | 1295.50 | 1291.00 |        | 545.12   | 2.620    | 1428.43       | .000     | .000                        | .000    | .000     | .000     | -489.48                  |          |
| 6                     | 1291.00 | 1286.50 |        | 588.64   | 2.631    | 1548.97       | .000     | .000                        | .000    | .000     | .000     | -525.74                  |          |
| 7                     | 1286.50 | 1282.00 |        | 633.13   | 2.644    | 1674.26       | .000     | .000                        | .000    | .000     | .000     | -573.83                  |          |
| 8                     | 1282.00 | 1277.50 |        | 685.80   | 2.655    | 1820.66       | .000     | .000                        | .000    | .000     | .000     | -627.87                  |          |
| 9                     | 1277.50 | 1273.00 |        | 725.71   | 2.643    | 1917.99       | .000     | .000                        | .000    | .000     | .000     | -655.36                  |          |
| 10                    | 1273.00 | 1268.50 |        | 739.75   | 2.643    | 1955.46       | .000     | .000                        | .000    | .000     | .000     | -656.00                  |          |
| 11                    | 1268.50 | 1264.00 |        | 754.39   | 2.649    | 1998.19       | .000     | .000                        | .000    | .000     | .000     | -673.09                  |          |
| 12                    | 1264.00 | 1259.50 |        | 781.74   | 2.661    | 2080.24       | .000     | .000                        | .000    | .000     | .000     | -707.28                  |          |
| 13                    | 1259.50 | 1255.00 |        | 760.84   | 2.691    | 2047.43       | .000     | .000                        | .000    | .000     | .000     | -725.49                  |          |
| 14                    | 1255.00 | 1250.50 |        | 722.35   | 2.695    | 1946.42       | .000     | .000                        | .000    | .000     | .000     | -691.59                  |          |
| 15                    | 1250.50 | 1246.00 |        | 716.53   | 2.692    | 1928.55       | .000     | .000                        | .000    | .000     | .000     | -696.88                  |          |
| 16                    | 1246.00 | 1241.50 |        | 715.99   | 2.690    | 1926.36       | .000     | .000                        | .000    | .000     | .000     | -695.79                  |          |
| 17                    | 1241.50 | 1237.00 |        | 709.03   | 2.693    | 1909.08       | .000     | .000                        | .000    | .000     | .000     | -703.46                  |          |
| 18                    | 1237.00 | 1232.50 |        | 695.24   | 2.693    | 1872.16       | .000     | .000                        | .000    | .000     | .000     | -702.88                  |          |
| 19                    | 1232.50 | 1228.00 |        | 683.82   | 2.692    | 1840.91       | .000     | .000                        | .000    | .000     | .000     | -690.98                  |          |
| 20                    | 1228.00 | 1223.50 |        | 670.63   | 2.698    | 1809.38       | .007     | .004                        | .003    | .071     | .002     | -692.98                  |          |
| 21                    | 1223.50 | 1219.00 |        | 657.76   | 2.701    | 1776.68       | .005     | .003                        | .002    | .052     | .001     | -682.10                  |          |
| 22                    | 1219.00 | 1214.50 |        | 648.24   | 2.702    | 1751.57       | .009     | .005                        | .004    | .095     | .002     | -684.20                  |          |
| 23                    | 1214.50 | 1210.00 |        | 630.44   | 2.703    | 1703.96       | .010     | .006                        | .004    | .100     | .002     | -665.43                  |          |
| 24                    | 1210.00 | 1205.50 |        | 618.34   | 2.703    | 1671.41       | .012     | .007                        | .005    | .118     | .003     | -664.08                  |          |
| 25                    | 1205.50 | 1201.00 |        | 605.23   | 2.703    | 1636.13       | .014     | .008                        | .006    | .135     | .002     | -661.18                  |          |
| 26                    | 1201.00 | 1196.50 |        | 591.32   | 2.706    | 1599.84       | .025     | .014                        | .011    | .245     | .003     | -645.92                  |          |
| 27                    | 1196.50 | 1192.00 |        | 571.20   | 2.706    | 1545.49       | .022     | .012                        | .010    | .207     | .003     | -634.48                  |          |
| 28                    | 1192.00 | 1187.50 |        | 549.38   | 2.703    | 1485.23       | .014     | .008                        | .007    | .136     | .002     | -610.37                  |          |
| 29                    | 1187.50 | 1183.00 |        | 544.09   | 2.702    | 1470.00       | .005     | .003                        | .002    | .044     | .001     | -614.21                  |          |
| 30                    | 1183.00 | 1178.50 |        | 419.83   | 2.704    | 1135.20       | .009     | .005                        | .004    | .071     | .002     | -481.45                  |          |
| TOTAL FOR ALL BENCHES |         |         |        | 19001.54 | 2.659    | 50531.60      | .004     | .002                        | .002    | .040     |          | .00                      |          |

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## MINING RESERVE EVALUATION

DESCRIPTION : Stage 1a Quantities

TOP SURFACE GRID RECORD : 89 pit 4, Stage 1, incl ramp  
BOTTOM SURFACE GRID RECORD : 105 Stage 1a

BENCH TOTALS FOR STOCKPILE FROM 4.0000 [Pb+Zn ] TO 6.0000 [Pb+Zn ]

| BENCH                 | CREST   | TOE     | VOLUME |        | DENSITY  | TONNAGE       |          | A V E R A G E   G R A D E S |         |            |          | ECONOMIC                 |
|-----------------------|---------|---------|--------|--------|----------|---------------|----------|-----------------------------|---------|------------|----------|--------------------------|
|                       | [m      | ] [m    | ] [bcm | x1000] | [tn/bcm] | [ TONS x1000] | [Pb+Zn ] | [Pb %                       | ] [Zn % | ] [Ag g/m] | [Au g/m] | FACTOR<br>[CDN \$ x1000] |
| 1                     | 1336.00 | 1324.00 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000       | .000     | .00                      |
| 2                     | 1324.00 | 1312.00 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000       | .000     | .00                      |
| 3                     | 1312.00 | 1300.00 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000       | .000     | .00                      |
| 4                     | 1300.00 | 1295.50 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000       | .000     | .00                      |
| 5                     | 1295.50 | 1291.00 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000       | .000     | .00                      |
| 6                     | 1291.00 | 1286.50 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000       | .000     | .00                      |
| 7                     | 1286.50 | 1282.00 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000       | .000     | .00                      |
| 8                     | 1282.00 | 1277.50 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000       | .000     | .00                      |
| 9                     | 1277.50 | 1273.00 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000       | .000     | .00                      |
| 10                    | 1273.00 | 1268.50 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000       | .000     | .00                      |
| 11                    | 1268.50 | 1264.00 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000       | .000     | .00                      |
| 12                    | 1264.00 | 1259.50 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000       | .000     | .00                      |
| 13                    | 1259.50 | 1255.00 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000       | .000     | .00                      |
| 14                    | 1255.00 | 1250.50 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000       | .000     | .00                      |
| 15                    | 1250.50 | 1246.00 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000       | .000     | .00                      |
| 16                    | 1246.00 | 1241.50 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000       | .000     | .00                      |
| 17                    | 1241.50 | 1237.00 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000       | .000     | .00                      |
| 18                    | 1237.00 | 1232.50 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000       | .000     | .00                      |
| 19                    | 1232.50 | 1228.00 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000       | .000     | .00                      |
| 20                    | 1228.00 | 1223.50 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000       | .000     | .00                      |
| 21                    | 1223.50 | 1219.00 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000       | .000     | .00                      |
| 22                    | 1219.00 | 1214.50 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000       | .000     | .00                      |
| 23                    | 1214.50 | 1210.00 |        | .00    | .000     | .00           | .000     | .000                        | .000    | .000       | .000     | .00                      |
| 24                    | 1210.00 | 1205.50 | 1.62   |        | 3.870    | 6.27          | 4.759    | 2.027                       | 2.732   | 40.000     | .956     | -1.80                    |
| 25                    | 1205.50 | 1201.00 | 2.88   |        | 3.877    | 11.17         | 4.611    | 2.003                       | 2.608   | 39.038     | .954     | -3.20                    |
| 26                    | 1201.00 | 1196.50 | 3.24   |        | 3.909    | 12.66         | 4.724    | 2.082                       | 2.643   | 40.153     | 1.005    | -3.66                    |
| 27                    | 1196.50 | 1192.00 | 4.32   |        | 3.920    | 16.93         | 4.852    | 2.189                       | 2.663   | 41.175     | .988     | -4.96                    |
| 28                    | 1192.00 | 1187.50 | 3.24   |        | 4.000    | 12.96         | 4.889    | 2.338                       | 2.551   | 41.519     | 1.143    | -3.78                    |
| 29                    | 1187.50 | 1183.00 | 2.16   |        | 4.074    | 8.80          | 4.693    | 2.596                       | 2.097   | 40.481     | 1.404    | -2.52                    |
| 30                    | 1183.00 | 1178.50 | 2.16   |        | 4.133    | 8.93          | 4.631    | 2.736                       | 1.895   | 40.502     | 1.526    | -2.56                    |
| TOTAL FOR ALL BENCHES |         |         | 19.62  |        | 3.961    | 77.72         | 4.752    | 2.265                       | 2.486   | 40.508     |          | 1.12                     |
| -22,480               |         |         |        |        |          |               |          |                             |         |            |          |                          |

MINING RESERVE EVALUATION

DESCRIPTION : Stage 1a Quantities

TOP SURFACE GRID RECORD : 89 pit 4, Stage 1, incl ramp  
 BOTTOM SURFACE GRID RECORD : 105 Stage 1a

BENCH TOTALS FOR ORE ABOVE 6.0000 [Pb+Zn ]

| BENCH | CREST   | TOE     | VOLUME | DENSITY | TONNAGE  | A V E R A G E G R A D E S |          |         |         |          |          | ECONOMIC<br>FACTOR |
|-------|---------|---------|--------|---------|----------|---------------------------|----------|---------|---------|----------|----------|--------------------|
|       | [m      | ] [m    | ] [bcm | x1000]  | [tn/bcm] | [ TONS x1000]             | [Pb+Zn ] | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] | [CDN \$ x1000]     |
| 1     | 1336.00 | 1324.00 | .00    | .000    | .00      | .000                      | .000     | .000    | .000    | .000     | .000     | .00                |
| 2     | 1324.00 | 1312.00 | .00    | .000    | .00      | .000                      | .000     | .000    | .000    | .000     | .000     | .00                |
| 3     | 1312.00 | 1300.00 | .00    | .000    | .00      | .000                      | .000     | .000    | .000    | .000     | .000     | .00                |
| 4     | 1300.00 | 1295.50 | .00    | .000    | .00      | .000                      | .000     | .000    | .000    | .000     | .000     | .00                |
| 5     | 1295.50 | 1291.00 | .00    | .000    | .00      | .000                      | .000     | .000    | .000    | .000     | .000     | .00                |
| 6     | 1291.00 | 1286.50 | .00    | .000    | .00      | .000                      | .000     | .000    | .000    | .000     | .000     | .00                |
| 7     | 1286.50 | 1282.00 | .00    | .000    | .00      | .000                      | .000     | .000    | .000    | .000     | .000     | .00                |
| 8     | 1282.00 | 1277.50 | .00    | .000    | .00      | .000                      | .000     | .000    | .000    | .000     | .000     | .00                |
| 9     | 1277.50 | 1273.00 | .00    | .000    | .00      | .000                      | .000     | .000    | .000    | .000     | .000     | .00                |
| 10    | 1273.00 | 1268.50 | .00    | .000    | .00      | .000                      | .000     | .000    | .000    | .000     | .000     | .00                |
| 11    | 1268.50 | 1264.00 | .00    | .000    | .00      | .000                      | .000     | .000    | .000    | .000     | .000     | .00                |
| 12    | 1264.00 | 1259.50 | .00    | .000    | .00      | .000                      | .000     | .000    | .000    | .000     | .000     | .00                |
| 13    | 1259.50 | 1255.00 | .00    | .000    | .00      | .000                      | .000     | .000    | .000    | .000     | .000     | .00                |
| 14    | 1255.00 | 1250.50 | .00    | .000    | .00      | .000                      | .000     | .000    | .000    | .000     | .000     | .00                |
| 15    | 1250.50 | 1246.00 | .00    | .000    | .00      | .000                      | .000     | .000    | .000    | .000     | .000     | .00                |
| 16    | 1246.00 | 1241.50 | .00    | .000    | .00      | .000                      | .000     | .000    | .000    | .000     | .000     | .00                |
| 17    | 1241.50 | 1237.00 | .00    | .000    | .00      | .000                      | .000     | .000    | .000    | .000     | .000     | .00                |
| 18    | 1237.00 | 1232.50 | .00    | .000    | .00      | .000                      | .000     | .000    | .000    | .000     | .000     | .00                |
| 19    | 1232.50 | 1228.00 | .00    | .000    | .00      | .000                      | .000     | .000    | .000    | .000     | .000     | .00                |
| 20    | 1228.00 | 1223.50 | .00    | .000    | .00      | .000                      | .000     | .000    | .000    | .000     | .000     | .00                |
| 21    | 1223.50 | 1219.00 | .00    | .000    | .00      | .000                      | .000     | .000    | .000    | .000     | .000     | .00                |
| 22    | 1219.00 | 1214.50 | .49    | 3.946   | 1.94     | 14.976                    | 5.149    | 9.827   | 86.365  | 1.104    |          | 117.73             |
| 23    | 1214.50 | 1210.00 | 1.62   | 4.280   | 6.93     | 9.810                     | 4.328    | 5.483   | 73.186  | 1.057    |          | 196.50             |
| 24    | 1210.00 | 1205.50 | 1.60   | 4.290   | 6.85     | 10.958                    | 4.464    | 6.494   | 75.234  | 1.134    |          | 245.12             |
| 25    | 1205.50 | 1201.00 | .77    | 4.304   | 3.31     | 12.520                    | 4.654    | 7.866   | 76.359  | 1.112    |          | 149.40             |
| 26    | 1201.00 | 1196.50 | 2.87   | 4.378   | 12.56    | 14.231                    | 5.475    | 8.755   | 88.007  | 1.161    |          | 699.23             |
| 27    | 1196.50 | 1192.00 | 8.76   | 4.305   | 37.71    | 14.330                    | 5.705    | 8.625   | 90.925  | 1.134    |          | 2111.98            |
| 28    | 1192.00 | 1187.50 | 13.48  | 4.392   | 59.18    | 13.851                    | 6.074    | 7.777   | 93.953  | 1.124    |          | 3105.82            |
| 29    | 1187.50 | 1183.00 | 11.35  | 4.293   | 48.74    | 13.101                    | 6.040    | 7.061   | 93.224  | 1.063    |          | 2314.42            |
| 30    | 1183.00 | 1178.50 | 7.54   | 4.094   | 30.86    | 12.280                    | 5.736    | 6.544   | 90.822  | .982     |          | 1312.30            |

TOTAL FOR ALL BENCHES 48.47 4.293 208.07 13.312 5.770 7.541 90.752 1.09

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MINING RESERVE EVALUATION

DESCRIPTION : Stage 1a Quantities

TOP SURFACE GRID RECORD : 89 pit 4, Stage 1, incl ramp  
BOTTOM SURFACE GRID RECORD : 105 Stage 1a

BENCH TOTALS FOR ALL MATERIAL

| BENCH | CREST   | TOE     | VOLUME |         | DENSITY  | TONNAGE       | A V E R A G E   G R A D E S |         |         |          |          | ECONOMIC                 |
|-------|---------|---------|--------|---------|----------|---------------|-----------------------------|---------|---------|----------|----------|--------------------------|
|       | [m      | ] [m    | ] [bcm | x1000]  | [tn/bcm] | [ TONS x1000] | [Pb+Zn ]                    | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] | FACTOR<br>[CDN \$ x1000] |
| 1     | 1336.00 | 1324.00 |        | 11.16   | 2.100    | 23.44         | .000                        | .000    | .000    | .000     | .000     | -4.34                    |
| 2     | 1324.00 | 1312.00 |        | 508.37  | 2.100    | 1067.57       | .000                        | .000    | .000    | .000     | .000     | -190.64                  |
| 3     | 1312.00 | 1300.00 |        | 1023.13 | 2.608    | 2668.47       | .000                        | .000    | .000    | .000     | .000     | -911.02                  |
| 4     | 1300.00 | 1295.50 |        | 494.32  | 2.614    | 1292.12       | .000                        | .000    | .000    | .000     | .000     | -440.52                  |
| 5     | 1295.50 | 1291.00 |        | 545.12  | 2.620    | 1428.43       | .000                        | .000    | .000    | .000     | .000     | -489.48                  |
| 6     | 1291.00 | 1286.50 |        | 588.64  | 2.631    | 1548.97       | .000                        | .000    | .000    | .000     | .000     | -525.74                  |
| 7     | 1286.50 | 1282.00 |        | 633.13  | 2.644    | 1674.26       | .000                        | .000    | .000    | .000     | .000     | -573.83                  |
| 8     | 1282.00 | 1277.50 |        | 685.80  | 2.655    | 1820.66       | .000                        | .000    | .000    | .000     | .000     | -627.87                  |
| 9     | 1277.50 | 1273.00 |        | 725.71  | 2.643    | 1917.99       | .000                        | .000    | .000    | .000     | .000     | -655.36                  |
| 10    | 1273.00 | 1268.50 |        | 739.75  | 2.643    | 1955.46       | .000                        | .000    | .000    | .000     | .000     | -656.00                  |
| 11    | 1268.50 | 1264.00 |        | 754.39  | 2.649    | 1998.19       | .000                        | .000    | .000    | .000     | .000     | -673.09                  |
| 12    | 1264.00 | 1259.50 |        | 781.74  | 2.661    | 2080.24       | .000                        | .000    | .000    | .000     | .000     | -707.28                  |
| 13    | 1259.50 | 1255.00 |        | 760.84  | 2.691    | 2047.43       | .000                        | .000    | .000    | .000     | .000     | -725.49                  |
| 14    | 1255.00 | 1250.50 |        | 722.35  | 2.695    | 1946.42       | .000                        | .000    | .000    | .000     | .000     | -691.59                  |
| 15    | 1250.50 | 1246.00 |        | 716.53  | 2.692    | 1928.55       | .000                        | .000    | .000    | .000     | .000     | -696.88                  |
| 16    | 1246.00 | 1241.50 |        | 715.99  | 2.690    | 1926.36       | .000                        | .000    | .000    | .000     | .000     | -695.79                  |
| 17    | 1241.50 | 1237.00 |        | 709.03  | 2.693    | 1909.08       | .000                        | .000    | .000    | .000     | .000     | -703.46                  |
| 18    | 1237.00 | 1232.50 |        | 695.24  | 2.693    | 1872.16       | .000                        | .000    | .000    | .000     | .000     | -702.88                  |
| 19    | 1232.50 | 1228.00 |        | 683.82  | 2.692    | 1840.91       | .000                        | .000    | .000    | .000     | .000     | -690.98                  |
| 20    | 1228.00 | 1223.50 |        | 670.63  | 2.698    | 1809.38       | .007                        | .004    | .003    | .071     | .002     | -692.98                  |
| 21    | 1223.50 | 1219.00 |        | 657.76  | 2.701    | 1776.68       | .005                        | .003    | .002    | .052     | .001     | -682.10                  |
| 22    | 1219.00 | 1214.50 |        | 648.73  | 2.703    | 1753.52       | .026                        | .011    | .015    | .191     | .004     | -566.47                  |
| 23    | 1214.50 | 1210.00 |        | 632.06  | 2.707    | 1710.89       | .050                        | .023    | .026    | .397     | .007     | -468.93                  |
| 24    | 1210.00 | 1205.50 |        | 621.55  | 2.710    | 1684.53       | .074                        | .032    | .042    | .571     | .011     | -420.76                  |
| 25    | 1205.50 | 1201.00 |        | 608.88  | 2.711    | 1650.60       | .070                        | .030    | .040    | .551     | .011     | -514.98                  |
| 26    | 1201.00 | 1196.50 |        | 597.43  | 2.720    | 1625.06       | .172                        | .072    | .100    | 1.234    | .020     | 49.66                    |
| 27    | 1196.50 | 1192.00 |        | 584.28  | 2.739    | 1600.14       | .410                        | .169    | .241    | 2.779    | .040     | 1472.54                  |
| 28    | 1192.00 | 1187.50 |        | 566.10  | 2.751    | 1557.38       | .581                        | .258    | .323    | 4.046    | .054     | 2491.67                  |
| 29    | 1187.50 | 1183.00 |        | 557.60  | 2.739    | 1527.54       | .450                        | .210    | .239    | 3.250    | .043     | 1697.70                  |
| 30    | 1183.00 | 1178.50 |        | 429.53  | 2.736    | 1174.98       | .367                        | .176    | .191    | 2.762    | .039     | 828.29                   |

TOTAL FOR ALL BENCHES      19069.63      2.665      50817.38      .066      .029      .037      .474      .01

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MINING RESERVE EVALUATION

DESCRIPTION : Pit 4, Stage 1 Reserves

TOP SURFACE GRID RECORD : 1 TOPOGRAPHY  
BOTTOM SURFACE GRID RECORD : 89 pit 4, Stage 1, incl ramp

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

| BENCH | CREST   | TOE     | VOLUME        | DENSITY  | TONNAGE       | A V E R A G E G R A D E S |         |         |          |          | ECONOMIC<br>FACTOR |
|-------|---------|---------|---------------|----------|---------------|---------------------------|---------|---------|----------|----------|--------------------|
|       | [m      | ] [m    | ] [bcm x1000] | [tn/bcm] | [ TONS x1000] | [Pb+Zn ]                  | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] | [CDN \$ x1000]     |
| 1     | 1336.00 | 1324.00 | .00           | .000     | .00           | .000                      | .000    | .000    | .000     | .000     | .00                |
| 2     | 1324.00 | 1312.00 | 262.12        | 2.100    | 550.44        | .000                      | .000    | .000    | .000     | .000     | -98.29             |
| 3     | 1312.00 | 1300.00 | 1247.28       | 2.389    | 2979.86       | .000                      | .000    | .000    | .000     | .000     | -826.01            |
| 4     | 1300.00 | 1295.50 | 952.99        | 2.344    | 2233.64       | .000                      | .000    | .000    | .000     | .000     | -579.15            |
| 5     | 1295.50 | 1291.00 | 980.93        | 2.397    | 2351.61       | .000                      | .000    | .000    | .000     | .000     | -651.21            |
| 6     | 1291.00 | 1286.50 | 1013.33       | 2.429    | 2461.26       | .000                      | .000    | .000    | .000     | .000     | -695.99            |
| 7     | 1286.50 | 1282.00 | 1055.17       | 2.424    | 2558.08       | .000                      | .000    | .000    | .000     | .000     | -719.82            |
| 8     | 1282.00 | 1277.50 | 1070.52       | 2.425    | 2596.22       | .000                      | .000    | .000    | .000     | .000     | -722.16            |
| 9     | 1277.50 | 1273.00 | 1181.40       | 2.400    | 2835.92       | .000                      | .000    | .000    | .000     | .000     | -766.31            |
| 10    | 1273.00 | 1268.50 | 1215.52       | 2.393    | 2908.54       | .000                      | .000    | .000    | .000     | .000     | -767.72            |
| 11    | 1268.50 | 1264.00 | 1188.14       | 2.407    | 2860.33       | .000                      | .000    | .000    | .000     | .000     | -768.04            |
| 12    | 1264.00 | 1259.50 | 1166.06       | 2.420    | 2821.60       | .000                      | .000    | .000    | .000     | .000     | -768.46            |
| 13    | 1259.50 | 1255.00 | 1095.71       | 2.458    | 2693.31       | .007                      | .003    | .005    | .050     | .001     | -775.95            |
| 14    | 1255.00 | 1250.50 | 1022.16       | 2.480    | 2534.45       | .010                      | .004    | .007    | .072     | .002     | -753.49            |
| 15    | 1250.50 | 1246.00 | 944.90        | 2.560    | 2418.49       | .020                      | .007    | .013    | .142     | .005     | -785.16            |
| 16    | 1246.00 | 1241.50 | 879.38        | 2.589    | 2276.88       | .038                      | .013    | .025    | .271     | .008     | -758.62            |
| 17    | 1241.50 | 1237.00 | 787.87        | 2.631    | 2073.05       | .060                      | .021    | .040    | .416     | .012     | -723.38            |
| 18    | 1237.00 | 1232.50 | 727.63        | 2.652    | 1929.69       | .080                      | .028    | .051    | .532     | .013     | -697.14            |
| 19    | 1232.50 | 1228.00 | 670.03        | 2.680    | 1795.67       | .120                      | .044    | .076    | .815     | .017     | -657.78            |
| 20    | 1228.00 | 1223.50 | 595.57        | 2.702    | 1609.45       | .095                      | .033    | .062    | .629     | .012     | -610.44            |
| 21    | 1223.50 | 1219.00 | 540.04        | 2.714    | 1465.91       | .088                      | .032    | .056    | .604     | .014     | -559.68            |
| 22    | 1219.00 | 1214.50 | 521.51        | 2.722    | 1419.49       | .154                      | .056    | .098    | 1.072    | .023     | -549.56            |
| 23    | 1214.50 | 1210.00 | 498.66        | 2.720    | 1356.45       | .163                      | .057    | .106    | 1.082    | .023     | -525.92            |
| 24    | 1210.00 | 1205.50 | 441.30        | 2.717    | 1199.07       | .113                      | .041    | .072    | .776     | .018     | -473.35            |
| 25    | 1205.50 | 1201.00 | 394.33        | 2.709    | 1068.34       | .064                      | .022    | .043    | .434     | .010     | -430.50            |
| 26    | 1201.00 | 1196.50 | 347.27        | 2.712    | 941.63        | .069                      | .021    | .048    | .468     | .014     | -379.04            |
| 27    | 1196.50 | 1192.00 | 319.74        | 2.715    | 868.00        | .084                      | .027    | .058    | .586     | .018     | -354.84            |
| 28    | 1192.00 | 1187.50 | 288.08        | 2.723    | 784.42        | .149                      | .048    | .102    | .974     | .030     | -319.80            |
| 29    | 1187.50 | 1183.00 | 245.18        | 2.726    | 668.31        | .155                      | .049    | .107    | 1.072    | .038     | -276.44            |
| 30    | 1183.00 | 1178.50 | 198.90        | 2.735    | 543.93        | .219                      | .068    | .151    | 1.604    | .052     | -227.83            |

TOTAL FOR ALL BENCHES 21851.74 2.508 54804.03 .038 .013 .025 .259 .01

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MINING RESERVE EVALUATION

DESCRIPTION : Pit 4, Stage 1 Reserves

TOP SURFACE GRID RECORD : 1 TOPOGRAPHY  
BOTTOM SURFACE GRID RECORD : 89 pit 4, Stage 1, incl ramp

BENCH TOTALS FOR STOCKPILE FROM 4.0000 [Pb+Zn ] TO 6.0000 [Pb+Zn ]

| BENCH | CREST   | TOE     | VOLUME      | DENSITY  | TONNAGE       | AVERAGE GRADES |         |         |          |          | ECONOMIC FACTOR |
|-------|---------|---------|-------------|----------|---------------|----------------|---------|---------|----------|----------|-----------------|
|       | [m ]    | [m ]    | [bcm x1000] | [tn/bcm] | [ TONS x1000] | [Pb+Zn ]       | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] | [CDN \$ x1000]  |
| 1     | 1336.00 | 1324.00 | .00         | .000     | .00           | .000           | .000    | .000    | .000     | .000     | .00             |
| 2     | 1324.00 | 1312.00 | .00         | .000     | .00           | .000           | .000    | .000    | .000     | .000     | .00             |
| 3     | 1312.00 | 1300.00 | .00         | .000     | .00           | .000           | .000    | .000    | .000     | .000     | .00             |
| 4     | 1300.00 | 1295.50 | .00         | .000     | .00           | .000           | .000    | .000    | .000     | .000     | .00             |
| 5     | 1295.50 | 1291.00 | .54         | 3.046    | 1.64          | 5.864          | 2.198   | 3.666   | 34.000   | .494     | -1.53           |
| 6     | 1291.00 | 1286.50 | 1.62        | 3.048    | 4.94          | 5.874          | 2.222   | 3.652   | 34.667   | .490     | -1.59           |
| 7     | 1286.50 | 1282.00 | 2.70        | 3.060    | 8.26          | 5.754          | 2.156   | 3.598   | 33.994   | .493     | -2.65           |
| 8     | 1282.00 | 1277.50 | 4.86        | 3.060    | 14.87         | 5.810          | 2.198   | 3.612   | 34.665   | .507     | -4.68           |
| 9     | 1277.50 | 1273.00 | 7.56        | 3.063    | 23.16         | 5.813          | 2.225   | 3.588   | 35.499   | .516     | -7.28           |
| 10    | 1273.00 | 1268.50 | 12.96       | 3.095    | 40.11         | 5.669          | 2.060   | 3.608   | 33.810   | .767     | -12.48          |
| 11    | 1268.50 | 1264.00 | 15.12       | 3.096    | 46.81         | 5.554          | 1.962   | 3.593   | 32.753   | .810     | -14.28          |
| 12    | 1264.00 | 1259.50 | 17.28       | 3.133    | 54.13         | 5.096          | 1.775   | 3.321   | 30.243   | .819     | -16.32          |
| 13    | 1259.50 | 1255.00 | 21.60       | 3.126    | 67.51         | 5.105          | 1.779   | 3.325   | 30.730   | .811     | -20.80          |
| 14    | 1255.00 | 1250.50 | 20.52       | 3.098    | 63.58         | 5.118          | 1.756   | 3.362   | 31.164   | .781     | -20.14          |
| 15    | 1250.50 | 1246.00 | 21.06       | 3.107    | 65.44         | 4.868          | 1.611   | 3.257   | 29.590   | .795     | -20.67          |
| 16    | 1246.00 | 1241.50 | 34.56       | 3.136    | 108.39        | 5.014          | 1.645   | 3.368   | 30.576   | .739     | -34.56          |
| 17    | 1241.50 | 1237.00 | 35.10       | 3.114    | 109.32        | 4.768          | 1.583   | 3.184   | 30.324   | .618     | -35.75          |
| 18    | 1237.00 | 1232.50 | 36.18       | 3.128    | 113.19        | 4.715          | 1.557   | 3.158   | 30.181   | .558     | -36.85          |
| 19    | 1232.50 | 1228.00 | 29.16       | 3.137    | 91.47         | 4.710          | 1.550   | 3.160   | 28.849   | .480     | -30.24          |
| 20    | 1228.00 | 1223.50 | 34.56       | 3.154    | 108.99        | 4.845          | 1.591   | 3.254   | 29.292   | .464     | -36.48          |
| 21    | 1223.50 | 1219.00 | 42.12       | 3.145    | 132.49        | 4.757          | 1.575   | 3.182   | 29.457   | .502     | -45.24          |
| 22    | 1219.00 | 1214.50 | 42.12       | 3.166    | 133.36        | 4.832          | 1.631   | 3.201   | 29.821   | .504     | -45.24          |
| 23    | 1214.50 | 1210.00 | 36.18       | 3.184    | 115.20        | 4.778          | 1.649   | 3.129   | 29.167   | .481     | -39.53          |
| 24    | 1210.00 | 1205.50 | 32.40       | 3.150    | 102.07        | 4.967          | 1.742   | 3.225   | 29.075   | .475     | -36.00          |
| 25    | 1205.50 | 1201.00 | 38.70       | 3.136    | 121.35        | 5.130          | 1.755   | 3.375   | 29.500   | .484     | -43.00          |
| 26    | 1201.00 | 1196.50 | 40.50       | 3.124    | 126.50        | 5.199          | 1.753   | 3.446   | 29.836   | .481     | -45.75          |
| 27    | 1196.50 | 1192.00 | 40.91       | 3.114    | 127.40        | 5.096          | 1.676   | 3.420   | 29.511   | .495     | -46.97          |
| 28    | 1192.00 | 1187.50 | 32.30       | 3.125    | 100.95        | 4.953          | 1.623   | 3.330   | 28.564   | .490     | -37.69          |
| 29    | 1187.50 | 1183.00 | 36.72       | 3.149    | 115.62        | 5.077          | 1.701   | 3.376   | 28.713   | .513     | -42.84          |
| 30    | 1183.00 | 1178.50 | 29.87       | 3.146    | 93.95         | 5.075          | 1.697   | 3.377   | 29.255   | .578     | -35.40          |

TOTAL FOR ALL BENCHES      667.20      3.134      2090.70      4.994      1.688      3.306      29.901      .57  
-712.956

MINING RESERVE EVALUATION

DESCRIPTION : Pit 4, Stage 1 Reserves

TOP SURFACE GRID RECORD : 1 TOPOGRAPHY  
BOTTOM SURFACE GRID RECORD : 89 pit 4, Stage 1, incl ramp

BENCH TOTALS FOR ORE ABOVE 6.0000 [Pb+Zn]

| BENCH                 | CREST   | TOE     | VOLUME      | DENSITY  | TONNAGE       | AVERAGE GRADES |        |        |          |          |  | ECONOMIC FACTOR |
|-----------------------|---------|---------|-------------|----------|---------------|----------------|--------|--------|----------|----------|--|-----------------|
|                       | [m]     | [m]     | [bcm x1000] | [tn/bcm] | [ TONS x1000] | [Pb+Zn]        | [Pb %] | [Zn %] | [Ag g/m] | [Au g/m] |  | [CDN \$ x1000]  |
| 1                     | 1336.00 | 1324.00 | .00         | .000     | .00           | .000           | .000   | .000   | .000     | .000     |  | .00             |
| 2                     | 1324.00 | 1312.00 | .00         | .000     | .00           | .000           | .000   | .000   | .000     | .000     |  | .00             |
| 3                     | 1312.00 | 1300.00 | .00         | .000     | .00           | .000           | .000   | .000   | .000     | .000     |  | .00             |
| 4                     | 1300.00 | 1295.50 | .00         | .000     | .00           | .000           | .000   | .000   | .000     | .000     |  | .00             |
| 5                     | 1295.50 | 1291.00 | .00         | .000     | .00           | .000           | .000   | .000   | .000     | .000     |  | .00             |
| 6                     | 1291.00 | 1286.50 | .00         | .000     | .00           | .000           | .000   | .000   | .000     | .000     |  | .00             |
| 7                     | 1286.50 | 1282.00 | .00         | .000     | .00           | .000           | .000   | .000   | .000     | .000     |  | .00             |
| 8                     | 1282.00 | 1277.50 | 1.08        | 3.563    | 3.85          | 12.405         | 4.572  | 7.834  | 84.071   | .791     |  | 170.08          |
| 9                     | 1277.50 | 1273.00 | 2.70        | 3.375    | 9.11          | 10.386         | 3.788  | 6.598  | 68.804   | .729     |  | 283.91          |
| 10                    | 1273.00 | 1268.50 | 1.62        | 3.222    | 5.22          | 9.624          | 3.069  | 6.555  | 61.629   | .820     |  | 143.68          |
| 11                    | 1268.50 | 1264.00 | 2.16        | 3.066    | 6.62          | 8.187          | 2.391  | 5.796  | 50.000   | .816     |  | 123.10          |
| 12                    | 1264.00 | 1259.50 | 5.94        | 3.077    | 18.28         | 7.270          | 2.365  | 4.905  | 43.127   | .839     |  | 221.69          |
| 13                    | 1259.50 | 1255.00 | 12.42       | 3.106    | 38.58         | 7.678          | 2.574  | 5.103  | 45.558   | .768     |  | 547.91          |
| 14                    | 1255.00 | 1250.50 | 27.00       | 3.117    | 84.16         | 8.140          | 2.821  | 5.319  | 48.549   | .733     |  | 1409.50         |
| 15                    | 1250.50 | 1246.00 | 44.82       | 3.182    | 142.60        | 8.766          | 3.210  | 5.556  | 54.584   | .757     |  | 2942.12         |
| 16                    | 1246.00 | 1241.50 | 52.38       | 3.212    | 168.25        | 9.058          | 3.378  | 5.679  | 55.830   | .759     |  | 3741.18         |
| 17                    | 1241.50 | 1237.00 | 70.36       | 3.241    | 228.05        | 9.011          | 3.316  | 5.695  | 53.736   | .786     |  | 5004.22         |
| 18                    | 1237.00 | 1232.50 | 78.79       | 3.270    | 257.63        | 9.351          | 3.387  | 5.964  | 53.903   | .776     |  | 6154.33         |
| 19                    | 1232.50 | 1228.00 | 93.46       | 3.292    | 307.63        | 8.886          | 3.149  | 5.737  | 50.871   | .732     |  | 6449.05         |
| 20                    | 1228.00 | 1223.50 | 114.18      | 3.329    | 380.10        | 8.769          | 3.144  | 5.625  | 50.747   | .726     |  | 7680.63         |
| 21                    | 1223.50 | 1219.00 | 113.99      | 3.362    | 383.23        | 8.913          | 3.261  | 5.652  | 52.420   | .750     |  | 8104.69         |
| 22                    | 1219.00 | 1214.50 | 95.38       | 3.317    | 316.39        | 8.789          | 3.140  | 5.649  | 51.119   | .739     |  | 6464.27         |
| 23                    | 1214.50 | 1210.00 | 95.24       | 3.249    | 309.47        | 8.276          | 2.880  | 5.397  | 47.477   | .715     |  | 5410.04         |
| 24                    | 1210.00 | 1205.50 | 106.20      | 3.249    | 345.08        | 8.146          | 2.854  | 5.292  | 46.920   | .727     |  | 5941.93         |
| 25                    | 1205.50 | 1201.00 | 109.58      | 3.290    | 360.54        | 8.472          | 3.034  | 5.438  | 48.861   | .733     |  | 7187.91         |
| 26                    | 1201.00 | 1196.50 | 108.16      | 3.359    | 363.33        | 9.093          | 3.317  | 5.776  | 52.978   | .804     |  | 8999.56         |
| 27                    | 1196.50 | 1192.00 | 97.87       | 3.434    | 336.08        | 9.447          | 3.477  | 5.970  | 56.504   | .842     |  | 9214.43         |
| 28                    | 1192.00 | 1187.50 | 92.18       | 3.388    | 312.30        | 8.900          | 3.155  | 5.745  | 52.527   | .783     |  | 7508.85         |
| 29                    | 1187.50 | 1183.00 | 90.71       | 3.320    | 301.16        | 8.418          | 2.966  | 5.452  | 50.468   | .741     |  | 6402.25         |
| 30                    | 1183.00 | 1178.50 | 108.08      | 3.312    | 358.01        | 8.464          | 3.017  | 5.447  | 50.906   | .755     |  | 7494.71         |
| TOTAL FOR ALL BENCHES |         |         | 1524.30     | 3.304    | 5035.65       | 8.760          | 3.143  | 5.617  | 51.497   |          |  | .76             |

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MINING RESERVE EVALUATION

DESCRIPTION : Pit 4, Stage 1 Reserves

TOP SURFACE GRID RECORD : 1 TOPOGRAPHY  
 BOTTOM SURFACE GRID RECORD : 89 pit 4, Stage 1, incl ramp

BENCH TOTALS FOR ALL MATERIAL

| BENCH | CREST   | TOE     | VOLUME |         | DENSITY  | TONNAGE       | A V E R A G E   G R A D E S |         |         |          |          | ECONOMIC       |
|-------|---------|---------|--------|---------|----------|---------------|-----------------------------|---------|---------|----------|----------|----------------|
|       | [m      | ] [m    | ] [bcm | x1000]  | [tn/bcm] | [ TONS x1000] | [Pb+Zn ]                    | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] | [CDN \$ x1000] |
| 1     | 1336.00 | 1324.00 |        | .00     | .000     | .00           | .000                        | .000    | .000    | .000     | .000     | .00            |
| 2     | 1324.00 | 1312.00 |        | 262.12  | 2.100    | 550.44        | .000                        | .000    | .000    | .000     | .000     | -98.29         |
| 3     | 1312.00 | 1300.00 |        | 1247.28 | 2.389    | 2979.86       | .000                        | .000    | .000    | .000     | .000     | -826.01        |
| 4     | 1300.00 | 1295.50 |        | 952.99  | 2.344    | 2233.64       | .000                        | .000    | .000    | .000     | .000     | -579.15        |
| 5     | 1295.50 | 1291.00 |        | 981.47  | 2.398    | 2353.26       | .004                        | .002    | .003    | .024     | .000     | -651.74        |
| 6     | 1291.00 | 1286.50 |        | 1014.95 | 2.430    | 2466.20       | .012                        | .004    | .007    | .069     | .001     | -697.58        |
| 7     | 1286.50 | 1282.00 |        | 1057.87 | 2.426    | 2566.34       | .019                        | .007    | .012    | .109     | .002     | -722.47        |
| 8     | 1282.00 | 1277.50 |        | 1076.46 | 2.429    | 2614.94       | .051                        | .019    | .032    | .321     | .004     | -556.76        |
| 9     | 1277.50 | 1273.00 |        | 1191.66 | 2.407    | 2868.19       | .080                        | .030    | .050    | .505     | .006     | -489.68        |
| 10    | 1273.00 | 1268.50 |        | 1230.10 | 2.401    | 2953.87       | .094                        | .033    | .061    | .568     | .012     | -636.52        |
| 11    | 1268.50 | 1264.00 |        | 1205.42 | 2.417    | 2913.76       | .108                        | .037    | .071    | .640     | .015     | -659.22        |
| 12    | 1264.00 | 1259.50 |        | 1189.28 | 2.433    | 2894.01       | .141                        | .048    | .093    | .838     | .021     | -563.09        |
| 13    | 1259.50 | 1255.00 |        | 1129.73 | 2.478    | 2799.39       | .236                        | .081    | .155    | 1.417    | .032     | -248.84        |
| 14    | 1255.00 | 1250.50 |        | 1069.68 | 2.507    | 2682.18       | .386                        | .133    | .253    | 2.330    | .044     | 635.87         |
| 15    | 1250.50 | 1246.00 |        | 1010.78 | 2.599    | 2626.53       | .615                        | .221    | .395    | 3.831    | .065     | 2136.29        |
| 16    | 1246.00 | 1241.50 |        | 966.32  | 2.643    | 2553.51       | .843                        | .304    | .539    | 5.218    | .089     | 2948.00        |
| 17    | 1241.50 | 1237.00 |        | 893.33  | 2.698    | 2410.41       | 1.120                       | .403    | .717    | 6.817    | .113     | 4245.08        |
| 18    | 1237.00 | 1232.50 |        | 842.60  | 2.730    | 2300.50       | 1.346                       | .479    | .866    | 7.968    | .125     | 5420.34        |
| 19    | 1232.50 | 1228.00 |        | 792.65  | 2.769    | 2194.77       | 1.540                       | .542    | .998    | 8.999    | .137     | 5761.03        |
| 20    | 1228.00 | 1223.50 |        | 744.31  | 2.819    | 2098.55       | 1.913                       | .678    | 1.235   | 11.195   | .165     | 7033.71        |
| 21    | 1223.50 | 1219.00 |        | 696.14  | 2.847    | 1981.62       | 2.107                       | .760    | 1.347   | 12.554   | .189     | 7499.77        |
| 22    | 1219.00 | 1214.50 |        | 659.00  | 2.836    | 1869.24       | 1.949                       | .691    | 1.259   | 11.594   | .178     | 5869.47        |
| 23    | 1214.50 | 1210.00 |        | 630.08  | 2.827    | 1781.11       | 1.871                       | .650    | 1.221   | 10.960   | .173     | 4844.59        |
| 24    | 1210.00 | 1205.50 |        | 579.90  | 2.839    | 1646.22       | 2.098                       | .736    | 1.362   | 12.203   | .195     | 5432.58        |
| 25    | 1205.50 | 1201.00 |        | 542.62  | 2.857    | 1550.23       | 2.416                       | .858    | 1.558   | 13.972   | .216     | 6714.41        |
| 26    | 1201.00 | 1196.50 |        | 495.92  | 2.886    | 1431.46       | 2.813                       | 1.011   | 1.802   | 16.391   | .256     | 8574.77        |
| 27    | 1196.50 | 1192.00 |        | 458.52  | 2.904    | 1331.49       | 2.927                       | 1.056   | 1.872   | 17.468   | .272     | 8812.62        |
| 28    | 1192.00 | 1187.50 |        | 412.57  | 2.903    | 1197.66       | 2.836                       | .991    | 1.845   | 16.742   | .265     | 7151.36        |
| 29    | 1187.50 | 1183.00 |        | 372.61  | 2.912    | 1085.09       | 2.973                       | 1.034   | 1.939   | 17.727   | .283     | 6082.97        |
| 30    | 1183.00 | 1178.50 |        | 336.85  | 2.956    | 995.89        | 3.641                       | 1.282   | 2.359   | 21.936   | .354     | 7231.49        |

TOTAL FOR ALL BENCHES      24043.24      2.576      61930.38      .914      .324      .590      5.426      .09

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# MINING RESERVE EVALUATION

DESCRIPTION : Grum 8606 Ultimate Pit Reserves

TOTAL FOR ALL BENCHES

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

TOP SURFACE GRID RECORD : 1 TOPOGRAPHY  
BOTTOM SURFACE GRID RECORD : 89 pit 4, Stage 1, incl ramp

## INCREMENTAL RESULTS

| CUT-OFF GRADES   |                | ROCK-TYPE<br>CODE | VOLUME    |        | DENSITY<br>[tn/bcm] | TONNAGE<br>[ TONS x1000] | A V E R A G E G R A D E S |         |         |          |          | ECONOMIC<br>FACTOR<br>[CDN \$ x1000] |
|------------------|----------------|-------------------|-----------|--------|---------------------|--------------------------|---------------------------|---------|---------|----------|----------|--------------------------------------|
| FROM<br>[Pb+Zn ] | TO<br>[Pb+Zn ] |                   | [bcm      | x1000] |                     |                          | [Pb+Zn ]                  | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] |                                      |
| 6.000            | 100.000        | 1                 | 164.51    |        | 3.252               | 534.98                   | 8.062                     | 2.801   | 5.261   | 45.273   | .826     | 8712.97                              |
| 6.000            | 100.000        | 2                 | 840.01    |        | 3.190               | 2679.36                  | 7.488                     | 2.612   | 4.876   | 43.906   | .725     | 33519.44                             |
| 6.000            | 100.000        | 3                 | 11.06     |        | 3.480               | 38.50                    | 9.259                     | 3.287   | 5.972   | 54.524   | .470     | 859.87                               |
| 6.000            | 100.000        | 4                 | 280.48    |        | 3.238               | 908.18                   | 9.034                     | 3.181   | 5.853   | 51.320   | .634     | 19465.81                             |
| 6.000            | 100.000        | 5                 | 78.16     |        | 3.854               | 301.20                   | 12.191                    | 4.899   | 7.292   | 74.188   | .952     | 12513.89                             |
| 6.000            | 100.000        | 6                 | 94.80     |        | 4.065               | 385.40                   | 14.650                    | 5.568   | 9.082   | 91.080   | 1.095    | 22418.15                             |
| 6.000            | 100.000        | 7                 | 10.25     |        | 4.393               | 45.02                    | 16.369                    | 6.197   | 10.172  | 100.122  | 1.214    | 3113.62                              |
| 6.000            | 100.000        | 9                 | 62.29     |        | 3.237               | 201.66                   | 8.103                     | 2.969   | 5.134   | 49.724   | .586     | 8267.47                              |
| 4.000            | 6.000          | 1                 | 342.26    |        | 3.129               | 1070.80                  | 4.962                     | 1.674   | 3.288   | 29.929   | .568     | -358.41                              |
| 4.000            | 6.000          | 2                 | 120.82    |        | 3.148               | 380.36                   | 5.631                     | 2.031   | 3.600   | 32.681   | .688     | -132.59                              |
| 4.000            | 6.000          | 3                 | 104.58    |        | 3.089               | 323.00                   | 4.501                     | 1.442   | 3.059   | 27.208   | .484     | -111.75                              |
| 4.000            | 6.000          | 4                 | 19.98     |        | 3.061               | 61.17                    | 5.252                     | 1.825   | 3.427   | 33.207   | .499     | -21.93                               |
| 4.000            | 6.000          | 5                 | 12.96     |        | 3.576               | 46.35                    | 4.690                     | 1.418   | 3.272   | 32.174   | .529     | -13.84                               |
| 4.000            | 6.000          | 9                 | 72.96     |        | 3.140               | 229.12                   | 4.737                     | 1.549   | 3.188   | 27.617   | .503     | -82.11                               |
| .000             | 4.000          | 1                 | 143.11    |        | 3.157               | 451.77                   | 3.179                     | 1.040   | 2.138   | 21.521   | .583     | -146.44                              |
| .000             | 4.000          | 2                 | 1.08      |        | 3.147               | 3.40                     | 2.014                     | .722    | 1.292   | 17.271   | .443     | -1.10                                |
| .000             | 4.000          | 3                 | 47.02     |        | 3.261               | 153.32                   | 3.369                     | 1.347   | 2.023   | 23.796   | .555     | -48.46                               |
| .000             | 4.000          | 4                 | 8.41      |        | 2.990               | 25.16                    | 2.210                     | .815    | 1.395   | 15.267   | .198     | -8.46                                |
| .000             | 4.000          | 5                 | 3.36      |        | 3.000               | 10.08                    | .000                      | .000    | .000    | .000     | .000     | -3.60                                |
| .000             | 4.000          | 6                 | 9.18      |        | 3.000               | 27.54                    | .000                      | .000    | .000    | .000     | .000     | -9.72                                |
| .000             | 4.000          | 7                 | 14.04     |        | 3.000               | 42.12                    | .000                      | .000    | .000    | .000     | .000     | -14.26                               |
| .000             | 4.000          | 8                 | 4.32      |        | 3.000               | 12.96                    | .000                      | .000    | .000    | .000     | .000     | -4.70                                |
| .000             | 4.000          | 9                 | 20.14     |        | 3.019               | 60.78                    | 1.352                     | .415    | .937    | 8.378    | .166     | -20.78                               |
| .000             | 9999.000       | 10                | 14458.85  |        | 2.700               | 39038.89                 | .000                      | .000    | .000    | .000     | .000     | -14516.16                            |
| .000             | 9999.000       | 11                | (6678.83) |        | 2.100               | (14025.54)               | .000                      | .000    | .000    | .000     | .000     | -2306.78                             |
| .000             | 9999.000       | ****              | 496.26    |        | 2.100               | 1042.15                  | .000                      | .000    | .000    | .000     | .000     | -179.63                              |
| TOTAL            |                |                   | 24099.71  |        | 2.577               | 62098.79                 | .922                      | .327    | .595    | 5.475    | .087     | 90890.52                             |

# MINING RESERVE EVALUATION

DESCRIPTION : Grum 8606 Ultimate Pit Reserves

TOTAL FOR ALL BENCHES

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

TOP SURFACE GRID RECORD : 1 TOPOGRAPHY  
BOTTOM SURFACE GRID RECORD : 89 pit 4, Stage 1, incl ramp

## CUMULATIVE RESULTS

| CUT-OFF GRADES   |                | ROCK-TYPE<br>CODE | VOLUME   |        | DENSITY<br>[tn/bcm] | TONNAGE<br>[ TONS x1000] | A V E R A G E G R A D E S |         |         |          |          | ECONOMIC<br>FACTOR<br>[CDN \$ x1000] |
|------------------|----------------|-------------------|----------|--------|---------------------|--------------------------|---------------------------|---------|---------|----------|----------|--------------------------------------|
| FROM<br>[Pb+Zn ] | TO<br>[Pb+Zn ] |                   | [bcm     | x1000] |                     |                          | [Pb+Zn ]                  | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] |                                      |
| 6.000            | 100.000        | 1                 | 164.51   |        | 3.252               | 534.98                   | 8.062                     | 2.801   | 5.261   | 45.273   | .826     | 8712.97                              |
| 6.000            | 100.000        | 2                 | 1004.52  |        | 3.200               | 3214.33                  | 7.583                     | 2.643   | 4.940   | 44.133   | .742     | 42232.41                             |
| 6.000            | 100.000        | 3                 | 1015.58  |        | 3.203               | 3252.83                  | 7.603                     | 2.651   | 4.952   | 44.256   | .739     | 43092.28                             |
| 6.000            | 100.000        | 4                 | 1296.06  |        | 3.211               | 4161.01                  | 7.915                     | 2.766   | 5.149   | 45.798   | .716     | 62558.09                             |
| 6.000            | 100.000        | 5                 | 1374.22  |        | 3.247               | 4462.21                  | 8.204                     | 2.910   | 5.294   | 47.714   | .732     | 75071.98                             |
| 6.000            | 100.000        | 6                 | 1469.02  |        | 3.300               | 4847.61                  | 8.716                     | 3.122   | 5.595   | 51.162   | .761     | 97490.13                             |
| 6.000            | 100.000        | 7                 | 1479.26  |        | 3.307               | 4892.63                  | 8.787                     | 3.150   | 5.637   | 51.613   | .765     | 100603.80                            |
| 6.000            | 100.000        | 8                 | 1479.26  |        | 3.307               | 4892.63                  | 8.787                     | 3.150   | 5.637   | 51.613   | .765     | 100603.80                            |
| 6.000            | 100.000        | 9                 | 1541.56  |        | 3.305               | 5094.29                  | 8.760                     | 3.143   | 5.617   | 51.538   | .758     | 108871.20                            |
| 4.000            | 6.000          | 1                 | 1883.82  |        | 3.273               | 6165.09                  | 8.100                     | 2.888   | 5.213   | 47.785   | .725     | 108512.80                            |
| 4.000            | 6.000          | 2                 | 2004.64  |        | 3.265               | 6545.44                  | 7.957                     | 2.838   | 5.119   | 46.907   | .723     | 108380.20                            |
| 4.000            | 6.000          | 3                 | 2109.22  |        | 3.256               | 6868.44                  | 7.794                     | 2.772   | 5.022   | 45.981   | .711     | 108268.50                            |
| 4.000            | 6.000          | 4                 | 2129.20  |        | 3.255               | 6929.61                  | 7.772                     | 2.764   | 5.008   | 45.868   | .710     | 108246.50                            |
| 4.000            | 6.000          | 5                 | 2142.16  |        | 3.257               | 6975.96                  | 7.751                     | 2.755   | 4.996   | 45.777   | .708     | 108232.70                            |
| 4.000            | 6.000          | 6                 | 2142.16  |        | 3.257               | 6975.96                  | 7.751                     | 2.755   | 4.996   | 45.777   | .708     | 108232.70                            |
| 4.000            | 6.000          | 7                 | 2142.16  |        | 3.257               | 6975.96                  | 7.751                     | 2.755   | 4.996   | 45.777   | .708     | 108232.70                            |
| 4.000            | 6.000          | 8                 | 2142.16  |        | 3.257               | 6975.96                  | 7.751                     | 2.755   | 4.996   | 45.777   | .708     | 108232.70                            |
| 4.000            | 6.000          | 9                 | 2215.12  |        | 3.253               | 7205.08                  | 7.655                     | 2.716   | 4.939   | 45.199   | .702     | 108150.60                            |
| .000             | 4.000          | 1                 | 2358.23  |        | 3.247               | 7656.84                  | 7.391                     | 2.618   | 4.774   | 43.802   | .695     | 108004.10                            |
| .000             | 4.000          | 2                 | 2359.31  |        | 3.247               | 7660.24                  | 7.389                     | 2.617   | 4.772   | 43.791   | .695     | 108003.10                            |
| .000             | 4.000          | 3                 | 2406.32  |        | 3.247               | 7813.56                  | 7.310                     | 2.592   | 4.718   | 43.398   | .692     | 107954.60                            |
| .000             | 4.000          | 4                 | 2414.74  |        | 3.246               | 7838.72                  | 7.294                     | 2.586   | 4.708   | 43.308   | .690     | 107946.10                            |
| .000             | 4.000          | 5                 | 2418.10  |        | 3.246               | 7848.80                  | 7.284                     | 2.583   | 4.701   | 43.252   | .690     | 107942.50                            |
| .000             | 4.000          | 6                 | 2427.28  |        | 3.245               | 7876.34                  | 7.259                     | 2.574   | 4.685   | 43.101   | .687     | 107932.80                            |
| .000             | 4.000          | 7                 | 2441.32  |        | 3.244               | 7918.46                  | 7.220                     | 2.560   | 4.660   | 42.872   | .683     | 107918.60                            |
| .000             | 4.000          | 8                 | 2445.64  |        | 3.243               | 7931.42                  | 7.208                     | 2.556   | 4.653   | 42.802   | .682     | 107913.90                            |
| .000             | 4.000          | 9                 | 2465.77  |        | 3.241               | 7992.21                  | 7.164                     | 2.540   | 4.624   | 42.540   | .678     | 107893.10                            |
| .000             | 9999.000       | 10                | 16924.62 |        | 2.779               | 47031.10                 | 1.217                     | .432    | .786    | 7.229    | .115     | 93376.92                             |
| .000             | 9999.000       | 11                | 23603.45 |        | 2.587               | 61056.64                 | .938                      | .332    | .605    | 5.568    | .089     | 91070.14                             |
| .000             | 9999.000       | ****              | 24099.71 |        | 2.577               | 62098.79                 | .922                      | .327    | .595    | 5.475    | .087     | 90890.52                             |

|       |          |       |          |      |      |      |       |      |          |
|-------|----------|-------|----------|------|------|------|-------|------|----------|
| TOTAL | 24099.71 | 2.577 | 62098.79 | .922 | .327 | .595 | 5.475 | .087 | 90890.52 |
|-------|----------|-------|----------|------|------|------|-------|------|----------|

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MINING RESERVE EVALUATION

DESCRIPTION : Grum 8606 Ultimate Pit Reserves

TOTAL FOR ALL BENCHES

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

TOP SURFACE GRID RECORD : 89 pit 4, Stage 1, incl ramp  
BOTTOM SURFACE GRID RECORD : 114 Stage 2 Stripped

INCREMENTAL RESULTS

| CUT-OFF GRADES   |                | ROCK-TYPE<br>CODE | VOLUME   |        | DENSITY<br>[tn/bcm] | TONNAGE<br>[ TONS x1000] | A V E R A G E   G R A D E S |         |         |          |          | ECONOMIC<br>FACTOR<br>[CDN \$ x1000] |
|------------------|----------------|-------------------|----------|--------|---------------------|--------------------------|-----------------------------|---------|---------|----------|----------|--------------------------------------|
| FROM<br>[Pb+Zn ] | TO<br>[Pb+Zn ] |                   | [bcm     | x1000] |                     |                          | [Pb+Zn ]                    | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] |                                      |
| 6.000            | 100.000        | 1                 | 6.97     |        | 3.210               | 22.38                    | 6.930                       | 2.243   | 4.687   | 39.111   | .735     | 208.52                               |
| 6.000            | 100.000        | 2                 | 18.68    |        | 3.231               | 60.36                    | 8.242                       | 3.259   | 4.983   | 54.554   | .805     | 1050.52                              |
| 6.000            | 100.000        | 3                 | 1.36     |        | 3.619               | 4.91                     | 11.642                      | 4.094   | 7.548   | 68.035   | .467     | 182.08                               |
| 6.000            | 100.000        | 4                 | 9.50     |        | 3.750               | 35.64                    | 17.807                      | 6.063   | 11.744  | 106.062  | 1.495    | 2863.54                              |
| 6.000            | 100.000        | 5                 | 8.78     |        | 3.677               | 32.30                    | 10.636                      | 3.786   | 6.849   | 60.451   | .828     | 1037.39                              |
| 6.000            | 100.000        | 6                 | 33.55    |        | 4.050               | 135.88                   | 16.546                      | 6.993   | 9.554   | 116.534  | 1.011    | 9451.63                              |
| 6.000            | 100.000        | 7                 | 41.66    |        | 4.401               | 183.36                   | 13.714                      | 5.905   | 7.809   | 92.765   | 1.117    | 9505.64                              |
| 6.000            | 100.000        | 9                 | .35      |        | 3.238               | 1.13                     | 6.400                       | 2.266   | 4.134   | 36.000   | .614     | 29.52                                |
| 4.000            | 6.000          | 1                 | 18.91    |        | 3.400               | 64.30                    | 5.073                       | 2.057   | 3.016   | 36.168   | 1.160    | -21.30                               |
| 4.000            | 6.000          | 2                 | 2.53     |        | 3.271               | 8.28                     | 5.729                       | 1.639   | 4.090   | 27.728   | .256     | -2.75                                |
| 4.000            | 6.000          | 3                 | 15.30    |        | 3.914               | 59.89                    | 4.791                       | 2.132   | 2.660   | 40.585   | 1.003    | -17.40                               |
| 4.000            | 6.000          | 5                 | .82      |        | 4.195               | 3.42                     | 5.580                       | 1.150   | 4.430   | 22.662   | .606     | -.85                                 |
| .000             | 4.000          | 1                 | .53      |        | 3.057               | 1.61                     | 3.785                       | 1.264   | 2.521   | 24.000   | .477     | -.58                                 |
| .000             | 4.000          | 3                 | 13.72    |        | 3.706               | 50.84                    | 3.392                       | 1.809   | 1.583   | 32.025   | .553     | -14.69                               |
| .000             | 4.000          | 4                 | 4.37     |        | 3.661               | 15.99                    | 3.127                       | 1.847   | 1.280   | 33.000   | .841     | -4.45                                |
| .000             | 4.000          | 5                 | 4.02     |        | 3.000               | 12.06                    | .000                        | .000    | .000    | .000     | .000     | -4.30                                |
| .000             | 4.000          | 9                 | 7.94     |        | 3.000               | 23.83                    | .000                        | .000    | .000    | .000     | .000     | -8.57                                |
| .000             | 9999.000       | 10                | 22460.20 |        | 2.700               | 60642.52                 | .000                        | .000    | .000    | .000     | .000     | -22936.16                            |
| .000             | 9999.000       | 11                | 4448.45  |        | 2.100               | 9341.74                  | .000                        | .000    | .000    | .000     | .000     | -1566.14                             |
| .000             | 9999.000       | ****              | 265.68   |        | 2.104               | 558.90                   | .000                        | .000    | .000    | .000     | .000     | -96.24                               |
| TOTAL            |                |                   | 27363.32 |        | 2.604               | 71259.34                 | .103                        | .043    | .061    | .707     | .009     | -344.59                              |

# MINING RESERVE EVALUATION

DESCRIPTION : Grum 8606 Ultimate Pit Reserves

TOTAL FOR ALL BENCHES

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

TOP SURFACE GRID RECORD : 89 pit 4, Stage 1, incl ramp  
BOTTOM SURFACE GRID RECORD : 114 Stage 2 Stripped

## CUMULATIVE RESULTS

| CUT-OFF GRADES   |                | ROCK-TYPE<br>CODE | VOLUME   |        | DENSITY<br>[tn/bcm] | TONNAGE<br>[ TONS x1000] | A V E R A G E   G R A D E S |         |         |          |          | ECONOMIC<br>FACTOR<br>[CDN \$ x1000] |
|------------------|----------------|-------------------|----------|--------|---------------------|--------------------------|-----------------------------|---------|---------|----------|----------|--------------------------------------|
| FROM<br>[Pb+Zn ] | TO<br>[Pb+Zn ] |                   | [bcm     | x1000] |                     |                          | [Pb+Zn ]                    | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] |                                      |
| 6.000            | 100.000        | 1                 | 6.97     |        | 3.210               | 22.38                    | 6.930                       | 2.243   | 4.687   | 39.111   | .735     | 208.52                               |
| 6.000            | 100.000        | 2                 | 25.66    |        | 3.225               | 82.74                    | 7.888                       | 2.985   | 4.903   | 50.377   | .786     | 1259.04                              |
| 6.000            | 100.000        | 3                 | 27.01    |        | 3.245               | 87.65                    | 8.098                       | 3.047   | 5.051   | 51.366   | .768     | 1441.12                              |
| 6.000            | 100.000        | 4                 | 36.52    |        | 3.376               | 123.29                   | 10.905                      | 3.919   | 6.986   | 67.178   | .978     | 4304.66                              |
| 6.000            | 100.000        | 5                 | 45.30    |        | 3.435               | 155.58                   | 10.849                      | 3.891   | 6.958   | 65.782   | .947     | 5342.05                              |
| 6.000            | 100.000        | 6                 | 78.85    |        | 3.696               | 291.46                   | 13.505                      | 5.337   | 8.168   | 89.442   | .977     | 14793.68                             |
| 6.000            | 100.000        | 7                 | 120.52   |        | 3.940               | 474.82                   | 13.586                      | 5.557   | 8.029   | 90.725   | 1.031    | 24299.31                             |
| 6.000            | 100.000        | 8                 | 120.52   |        | 3.940               | 474.82                   | 13.586                      | 5.557   | 8.029   | 90.725   | 1.031    | 24299.31                             |
| 6.000            | 100.000        | 9                 | 120.86   |        | 3.938               | 475.95                   | 13.569                      | 5.549   | 8.020   | 90.595   | 1.030    | 24328.83                             |
| 4.000            | 6.000          | 1                 | 139.78   |        | 3.865               | 540.25                   | 12.558                      | 5.133   | 7.424   | 84.118   | 1.046    | 24307.53                             |
| 4.000            | 6.000          | 2                 | 142.31   |        | 3.855               | 548.53                   | 12.455                      | 5.081   | 7.374   | 83.266   | 1.034    | 24304.78                             |
| 4.000            | 6.000          | 3                 | 157.61   |        | 3.860               | 608.42                   | 11.700                      | 4.790   | 6.910   | 79.065   | 1.031    | 24287.38                             |
| 4.000            | 6.000          | 4                 | 157.61   |        | 3.860               | 608.42                   | 11.700                      | 4.790   | 6.910   | 79.065   | 1.031    | 24287.38                             |
| 4.000            | 6.000          | 5                 | 158.42   |        | 3.862               | 611.84                   | 11.666                      | 4.770   | 6.896   | 78.749   | 1.028    | 24286.53                             |
| 4.000            | 6.000          | 6                 | 158.42   |        | 3.862               | 611.84                   | 11.666                      | 4.770   | 6.896   | 78.749   | 1.028    | 24286.53                             |
| 4.000            | 6.000          | 7                 | 158.42   |        | 3.862               | 611.84                   | 11.666                      | 4.770   | 6.896   | 78.749   | 1.028    | 24286.53                             |
| 4.000            | 6.000          | 8                 | 158.42   |        | 3.862               | 611.84                   | 11.666                      | 4.770   | 6.896   | 78.749   | 1.028    | 24286.53                             |
| 4.000            | 6.000          | 9                 | 158.42   |        | 3.862               | 611.84                   | 11.666                      | 4.770   | 6.896   | 78.749   | 1.028    | 24286.53                             |
| .000             | 4.000          | 1                 | 158.95   |        | 3.859               | 613.46                   | 11.645                      | 4.761   | 6.885   | 78.605   | 1.027    | 24285.95                             |
| .000             | 4.000          | 2                 | 158.95   |        | 3.859               | 613.46                   | 11.645                      | 4.761   | 6.885   | 78.605   | 1.027    | 24285.95                             |
| .000             | 4.000          | 3                 | 172.67   |        | 3.847               | 664.30                   | 11.014                      | 4.535   | 6.479   | 75.041   | .991     | 24271.26                             |
| .000             | 4.000          | 4                 | 177.04   |        | 3.843               | 680.29                   | 10.828                      | 4.472   | 6.357   | 74.052   | .987     | 24266.81                             |
| .000             | 4.000          | 5                 | 181.06   |        | 3.824               | 692.35                   | 10.640                      | 4.394   | 6.246   | 72.763   | .970     | 24262.52                             |
| .000             | 4.000          | 6                 | 181.06   |        | 3.824               | 692.35                   | 10.640                      | 4.394   | 6.246   | 72.763   | .970     | 24262.52                             |
| .000             | 4.000          | 7                 | 181.06   |        | 3.824               | 692.35                   | 10.640                      | 4.394   | 6.246   | 72.763   | .970     | 24262.52                             |
| .000             | 4.000          | 8                 | 181.06   |        | 3.824               | 692.35                   | 10.640                      | 4.394   | 6.246   | 72.763   | .970     | 24262.52                             |
| .000             | 4.000          | 9                 | 189.00   |        | 3.789               | 716.18                   | 10.286                      | 4.248   | 6.038   | 70.341   | .938     | 24253.95                             |
| .000             | 9999.000       | 10                | 22649.20 |        | 2.709               | 61358.70                 | .120                        | .050    | .070    | .821     | .011     | 1317.79                              |
| .000             | 9999.000       | 11                | 27097.64 |        | 2.609               | 70700.44                 | .104                        | .043    | .061    | .713     | .009     | -248.35                              |
| .000             | 9999.000       | ****              | 27363.32 |        | 2.604               | 71259.34                 | .103                        | .043    | .061    | .707     | .009     | -344.59                              |

|       |          |       |          |      |      |      |      |      |         |
|-------|----------|-------|----------|------|------|------|------|------|---------|
| TOTAL | 27363.32 | 2.604 | 71259.34 | .103 | .043 | .061 | .707 | .009 | -344.59 |
|-------|----------|-------|----------|------|------|------|------|------|---------|

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# MINING RESERVE EVALUATION

DESCRIPTION : Grum B606 Ultimate Pit Reserves

TOTAL FOR ALL BENCHES

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

TOP SURFACE GRID RECORD : 114 Stage 2 Stripped  
BOTTOM SURFACE GRID RECORD : 110 Stage 2 Pit

## INCREMENTAL RESULTS

| CUT-OFF GRADES   |                | ROCK-TYPE<br>CODE | VOLUME  |        | DENSITY<br>[tn/bcm] | TONNAGE<br>[ TONS x1000] | A V E R A G E G R A D E S |         |         |          |          | ECONOMIC<br>FACTOR<br>[CDN \$ x1000] |
|------------------|----------------|-------------------|---------|--------|---------------------|--------------------------|---------------------------|---------|---------|----------|----------|--------------------------------------|
| FROM<br>[Pb+Zn ] | TO<br>[Pb+Zn ] |                   | [bcm    | x1000] |                     |                          | [Pb+Zn ]                  | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] |                                      |
| 6.000            | 100.000        | 1                 | 123.77  |        | 3.444               | 426.28                   | 8.567                     | 3.087   | 5.479   | 51.199   | 1.089    | 8791.93                              |
| 6.000            | 100.000        | 2                 | 457.18  |        | 3.329               | 1522.10                  | 8.327                     | 3.068   | 5.259   | 52.021   | .946     | 28374.88                             |
| 6.000            | 100.000        | 3                 | 5.94    |        | 3.303               | 19.62                    | 7.156                     | 2.477   | 4.679   | 40.040   | .373     | 171.61                               |
| 6.000            | 100.000        | 4                 | 173.27  |        | 3.403               | 589.59                   | 11.182                    | 3.964   | 7.218   | 64.069   | .836     | 20943.04                             |
| 6.000            | 100.000        | 5                 | 89.86   |        | 3.861               | 346.94                   | 11.155                    | 4.193   | 6.962   | 68.390   | 1.172    | 12792.79                             |
| 6.000            | 100.000        | 6                 | 225.04  |        | 4.272               | 961.30                   | 17.131                    | 6.240   | 10.891  | 104.468  | 1.393    | 72190.61                             |
| 6.000            | 100.000        | 7                 | 128.76  |        | 4.270               | 549.86                   | 11.744                    | 5.308   | 6.436   | 85.451   | .909     | 21463.71                             |
| 6.000            | 100.000        | 9                 | 55.62   |        | 3.137               | 174.47                   | 7.499                     | 2.581   | 4.918   | 47.688   | .808     | 6888.91                              |
| 4.000            | 6.000          | 1                 | 289.49  |        | 3.239               | 937.73                   | 4.919                     | 1.837   | 3.082   | 32.812   | .832     | -368.83                              |
| 4.000            | 6.000          | 2                 | 42.23   |        | 3.210               | 135.54                   | 5.694                     | 2.180   | 3.514   | 35.885   | .801     | -53.31                               |
| 4.000            | 6.000          | 3                 | 30.92   |        | 3.228               | 99.84                    | 5.009                     | 1.782   | 3.227   | 31.218   | .421     | -38.13                               |
| 4.000            | 6.000          | 4                 | 12.73   |        | 3.133               | 39.90                    | 5.570                     | 2.147   | 3.423   | 35.634   | .601     | -15.63                               |
| 4.000            | 6.000          | 5                 | 9.50    |        | 3.900               | 37.07                    | 5.343                     | 2.577   | 2.766   | 45.201   | .736     | -11.81                               |
| 4.000            | 6.000          | 9                 | 52.38   |        | 3.079               | 161.27                   | 4.853                     | 1.796   | 3.056   | 31.040   | .663     | -65.93                               |
| .000             | 4.000          | 1                 | 123.25  |        | 3.138               | 386.75                   | 3.372                     | 1.293   | 2.080   | 23.866   | .661     | -145.84                              |
| .000             | 4.000          | 3                 | 31.81   |        | 3.463               | 110.15                   | 2.524                     | .741    | 1.783   | 20.425   | .554     | -37.32                               |
| .000             | 4.000          | 4                 | 9.56    |        | 3.004               | 28.73                    | .223                      | .099    | .124    | 1.730    | .040     | -11.15                               |
| .000             | 4.000          | 5                 | 14.04   |        | 3.511               | 49.30                    | 1.860                     | .755    | 1.105   | 14.128   | .000     | -16.59                               |
| .000             | 4.000          | 6                 | 4.32    |        | 3.000               | 12.96                    | .000                      | .000    | .000    | .000     | .000     | -5.01                                |
| .000             | 4.000          | 7                 | 2.70    |        | 3.000               | 8.10                     | .000                      | .000    | .000    | .000     | .000     | -3.12                                |
| .000             | 4.000          | 9                 | 44.17   |        | 3.081               | 136.10                   | 3.061                     | 1.250   | 1.811   | 19.950   | .468     | -52.67                               |
| .000             | 9999.000       | 10                | 7248.18 |        | 2.700               | 19570.07                 | .000                      | .000    | .000    | .000     | .000     | -8668.00                             |
| .000             | 9999.000       | ****              | 11.24   |        | 2.700               | 30.36                    | .000                      | .000    | .000    | .000     | .000     | -6.43                                |
| TOTAL            |                |                   | 9185.96 |        | 2.867               | 26334.02                 | 2.292                     | .860    | 1.431   | 14.461   | .238     | 162117.70                            |

MINING RESERVE EVALUATION

DESCRIPTION : Grum B606 Ultimate Pit Reserves

TOTAL FOR ALL BENCHES

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

TOP SURFACE GRID RECORD : 114 Stage 2 Stripped  
BOTTOM SURFACE GRID RECORD : 110 Stage 2 Pit

CUMULATIVE RESULTS

| CUT-OFF GRADES   |                | ROCK-TYPE<br>CODE | VOLUME  |        | DENSITY<br>[tn/bcm] | TONNAGE<br>[ TONS x1000] | A V E R A G E   G R A D E S |         |         |          |          | ECONOMIC<br>FACTOR<br>[CDN \$ x1000] |
|------------------|----------------|-------------------|---------|--------|---------------------|--------------------------|-----------------------------|---------|---------|----------|----------|--------------------------------------|
| FROM<br>[Pb+Zn ] | TO<br>[Pb+Zn ] |                   | [bcm    | x1000] |                     |                          | [Pb+Zn ]                    | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] |                                      |
| 6.000            | 100.000        | 1                 | 123.77  |        | 3.444               | 426.28                   | 8.567                       | 3.087   | 5.479   | 51.199   | 1.089    | 8791.93                              |
| 6.000            | 100.000        | 2                 | 580.94  |        | 3.354               | 1948.39                  | 8.379                       | 3.072   | 5.307   | 51.841   | .977     | 37166.82                             |
| 6.000            | 100.000        | 3                 | 586.88  |        | 3.353               | 1968.00                  | 8.367                       | 3.066   | 5.301   | 51.723   | .971     | 37338.43                             |
| 6.000            | 100.000        | 4                 | 760.15  |        | 3.365               | 2557.59                  | 9.016                       | 3.273   | 5.743   | 54.569   | .940     | 58281.46                             |
| 6.000            | 100.000        | 5                 | 850.01  |        | 3.417               | 2904.53                  | 9.271                       | 3.383   | 5.888   | 56.220   | .968     | 71074.25                             |
| 6.000            | 100.000        | 6                 | 1075.04 |        | 3.596               | 3865.83                  | 11.226                      | 4.094   | 7.132   | 68.218   | 1.074    | 143264.90                            |
| 6.000            | 100.000        | 7                 | 1203.80 |        | 3.668               | 4415.69                  | 11.290                      | 4.245   | 7.046   | 70.364   | 1.053    | 164728.60                            |
| 6.000            | 100.000        | 8                 | 1203.80 |        | 3.668               | 4415.69                  | 11.290                      | 4.245   | 7.046   | 70.364   | 1.053    | 164728.60                            |
| 6.000            | 100.000        | 9                 | 1259.42 |        | 3.645               | 4590.17                  | 11.146                      | 4.182   | 6.965   | 69.502   | 1.044    | 171617.50                            |
| 4.000            | 6.000          | 1                 | 1548.91 |        | 3.569               | 5527.89                  | 10.090                      | 3.784   | 6.306   | 63.278   | 1.008    | 171248.70                            |
| 4.000            | 6.000          | 2                 | 1591.14 |        | 3.559               | 5663.43                  | 9.985                       | 3.746   | 6.239   | 62.622   | 1.003    | 171195.30                            |
| 4.000            | 6.000          | 3                 | 1622.06 |        | 3.553               | 5763.27                  | 9.898                       | 3.712   | 6.187   | 62.078   | .993     | 171157.20                            |
| 4.000            | 6.000          | 4                 | 1634.80 |        | 3.550               | 5803.16                  | 9.869                       | 3.701   | 6.168   | 61.897   | .990     | 171141.60                            |
| 4.000            | 6.000          | 5                 | 1644.30 |        | 3.552               | 5840.23                  | 9.840                       | 3.694   | 6.146   | 61.791   | .989     | 171129.80                            |
| 4.000            | 6.000          | 6                 | 1644.30 |        | 3.552               | 5840.23                  | 9.840                       | 3.694   | 6.146   | 61.791   | .989     | 171129.80                            |
| 4.000            | 6.000          | 7                 | 1644.30 |        | 3.552               | 5840.23                  | 9.840                       | 3.694   | 6.146   | 61.791   | .989     | 171129.80                            |
| 4.000            | 6.000          | 8                 | 1644.30 |        | 3.552               | 5840.23                  | 9.840                       | 3.694   | 6.146   | 61.791   | .989     | 171129.80                            |
| 4.000            | 6.000          | 9                 | 1696.68 |        | 3.537               | 6001.50                  | 9.706                       | 3.643   | 6.063   | 60.964   | .980     | 171063.80                            |
| .000             | 4.000          | 1                 | 1819.93 |        | 3.510               | 6388.25                  | 9.323                       | 3.500   | 5.822   | 58.718   | .960     | 170918.00                            |
| .000             | 4.000          | 2                 | 1819.93 |        | 3.510               | 6388.25                  | 9.323                       | 3.500   | 5.822   | 58.718   | .960     | 170918.00                            |
| .000             | 4.000          | 3                 | 1851.74 |        | 3.509               | 6498.40                  | 9.207                       | 3.454   | 5.754   | 58.069   | .954     | 170880.70                            |
| .000             | 4.000          | 4                 | 1861.31 |        | 3.507               | 6527.13                  | 9.168                       | 3.439   | 5.729   | 57.821   | .950     | 170869.50                            |
| .000             | 4.000          | 5                 | 1875.35 |        | 3.507               | 6576.43                  | 9.113                       | 3.419   | 5.694   | 57.494   | .942     | 170852.90                            |
| .000             | 4.000          | 6                 | 1879.67 |        | 3.506               | 6589.39                  | 9.095                       | 3.412   | 5.683   | 57.381   | .941     | 170847.90                            |
| .000             | 4.000          | 7                 | 1882.37 |        | 3.505               | 6597.49                  | 9.084                       | 3.408   | 5.676   | 57.310   | .939     | 170844.80                            |
| .000             | 4.000          | 8                 | 1882.37 |        | 3.505               | 6597.49                  | 9.084                       | 3.408   | 5.676   | 57.310   | .939     | 170844.80                            |
| .000             | 4.000          | 9                 | 1926.54 |        | 3.495               | 6733.59                  | 8.962                       | 3.364   | 5.598   | 56.555   | .930     | 170792.10                            |
| .000             | 9999.000       | 10                | 9174.72 |        | 2.867               | 26303.66                 | 2.294                       | .861    | 1.433   | 14.478   | .238     | 162124.10                            |
| .000             | 9999.000       | 11                | 9174.72 |        | 2.867               | 26303.66                 | 2.294                       | .861    | 1.433   | 14.478   | .238     | 162124.10                            |
| .000             | 9999.000       | ****              | 9185.96 |        | 2.867               | 26334.02                 | 2.292                       | .860    | 1.431   | 14.461   | .238     | 162117.70                            |

|       |         |       |          |       |      |       |        |      |           |
|-------|---------|-------|----------|-------|------|-------|--------|------|-----------|
| TOTAL | 9185.96 | 2.867 | 26334.02 | 2.292 | .860 | 1.431 | 14.461 | .238 | 162117.70 |
|-------|---------|-------|----------|-------|------|-------|--------|------|-----------|

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# MINING RESERVE EVALUATION

DESCRIPTION : Grum 8606 Ultimate Pit Reserves

TOTAL FOR ALL BENCHES

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

TOP SURFACE GRID RECORD : 110 Stage 2 Pit  
BOTTOM SURFACE GRID RECORD : 117 Stage 3 pit

## INCREMENTAL RESULTS

| CUT-OFF GRADES   |                | ROCK-TYPE<br>CODE | VOLUME  |        | DENSITY<br>[tn/bcm] | TONNAGE<br>[ TONS x1000] | A V E R A G E G R A D E S |         |         |          |          | ECONOMIC<br>FACTOR<br>[CDN \$ x1000] |
|------------------|----------------|-------------------|---------|--------|---------------------|--------------------------|---------------------------|---------|---------|----------|----------|--------------------------------------|
| FROM<br>[Pb+Zn ] | TO<br>[Pb+Zn ] |                   | [bcm    | x1000] |                     |                          | [Pb+Zn ]                  | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] |                                      |
| 6.000            | 100.000        | 1                 | 81.52   |        | 3.389               | 276.27                   | 7.971                     | 2.850   | 5.121   | 50.729   | 1.068    | 4767.41                              |
| 6.000            | 100.000        | 2                 | 373.28  |        | 3.277               | 1223.07                  | 8.801                     | 3.174   | 5.627   | 54.863   | .987     | 26726.91                             |
| 6.000            | 100.000        | 4                 | 119.34  |        | 3.589               | 428.36                   | 13.590                    | 4.816   | 8.774   | 81.016   | 1.267    | 22525.00                             |
| 6.000            | 100.000        | 5                 | 38.94   |        | 3.792               | 147.65                   | 10.338                    | 3.838   | 6.500   | 68.054   | 1.171    | 4796.33                              |
| 6.000            | 100.000        | 6                 | 225.54  |        | 4.281               | 965.43                   | 14.619                    | 5.308   | 9.311   | 91.579   | 1.300    | 57427.50                             |
| 6.000            | 100.000        | 7                 | 36.10   |        | 4.286               | 154.70                   | 12.507                    | 4.896   | 7.612   | 79.594   | .910     | 6812.67                              |
| 6.000            | 100.000        | 9                 | 3.78    |        | 3.082               | 11.65                    | 7.007                     | 2.474   | 4.533   | 41.274   | .582     | 364.64                               |
| 4.000            | 6.000          | 1                 | 194.22  |        | 3.156               | 612.92                   | 4.771                     | 1.794   | 2.977   | 32.277   | .794     | -267.27                              |
| 4.000            | 6.000          | 2                 | 60.22   |        | 3.149               | 189.61                   | 5.368                     | 2.322   | 3.046   | 35.135   | .957     | -81.99                               |
| 4.000            | 6.000          | 3                 | 13.99   |        | 3.086               | 43.18                    | 4.362                     | 1.790   | 2.572   | 28.187   | .421     | -19.42                               |
| 4.000            | 6.000          | 4                 | 1.62    |        | 3.180               | 5.15                     | 5.855                     | 2.549   | 3.306   | 33.668   | .927     | -2.31                                |
| 4.000            | 6.000          | 5                 | 6.44    |        | 3.881               | 25.01                    | 5.253                     | 1.919   | 3.334   | 41.435   | 1.404    | -9.03                                |
| 4.000            | 6.000          | 6                 | .54     |        | 4.614               | 2.49                     | 5.579                     | 2.237   | 3.342   | 52.000   | 1.552    | -.78                                 |
| 4.000            | 6.000          | 9                 | 41.58   |        | 3.074               | 127.81                   | 4.407                     | 2.034   | 2.373   | 29.261   | .555     | -58.34                               |
| .000             | 4.000          | 1                 | 151.85  |        | 3.065               | 465.38                   | 3.475                     | 1.493   | 1.981   | 24.920   | .795     | -193.68                              |
| .000             | 4.000          | 2                 | .29     |        | 3.000               | .86                      | .000                      | .000    | .000    | .000     | .000     | -.37                                 |
| .000             | 4.000          | 3                 | 14.47   |        | 3.354               | 48.53                    | 3.073                     | 1.344   | 1.728   | 20.694   | .581     | -18.59                               |
| .000             | 4.000          | 4                 | 5.18    |        | 3.000               | 15.55                    | .000                      | .000    | .000    | .000     | .000     | -6.54                                |
| .000             | 4.000          | 5                 | 1.84    |        | 3.987               | 7.32                     | 3.088                     | 1.263   | 1.824   | 23.698   | .000     | -2.27                                |
| .000             | 4.000          | 7                 | .44     |        | 3.000               | 1.33                     | .000                      | .000    | .000    | .000     | .000     | -.58                                 |
| .000             | 4.000          | 9                 | 61.67   |        | 3.000               | 184.99                   | 3.471                     | 1.659   | 1.812   | 24.609   | .663     | -78.40                               |
| .000             | 9999.000       | 10                | 2287.66 |        | 2.700               | 6176.67                  | .000                      | .000    | .000    | .000     | .000     | -2973.99                             |
| .000             | 9999.000       | ****              | 1.62    |        | 2.700               | 4.37                     | .000                      | .000    | .000    | .000     | .000     | -1.19                                |
| TOTAL            |                |                   | 3722.12 |        | 2.987               | 11118.33                 | 3.934                     | 1.460   | 2.475   | 24.927   | .445     | 119705.70                            |

MINING RESERVE EVALUATION

DESCRIPTION : Grum 8606 Ultimate Pit Reserves

TOTAL FOR ALL BENCHES

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

TOP SURFACE GRID RECORD : 110 Stage 2 Pit  
BOTTOM SURFACE GRID RECORD : 117 Stage 3 pit

CUMULATIVE RESULTS

| CUT-OFF GRADES   |                | ROCK-TYPE<br>CODE | VOLUME  |        | DENSITY<br>[tn/bcm] | TONNAGE<br>[ TONS x1000] | A V E R A G E   G R A D E S |         |         |          |          | ECONOMIC<br>FACTOR<br>[CDN \$ x1000] |
|------------------|----------------|-------------------|---------|--------|---------------------|--------------------------|-----------------------------|---------|---------|----------|----------|--------------------------------------|
| FROM<br>[Pb+Zn ] | TO<br>[Pb+Zn ] |                   | [bcm    | x1000] |                     |                          | [Pb+Zn ]                    | [Pb % ] | [Zn % ] | [Ag g/m] | [Au g/m] |                                      |
| 6.000            | 100.000        | 1                 | 81.52   |        | 3.389               | 276.27                   | 7.971                       | 2.850   | 5.121   | 50.729   | 1.068    | 4767.41                              |
| 6.000            | 100.000        | 2                 | 454.80  |        | 3.297               | 1499.34                  | 8.648                       | 3.114   | 5.534   | 54.101   | 1.002    | 31494.32                             |
| 6.000            | 100.000        | 3                 | 454.80  |        | 3.297               | 1499.34                  | 8.648                       | 3.114   | 5.534   | 54.101   | 1.002    | 31494.32                             |
| 6.000            | 100.000        | 4                 | 574.14  |        | 3.358               | 1927.70                  | 9.746                       | 3.492   | 6.254   | 60.082   | 1.061    | 54019.31                             |
| 6.000            | 100.000        | 5                 | 613.08  |        | 3.385               | 2075.35                  | 9.788                       | 3.517   | 6.272   | 60.649   | 1.069    | 58815.64                             |
| 6.000            | 100.000        | 6                 | 838.62  |        | 3.626               | 3040.78                  | 11.322                      | 4.085   | 7.237   | 70.469   | 1.142    | 116243.10                            |
| 6.000            | 100.000        | 7                 | 874.72  |        | 3.653               | 3195.48                  | 11.379                      | 4.125   | 7.255   | 70.911   | 1.131    | 123055.80                            |
| 6.000            | 100.000        | 8                 | 874.72  |        | 3.653               | 3195.48                  | 11.379                      | 4.125   | 7.255   | 70.911   | 1.131    | 123055.80                            |
| 6.000            | 100.000        | 9                 | 878.50  |        | 3.651               | 3207.13                  | 11.364                      | 4.119   | 7.245   | 70.803   | 1.129    | 123420.40                            |
| 4.000            | 6.000          | 1                 | 1072.72 |        | 3.561               | 3820.05                  | 10.306                      | 3.746   | 6.560   | 64.622   | 1.075    | 123153.20                            |
| 4.000            | 6.000          | 2                 | 1132.93 |        | 3.539               | 4009.66                  | 10.072                      | 3.678   | 6.394   | 63.228   | 1.070    | 123071.20                            |
| 4.000            | 6.000          | 3                 | 1146.92 |        | 3.534               | 4052.84                  | 10.012                      | 3.658   | 6.353   | 62.854   | 1.063    | 123051.80                            |
| 4.000            | 6.000          | 4                 | 1148.54 |        | 3.533               | 4058.00                  | 10.006                      | 3.657   | 6.349   | 62.817   | 1.062    | 123049.40                            |
| 4.000            | 6.000          | 5                 | 1154.99 |        | 3.535               | 4083.01                  | 9.977                       | 3.646   | 6.331   | 62.686   | 1.065    | 123040.40                            |
| 4.000            | 6.000          | 6                 | 1155.53 |        | 3.536               | 4085.50                  | 9.974                       | 3.645   | 6.329   | 62.680   | 1.065    | 123039.60                            |
| 4.000            | 6.000          | 7                 | 1155.53 |        | 3.536               | 4085.50                  | 9.974                       | 3.645   | 6.329   | 62.680   | 1.065    | 123039.60                            |
| 4.000            | 6.000          | 8                 | 1155.53 |        | 3.536               | 4085.50                  | 9.974                       | 3.645   | 6.329   | 62.680   | 1.065    | 123039.60                            |
| 4.000            | 6.000          | 9                 | 1197.11 |        | 3.520               | 4213.31                  | 9.806                       | 3.596   | 6.209   | 61.666   | 1.049    | 122981.30                            |
| .000             | 4.000          | 1                 | 1348.96 |        | 3.468               | 4678.69                  | 9.176                       | 3.387   | 5.789   | 58.011   | 1.024    | 122787.60                            |
| .000             | 4.000          | 2                 | 1349.24 |        | 3.468               | 4679.55                  | 9.174                       | 3.387   | 5.787   | 58.000   | 1.024    | 122787.30                            |
| .000             | 4.000          | 3                 | 1363.72 |        | 3.467               | 4728.09                  | 9.112                       | 3.366   | 5.746   | 57.617   | 1.019    | 122768.70                            |
| .000             | 4.000          | 4                 | 1368.90 |        | 3.465               | 4743.64                  | 9.082                       | 3.355   | 5.727   | 57.428   | 1.016    | 122762.10                            |
| .000             | 4.000          | 5                 | 1370.74 |        | 3.466               | 4750.96                  | 9.072                       | 3.351   | 5.721   | 57.376   | 1.014    | 122759.90                            |
| .000             | 4.000          | 6                 | 1370.74 |        | 3.466               | 4750.96                  | 9.072                       | 3.351   | 5.721   | 57.376   | 1.014    | 122759.90                            |
| .000             | 4.000          | 7                 | 1371.18 |        | 3.466               | 4752.29                  | 9.070                       | 3.351   | 5.719   | 57.360   | 1.014    | 122759.30                            |
| .000             | 4.000          | 8                 | 1371.18 |        | 3.466               | 4752.29                  | 9.070                       | 3.351   | 5.719   | 57.360   | 1.014    | 122759.30                            |
| .000             | 4.000          | 9                 | 1432.85 |        | 3.446               | 4937.28                  | 8.860                       | 3.287   | 5.573   | 56.133   | 1.001    | 122680.90                            |
| .000             | 9999.000       | 10                | 3720.50 |        | 2.987               | 11113.95                 | 3.936                       | 1.460   | 2.476   | 24.937   | .445     | 119706.90                            |
| .000             | 9999.000       | 11                | 3720.50 |        | 2.987               | 11113.95                 | 3.936                       | 1.460   | 2.476   | 24.937   | .445     | 119706.90                            |
| .000             | 9999.000       | ****              | 3722.12 |        | 2.987               | 11118.33                 | 3.934                       | 1.460   | 2.475   | 24.927   | .445     | 119705.70                            |

|       |         |       |          |       |       |       |        |      |           |
|-------|---------|-------|----------|-------|-------|-------|--------|------|-----------|
| TOTAL | 3722.12 | 2.987 | 11118.33 | 3.934 | 1.460 | 2.475 | 24.927 | .445 | 119705.70 |
|-------|---------|-------|----------|-------|-------|-------|--------|------|-----------|

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TWO DIMENSIONAL VARIOGRAM

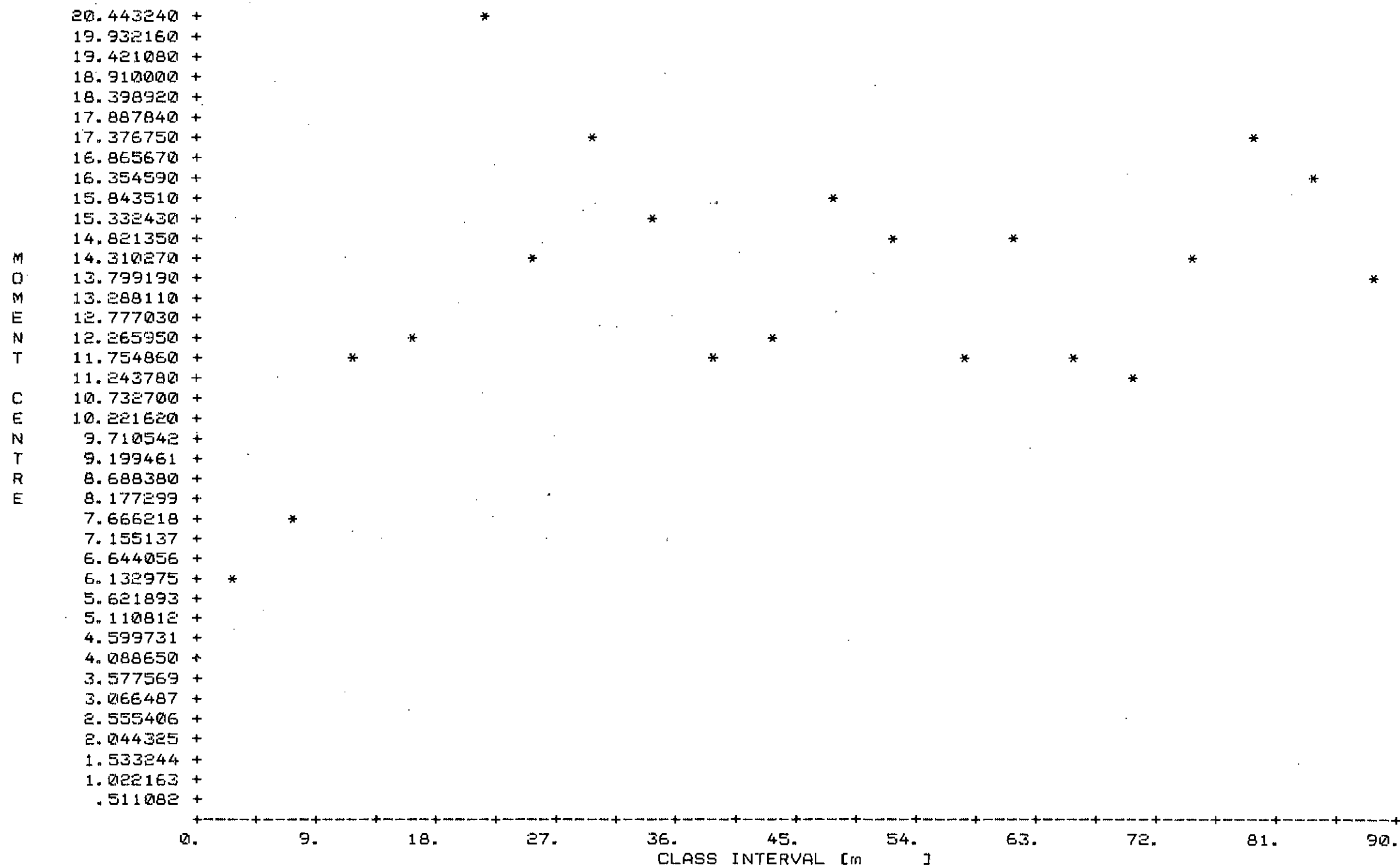
EXTRACTION DATA USED : ALL GEOLOGY 2ND.01

DIRECTION : 90.00 [DEGREES]  
ANGLE OF SPREAD : 15.00 [DEGREES]  
CLASS INTERVAL : 4.50 [m ]  
MAXIMUM DISTANCE : 90.00 [m ]  
OFFSET : .00 [m ]  
TOP ELEVATION : 1336.00 [m ]  
BOTTOM ELEVATION : 1000.00 [m ]  
TRANSFORMATION OF DATA : NONE  
NORMALIZATION OF DATA : NONE  
MEAN : 5.228364  
VARIANCE : 13.559090  
STANDARD DEVIATION : 3.682267  
NUMBER OF SAMPLES : 2939

| CLASS | CLASS INTERVAL<br>FROM TO<br>[m ] [m ] | NO OF SAMPLES | DRIFT     | GAMMA [H] | MOMENT CENTRE | AVERAGE DISTANCE<br>[m ] |
|-------|----------------------------------------|---------------|-----------|-----------|---------------|--------------------------|
| 1     | .00 4.50                               | 2107          | -1.647058 | 5.961219  | 5.898907      | 1.95                     |
| 2     | 4.50 9.00                              | 1347          | -1.629184 | 7.288773  | 7.467892      | 6.62                     |
| 3     | 9.00 13.50                             | 880           | .857647   | 11.369890 | 11.416740     | 11.16                    |
| 4     | 13.50 18.00                            | 721           | 2.308584  | 11.814120 | 11.919650     | 15.56                    |
| 5     | 18.00 22.50                            | 795           | 4.447394  | 20.135110 | 20.443240     | 20.73                    |
| 6     | 22.50 27.00                            | 1771          | 3.838927  | 13.957530 | 13.844010     | 25.12                    |
| 7     | 27.00 31.50                            | 4529          | 4.311868  | 16.925540 | 16.984110     | 29.36                    |
| 8     | 31.50 36.00                            | 5423          | 4.180533  | 14.895340 | 14.851830     | 33.49                    |
| 9     | 36.00 40.50                            | 2657          | 3.585140  | 11.580560 | 11.506820     | 38.21                    |
| 10    | 40.50 45.00                            | 2682          | 3.597875  | 11.766770 | 11.824950     | 42.75                    |
| 11    | 45.00 49.50                            | 4060          | 4.263503  | 15.554240 | 15.549010     | 47.20                    |
| 12    | 49.50 54.00                            | 4143          | 4.139471  | 14.401540 | 14.398530     | 51.93                    |
| 13    | 54.00 58.50                            | 7967          | 3.666529  | 11.641400 | 11.626700     | 56.75                    |
| 14    | 58.50 63.00                            | 19338         | 4.106420  | 14.757330 | 14.769490     | 60.75                    |
| 15    | 63.00 67.50                            | 11878         | 3.649608  | 11.625260 | 11.609740     | 65.06                    |
| 16    | 67.50 72.00                            | 6997          | 3.526694  | 10.797760 | 10.795650     | 69.61                    |
| 17    | 72.00 76.50                            | 4356          | 4.050648  | 14.049030 | 14.080030     | 74.14                    |
| 18    | 76.50 81.00                            | 4103          | 4.510540  | 17.286420 | 17.294770     | 78.60                    |
| 19    | 81.00 85.50                            | 3810          | 4.403251  | 15.932110 | 15.959510     | 83.52                    |
| 20    | 85.50 90.00                            | 4356          | 3.882170  | 13.298590 | 13.316780     | 88.02                    |

# TWO DIMENSIONAL VARIOGRAM

## EXTRACTION DATA USED :



THE SYMBOL "\*" INDICATES LESS THAN 30 SAMPLES IN THAT CLASS

lev..50 row.. 21 s col..64 e col..65  
 lev..50 row.. 46 s col..32 e col..33  
 lev..50 row.. 47 s col..32 e col..33  
 lev..50 row.. 51 s col..32 e col..33

TWO DIMENSIONAL VARIOGRAM

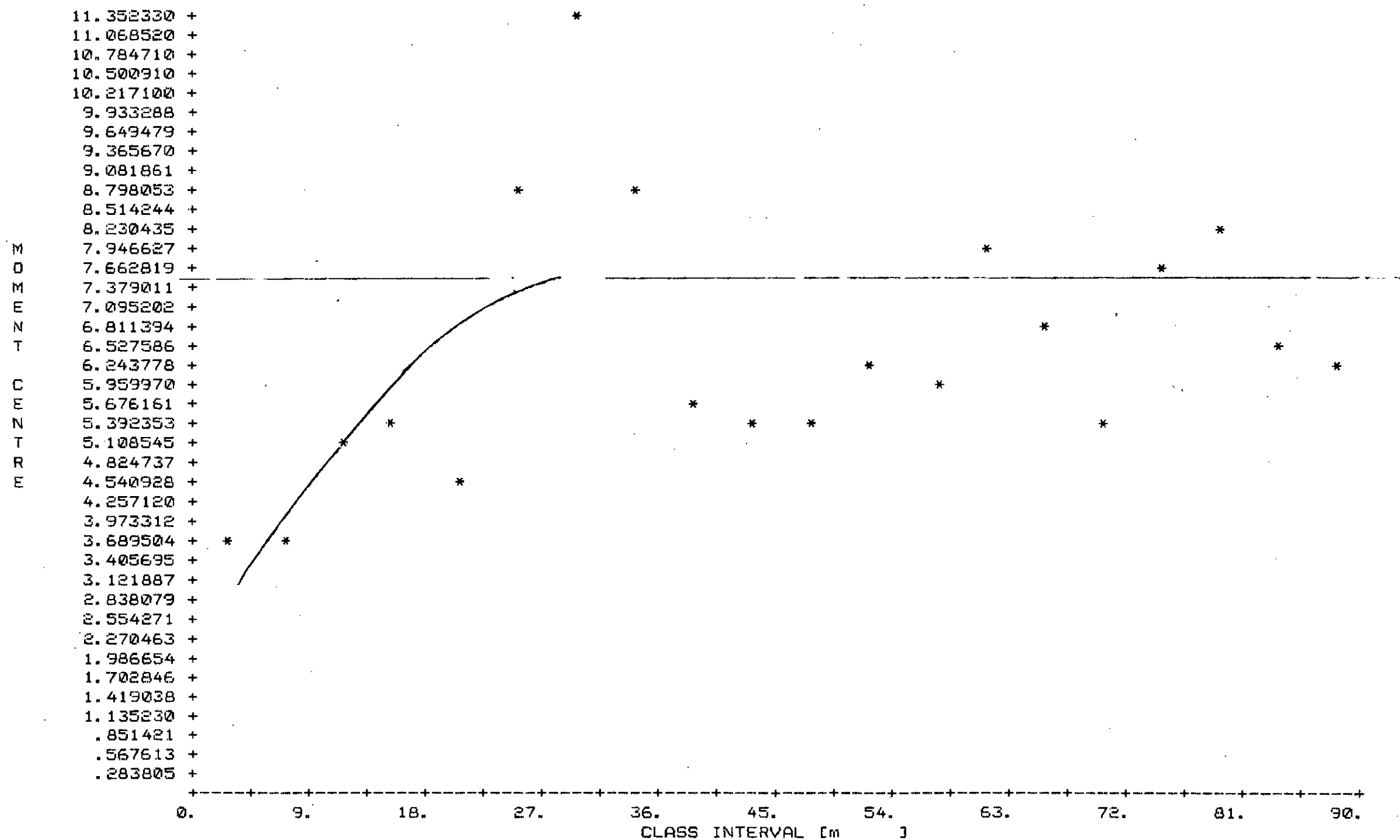
EXTRACTION DATA USED :

DIRECTION : 90.00 [DEGREES]  
ANGLE OF SPREAD : 15.00 [DEGREES]  
CLASS INTERVAL : 4.50 [m ]  
MAXIMUM DISTANCE : 90.00 [m ]  
OFFSET : .00 [m ]  
TOP ELEVATION : 1336.00 [m ]  
BOTTOM ELEVATION : 1000.00 [m ]  
TRANSFORMATION OF DATA : NONE  
NORMALIZATION OF DATA : NONE  
MEAN : 4.246473  
VARIANCE : 7.493086  
STANDARD DEVIATION : 2.737350  
NUMBER OF SAMPLES : 1301

| CLASS | CLASS INTERVAL<br>FROM TO<br>[m ] [m ] | NO OF SAMPLES | DRIFT     | GAMMA [H] | MOMENT CENTRE | AVERAGE DISTANCE<br>[m ] |
|-------|----------------------------------------|---------------|-----------|-----------|---------------|--------------------------|
| 1     | .00 4.50                               | 821           | -1.089902 | 3.567578  | 3.494836      | 1.85                     |
| 2     | 4.50 9.00                              | 476           | -.785714  | 3.390385  | 3.492248      | 6.60                     |
| 3     | 9.00 13.50                             | 301           | .040499   | 4.932462  | 4.903041      | 11.09                    |
| 4     | 13.50 18.00                            | 147           | .284626   | 5.151568  | 5.259610      | 15.27                    |
| 5     | 18.00 22.50                            | 139           | 1.668921  | 4.390900  | 4.409163      | 20.56                    |
| 6     | 22.50 27.00                            | 328           | 3.050641  | 8.632268  | 8.766617      | 25.12                    |
| 7     | 27.00 31.50                            | 852           | 3.401692  | 11.309110 | 11.352330     | 29.50                    |
| 8     | 31.50 36.00                            | 932           | 3.083583  | 8.703078  | 8.611743      | 33.55                    |
| 9     | 36.00 40.50                            | 624           | 2.484599  | 5.653222  | 5.655720      | 38.49                    |
| 10    | 40.50 45.00                            | 679           | 2.250854  | 5.131185  | 5.117967      | 42.69                    |
| 11    | 45.00 49.50                            | 775           | 2.373989  | 5.347963  | 5.345285      | 47.26                    |
| 12    | 49.50 54.00                            | 818           | 2.539475  | 6.024624  | 6.029989      | 51.87                    |
| 13    | 54.00 58.50                            | 1856          | 2.578911  | 5.867644  | 5.863728      | 56.91                    |
| 14    | 58.50 63.00                            | 4978          | 2.874496  | 7.885381  | 7.888516      | 60.71                    |
| 15    | 63.00 67.50                            | 2625          | 2.693595  | 6.629502  | 6.610692      | 65.00                    |
| 16    | 67.50 72.00                            | 1517          | 2.479111  | 5.235057  | 5.243279      | 69.71                    |
| 17    | 72.00 76.50                            | 977           | 2.955732  | 7.528258  | 7.552234      | 74.12                    |
| 18    | 76.50 81.00                            | 629           | 2.936580  | 8.082568  | 8.043331      | 78.65                    |
| 19    | 81.00 85.50                            | 641           | 2.751670  | 6.521248  | 6.518273      | 83.16                    |
| 20    | 85.50 90.00                            | 770           | 2.369026  | 6.081688  | 6.111702      | 87.92                    |

TWO DIMENSIONAL VARIOGRAM

EXTRACTION DATA USED : GEOLOGY 1,2 >0' 2N



THE SYMBOL "#" INDICATES LESS THAN 30 SAMPLES IN THAT CLASS

TWO DIMENSIONAL VARIOGRAM

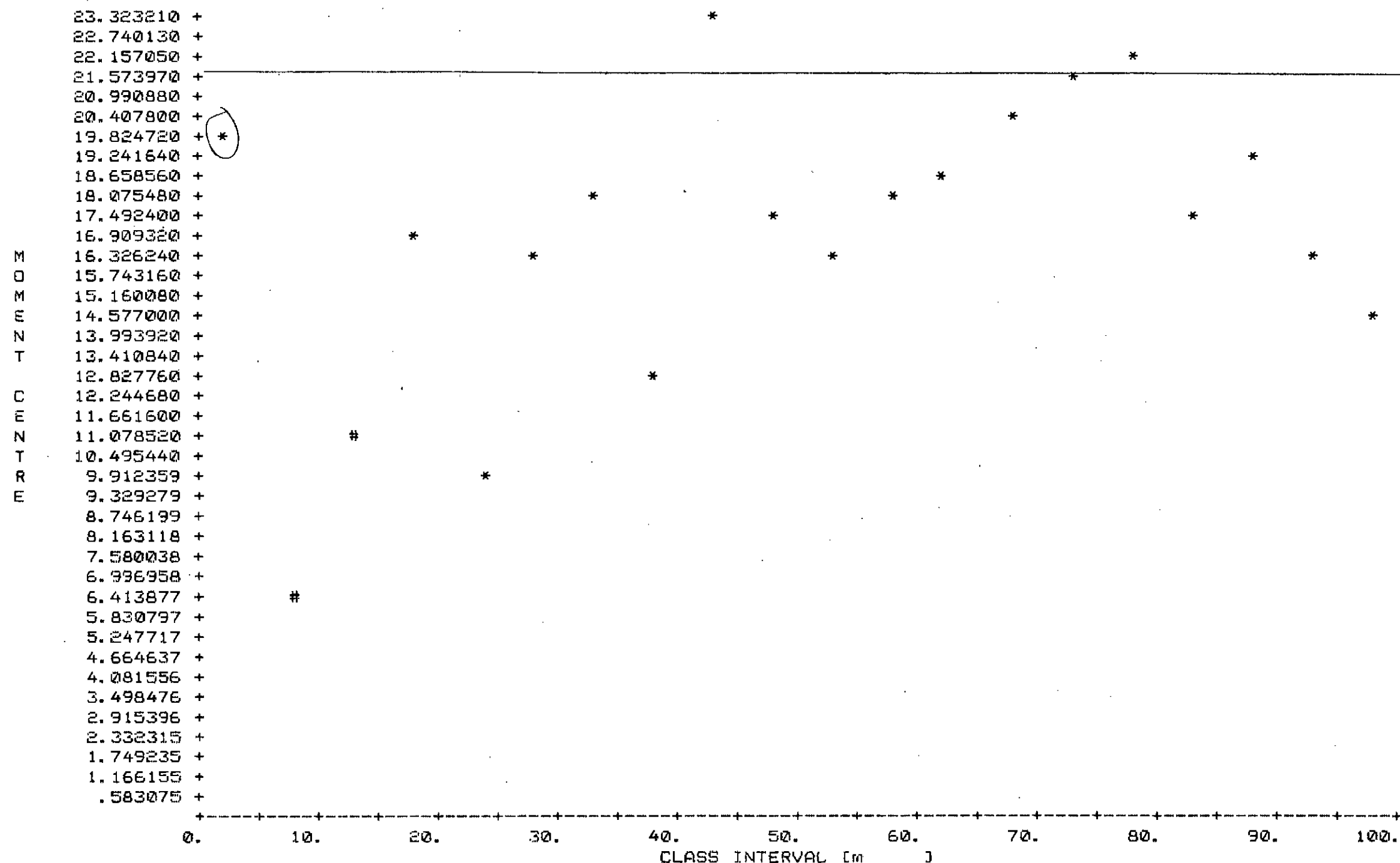
EXTRACTION DATA USED : *GEOLOGY 5/6 ZN > .01*

DIRECTION : 90.00 [DEGREES]  
 ANGLE OF SPREAD : 15.00 [DEGREES]  
 CLASS INTERVAL : 5.00 [m ]  
 MAXIMUM DISTANCE : 100.00 [m ]  
 OFFSET : .00 [m ]  
 TOP ELEVATION : 1336.00 [m ]  
 BOTTOM ELEVATION : 1000.00 [m ]  
 TRANSFORMATION OF DATA : NONE  
 NORMALIZATION OF DATA : NONE  
 MEAN : 7.122381  
 VARIANCE : 21.785460  
 STANDARD DEVIATION : 4.667490  
 NUMBER OF SAMPLES : 650

| CLASS | CLASS INTERVAL       | NO OF SAMPLES | DRIFT     | GAMMA [H] | MOMENT CENTRE | AVERAGE DISTANCE |
|-------|----------------------|---------------|-----------|-----------|---------------|------------------|
|       | FROM TO<br>[m ] [m ] |               |           |           |               | [m ]             |
| 1     | .00 5.00             | 31            | -1.937097 | 20.810670 | 19.434330     | 1.35             |
| 2     | 5.00 10.00           | 19            | 1.936842  | 6.724600  | 6.287096      | 7.59             |
| 3     | 10.00 15.00          | 24            | 4.044166  | 10.342620 | 10.597700     | 12.09            |
| 4     | 15.00 20.00          | 61            | 4.764917  | 16.658580 | 16.722610     | 17.48            |
| 5     | 20.00 25.00          | 96            | 3.591563  | 9.855686  | 9.840706      | 23.61            |
| 6     | 25.00 30.00          | 252           | 4.368254  | 16.009800 | 16.166690     | 27.98            |
| 7     | 30.00 35.00          | 542           | 4.852805  | 18.005500 | 17.977650     | 32.23            |
| 8     | 35.00 40.00          | 143           | 3.795106  | 12.601710 | 12.719190     | 37.21            |
| 9     | 40.00 45.00          | 64            | 5.364532  | 23.299490 | 23.323210     | 42.62            |
| 10    | 45.00 50.00          | 246           | 4.701503  | 17.201270 | 17.301350     | 47.68            |
| 11    | 50.00 55.00          | 414           | 4.657294  | 16.263950 | 16.316320     | 52.92            |
| 12    | 55.00 60.00          | 713           | 4.635833  | 17.495300 | 17.524730     | 57.84            |
| 13    | 60.00 65.00          | 1057          | 4.934948  | 18.549530 | 18.528220     | 61.97            |
| 14    | 65.00 70.00          | 375           | 4.874641  | 19.933060 | 19.898260     | 67.19            |
| 15    | 70.00 75.00          | 346           | 5.097398  | 20.944080 | 21.043030     | 72.40            |
| 16    | 75.00 80.00          | 394           | 5.312970  | 21.632810 | 21.658220     | 77.46            |
| 17    | 80.00 85.00          | 375           | 5.017868  | 17.354380 | 17.326170     | 82.66            |
| 18    | 85.00 90.00          | 337           | 5.037864  | 18.780400 | 18.842930     | 87.57            |
| 19    | 90.00 95.00          | 916           | 4.510929  | 15.817800 | 15.802270     | 92.53            |
| 20    | 95.00 100.00         | 472           | 4.159492  | 14.494220 | 14.531500     | 97.03            |

TWO DIMENSIONAL VARIOGRAM

EXTRACTION DATA USED :



THE SYMBOL "#" INDICATES LESS THAN 30 SAMPLES IN THAT CLASS

TWO DIMENSIONAL VARIOGRAM

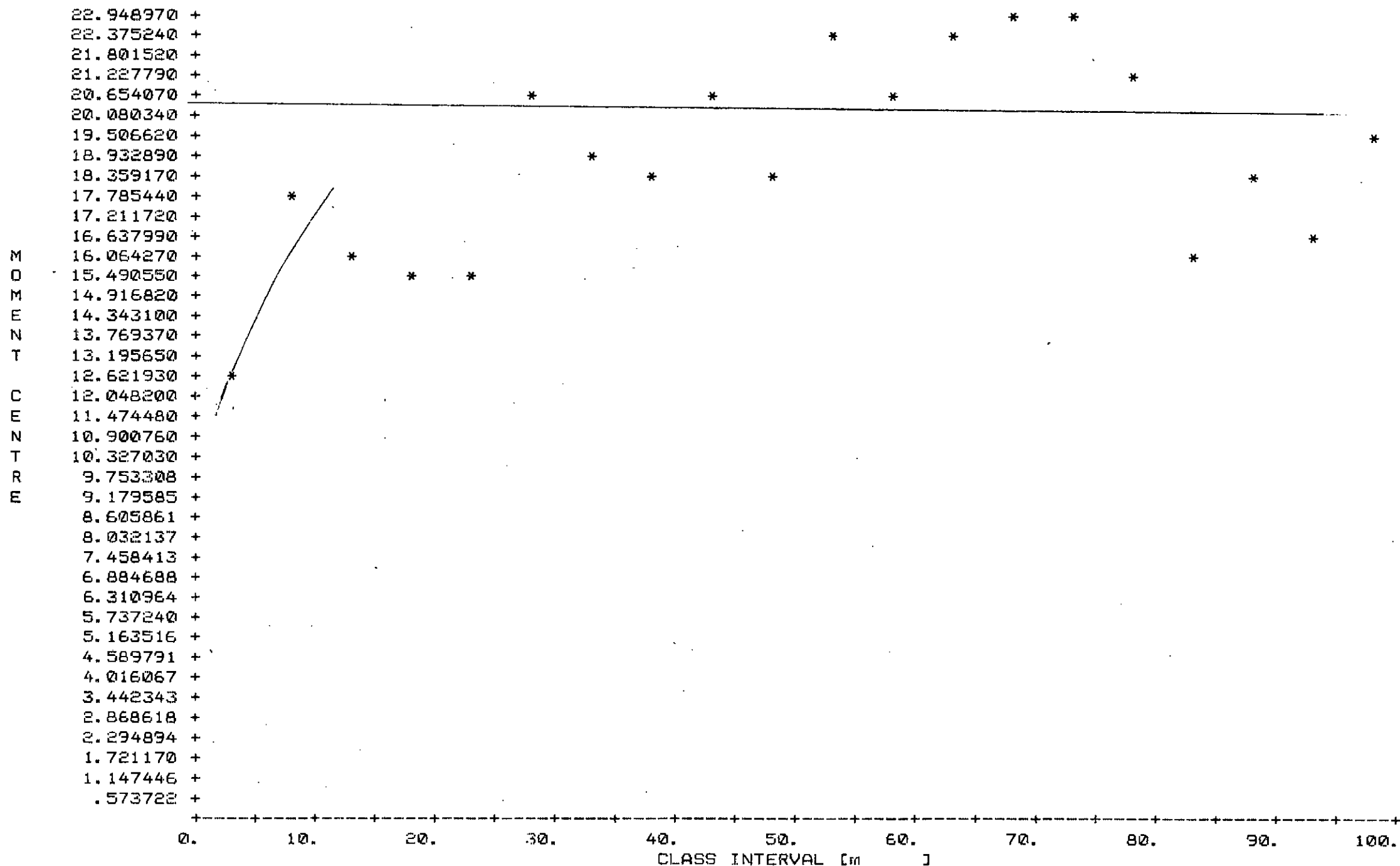
EXTRACTION DATA USED : *GEOLOGY 5/6 2N 2.01*

DIRECTION : .00 [DEGREES]  
 ANGLE OF SPREAD : 15.00 [DEGREES]  
 CLASS INTERVAL : 5.00 [m ]  
 MAXIMUM DISTANCE : 100.00 [m ]  
 OFFSET : .00 [m ]  
 TOP ELEVATION : 1336.00 [m ]  
 BOTTOM ELEVATION : 1000.00 [m ]  
 TRANSFORMATION OF DATA : NONE  
 NORMALIZATION OF DATA : NONE  
 MEAN : 7.111305  
 VARIANCE : 20.571130  
 STANDARD DEVIATION : 4.535541  
 NUMBER OF SAMPLES : 650

| CLASS | CLASS INTERVAL<br>FROM TO<br>[m ] [m ] | NO OF SAMPLES | DRIFT     | GAMMA [H] | MOMENT CENTRE | AVERAGE DISTANCE<br>[m ] |
|-------|----------------------------------------|---------------|-----------|-----------|---------------|--------------------------|
| 1     | .00 5.00                               | 403           | -1.349106 | 12.160880 | 12.263770     | 2.58                     |
| 2     | 5.00 10.00                             | 408           | -.058995  | 17.992440 | 17.593130     | 7.41                     |
| 3     | 10.00 15.00                            | 315           | .980508   | 15.980370 | 16.023650     | 12.48                    |
| 4     | 15.00 20.00                            | 321           | .263022   | 15.316580 | 15.326230     | 17.25                    |
| 5     | 20.00 25.00                            | 359           | -.120362  | 15.192220 | 15.051630     | 22.48                    |
| 6     | 25.00 30.00                            | 406           | -1.489879 | 20.113410 | 20.286190     | 27.85                    |
| 7     | 30.00 35.00                            | 339           | -.317404  | 18.336190 | 18.450990     | 32.44                    |
| 8     | 35.00 40.00                            | 379           | -.486992  | 18.425060 | 18.352210     | 37.60                    |
| 9     | 40.00 45.00                            | 429           | -1.993893 | 20.195080 | 20.164730     | 42.55                    |
| 10    | 45.00 50.00                            | 410           | -1.358099 | 18.066890 | 18.045640     | 47.47                    |
| 11    | 50.00 55.00                            | 407           | -1.161819 | 22.059250 | 22.056720     | 52.67                    |
| 12    | 55.00 60.00                            | 449           | -1.098329 | 20.460740 | 20.445150     | 57.61                    |
| 13    | 60.00 65.00                            | 396           | -.496490  | 22.041530 | 21.958410     | 62.44                    |
| 14    | 65.00 70.00                            | 395           | -1.861445 | 22.921460 | 22.948970     | 67.58                    |
| 15    | 70.00 75.00                            | 341           | -2.276041 | 22.779200 | 22.836680     | 72.54                    |
| 16    | 75.00 80.00                            | 315           | -1.177524 | 21.044360 | 21.072950     | 77.38                    |
| 17    | 80.00 85.00                            | 365           | -1.274439 | 15.933330 | 15.885260     | 82.56                    |
| 18    | 85.00 90.00                            | 457           | -1.686083 | 18.251900 | 18.210440     | 87.66                    |
| 19    | 90.00 95.00                            | 347           | -1.650606 | 16.595160 | 16.590360     | 92.53                    |
| 20    | 95.00 100.00                           | 389           | -2.130384 | 19.076380 | 19.061850     | 97.46                    |

TWO DIMENSIONAL VARIOGRAM

EXTRACTION DATA USED :



THE SYMBOL "\*" INDICATES LESS THAN 30 SAMPLES IN THAT CLASS

TWO DIMENSIONAL VARIOGRAM

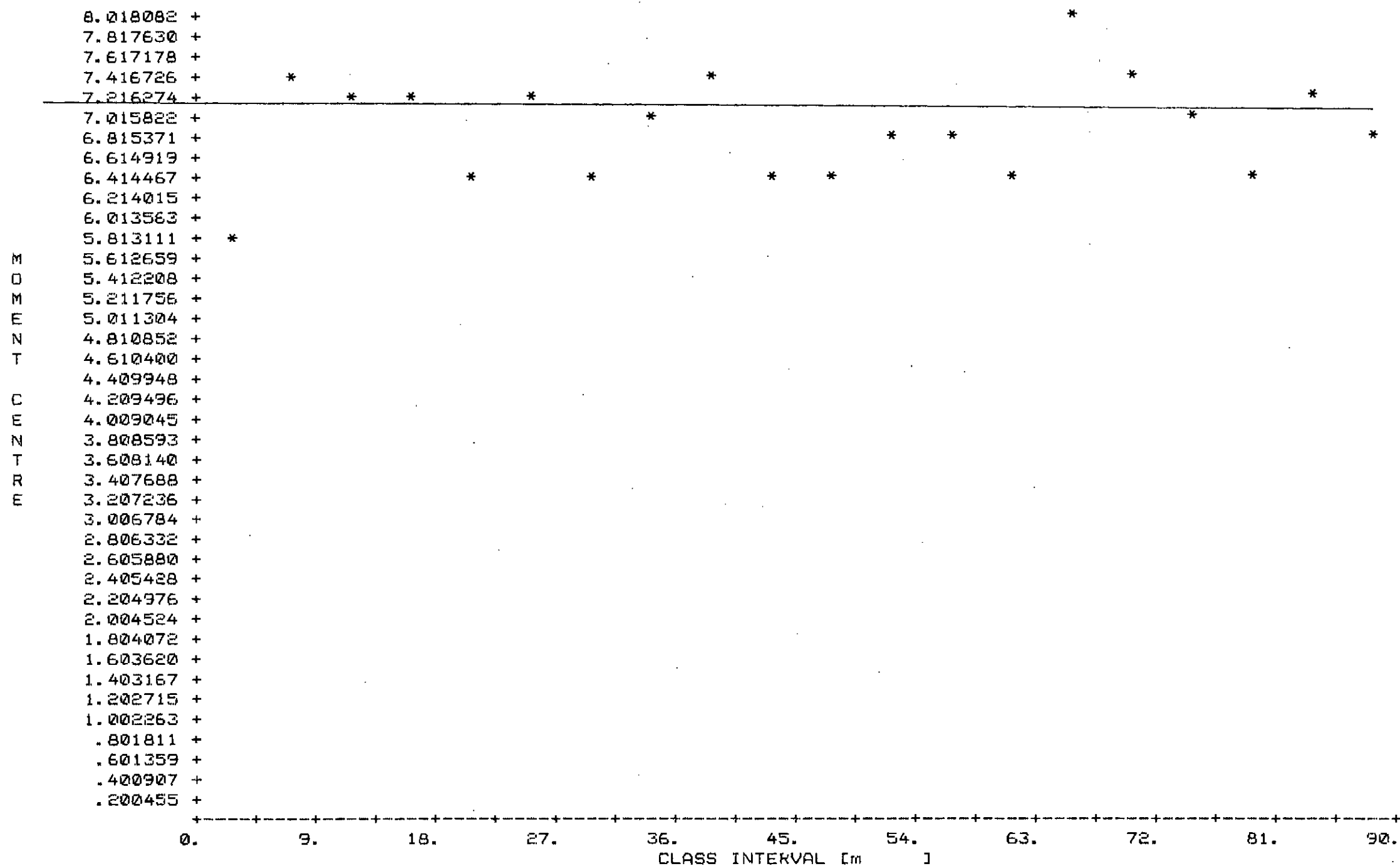
EXTRACTION DATA USED :

DIRECTION : .00 [DEGREES]  
 ANGLE OF SPREAD : 15.00 [DEGREES]  
 CLASS INTERVAL : 4.50 [m ]  
 MAXIMUM DISTANCE : 90.00 [m ]  
 OFFSET : .00 [m ]  
 TOP ELEVATION : 1336.00 [m ]  
 BOTTOM ELEVATION : 1000.00 [m ]  
 TRANSFORMATION OF DATA : NONE  
 NORMALIZATION OF DATA : NONE  
 MEAN : 4.296904  
 VARIANCE : 7.150269  
 STANDARD DEVIATION : 2.673999  
 NUMBER OF SAMPLES : 1301

| CLASS | CLASS INTERVAL<br>FROM TO<br>[m ] [m ] | NO OF SAMPLES | DRIFT     | GAMMA [H] | MOMENT CENTRE | AVERAGE DISTANCE<br>[m ] |
|-------|----------------------------------------|---------------|-----------|-----------|---------------|--------------------------|
| 1     | .00 4.50                               | 729           | -.360535  | 6.084325  | 5.804179      | 2.42                     |
| 2     | 4.50 9.00                              | 936           | -.254904  | 7.213868  | 7.237378      | 6.48                     |
| 3     | 9.00 13.50                             | 919           | -.006572  | 6.869651  | 7.048582      | 11.19                    |
| 4     | 13.50 18.00                            | 941           | .234293   | 7.165401  | 7.173653      | 15.78                    |
| 5     | 18.00 22.50                            | 947           | .185069   | 6.302551  | 6.332652      | 20.36                    |
| 6     | 22.50 27.00                            | 1151          | -.402936  | 7.120001  | 7.140801      | 24.87                    |
| 7     | 27.00 31.50                            | 1652          | -.734328  | 6.252818  | 6.240157      | 29.37                    |
| 8     | 31.50 36.00                            | 1674          | -.914564  | 6.877843  | 6.877081      | 33.73                    |
| 9     | 36.00 40.50                            | 1438          | -.620528  | 7.238616  | 7.268468      | 38.18                    |
| 10    | 40.50 45.00                            | 1117          | -.211343  | 6.375490  | 6.370045      | 42.76                    |
| 11    | 45.00 49.50                            | 1427          | -.307975  | 6.280555  | 6.251115      | 47.48                    |
| 12    | 49.50 54.00                            | 1503          | -.332268  | 6.605963  | 6.616332      | 51.69                    |
| 13    | 54.00 58.50                            | 1721          | -.686026  | 6.687902  | 6.680594      | 56.52                    |
| 14    | 58.50 63.00                            | 1904          | -1.191393 | 6.256451  | 6.268412      | 60.64                    |
| 15    | 63.00 67.50                            | 1394          | -.758688  | 8.017623  | 8.018082      | 65.10                    |
| 16    | 67.50 72.00                            | 1201          | -.863938  | 7.211477  | 7.219972      | 69.52                    |
| 17    | 72.00 76.50                            | 1014          | -.150069  | 6.996066  | 7.001281      | 74.26                    |
| 18    | 76.50 81.00                            | 1462          | -.373536  | 6.248952  | 6.239367      | 79.04                    |
| 19    | 81.00 85.50                            | 1627          | -.121253  | 7.171700  | 7.156196      | 83.17                    |
| 20    | 85.50 90.00                            | 2143          | -.488759  | 6.737073  | 6.728962      | 87.70                    |

TWO DIMENSIONAL VARIOGRAM

EXTRACTION DATA USED : GEOLOGY 1,2 2N>.01



THE SYMBOL "#" INDICATES LESS THAN 30 SAMPLES IN THAT CLASS

SG interpolation test  
Benches 21:43  
75m @ 1.41  
180° & -11°

PC-MINE VERSION 1.10 CURRAGH RESOURCES 21/ 6/1986 SERIAL NO: 20320 BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System Module : 3.03  
GRUM DEPOSIT (MODEL DATA) Page : 1

INVERSE DISTANCE MODELLING

DESCRIPTION : SG INTERPOLATION

OVERWRITING AN EXISTING MODEL

DENSITY MODEL

FROM COLUMN [ 1 ] TO COLUMN [ 80 ] FROM ROW [ 1 ] TO ROW [110]

ROCK-TYPES USED FOR MODELLING :

ROCK-TYPE MODELLED: RESTRICTING ROCK-TYPE:

|   |   |
|---|---|
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |
| 8 | 8 |
| 9 | 9 |

MAXIMUM RANGE FOR INCLUSION OF SAMPLES : 75.00 [m ]  
MINIMUM NUMBER OF SAMPLES TO BE USED TO INTERPOLATE ONE BLOCK : 2  
MAXIMUM NUMBER OF SAMPLES TO BE USED TO INTERPOLATE ONE BLOCK : 8

WEIGHTING BY INVERSE DISTANCE SQUARED

HORIZONTAL ANGLE OF ANISOTROPY : 180.00 [DEGREES]  
VERTICAL ANGLE OF ANISOTROPY : -11.00 [DEGREES]  
HORIZONTAL ANISOTROPY FACTOR : 1.41  
VERTICAL ANISOTROPY FACTOR : 1.41

PC-MINE VERSION 1.10      CURRAGH RESOURCES      21/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System      Module : 3.04  
GRUM DEPOSIT (MODEL DATA)      Page : 3

## DENSITY MODEL

DESCRIPTION : SG INTERPOLATION

CREATED ON : 21/ 6/1986

BENCH : 21 CREST ELEVATION : 1233.50 m TOE ELEVATION : 1219.00 m COLUMN [ 11 TO COLUMN [ 25] ROW [ 1] TO ROW [ 43]

[illegible]

PC-MINE VERSION 1.10      CURRAGH RESOURCES      21/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System      Module : 3.04  
GRUM DEPOSIT (MODEL DATA)      Page : 4

## DESCRIPTION : SG INTERPOLATION

CREATED ON : 21/ 6/1986

BENCH : 21 CREST ELEVATION : 1223.50 m TOE ELEVATION : 1219.00 m COLUMN [ 26] TO COLUMN [ 50] ROW [ 1] TO ROW [ 43]

[illegible]

PC-MINE VERSION 1.10      CURRAGH RESOURCES      21/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System      Module : 3.04  
GRUM DEPOSIT (MODEL DATA)      Page : 5

## DESCRIPTION : SG INTERPOLATION

CREATED ON : 21/ 6/1986

BENCH : 21 CREST ELEVATION : 1223.50 m TOE ELEVATION : 1219.00 m COLUMN [ 51] TO COLUMN [ 75] ROW [ 1] TO ROW [ 43]

[illegible]

|    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 31 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 32 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 33 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 34 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 35 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 36 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 37 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 38 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 39 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 40 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 41 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 42 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 43 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |

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PC-MINE VERSION 1.10      CURRAGH RESOURCES      21/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System      Module : 3.04  
GRUM DEPOSIT (MODEL DATA)      Page : 6

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DENSITY MODEL

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DESCRIPTION : SG INTERPOLATION

CREATED ON : 21/ 6/1986

BENCH : 21 CREST ELEVATION : 1223.50 m      TOE ELEVATION : 1219.00 m      COLUMN [ 76] TO COLUMN [ 80]      ROW [ 1] TO ROW [ 43]

|    | 76   | 77   | 78   | 79   | 80   |
|----|------|------|------|------|------|
| 1  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 2  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 3  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 4  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 5  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 6  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 7  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 8  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 9  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 10 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 11 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 12 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 13 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 14 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 15 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 16 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 17 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 18 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 19 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 20 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 21 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 22 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 23 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 24 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 25 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 26 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 27 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 28 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 29 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 30 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |

PC-MINE VERSION 1.10      CURRAGH RESOURCES      21/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
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GRUM DEPOSIT (MODEL DATA)      Page : 7

## DESCRIPTION : SG INTERPOLATION

CREATED ON : 21/ 6/1986

BENCH : 21 CREST ELEVATION : 1223.50 m TOE ELEVATION : 1219.00 m COLUMN C 13 TO COLUMN C 253 ROW C 443 TO ROW C 863

[illegible]

```
PC-MINE VERSION 1.10          CURRAGH RESOURCES          21/ 6/1986          SERIAL NO: 20320          BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC
Orebody Modelling and Pit Evaluation System
GRUM DEPOSIT (MODEL DATA)
Module : 3.04
Page : 8
```

CREATED ON : 21/ 6/1986

|    | 26   | 27   | 28   | 29   | 30   | 31   | 32   | 33   | 34   | 35   | 36   | 37   | 38   | 39   | 40   | 41   | 42   | 43   | 44   | 45   | 46   | 47   | 48   | 49   | 50   |      |
|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 44 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 3.13 | 3.35 | 3.35 | 3.30 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |      |
| 45 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 3.12 | 2.70 | 2.70 | 2.70 | 3.49 | 3.47 | 3.50 | 3.53 | 2.70 | 2.70 | 2.70 | 2.70 |      |
| 46 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 3.11 | 2.70 | 2.70 | 2.70 | 3.56 | 3.56 | 3.29 | 3.72 | 2.70 | 2.70 | 2.70 | 2.70 |      |
| 47 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 3.00 | 3.18 | 3.32 | 2.70 | 3.58 | 3.65 | 3.61 | 3.73 | 2.70 | 2.70 | 2.70 | 2.70 |      |
| 48 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 3.22 | 3.32 | 2.70 | 3.58 | 3.64 | 3.59 | 3.73 | 2.70 | 2.70 | 2.70 | 2.70 |      |
| 49 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |      |
| 50 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |      |
| 51 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |      |
| 52 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 3.24 | 3.11 | 3.10 | 2.70 |
| 53 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 3.26 | 3.09 | 3.08 | 3.08 |
| 54 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 3.26 | 3.09 | 3.09 | 3.07 |
| 55 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 3.26 | 3.08 | 3.09 | 3.07 |
| 56 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 3.27 | 3.07 | 3.07 | 3.07 |
| 57 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 3.24 | 3.06 | 3.07 | 3.07 |
| 58 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 3.27 | 3.29 | 3.29 | 3.28 |
| 59 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 60 | 2.70 | 2.70 | 2.   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |

PC-MINE VERSION 1.10      CURRAGH RESOURCES      21/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System      Module : 3.04  
GRUM DEPOSIT (MODEL DATA)      Page : 9

DESCRIPTION : SG INTERPOLATION

CREATED ON : 21/ 6/1986

BENCH : 21 CREST ELEVATION : 1223.50 m TDE ELEVATION : 1219.00 m COLUMN [ 51] TO COLUMN [ 75] ROW [ 44] TO ROW [ 86]

[illegible]

|    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 74 | 2.70 | 2.70 | 2.70 | 4.09 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 75 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 4.04 | 2.70 | 2.70 | 2.70 | 3.63 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 76 | 2.70 | 2.70 | 2.70 | 2.70 | 3.98 | 2.70 | 2.70 | 4.03 | 3.66 | 3.66 | 3.66 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 77 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 78 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 79 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 80 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 81 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 82 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 83 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 84 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 85 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 86 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |

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PC-MINE VERSION 1.10      CURRAGH RESOURCES      21/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
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GRUM DEPOSIT (MODEL DATA)      Page : 10

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# DENSITY MODEL

DESCRIPTION : SG INTERPOLATION

CREATED ON : 21/ 6/1986

BENCH : 21 CREST ELEVATION : 1223.50 m      TOE ELEVATION : 1219.00 m      COLUMN [ 76 ] TO COLUMN [ 80 ]      ROW [ 44 ] TO ROW [ 86 ]

|    | 76   | 77   | 78   | 79   | 80   |
|----|------|------|------|------|------|
| 44 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 45 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 46 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 47 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 48 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 49 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 50 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 51 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 52 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 53 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 54 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 55 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 56 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 57 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 58 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 59 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 60 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 61 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 62 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 63 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 64 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 65 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 66 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 67 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 68 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 69 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 71 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 72 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 73 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |

PC-MINE VERSION 1.10      CURRAGH RESOURCES      21/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System      Module : 3.04  
GRUM DEPOSIT (MODEL DATA)      Page : 11

## DESCRIPTION : SG INTERPOLATION

CREATED ON : 21/ 6/1986

BENCH : 21 CREST ELEVATION : 1223.50 m TOE ELEVATION : 1219.00 m COLUMN [ 1 ] TO COLUMN [ 25] ROW [ 87] TO ROW [110]

[illegible]

PC-MINE VERSION 1.10      CURRAGH RESOURCES      21/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System      Module : 3.04  
GRUM DEPOSIT (MODEL DATA)      Page : 12

### DENSITY MODEL

DESCRIPTION : SG INTERPOLATION

CREATED ON : 21/ 6/1986

BENCH : 21 CREST ELEVATION : 1223.50 m TOE ELEVATION : 1219.00 m COLUMN [ 26] TO COLUMN [ 50] ROW [ 87] TO ROW [1103]

[illegible]

PC-MINE VERSION 1.10      CURRAGH RESOURCES      21/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System      Module : 3.04  
GRUM DEPOSIT (MODEL DATA)      Page : 13

## DENSITY MODEL

DESCRIPTION : SG INTERPOLATION

CREATED ON : 21/ 6/1986

BENCH : 21 CREST ELEVATION : 1223.50 m TOE ELEVATION : 1219.00 m COLUMN [ 51] TO COLUMN [ 75] ROW [ 87] TO ROW [110]

[illegible]

PC-MINE VERSION 1.10 CURRAGH RESOURCES 21/ 6/1986 SERIAL NO: 20320 BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System Module : 3.04  
GRUM DEPOSIT (MODEL DATA) Page : 14

DENSITY MODEL

DESCRIPTION : SG INTERPOLATION

CREATED ON : 21/ 6/1986

BENCH : 21 CREST ELEVATION : 1223.50 m TOE ELEVATION : 1219.00 m COLUMN [ 76] TO COLUMN [ 80] ROW [ 87] TO ROW [110]

|     | 76   | 77   | 78   | 79   | 80   |
|-----|------|------|------|------|------|
| 87  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 88  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 89  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 90  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 91  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 92  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 93  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 94  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 95  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 96  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 97  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 98  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 99  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 100 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 101 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 102 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 103 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 104 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 105 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 106 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 107 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 108 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 109 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 110 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |

PC-MINE VERSION 1.10      CURRAGH RESOURCES      21/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System      Module : 3.04  
GRUM DEPOSIT (MODEL DATA)      Page : 15

## DENSITY MODEL

DESCRIPTION : SG INTERPOLATION

CREATED ON : 21/ 6/1986.

BENCH : 43 CREST ELEVATION : 1124.50 m TOE ELEVATION : 1120.00 m COLUMN [ 13 TO COLUMN [ 25] ROW [ 13 TO ROW [ 43]

[illegible]

PC-MINE VERSION 1.10      CURRAGH RESOURCES      21/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System      Module : 3.04  
GRUM DEPOSIT (MODEL DATA)      Page : 16

## DESCRIPTION : SG INTERPOLATION

CREATED ON : 21/ 6/1986

BENCH : 43 CREST ELEVATION : 1124.50 m TOE ELEVATION : 1120.00 m COLUMN [ 26] TO COLUMN [ 50] ROW [ 1] TO ROW [ 43]

[illegible]

PC-MINE VERSION 1.10      CURRAGH RESOURCES      21/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System      Module : 3.04  
GRUM DEPOSIT (MODEL DATA)      Page : 17

## DESCRIPTION : SG INTERPOLATION

CREATED ON : 21/ 6/1986

BENCH : 43 CREST ELEVATION : 1124.50 m TOE ELEVATION : 1120.00 m COLUMN [ 51] TO COLUMN [ 75] ROW [ 1] TO ROW [ 43]

[illegible]

|    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 31 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 32 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 33 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 34 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 35 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 36 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 37 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 38 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 39 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 40 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 41 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 42 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 43 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |

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PC-MINE VERSION 1.10      CURRAGH RESOURCES      21/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System      Module : 3.04  
GRUM DEPOSIT (MODEL DATA)      Page : 18

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DENSITY MODEL

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DESCRIPTION : SG INTERPOLATION

CREATED ON : 21/ 6/1986

BENCH : 43 CREST ELEVATION : 1124.50 m      TOE ELEVATION : 1120.00 m      COLUMN [ 76] TO COLUMN [ 80]      ROW [ 1] TO ROW [ 43]

|    | 76   | 77   | 78   | 79   | 80   |
|----|------|------|------|------|------|
| 1  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 2  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 3  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 4  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 5  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 6  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 7  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 8  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 9  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 10 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 11 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 12 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 13 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 14 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 15 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 16 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 17 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 18 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 19 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 20 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 21 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 22 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 23 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 24 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 25 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 26 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 27 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 28 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 29 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 30 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |

PC-MINE VERSION 1.10      CURRAGH RESOURCES      21/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System      Module : 3.04  
GRUM DEPOSIT (MODEL DATA)      Page : 19

## DESCRIPTION : SG INTERPOLATION

CREATED ON : 21/ 6/1986

BENCH : 43 CREST ELEVATION : 1124.50 m TOE ELEVATION : 1120.00 m COLUMN [ 1 ] TO COLUMN [ 25] ROW [ 44] TO ROW [ 86]

[illegible]

PC-MINE VERSION 1.10      CURRAGH RESOURCES      21/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System      Module : 3.04  
GRUM DEPOSIT (MODEL DATA)      Page : 20

## DESCRIPTION : SG INTERPOLATION

CREATED ON : 21/ 6/1986

BENCH : 43 CREST ELEVATION : 1124.50 m TOE ELEVATION : 1120.00 m COLUMN [ 26 ] TO COLUMN [ 50 ] ROW [ 44 ] TO ROW [ 86 ]

|    | 26   | 27   | 28   | 29   | 30   | 31   | 32   | 33   | 34   | 35   | 36   | 37   | 38   | 39   | 40   | 41   | 42   | 43   | 44   | 45   | 46   | 47   | 48   | 49   | 50   |      |
|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 44 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 4.22 |      |
| 45 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |      |
| 46 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |      |
| 47 | 2.70 | 3.18 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 3.34 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |      |
| 48 | 2.70 | 3.13 | 3.15 | 3.13 | 3.10 | 3.31 | 3.36 | 3.36 | 3.36 | 2.70 | 3.44 | 3.40 | 2.70 | 3.42 | 3.28 | 3.36 | 3.31 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |      |
| 49 | 3.35 | 3.12 | 3.11 | 3.10 | 3.07 | 3.21 | 3.24 | 3.31 | 3.29 | 3.39 | 3.48 | 3.43 | 3.19 | 2.70 | 3.32 | 3.35 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |      |
| 50 | 3.35 | 3.11 | 3.08 | 3.06 | 3.05 | 3.07 | 3.06 | 3.16 | 3.24 | 3.37 | 3.40 | 3.37 | 3.44 | 2.70 | 3.29 | 3.33 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |      |
| 51 | 3.08 | 3.12 | 3.09 | 3.05 | 3.04 | 3.03 | 3.04 | 3.02 | 3.16 | 3.34 | 3.18 | 3.16 | 3.16 | 3.25 | 3.30 | 3.30 | 3.46 | 3.45 | 3.54 | 3.73 | 3.37 | 2.70 | 2.70 | 2.70 | 2.70 |      |
| 52 | 2.70 | 3.11 | 3.06 | 3.06 | 3.05 | 3.01 | 2.91 | 2.91 | 2.92 | 3.23 | 3.25 | 3.25 | 3.20 | 3.59 | 3.19 | 3.18 | 3.39 | 2.70 | 2.70 | 2.70 | 3.37 | 3.52 | 3.57 | 3.56 | 3.59 |      |
| 53 | 2.70 | 2.70 | 3.06 | 3.06 | 3.06 | 2.70 | 2.91 | 2.92 | 2.92 | 3.15 | 3.09 | 3.10 | 3.15 | 3.11 | 3.08 | 3.13 | 3.10 | 2.70 | 3.47 | 3.48 | 3.41 | 3.55 | 3.61 | 3.59 | 2.70 |      |
| 54 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 3.09 | 3.00 | 3.03 | 3.07 | 2.94 | 2.95 | 2.94 | 2.97 | 3.32 | 3.52 | 3.56 | 3.39 | 3.79 | 3.60 | 3.61 | 2.70 |      |
| 55 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 3.09 | 3.02 | 3.04 | 3.04 | 2.94 | 2.92 | 2.91 | 3.03 | 3.28 | 3.31 | 3.30 | 3.31 | 4.11 | 2.70 | 2.70 | 2.70 |      |
| 56 | 3.06 | 3.21 | 2.70 | 2.70 | 2.70 | 3.04 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 3.09 | 3.06 | 2.93 | 2.96 | 3.07 | 3.22 | 3.18 | 3.16 | 3.23 | 3.45 | 2.70 | 2.70 | 2.70 |      |
| 57 | 3.04 | 3.21 | 3.25 | 3.29 | 2.70 | 3.04 | 3.09 | 3.10 | 2.70 | 2.70 | 2.70 | 2.70 | 3.10 | 3.05 | 2.94 | 2.99 | 3.13 | 3.19 | 3.17 | 3.16 | 2.70 | 3.41 | 2.70 | 2.70 | 4.04 |      |
| 58 | 3.05 | 3.17 | 3.23 | 3.26 | 3.06 | 3.09 | 3.11 | 3.11 | 3.13 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 4.09 |      |
| 59 | 3.05 | 3.13 | 3.18 | 3.17 | 3.11 | 2.98 | 3.16 | 3.25 | 3.19 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |      |
| 60 | 3.04 | 3.30 | 3.30 | 3.30 | 3.30 | 2.94 | 3.10 | 3.09 | 3.03 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |      |
| 61 | 2.70 | 3.31 | 3.30 | 3.30 | 3.29 | 3.13 | 3.10 | 3.11 | 3.14 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 3.72 | 3.72 | 3.75 | 3.71 |
| 62 | 2.70 | 3.31 | 3.30 | 3.30 | 3.30 | 3.44 | 3.14 | 3.11 | 3.15 | 3.14 | 2.70 | 2.70 | 2.70 | 4.43 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 4.25 | 2.70 | 2.70 | 2.70 |      |
| 63 | 2.70 | 2.70 | 3.34 | 3.33 | 3.33 | 3.14 | 3.11 | 3.12 | 3.16 | 3.16 | 3.03 | 3.09 | 3.26 | 4.56 | 2.70 | 2.70 | 3.17 | 3.24 | 3.14 | 3.13 | 3.18 | 4.39 | 2.70 | 2.70 | 2.70 |      |
| 64 | 2.70 | 2.70 | 3.35 | 3.35 | 3.34 | 3.37 | 3.19 | 3.35 | 3.19 | 4.45 | 3.43 | 3.43 | 3.40 | 4.35 | 4.32 | 4.39 | 3.23 | 3.22 | 3.27 | 3.23 | 3.91 | 2.70 | 2.70 | 2.70 | 2.70 |      |
| 65 | 2.70 | 2.70 | 3.38 | 3.35 | 3.36 | 4.39 | 3.48 | 3.47 | 3.64 | 4.28 | 4.18 | 4.24 | 4.29 | 3.17 | 4.31 | 4.35 | 2.70 | 3.29 | 3.66 | 3.73 | 4.39 | 2.70 | 2.70 | 2.70 | 2.70 |      |
| 66 | 2.70 | 2.70 | 4.19 | 3.99 | 3.44 | 4.31 | 4.40 | 4.42 | 4.41 | 4.26 | 2.70 | 2.70 | 2.70 | 4.19 | 4.23 | 4.26 | 4.35 | 4.43 | 4.45 | 4.34 | 4.41 | 2.70 | 2.70 | 2.70 | 2.70 |      |
| 67 | 2.70 | 2.70 | 2.70 | 2.70 | 4.06 | 2.70 | 4.44 | 4.39 | 4.30 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 4.25 | 4.44 | 4.33 | 4.36 | 2.70 | 2.70 | 2.70 | 2.70 |      |
| 68 | 2.70 | 2.70 | 2.70 | 2.70 | 4.17 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 4.18 | 4.18 | 4.36 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |      |
| 69 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |      |
| 70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |      |
| 71 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |      |
| 72 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |      |
| 73 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |      |



|    |  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|----|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 74 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 75 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 76 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 77 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 78 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 79 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 80 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 81 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 82 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 83 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 84 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 85 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 86 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |

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|                                             |                   |            |                  |                                           |
|---------------------------------------------|-------------------|------------|------------------|-------------------------------------------|
| PC-MINE VERSION 1.10                        | CURRAGH RESOURCES | 21/ 6/1986 | SERIAL NO: 20320 | BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC |
| Orebody Modelling and Pit Evaluation System |                   |            |                  | Module : 3.04                             |
| GRUM DEPOSIT (MODEL DATA)                   |                   |            |                  | Page : 22                                 |

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DENSITY MODEL

-----

DESCRIPTION : SG INTERPOLATION

CREATED ON : 21/ 6/1986

BENCH : 43 CREST ELEVATION : 1124.50 m      TOE ELEVATION : 1120.00 m      COLUMN [ 76 ] TO COLUMN [ 80 ]      ROW [ 44 ] TO ROW [ 86 ]

|    |  |      |      |      |      |      |
|----|--|------|------|------|------|------|
|    |  | 76   | 77   | 78   | 79   | 80   |
| 44 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 45 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 46 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 47 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 48 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 49 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 50 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 51 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 52 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 53 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 54 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 55 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 56 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 57 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 58 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 59 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 60 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 61 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 62 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 63 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 64 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 65 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 66 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 67 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 68 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 69 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 70 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 71 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 72 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |
| 73 |  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 |

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PC-MINE VERSION 1.10          CURRAGH RESOURCES          21/ 6/1986          SERIAL NO: 20320          BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC
Orebody Modelling and Pit Evaluation System
GRUM DEPOSIT (MODEL DATA)
Module : 3.04
Page : 23

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## DESCRIPTION : SG INTERPOLATION

CREATED ON : 21/ 6/1986

BENCH : 43 CREST ELEVATION : 1124.50 m TOE ELEVATION : 1120.00 m COLUMN [ 13 TO COLUMN [ 25] ROW [ 87] TO ROW [110]

[illegible]

CREATED ON : 21/ 6/1986

[illegible][illegible]

Page : 1

[illegible]

PC-MINE VERSION 1.10      CURRAGH RESOURCES      23/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System      Module : 3.09  
GRUM DEPOSIT (MODEL DATA)      Page : 2

## DESCRIPTION : DENSITY MODEL

CREATED ON : 22/ 6/1986

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BENCH : 14 CREST ELEVATION : 1253.50 M TOE ELEVATION : 1253.00 M COLUMN [ 26] TO COLUMN [ 50] ROW [ 1] TO ROW [ 43]

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|    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|

[illegible]

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PC-MINE VERSION 1.10      CURRAGH RESOURCES      23/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System  
GRUM DEPOSIT (MODEL DATA)  
  
Module : 3.09  
Page : 3
```

DESCRIPTION : DENSITY MODEL

CREATED ON : 22/ 6/1986

BENCH : 13 CREST ELEVATION : 1259.50 m TOE ELEVATION : 1255.00 m COLUMN [ 51] TO COLUMN [ 75] ROW [ 1] TO ROW [ 43]

[illegible]

|    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 37 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 38 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 39 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 40 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 41 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 42 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 43 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |

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PC-MINE VERSION 1.10      CURRAGH RESOURCES      23/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System      Module : 3.09  
GRUM DEPOSIT (MODEL DATA)      Page : 4

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DENSITY MODEL

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DESCRIPTION : DENSITY MODEL

CREATED ON : 22/ 6/1986

BENCH : 13 CREST ELEVATION : 1259.50 m      TOE ELEVATION : 1255.00 m      COLUMN [ 76] TO COLUMN [ 80]      ROW [ 1] TO ROW [ 43]

|    | 76   | 77   | 78   | 79   | 80   |
|----|------|------|------|------|------|
| 1  | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 2  | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 3  | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 4  | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 5  | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 6  | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 7  | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 8  | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 9  | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 11 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 12 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 13 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 14 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 15 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 16 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 17 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 18 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 19 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 20 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 21 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 22 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 23 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 24 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 25 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 26 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 27 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 28 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 29 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 30 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 31 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 32 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 33 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 34 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 35 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 36 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |

[illegible]

## DESCRIPTION : DENSITY MODEL

CREATED ON : 22/ 6/1986

BENCH : 13 CREST ELEVATION : 1259.50 m TOE ELEVATION : 1255.00 m COLUMN [ 13 ] TO COLUMN [ 25] ROW [ 44] TO ROW [ 86]

[illegible]

PC-MINE VERSION 1.10      CURRAGH RESOURCES      23/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System      Module : 3.09  
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PC-MINE VERSION 1.10      CURRAGH RESOURCES      23/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System  
GRUM DEPOSIT (MODEL DATA)  
  
Module : 3.09  
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```

## DESCRIPTION : DENSITY MODEL

CREATED ON : 22/ 6/1986

BENCH : 13 CREST ELEVATION : 1259.50 m TOE ELEVATION : 1255.00 m COLUMN [ 51] TO COLUMN [ 75] ROW [ 44] TO ROW [ 86]

[illegible]

|    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 80 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 81 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 82 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 83 | 2.70 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 84 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 85 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 86 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |

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PC-MINE VERSION 1.10      CURRAGH RESOURCES      23/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System      Module : 3.09  
GRUM DEPOSIT (MODEL DATA)      Page : 8

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# DENSITY MODEL

DESCRIPTION : DENSITY MODEL

CREATED ON : 22/ 6/1986

BENCH : 13 CREST ELEVATION : 1259.50 m      TOE ELEVATION : 1255.00 m      COLUMN [ 76 ] TO COLUMN [ 80 ]      ROW [ 44 ] TO ROW [ 86 ]

76    77    78    79    80

|    |      |      |      |      |      |
|----|------|------|------|------|------|
| 44 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 45 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 46 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 47 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 48 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 49 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 50 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 51 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 52 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 53 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 54 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 55 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 56 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 57 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 58 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 59 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 60 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 61 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 62 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 63 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 64 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 65 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 66 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 67 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 68 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 69 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 71 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 72 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 73 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 74 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 75 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 76 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 77 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 78 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 79 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |

PC-MINE VERSION 1.10      CURRAGH RESOURCES      23/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System      Module : 3.09  
GRUM DEPOSIT (MODEL DATA)      Page : 9

## DESCRIPTION : DENSITY MODEL

CREATED ON : 22/ 6/1986

BENCH : 13 CREST ELEVATION : 1259.50 m TOE ELEVATION : 1255.00 m COLUMN [ 1 ] TO COLUMN [ 25 ] ROW [ 0 ] TO ROW [ 10 ]

[illegible]

PC-MINE VERSION 1.10      CURRAGH RESOURCES      23/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC  
Orebody Modelling and Pit Evaluation System      Module : 3.09  
GRUM DEPOSIT (MODEL DATA)      Page : 10

DENSITY MODEL

DESCRIPTION : DENSITY MODEL

CREATED ON : 22/ 6/1986

BENCH : 13 CREST ELEVATION : 1259.50 m      TOE ELEVATION : 1255.00 m      COLUMN [ 51] TO COLUMN [ 75]      ROW [ 87] TO ROW [110]

|     | 51   | 52   | 53   | 54   | 55   | 56   | 57   | 58   | 59   | 60   | 61   | 62   | 63   | 64   | 65   | 66   | 67   | 68   | 69   | 70   | 71   | 72   | 73   | 74   | 75   |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 87  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 88  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 89  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 90  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 91  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 92  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 93  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 94  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 95  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 96  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 97  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 98  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 99  | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 100 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 101 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 102 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 103 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 104 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 105 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 106 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 107 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 108 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 109 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 110 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.70 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |

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PC-MINE VERSION 1.10      CURRAGH RESOURCES      23/ 6/1986      SERIAL NO: 20320      BY STEFFEN ROBERTSON AND KIRSTEN (BC) INC
Orebody Modelling and Pit Evaluation System
GRUM DEPOSIT (MODEL DATA)
Module : 3.09
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DENSITY MODEL

DESCRIPTION : DENSITY MODEL

CREATED ON : 22/ 6/1986

BENCH : 13 CREST ELEVATION : 1259.50 m TOE ELEVATION : 1255.00 m COLUMN [ 76] TO COLUMN [ 80] ROW [ 87] TO ROW [110]

|     | 76   | 77   | 78   | 79   | 80   |
|-----|------|------|------|------|------|
| 87  | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 88  | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 89  | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 90  | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 91  | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 92  | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 93  | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 94  | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 95  | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 96  | 2.10 | 2.10 | 2.40 | 2.10 | 2.10 |
| 97  | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 98  | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 99  | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 100 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 101 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 102 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 103 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 104 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 105 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 106 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 107 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 108 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 109 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |
| 110 | 2.10 | 2.10 | 2.10 | 2.10 | 2.10 |