

UR1988-11

1988/11. Operations report - 1987/88 helicopter gravity survey.

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Abstract

An area between the Lower Pieman Dam and Sandy Cape was covered with a gravity survey at a nominal reading density of one station per square kilometre.

INTRODUCTION

The total area now surveyed is shown in Figure 1. Survey techniques and philosophy are outlined in Richardson (1986). Appendix 1 details the hours flown and number of stations acquired during the helicopter operations. The gravity base stations used were those of Richardson and Dix (1986).

COSTS

Assume that a field assistant is paid \$18,000 per annum spread over 260 working days and that the daily travelling expenses rate is \$71. Then the total daily cost of a field assistant is \$140.23. Note that in the following calculations, days scheduled for flying but with bad weather impose both a machine and a labour cost.

Survey duration	-	35 days
Total helicopter charges	-	\$80,800
Number of successful stations	-	865
Number of personnel	-	3
Cost per station	-	\$110.43

From the above it is seen that in remote areas with poorly-developed road networks, a helicopter-supported operation remains much cheaper than a ground-supported operation (Richardson, 1987). The cost per station for helicopter acquisition has risen at a rate less than the inflation rate (Richardson, 1986; 1987).

FIELD PERSONNEL

(a) DEPARTMENT OF MINES

B. Payne	R. Richardson
B. Cox	P. Ruzicka
M. Mulcahy	J. Wright

(b) HELICOPTER RESOURCES PTY LTD

G. Findlay	C. Hardiman
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CONCLUSION

The 1987/88 helicopter gravity survey provided a cost-effective coverage of the area between the Lower Pieman Dam and Sandy Cape.

REFERENCES

- RICHARDSON, R. G. 1986. Operations report - 1985/86 Mt Read gravity survey.
Unpubl. Rep. Dep. Mines Tasm. 1986/74.
- RICHARDSON, R. G. 1987. Operations report - 1986/87 Mt Read gravity survey.
Unpubl. Rep. Dep. Mines Tasm. 1987/45.
- RICHARDSON, R. G.; DIX, M. J. 1986. West Coast gravity tie stations
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APPENDIX 1

Helicopter survey statistics

<i>Period</i>	<i>Hours flown</i>	<i>Stations acquired</i>
1. 2.88- 7. 2.88	26.0	181
8. 2.88-12. 2.88	26.9	208
22. 2.88-28. 2.88	22.6	175
29. 2.88- 6. 3.88	18.5	139
7. 3.88-13. 3.88	17.4	123
12. 4.88-14. 4.88	7.1	39

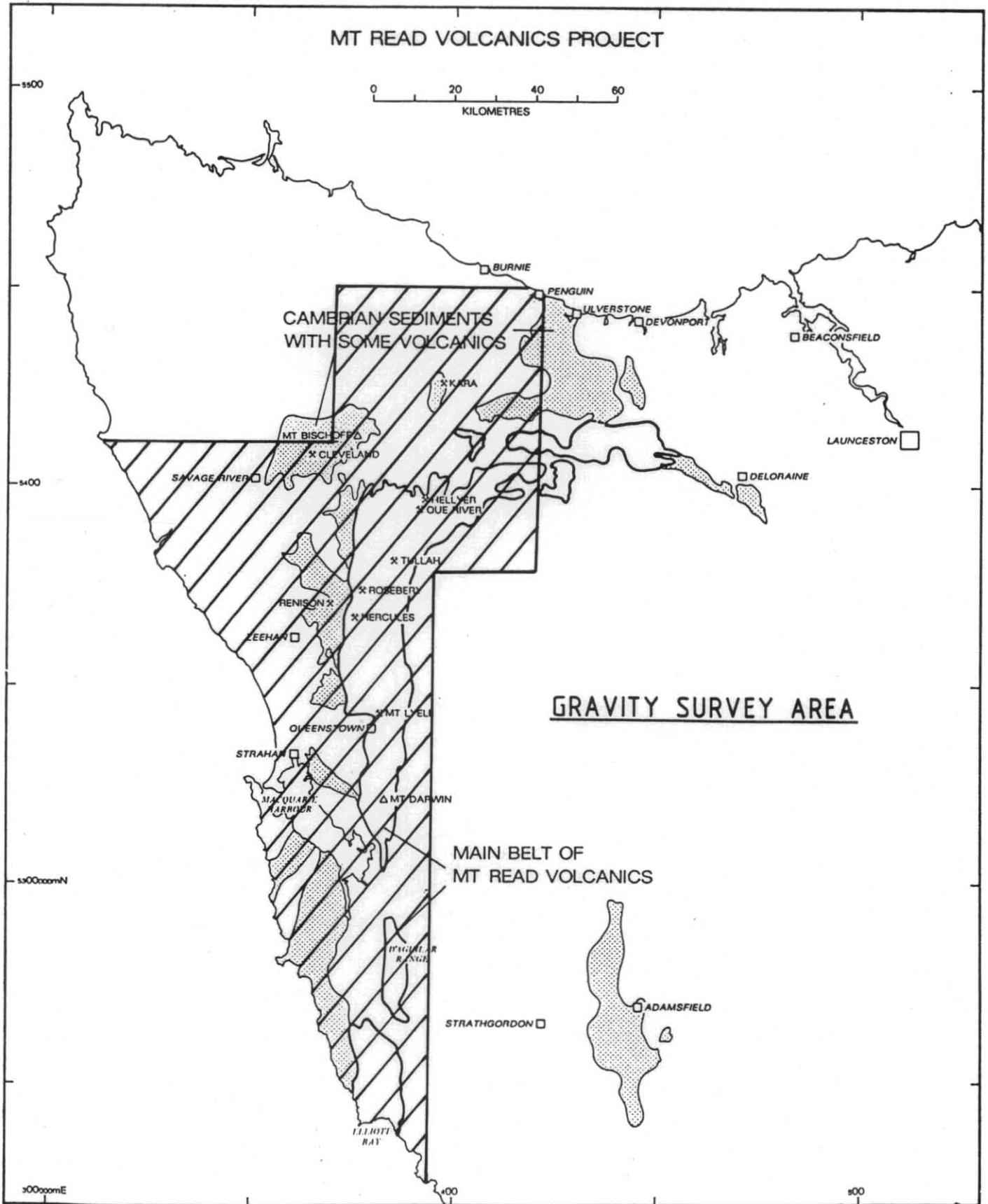


Figure 1.