

INTRODUCTION

A DIGHEM^{III} survey totalling 1,374 line-km was flown with a 200 m line-spacing for Comstaff Pty., from March 8 to April 22, 1983, over two blocks in the Rosebery area and one block near Waratah, of Tasmania (Figures 1 and 2).

The Lama VH-BQT turbine helicopter flew at an average airspeed of 113 km/h with an EM bird height of approximately 34 m. Ancillary equipment consisted of a Geometrics G803 magnetometer with its bird at an average height of 49 m, a Sperry radio altimeter, a Geocam sequence camera, an RMS GR 33 recorder, a Geometrics 714 digital data acquisition system and a Kennedy 9700 9-track 800-bpi magnetic tape recorder. The analog equipment recorded four channels of EM data at approximately 900 Hz, two channels of EM data at approximately 385 Hz, two ambient EM noise channels (for the coaxial and coplanar receivers), two channels of magnetics (coarse and fine count), and a channel of radio altitude. The digital equipment recorded the EM data with a sensitivity of 0.25 ppm and the magnetic field to one nT (i.e., one gamma).

Appendix A provides details on the data channels, their respective sensitivities, and the flight path recovery procedure. Noise levels of less than 2 ppm are generally maintained for wind speeds up to 35 km/h. Higher winds