

2.5 BASIN LAKE (P. Komyshan)

2.5.1 Introduction

Work done in the area prior to 1974 (including two drill holes put down by Pickands Mather (BL 801) and BL 802) is detailed in Sheppard (1974).

The Basin Lake Grid, established by Mount Lyell in the 1974-75 season, was covered by reconnaissance geology and geophysics. This was followed up with minor geochemistry up to the 1977-78 season, when two drill holes BL1 and BL2 were drilled. No further work was carried out in this area until the 1980-81 season.

Exploration during 1980-81 was centred on two areas:

1. A broad magnetic (300-500 gammas) anomaly between lines 24S and 42S and centred at line 30S, 8200'E (see Howland-Rose 1974).
2. A corresponding gradient array chargeability high and resistivity low extending between lines 24S and 42S, with a maximum peak at line 36S, 5900'E (see Howland-Rose 1974).

Work included repegging, soil sampling, magnetic and dipole-dipole I.P. surveys over lines 30S and 36S. Two drill holes, BL3 and BL4, totalling 740 m, were completed.

2.5.2 Access

Lines 30S, 36S and 42S were repegged over a total distance of 1.8 line-km. Two bulldozed drill sites were prepared by Lyell Transport, one beside the Basin Lake Road at line 30S and the second along a new 300 m access track at line 30S, 6700'E.

2.5.3 Geochemistry

Soils were resampled on lines 30S (5500'E-6500'E) and 36S (5500'E-6500'E) confirming the lack of any significant anomalies.

2.5.4 Geophysics

1. Magnetics

A detailed (25 ft. spaced) proton precession ground magnetic survey was carried out by Scintrex Pty. Ltd. on lines 30S (4500'E-9000'E) and 36S (4300'E-9000'E). The survey re-established a broad magnetic high, of 300-500 gammas (above background) located at 30S (7700'E-8400'E) and 36S (7500'E-8400'E), previously located in 1974 (see Howland-Rose 1974). This area, which is covered by a 15-30 m thick glacial moraine cover, was tested on line 30S by diamond drill hole BL3 (see section 2.5.5).

2. Dipole-Dipole I.P.

A dipole-dipole I.P. survey was carried out by Scintrex Pty. Ltd. (using a 200 ft. dipole) on lines 30S (5600'E-9100'E) and 36S (5700'E-7100'E). The survey's purpose was to cover a gradient array chargeability high and corresponding resistivity low located in 1974 (see Howland-Rose 1974). A broad chargeable zone centred at 30S, 6200'E and 36S, 6200'E was located. Diamond drill hole BL4 collared at 30S, 6700'E and drilled west (see Figure 56) tested this anomaly (see section 2.5.5).