




MWH
Geo-Surveys
Ltd.

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LOGISTICS REPORT
for
MINNOVA INC.
Yahk, B.C. GRAVITY SURVEY
by
MWH GEO-SURVEYS LTD.
June 20, 1988



Kevin MacNabb

INTRODUCTION:

During the period from June 12 to June 19, 1988, MWH Geo-Surveys Ltd. carried out a gravity survey in the area of Yahk, B.C. Our crew was mobilized to the survey area by truck from Calgary. A total of 14.9 kilometres were surveyed on three lines.

Personnel involved on the project were:

| | | |
|---------------|------------------|--------------|
| Kevin MacNabb | Supervisor | June 12 - 19 |
| Ian Balston | Gravity operator | June 12 - 18 |
| Brian Schultz | Surveyor | June 12 - 19 |
| Cary Hackler | Rod Man | June 15 - 19 |
| John Stevens | Line Cutter | June 14 - 17 |

STATISTICAL SUMMARY:

| | | |
|--------------------|--------|--------------|
| Mobilization: | 1 day | June 12 |
| Weather days: | nil | |
| Demobilization: | 1 day | June 19 |
| Gravity surveying: | 6 days | June 13 - 18 |

A total of 6 man days were available for the gravity surveying. A total of 298 unique stations were surveyed at 50 metre station spacing (14.9 kilometres) on 3 lines (6 kms: Line 60N, 6 kms: Line 31N, 2.9 kms: Line 100E).

SURVEY PROCEDURES:

Instrumentation:

Lacoste & Romberg gravity meter #332 was utilized for the gravity measurements. Pertinent data is summarized below.

Meter #332

| | | |
|-------------|----------------|-----------------|
| Range: 4000 | Value: 4245.68 | Factor: 1.06252 |
| 4100 | 4351.93 | 1.06257 |

A Wild T16 with a Sokkisha Red 2 EDM was utilized for the topographical surveying.

Additional Survey Equipment:

- 1 Compaq Portable III computer
- 3 Trucks
- 4 Motorola hand-held radios
- 1 All Terrain Vehicle

Field Procedures, Gravity:

All gravity readings were taken in a loop procedure to allow for correction of instrument drift. Loops were tied to a temporary bench mark established for this survey. Tide corrections were calculated and applied for all gravity readings.

The gravity meters were tuned (sensitivity set and maintained at '9') and readings were taken to the 1/100th of a milligal. Terrain corrections were taken where topography dictated. Approximately 6% of the gravity stations were repeated on a random basis as an additional check on data quality. The average repeat difference was .02 milligals.

Field Procedures, Surveying:

Vertical positions were obtained by looped survey traverses tied to Line 60N, Station 109E (elevation set at 1000 metres). All elevation ties were less than .25 metres.

GRAVITY DATA REDUCTION:

The gravity readings were converted to milligals and corrected for: instrument height, tides, drift between base ties and adjusted to a set base value (4000.00 milligals). The result is listed as Observed Gravity. Observed Gravity was then corrected to Bouguer Gravity using the following formula:

$$G_b = G_{obs} + t_c - G_l + (.30845 * h) - [(.04186 * h) * d]$$

where:

- G_b = Bouguer Gravity
- G_{obs} = Observed Gravity
- G_l = latitude correction
- t_c = terrain correction
- h = station height
- d = density (gm/cc)

The latitude correction was calculated as 1.307 * SIN(2 * Latitude) mgal/mile North/South. Line and station positions were used to geometrically derive North - South distances.

Terrain corrections were calculated using B, C, and D circles of a Hammer chart. Visual estimations and an inclinometer were used to determine slopes for terrain corrections.

Data was plotted using 2.6 gm/cc.

SUMMARY:

There were no technical problems with either the topographical or gravity surveys in this survey. We did however encounter problems surveying on Lines 3100N and 10000E due to the fact that the lines were poorly cut and heavily overgrown. This would have severely hindered the progress of the survey crew.

We therefore employed a local line-cutter to slash out these lines. There were several chaining errors in the field consequently Line 3000N is actually Line 3100N.

Due to the nature of the local topography, the close station spacing and the inherent inaccuracies of terrain corrections, I feel the bouguer profile uncorrected for terrain is a more accurate representation of the local gravity field.

Gravity base ties and repeatability indicate a reliable data set from which exploration decisions may be based.

Gravity Survey by MWH Geo-Surveys Ltd. for Minnova
 Yahk, B.C. June 1988

| Line | Stat | Terr | G Obs | Lat Corr | Elevtn | Boug@2.6 | Boug@2.6+T |
|---------|--------|------|---------|----------|---------|----------|------------|
| 10000 E | 3100 N | 0.23 | 4015.07 | -1.12 | 1077.59 | 4231.24 | 4231.47 |
| 10000 E | 3150 N | 0.48 | 4013.03 | -1.08 | 1087.99 | 4231.23 | 4231.71 |
| 10000 E | 3200 N | 0.62 | 4010.94 | -1.04 | 1098.67 | 4231.23 | 4231.85 |
| 10000 E | 3250 N | 0.62 | 4008.99 | -1.00 | 1108.75 | 4231.25 | 4231.87 |
| 10000 E | 3300 N | 1.60 | 4006.60 | -0.96 | 1119.88 | 4231.05 | 4232.65 |
| 10000 E | 3350 N | 1.24 | 4003.66 | -0.92 | 1133.80 | 4230.84 | 4232.08 |
| 10000 E | 3400 N | 1.08 | 4002.02 | -0.88 | 1142.27 | 4230.85 | 4231.93 |
| 10000 E | 3450 N | 0.93 | 4000.26 | -0.84 | 1151.08 | 4230.81 | 4231.74 |
| 10000 E | 3500 N | 0.75 | 3999.15 | -0.80 | 1156.32 | 4230.71 | 4231.46 |
| 10000 E | 3550 N | 1.15 | 3998.75 | -0.76 | 1158.30 | 4230.66 | 4231.81 |
| 10000 E | 3600 N | 0.89 | 3999.09 | -0.72 | 1157.74 | 4230.85 | 4231.74 |
| 10000 E | 3650 N | 0.66 | 3998.36 | -0.68 | 1161.28 | 4230.79 | 4231.45 |
| 10000 E | 3700 N | 0.69 | 3999.04 | -0.64 | 1158.62 | 4230.90 | 4231.59 |
| 10000 E | 3750 N | 0.60 | 3999.10 | -0.60 | 1158.26 | 4230.84 | 4231.44 |
| 10000 E | 3800 N | 0.93 | 3999.20 | -0.56 | 1158.23 | 4230.90 | 4231.83 |
| 10000 E | 3850 N | 0.99 | 3998.45 | -0.52 | 1161.30 | 4230.72 | 4231.71 |
| 10000 E | 3900 N | 0.94 | 3997.42 | -0.48 | 1165.49 | 4230.49 | 4231.43 |
| 10000 E | 3950 N | 1.56 | 3999.25 | -0.44 | 1157.28 | 4230.64 | 4232.20 |
| 10000 E | 4000 N | 0.48 | 4000.23 | -0.40 | 1153.42 | 4230.81 | 4231.29 |
| 10000 E | 4050 N | 0.10 | 4000.06 | -0.36 | 1154.54 | 4230.82 | 4230.92 |
| 10000 E | 4100 N | 0.13 | 3998.39 | -0.32 | 1161.09 | 4230.42 | 4230.55 |
| 10000 E | 4150 N | 0.10 | 3998.53 | -0.28 | 1160.32 | 4230.37 | 4230.47 |
| 10000 E | 4150 N | 0.06 | 3998.59 | -0.28 | 1160.32 | 4230.43 | 4230.49 |
| 10000 E | 4200 N | 0.05 | 3998.89 | -0.24 | 1159.18 | 4230.46 | 4230.51 |
| 10000 E | 4200 N | 0.13 | 3998.87 | -0.24 | 1159.18 | 4230.44 | 4230.57 |
| 10000 E | 4250 N | 0.34 | 3997.25 | -0.20 | 1166.68 | 4230.27 | 4230.61 |
| 10000 E | 4300 N | 0.18 | 3994.91 | -0.16 | 1177.72 | 4230.10 | 4230.28 |
| 10000 E | 4350 N | 0.05 | 3994.04 | -0.12 | 1182.00 | 4230.04 | 4230.09 |
| 10000 E | 4400 N | 0.11 | 3993.06 | -0.08 | 1186.59 | 4229.94 | 4230.05 |
| 10000 E | 4450 N | 0.07 | 3992.18 | -0.04 | 1190.42 | 4229.78 | 4229.85 |
| 10000 E | 4500 N | 0.19 | 3991.25 | 0.00 | 1194.52 | 4229.63 | 4229.82 |
| 10000 E | 4550 N | 0.22 | 3990.00 | 0.04 | 1199.95 | 4229.42 | 4229.64 |
| 10000 E | 4600 N | 0.21 | 3987.34 | 0.08 | 1211.23 | 4228.98 | 4229.19 |
| 10000 E | 4650 N | 0.67 | 3985.91 | 0.12 | 1217.44 | 4228.74 | 4229.41 |
| 10000 E | 4700 N | 0.40 | 3985.13 | 0.16 | 1220.65 | 4228.57 | 4228.97 |
| 10000 E | 4750 N | 1.36 | 3983.45 | 0.20 | 1227.44 | 4228.20 | 4229.56 |
| 10000 E | 4800 N | 1.22 | 3982.01 | 0.24 | 1233.49 | 4227.93 | 4229.15 |
| 10000 E | 4850 N | 1.22 | 3981.85 | 0.28 | 1234.43 | 4227.92 | 4229.14 |
| 10000 E | 4900 N | 0.34 | 3980.97 | 0.32 | 1238.14 | 4227.74 | 4228.08 |
| 10000 E | 4950 N | 0.30 | 3980.41 | 0.36 | 1240.54 | 4227.61 | 4227.91 |
| 10000 E | 5000 N | 0.48 | 3980.09 | 0.40 | 1241.72 | 4227.49 | 4227.97 |
| 10000 E | 5050 N | 0.26 | 3980.14 | 0.44 | 1241.31 | 4227.42 | 4227.68 |
| 10000 E | 5100 N | 0.48 | 3979.74 | 0.48 | 1242.77 | 4227.27 | 4227.75 |
| 10000 E | 5150 N | 0.34 | 3979.78 | 0.52 | 1242.32 | 4227.18 | 4227.52 |
| 10000 E | 5200 N | 0.23 | 3979.93 | 0.56 | 1241.53 | 4227.13 | 4227.36 |
| 10000 E | 5250 N | 0.17 | 3979.79 | 0.60 | 1241.73 | 4226.99 | 4227.16 |
| 10000 E | 5300 N | 0.23 | 3979.80 | 0.64 | 1241.30 | 4226.88 | 4227.11 |
| 10000 E | 5350 N | 0.05 | 3979.57 | 0.68 | 1241.73 | 4226.69 | 4226.74 |
| 10000 E | 5400 N | 0.19 | 3980.00 | 0.72 | 1239.33 | 4226.60 | 4226.79 |
| 10000 E | 5450 N | 0.03 | 3981.16 | 0.76 | 1234.04 | 4226.67 | 4226.70 |
| 10000 E | 5500 N | 0.06 | 3982.22 | 0.80 | 1229.02 | 4226.69 | 4226.75 |
| 10000 E | 5550 N | 0.06 | 3982.97 | 0.84 | 1225.19 | 4226.63 | 4226.69 |

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|---------|--------|------|---------|------|---------|---------|---------|
| 10000 E | 5600 N | 0.11 | 3984.80 | 0.88 | 1216.95 | 4226.78 | 4226.89 |
| 10000 E | 5650 N | 0.22 | 3984.95 | 0.92 | 1215.18 | 4226.53 | 4226.75 |
| 10000 E | 5700 N | 0.16 | 3986.67 | 0.96 | 1206.53 | 4226.49 | 4226.65 |
| 10000 E | 5750 N | 0.11 | 3988.00 | 1.00 | 1200.82 | 4226.64 | 4226.75 |
| 10000 E | 5800 N | 0.15 | 3989.23 | 1.04 | 1194.45 | 4226.56 | 4226.71 |
| 10000 E | 5850 N | 0.37 | 3991.39 | 1.08 | 1184.21 | 4226.63 | 4227.00 |
| 10000 E | 5900 N | 0.28 | 3993.98 | 1.12 | 1172.24 | 4226.79 | 4227.07 |
| 10000 E | 5950 N | 0.57 | 3996.20 | 1.16 | 1161.43 | 4226.82 | 4227.39 |
| 10000 E | 5950 N | 0.51 | 3996.18 | 1.16 | 1161.43 | 4226.80 | 4227.31 |
| 10000 E | 6000 N | 0.66 | 3999.33 | 1.20 | 1146.06 | 4226.84 | 4227.50 |
| 6000 N | 7050 E | 0.74 | 4037.72 | 0.99 | 941.40 | 4224.60 | 4225.34 |
| 6000 N | 7100 E | 0.62 | 4035.72 | 1.00 | 952.00 | 4224.70 | 4225.32 |
| 6000 N | 7150 E | 0.50 | 4033.64 | 1.00 | 963.17 | 4224.85 | 4225.35 |
| 6000 N | 7200 E | 0.44 | 4031.40 | 1.00 | 974.86 | 4224.95 | 4225.39 |
| 6000 N | 7250 E | 0.51 | 4030.12 | 1.01 | 982.14 | 4225.11 | 4225.62 |
| 6000 N | 7300 E | 0.52 | 4027.84 | 1.01 | 993.38 | 4225.07 | 4225.59 |
| 6000 N | 7350 E | 0.62 | 4025.49 | 1.02 | 1005.58 | 4225.15 | 4225.77 |
| 6000 N | 7400 E | 0.45 | 4023.72 | 1.02 | 1014.83 | 4225.22 | 4225.67 |
| 6000 N | 7450 E | 0.56 | 4021.74 | 1.02 | 1025.24 | 4225.32 | 4225.88 |
| 6000 N | 7500 E | 0.59 | 4019.91 | 1.03 | 1034.40 | 4225.31 | 4225.90 |
| 6000 N | 7550 E | 0.65 | 4017.75 | 1.03 | 1045.02 | 4225.27 | 4225.92 |
| 6000 N | 7600 E | 0.66 | 4015.10 | 1.03 | 1058.13 | 4225.23 | 4225.89 |
| 6000 N | 7650 E | 1.27 | 4012.49 | 1.04 | 1070.47 | 4225.08 | 4226.35 |
| 6000 N | 7700 E | 1.36 | 4009.45 | 1.04 | 1085.34 | 4225.00 | 4226.36 |
| 6000 N | 7750 E | 1.36 | 4006.38 | 1.04 | 1100.17 | 4224.89 | 4226.25 |
| 6000 N | 7800 E | 1.08 | 4003.37 | 1.05 | 1114.48 | 4224.73 | 4225.81 |
| 6000 N | 7850 E | 0.89 | 3999.71 | 1.05 | 1132.17 | 4224.60 | 4225.49 |
| 6000 N | 7900 E | 0.76 | 3996.77 | 1.05 | 1146.57 | 4224.53 | 4225.29 |
| 6000 N | 7950 E | 0.50 | 3994.10 | 1.06 | 1159.90 | 4224.51 | 4225.01 |
| 6000 N | 8000 E | 0.31 | 3991.21 | 1.06 | 1173.19 | 4224.27 | 4224.58 |
| 6000 N | 8050 E | 0.15 | 3989.35 | 1.06 | 1182.55 | 4224.28 | 4224.43 |
| 6000 N | 8100 E | 0.13 | 3989.75 | 1.07 | 1182.35 | 4224.63 | 4224.76 |
| 6000 N | 8150 E | 0.22 | 3991.24 | 1.07 | 1176.83 | 4225.02 | 4225.24 |
| 6000 N | 8200 E | 0.42 | 3992.88 | 1.07 | 1170.30 | 4225.36 | 4225.78 |
| 6000 N | 8250 E | 0.48 | 3995.45 | 1.08 | 1159.52 | 4225.77 | 4226.25 |
| 6000 N | 8300 E | 0.61 | 3997.65 | 1.08 | 1149.78 | 4226.02 | 4226.63 |
| 6000 N | 8350 E | 0.71 | 4000.39 | 1.09 | 1137.58 | 4226.32 | 4227.03 |
| 6000 N | 8400 E | 0.54 | 4002.90 | 1.09 | 1126.17 | 4226.55 | 4227.09 |
| 6000 N | 8450 E | 0.71 | 4005.45 | 1.09 | 1114.65 | 4226.80 | 4227.51 |
| 6000 N | 8500 E | 0.80 | 4008.02 | 1.10 | 1102.54 | 4226.95 | 4227.75 |
| 6000 N | 8550 E | 0.52 | 4010.56 | 1.10 | 1090.48 | 4227.08 | 4227.60 |
| 6000 N | 8600 E | 0.52 | 4013.27 | 1.10 | 1077.85 | 4227.27 | 4227.79 |
| 6000 N | 8650 E | 0.52 | 4015.02 | 1.11 | 1069.58 | 4227.36 | 4227.88 |
| 6000 N | 8700 E | 0.74 | 4016.95 | 1.11 | 1060.15 | 4227.41 | 4228.15 |
| 6000 N | 8750 E | 0.80 | 4018.99 | 1.11 | 1049.41 | 4227.30 | 4228.10 |
| 6000 N | 8800 E | 0.80 | 4021.22 | 1.12 | 1037.63 | 4227.17 | 4227.97 |
| 6000 N | 8850 E | 0.39 | 4023.76 | 1.12 | 1024.15 | 4227.02 | 4227.41 |
| 6000 N | 8900 E | 0.37 | 4022.58 | 1.12 | 1030.46 | 4227.10 | 4227.47 |
| 6000 N | 8950 E | 0.22 | 4021.35 | 1.13 | 1037.01 | 4227.17 | 4227.39 |
| 6000 N | 9000 E | 0.52 | 4019.86 | 1.13 | 1045.31 | 4227.33 | 4227.85 |
| 6000 N | 9050 E | 0.27 | 4018.45 | 1.13 | 1052.78 | 4227.41 | 4227.68 |
| 6000 N | 9100 E | 0.10 | 4017.80 | 1.14 | 1056.66 | 4227.53 | 4227.63 |
| 6000 N | 9150 E | 0.27 | 4017.25 | 1.14 | 1059.60 | 4227.57 | 4227.84 |
| 6000 N | 9200 E | 0.26 | 4016.08 | 1.14 | 1065.29 | 4227.53 | 4227.79 |
| 6000 N | 9250 E | 0.12 | 4015.46 | 1.15 | 1068.65 | 4227.57 | 4227.69 |
| 6000 N | 9300 E | 0.08 | 4014.80 | 1.15 | 1071.93 | 4227.57 | 4227.65 |

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|--------|---------|------|---------|------|---------|---------|---------|
| 6000 N | 9350 E | 0.11 | 4014.50 | 1.16 | 1073.28 | 4227.53 | 4227.64 |
| 6000 N | 9400 E | 0.19 | 4013.48 | 1.16 | 1077.75 | 4227.40 | 4227.59 |
| 6000 N | 9450 E | 0.24 | 4014.32 | 1.16 | 1073.73 | 4227.44 | 4227.68 |
| 6000 N | 9500 E | 0.11 | 4013.31 | 1.17 | 1078.70 | 4227.41 | 4227.52 |
| 6000 N | 9550 E | 0.24 | 4012.50 | 1.17 | 1082.48 | 4227.35 | 4227.59 |
| 6000 N | 9600 E | 0.43 | 4010.76 | 1.17 | 1090.39 | 4227.19 | 4227.62 |
| 6000 N | 9650 E | 0.61 | 4007.37 | 1.18 | 1106.69 | 4227.04 | 4227.65 |
| 6000 N | 9700 E | 0.36 | 4005.61 | 1.18 | 1115.19 | 4226.98 | 4227.34 |
| 6000 N | 9750 E | 0.45 | 4003.93 | 1.18 | 1123.71 | 4227.00 | 4227.45 |
| 6000 N | 9800 E | 0.58 | 4002.07 | 1.19 | 1132.32 | 4226.85 | 4227.43 |
| 6000 N | 9850 E | 0.14 | 4000.68 | 1.19 | 1139.19 | 4226.83 | 4226.97 |
| 6000 N | 9900 E | 0.12 | 3999.94 | 1.19 | 1142.82 | 4226.81 | 4226.93 |
| 6000 N | 9950 E | 0.32 | 3999.93 | 1.20 | 1143.21 | 4226.87 | 4227.19 |
| 6000 N | 10000 E | 0.64 | 3999.36 | 1.20 | 1146.06 | 4226.87 | 4227.51 |
| 6000 N | 10050 E | 0.19 | 3997.67 | 1.20 | 1154.00 | 4226.76 | 4226.95 |
| 6000 N | 10100 E | 0.06 | 3998.17 | 1.21 | 1151.95 | 4226.85 | 4226.91 |
| 6000 N | 10150 E | 0.39 | 3999.81 | 1.21 | 1144.22 | 4226.94 | 4227.33 |
| 6000 N | 10200 E | 0.36 | 4000.08 | 1.21 | 1141.96 | 4226.76 | 4227.12 |
| 6000 N | 10250 E | 0.63 | 4002.56 | 1.22 | 1130.45 | 4226.93 | 4227.56 |
| 6000 N | 10300 E | 0.62 | 4004.88 | 1.22 | 1119.79 | 4227.13 | 4227.75 |
| 6000 N | 10350 E | 0.62 | 4007.12 | 1.23 | 1109.17 | 4227.24 | 4227.86 |
| 6000 N | 10400 E | 0.57 | 4009.11 | 1.23 | 1099.50 | 4227.30 | 4227.87 |
| 6000 N | 10450 E | 0.56 | 4011.54 | 1.23 | 1088.51 | 4227.54 | 4228.10 |
| 6000 N | 10500 E | 0.62 | 4013.56 | 1.24 | 1078.35 | 4227.52 | 4228.14 |
| 6000 N | 10550 E | 0.48 | 4015.69 | 1.24 | 1068.06 | 4227.59 | 4228.07 |
| 6000 N | 10600 E | 0.44 | 4017.86 | 1.24 | 1056.89 | 4227.54 | 4227.98 |
| 6000 N | 10650 E | 0.45 | 4019.99 | 1.25 | 1047.50 | 4227.78 | 4228.23 |
| 6000 N | 10700 E | 0.52 | 4021.57 | 1.25 | 1039.49 | 4227.76 | 4228.28 |
| 6000 N | 10750 E | 0.52 | 4023.33 | 1.25 | 1030.49 | 4227.73 | 4228.25 |
| 6000 N | 10800 E | 0.48 | 4025.75 | 1.26 | 1018.49 | 4227.74 | 4228.22 |
| 6000 N | 10800 E | 0.48 | 4025.74 | 1.26 | 1018.49 | 4227.73 | 4228.21 |
| 6000 N | 10850 E | 0.33 | 4027.42 | 1.26 | 1009.71 | 4227.66 | 4227.99 |
| 6000 N | 10900 E | 0.33 | 4029.51 | 1.26 | 1000.00 | 4227.81 | 4228.14 |
| 6000 N | 10950 E | 0.30 | 4031.48 | 1.27 | 990.11 | 4227.80 | 4228.10 |
| 6000 N | 11000 E | 0.36 | 4033.70 | 1.27 | 978.96 | 4227.79 | 4228.15 |
| 6000 N | 11050 E | 0.38 | 4035.47 | 1.27 | 969.71 | 4227.72 | 4228.10 |
| 6000 N | 11050 E | 0.38 | 4035.51 | 1.27 | 969.71 | 4227.76 | 4228.14 |
| 6000 N | 11050 E | 0.38 | 4035.49 | 1.27 | 969.71 | 4227.74 | 4228.12 |
| 6000 N | 11100 E | 0.34 | 4038.07 | 1.28 | 957.09 | 4227.79 | 4228.13 |
| 6000 N | 11150 E | 0.32 | 4040.26 | 1.28 | 946.12 | 4227.79 | 4228.11 |
| 6000 N | 11200 E | 0.27 | 4042.33 | 1.28 | 935.62 | 4227.76 | 4228.03 |
| 6000 N | 11250 E | 0.38 | 4043.41 | 1.29 | 929.50 | 4227.61 | 4227.99 |
| 6000 N | 11300 E | 0.68 | 4045.86 | 1.29 | 916.20 | 4227.41 | 4228.09 |
| 6000 N | 11350 E | 0.76 | 4049.24 | 1.30 | 897.60 | 4227.07 | 4227.83 |
| 6000 N | 11400 E | 0.71 | 4052.36 | 1.30 | 880.42 | 4226.76 | 4227.47 |
| 6000 N | 11450 E | 0.90 | 4055.68 | 1.30 | 860.49 | 4226.10 | 4227.00 |
| 6000 N | 11500 E | 0.69 | 4059.78 | 1.31 | 834.91 | 4226.09 | 4225.78 |
| 6000 N | 11550 E | 0.45 | 4059.90 | 1.31 | 833.29 | 4224.88 | 4225.33 |
| 6000 N | 11600 E | 0.37 | 4056.51 | 1.31 | 855.48 | 4225.92 | 4226.29 |
| 6000 N | 11650 E | 0.66 | 4053.80 | 1.32 | 871.16 | 4226.33 | 4226.99 |
| 6000 N | 11700 E | 0.87 | 4049.42 | 1.32 | 895.08 | 4226.72 | 4227.59 |
| 6000 N | 11750 E | 0.57 | 4045.48 | 1.32 | 917.65 | 4227.29 | 4227.86 |
| 6000 N | 11800 E | 0.33 | 4043.23 | 1.33 | 930.97 | 4227.69 | 4228.02 |
| 6000 N | 11850 E | 0.38 | 4040.99 | 1.33 | 942.99 | 4227.84 | 4228.22 |
| 6000 N | 11900 E | 0.28 | 4038.32 | 1.33 | 957.71 | 4228.11 | 4228.39 |
| 6000 N | 11950 E | 0.12 | 4036.62 | 1.34 | 967.36 | 4228.33 | 4228.45 |

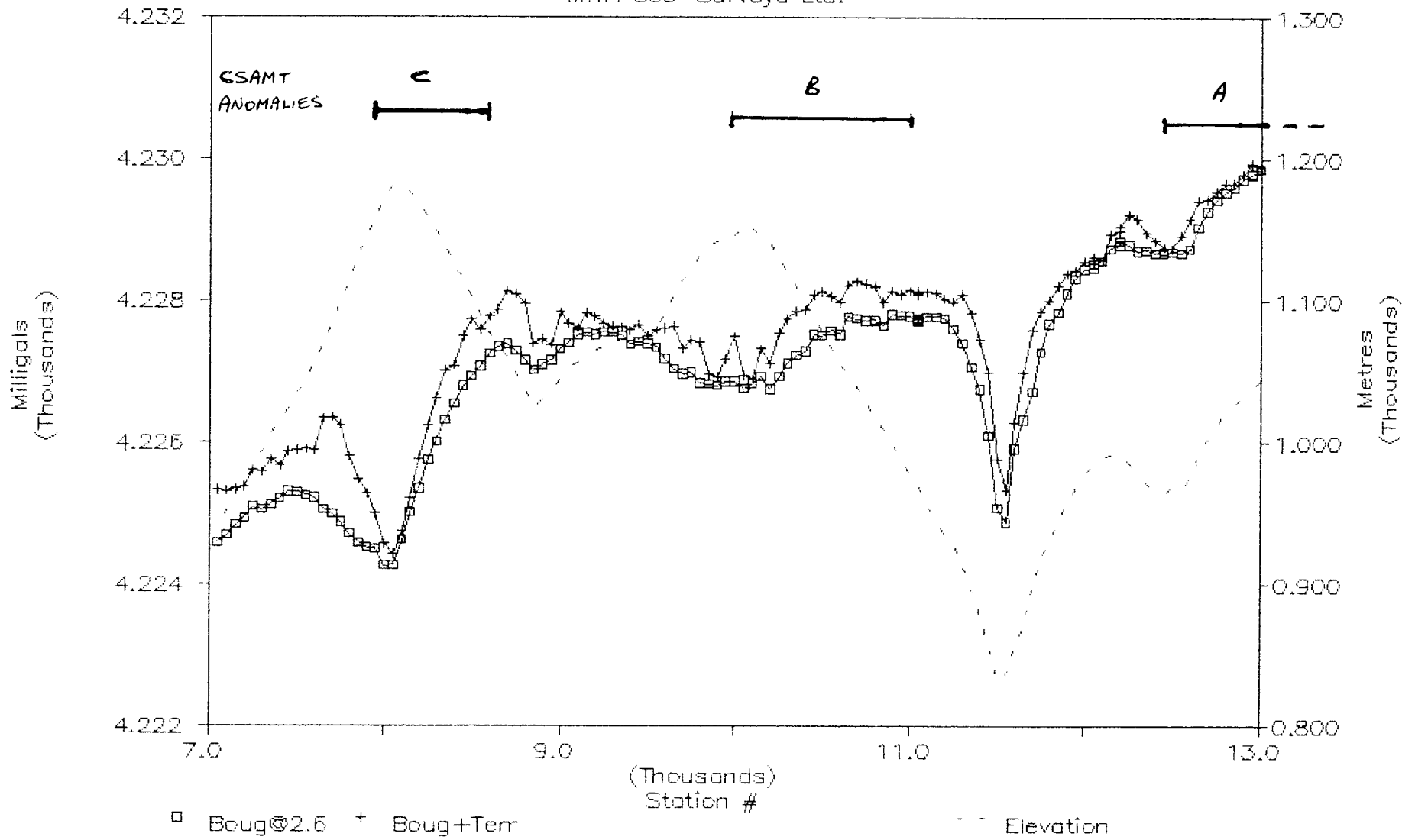
| | | | | | | | |
|--------|---------|------|---------|-------|---------|---------|---------|
| 6000 N | 12000 E | 0.11 | 4035.07 | 1.34 | 975.78 | 4228.46 | 4228.57 |
| 6000 N | 12050 E | 0.11 | 4033.14 | 1.34 | 985.56 | 4228.48 | 4228.59 |
| 6000 N | 12050 E | 0.11 | 4033.19 | 1.34 | 985.56 | 4228.53 | 4228.64 |
| 6000 N | 12100 E | 0.00 | 4032.37 | 1.35 | 989.97 | 4228.58 | 4228.58 |
| 6000 N | 12150 E | 0.20 | 4032.18 | 1.35 | 991.78 | 4228.75 | 4228.95 |
| 6000 N | 12200 E | 0.20 | 4032.47 | 1.35 | 990.56 | 4228.80 | 4229.00 |
| 6000 N | 12200 E | 0.20 | 4032.48 | 1.35 | 990.56 | 4228.81 | 4229.01 |
| 6000 N | 12200 E | 0.20 | 4032.53 | 1.35 | 990.56 | 4228.86 | 4229.06 |
| 6000 N | 12250 E | 0.43 | 4033.24 | 1.36 | 986.78 | 4228.80 | 4229.23 |
| 6000 N | 12300 E | 0.45 | 4034.55 | 1.36 | 979.79 | 4228.72 | 4229.17 |
| 6000 N | 12350 E | 0.24 | 4036.10 | 1.37 | 972.13 | 4228.73 | 4228.97 |
| 6000 N | 12400 E | 0.18 | 4037.24 | 1.37 | 966.19 | 4228.68 | 4228.86 |
| 6000 N | 12450 E | 0.09 | 4037.61 | 1.37 | 964.32 | 4228.68 | 4228.77 |
| 6000 N | 12500 E | 0.04 | 4036.68 | 1.38 | 969.20 | 4228.72 | 4228.76 |
| 6000 N | 12550 E | 0.25 | 4037.16 | 1.38 | 966.65 | 4228.69 | 4228.94 |
| 6000 N | 12600 E | 0.41 | 4035.62 | 1.38 | 974.68 | 4228.75 | 4229.16 |
| 6000 N | 12650 E | 0.38 | 4032.71 | 1.39 | 990.83 | 4229.05 | 4229.43 |
| 6000 N | 12700 E | 0.17 | 4030.60 | 1.39 | 1002.55 | 4229.28 | 4229.45 |
| 6000 N | 12750 E | 0.12 | 4029.00 | 1.39 | 1011.36 | 4229.44 | 4229.56 |
| 6000 N | 12800 E | 0.12 | 4027.16 | 1.40 | 1021.17 | 4229.55 | 4229.67 |
| 6000 N | 12850 E | 0.06 | 4025.97 | 1.40 | 1027.42 | 4229.60 | 4229.66 |
| 6000 N | 12900 E | 0.06 | 4025.21 | 1.40 | 1031.88 | 4229.73 | 4229.79 |
| 6000 N | 12950 E | 0.14 | 4024.12 | 1.41 | 1037.73 | 4229.80 | 4229.94 |
| 6000 N | 12950 E | 0.14 | 4024.11 | 1.41 | 1037.73 | 4229.79 | 4229.93 |
| 6000 N | 13000 E | 0.03 | 4022.90 | 1.41 | 1044.20 | 4229.87 | 4229.90 |
| 3100 N | 7000 E | 0.34 | 4005.62 | -1.33 | 1112.39 | 4228.94 | 4229.28 |
| 3100 N | 7050 E | 0.34 | 4007.48 | -1.33 | 1104.21 | 4229.17 | 4229.51 |
| 3100 N | 7100 E | 0.34 | 4009.54 | -1.32 | 1094.97 | 4229.37 | 4229.71 |
| 3100 N | 7150 E | 0.28 | 4010.77 | -1.32 | 1089.58 | 4229.53 | 4229.81 |
| 3100 N | 7200 E | 0.28 | 4012.35 | -1.32 | 1082.19 | 4229.63 | 4229.91 |
| 3100 N | 7250 E | 0.28 | 4013.52 | -1.31 | 1076.54 | 4229.67 | 4229.95 |
| 3100 N | 7300 E | 0.34 | 4015.14 | -1.31 | 1070.63 | 4230.11 | 4230.45 |
| 3100 N | 7350 E | 0.34 | 4016.82 | -1.31 | 1061.14 | 4229.89 | 4230.23 |
| 3100 N | 7400 E | 0.34 | 4018.28 | -1.30 | 1054.29 | 4229.98 | 4230.32 |
| 3100 N | 7450 E | 0.23 | 4019.59 | -1.30 | 1047.78 | 4229.99 | 4230.22 |
| 3100 N | 7500 E | 0.20 | 4020.48 | -1.30 | 1043.60 | 4230.04 | 4230.24 |
| 3100 N | 7550 E | 0.56 | 4021.25 | -1.29 | 1039.84 | 4230.05 | 4230.61 |
| 3100 N | 7600 E | 0.88 | 4023.14 | -1.29 | 1029.80 | 4229.94 | 4230.82 |
| 3100 N | 7650 E | 0.13 | 4023.44 | -1.29 | 1029.06 | 4230.09 | 4230.22 |
| 3100 N | 7700 E | 0.06 | 4021.72 | -1.28 | 1038.07 | 4230.16 | 4230.22 |
| 3100 N | 7750 E | 0.21 | 4020.87 | -1.28 | 1042.31 | 4230.16 | 4230.37 |
| 3100 N | 7800 E | 0.39 | 4019.73 | -1.27 | 1048.12 | 4230.16 | 4230.55 |
| 3100 N | 7850 E | 0.73 | 4017.72 | -1.27 | 1057.44 | 4230.01 | 4230.74 |
| 3100 N | 7900 E | 0.73 | 4015.50 | -1.27 | 1058.58 | 4230.02 | 4230.75 |
| 3100 N | 7950 E | 0.48 | 4013.26 | -1.26 | 1079.36 | 4229.92 | 4230.40 |
| 3100 N | 8000 E | 0.34 | 4011.14 | -1.26 | 1090.00 | 4229.92 | 4230.26 |
| 3100 N | 8050 E | 0.46 | 4009.83 | -1.26 | 1096.75 | 4229.96 | 4230.42 |
| 3100 N | 8100 E | 0.23 | 4008.88 | -1.25 | 1101.73 | 4229.99 | 4230.22 |
| 3100 N | 8150 E | 0.31 | 4007.76 | -1.25 | 1107.13 | 4229.95 | 4230.26 |
| 3100 N | 8200 E | 0.15 | 4006.72 | -1.25 | 1112.32 | 4229.95 | 4230.10 |
| 3100 N | 8250 E | 0.21 | 4006.76 | -1.24 | 1112.72 | 4230.06 | 4230.27 |
| 3100 N | 8300 E | 0.18 | 4007.72 | -1.24 | 1108.68 | 4230.21 | 4230.39 |
| 3100 N | 8350 E | 0.31 | 4008.16 | -1.24 | 1106.67 | 4230.25 | 4230.56 |
| 3100 N | 8400 E | 0.34 | 4009.84 | -1.23 | 1098.82 | 4230.35 | 4230.69 |
| 3100 N | 8450 E | 0.27 | 4011.08 | -1.23 | 1092.80 | 4230.39 | 4230.66 |
| 3100 N | 8500 E | 0.24 | 4012.00 | -1.23 | 1088.54 | 4230.46 | 4230.70 |

| | | | | | | | |
|--------|---------|------|---------|-------|---------|---------|---------|
| 3100 N | 8550 E | 0.17 | 4012.83 | -1.22 | 1084.41 | 4230.46 | 4230.63 |
| 3100 N | 8600 E | 0.11 | 4013.86 | -1.22 | 1079.32 | 4230.47 | 4230.58 |
| 3100 N | 8650 E | 0.18 | 4014.41 | -1.22 | 1076.24 | 4230.41 | 4230.59 |
| 3100 N | 8700 E | 0.12 | 4015.07 | -1.21 | 1072.96 | 4230.40 | 4230.52 |
| 3100 N | 8750 E | 0.09 | 4016.03 | -1.21 | 1068.18 | 4230.41 | 4230.50 |
| 3100 N | 8800 E | 0.14 | 4016.87 | -1.20 | 1064.02 | 4230.41 | 4230.55 |
| 3100 N | 8850 E | 0.20 | 4017.64 | -1.20 | 1060.47 | 4230.47 | 4230.67 |
| 3100 N | 8900 E | 0.24 | 4018.52 | -1.20 | 1056.02 | 4230.46 | 4230.70 |
| 3100 N | 8950 E | 0.33 | 4019.41 | -1.19 | 1051.79 | 4230.50 | 4230.83 |
| 3100 N | 9000 E | 0.17 | 4020.34 | -1.19 | 1047.65 | 4230.60 | 4230.77 |
| 3100 N | 9050 E | 0.15 | 4021.53 | -1.19 | 1042.35 | 4230.73 | 4230.88 |
| 3100 N | 9100 E | 0.16 | 4022.55 | -1.18 | 1037.80 | 4230.84 | 4231.00 |
| 3100 N | 9150 E | 0.29 | 4023.40 | -1.18 | 1033.76 | 4230.88 | 4231.17 |
| 3100 N | 9150 E | 0.29 | 4023.37 | -1.18 | 1033.76 | 4230.85 | 4231.14 |
| 3100 N | 9200 E | 0.45 | 4025.58 | -1.18 | 1021.89 | 4230.69 | 4231.14 |
| 3100 N | 9250 E | 0.27 | 4024.29 | -1.17 | 1029.42 | 4230.89 | 4231.16 |
| 3100 N | 9300 E | 0.20 | 4023.04 | -1.17 | 1037.08 | 4231.17 | 4231.37 |
| 3100 N | 9350 E | 0.23 | 4021.89 | -1.17 | 1043.50 | 4231.30 | 4231.53 |
| 3100 N | 9400 E | 0.25 | 4019.22 | -1.16 | 1056.98 | 4231.31 | 4231.56 |
| 3100 N | 9450 E | 0.25 | 4017.14 | -1.16 | 1067.60 | 4231.35 | 4231.60 |
| 3100 N | 9500 E | 0.19 | 4015.86 | -1.16 | 1074.24 | 4231.40 | 4231.59 |
| 3100 N | 9550 E | 0.14 | 4015.23 | -1.15 | 1077.68 | 4231.44 | 4231.58 |
| 3100 N | 9600 E | 0.03 | 4015.17 | -1.15 | 1078.11 | 4231.47 | 4231.50 |
| 3100 N | 9650 E | 0.04 | 4014.46 | -1.15 | 1079.22 | 4230.98 | 4231.02 |
| 3100 N | 9650 E | 0.04 | 4014.43 | -1.15 | 1079.22 | 4230.95 | 4230.99 |
| 3100 N | 9700 E | 0.00 | 4013.91 | -1.14 | 1084.01 | 4231.38 | 4231.38 |
| 3100 N | 9750 E | 0.00 | 4013.88 | -1.14 | 1084.05 | 4231.36 | 4231.36 |
| 3100 N | 9800 E | 0.00 | 4013.92 | -1.13 | 1083.42 | 4231.26 | 4231.26 |
| 3100 N | 9825 E | 0.00 | 4014.16 | -1.13 | 1082.56 | 4231.33 | 4231.33 |
| 3100 N | 9900 E | 0.05 | 4015.16 | -1.13 | 1077.45 | 4231.31 | 4231.36 |
| 3100 N | 9950 E | 0.06 | 4015.79 | -1.12 | 1074.28 | 4231.30 | 4231.36 |
| 3100 N | 10000 E | 0.27 | 4015.03 | -1.12 | 1077.59 | 4231.20 | 4231.47 |
| 3100 N | 10050 E | 0.34 | 4014.02 | -1.12 | 1083.31 | 4231.33 | 4231.67 |
| 3100 N | 10100 E | 0.34 | 4013.45 | -1.11 | 1087.30 | 4231.54 | 4231.88 |
| 3100 N | 10150 E | 0.16 | 4012.72 | -1.11 | 1091.45 | 4231.64 | 4231.80 |
| 3100 N | 10200 E | 0.31 | 4012.31 | -1.11 | 1093.54 | 4231.65 | 4231.96 |
| 3100 N | 10250 E | 0.55 | 4013.57 | -1.10 | 1087.27 | 4231.65 | 4232.20 |
| 3100 N | 10300 E | 0.80 | 4015.71 | -1.10 | 1076.36 | 4231.61 | 4232.41 |
| 3100 N | 10350 E | 0.98 | 4018.98 | -1.10 | 1059.91 | 4231.60 | 4232.58 |
| 3100 N | 10400 E | 0.93 | 4022.30 | -1.09 | 1043.79 | 4231.69 | 4232.62 |
| 3100 N | 10450 E | 0.64 | 4024.52 | -1.09 | 1033.43 | 4231.84 | 4232.48 |
| 3100 N | 10500 E | 0.32 | 4026.53 | -1.09 | 1023.62 | 4231.90 | 4232.22 |
| 3100 N | 10550 E | 0.22 | 4027.84 | -1.08 | 1016.71 | 4231.82 | 4232.04 |
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| 3100 N | 10800 E | 0.15 | 4020.96 | -1.06 | 1051.45 | 4231.85 | 4232.00 |
| 3100 N | 10850 E | 0.14 | 4020.07 | -1.06 | 1056.18 | 4231.90 | 4232.04 |
| 3100 N | 10900 E | 0.12 | 4020.84 | -1.06 | 1052.64 | 4231.97 | 4232.09 |
| 3100 N | 10950 E | 0.08 | 4022.95 | -1.05 | 1042.65 | 4232.07 | 4232.15 |
| 3100 N | 11000 E | 0.10 | 4024.45 | -1.05 | 1035.16 | 4232.08 | 4232.18 |
| 3100 N | 11050 E | 0.10 | 4025.32 | -1.05 | 1030.48 | 4232.01 | 4232.11 |
| 3100 N | 11100 E | 0.08 | 4026.65 | -1.04 | 1023.52 | 4231.95 | 4232.03 |
| 3100 N | 11150 E | 0.09 | 4027.42 | -1.04 | 1018.90 | 4231.77 | 4231.86 |
| 3100 N | 11200 E | 0.16 | 4028.55 | -1.04 | 1012.47 | 4231.64 | 4231.80 |

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|--------|---------|------|---------|-------|---------|---------|---------|
| 3100 N | 11275 E | 0.08 | 4030.63 | -1.03 | 1002.04 | 4231.63 | 4231.71 |
| 3100 N | 11300 E | 0.12 | 4031.29 | -1.03 | 998.85 | 4231.65 | 4231.77 |
| 3100 N | 11350 E | 0.04 | 4032.11 | -1.03 | 995.51 | 4231.81 | 4231.85 |
| 3100 N | 11400 E | 0.11 | 4032.40 | -1.02 | 995.16 | 4232.02 | 4232.13 |
| 3100 N | 11450 E | 0.34 | 4034.98 | -1.02 | 981.01 | 4231.77 | 4232.11 |
| 3100 N | 11450 E | 0.34 | 4034.97 | -1.02 | 981.01 | 4231.76 | 4232.10 |
| 3100 N | 11500 E | 0.28 | 4037.47 | -1.02 | 968.88 | 4231.84 | 4232.12 |
| 3100 N | 11550 E | 0.21 | 4037.41 | -1.01 | 969.36 | 4231.87 | 4232.08 |
| 3100 N | 11600 E | 0.29 | 4039.00 | -1.01 | 960.84 | 4231.76 | 4232.05 |
| 3100 N | 11650 E | 0.61 | 4041.58 | -1.01 | 947.26 | 4231.63 | 4232.24 |
| 3100 N | 11700 E | 0.33 | 4039.74 | -1.00 | 958.87 | 4232.09 | 4232.42 |
| 3100 N | 11750 E | 0.27 | 4038.59 | -1.00 | 966.31 | 4232.43 | 4232.70 |
| 3100 N | 11800 E | 0.21 | 4036.88 | -0.99 | 974.80 | 4232.40 | 4232.61 |
| 3100 N | 11850 E | 0.09 | 4036.59 | -0.99 | 975.88 | 4232.33 | 4232.42 |
| 3100 N | 11900 E | 0.11 | 4037.54 | -0.99 | 968.82 | 4231.87 | 4231.98 |
| 3100 N | 11950 E | 0.06 | 4038.24 | -0.98 | 964.60 | 4231.72 | 4231.78 |
| 3100 N | 11950 E | 0.06 | 4038.24 | -0.98 | 964.60 | 4231.72 | 4231.78 |
| 3100 N | 12000 E | 0.00 | 4038.04 | -0.98 | 964.33 | 4231.46 | 4231.46 |
| 3100 N | 12050 E | 0.03 | 4037.34 | -0.98 | 967.46 | 4231.39 | 4231.42 |
| 3100 N | 12100 E | 0.00 | 4037.34 | -0.97 | 967.99 | 4231.48 | 4231.48 |
| 3100 N | 12150 E | 0.04 | 4037.53 | -0.97 | 967.58 | 4231.59 | 4231.63 |
| 3100 N | 12200 E | 0.16 | 4036.95 | -0.97 | 970.73 | 4231.64 | 4231.80 |
| 3100 N | 12250 E | 0.24 | 4039.26 | -0.96 | 958.15 | 4231.43 | 4231.67 |
| 3100 N | 12300 E | 0.51 | 4038.19 | -0.96 | 964.26 | 4231.58 | 4232.09 |
| 3100 N | 12350 E | 0.45 | 4035.34 | -0.96 | 979.50 | 4231.77 | 4232.22 |
| 3100 N | 12400 E | 0.22 | 4034.62 | -0.95 | 983.58 | 4231.86 | 4232.08 |
| 3100 N | 12450 E | 0.28 | 4032.64 | -0.95 | 993.84 | 4231.92 | 4232.20 |
| 3100 N | 12500 E | 0.28 | 4030.47 | -0.95 | 1005.02 | 4231.98 | 4232.26 |
| 3100 N | 12550 E | 0.20 | 4028.94 | -0.94 | 1013.23 | 4232.08 | 4232.28 |
| 3100 N | 12550 E | 0.20 | 4028.94 | -0.94 | 1013.23 | 4232.08 | 4232.28 |
| 3100 N | 12600 E | 0.10 | 4028.22 | -0.94 | 1017.16 | 4232.15 | 4232.25 |
| 3100 N | 12650 E | 0.09 | 4027.42 | -0.94 | 1020.91 | 4232.09 | 4232.18 |
| 3100 N | 12700 E | 0.11 | 4026.23 | -0.93 | 1026.95 | 4232.10 | 4232.21 |
| 3100 N | 12750 E | 0.05 | 4025.02 | -0.93 | 1032.96 | 4232.09 | 4232.14 |
| 3100 N | 12800 E | 0.03 | 4024.99 | -0.92 | 1033.53 | 4232.16 | 4232.19 |
| 3100 N | 12850 E | 0.05 | 4024.82 | -0.92 | 1034.18 | 4232.12 | 4232.17 |
| 3100 N | 12900 E | 0.17 | 4024.80 | -0.92 | 1034.69 | 4232.20 | 4232.37 |
| 3100 N | 12950 E | 0.04 | 4024.74 | -0.91 | 1035.29 | 4232.25 | 4232.29 |
| 3100 N | 13000 E | 0.16 | 4025.28 | -0.91 | 1032.43 | 4232.22 | 4232.38 |

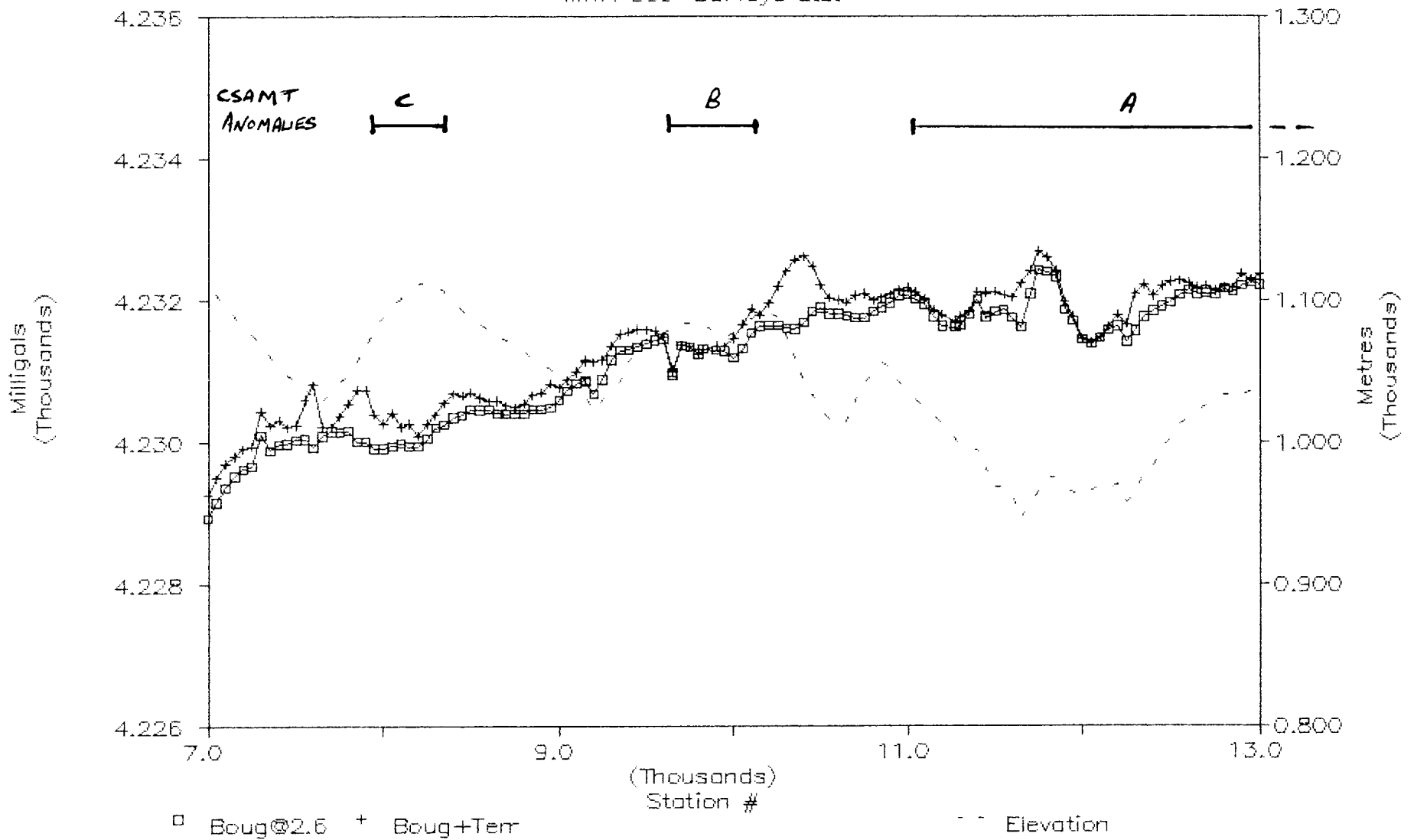
Gravity Profile Line 60N

MWH Geo-Surveys Ltd.



Gravity Profile Line 31N

MWH Geo-Surveys Ltd.



Gravity Profile Line 100E

MWH Geo-Surveys Ltd.

