9.3. AEROMAGNETICS (Fig. 7)

Four separate aeromagnetic surveys have been flown over parts of the Natone area. A survey carried out by Seigel Associates in 1972 in conjunction with their Turair survey covered the Natone area as far south as Moores Pimple. Because of equipment malfunction, no magnetics were recorded for 11 of the 54 flight lines during the initial survey, but this was subsequently re-flown. A Scintrex MAP-2 proton precession magnetometer was used. Results are presented as a magnetic contour plan and a magnetic interpretation plan, both at 1:15,840 (20 chains to 1"). This data was later combined with Geoex data on E.Z. 1:10,000 sheets.

Aeromagnetics were recorded as part of the Turair survey for Texins Devel. in 1973 over the Natone area south of Moores Pimple using a Scintrex MAP-2 proton precession magnetometer. Results are combined with a Turair anomaly plan at 1:10,000 presented in Howland-Rose (1973).

Similarly, aeromagnetics were included in the INPUT survey flown by Geoterrex for Comstaff in 1975. A Geometrics Model 803 proton precession magnetometer was used.

A helicopter-borne magnetic survey was conducted by Geoex in 1978 using a Varian V4937A proton precession magnetometer. The flight lines were east-west and spaced at 250m; nominal terrain clearance of 30m was maintained. Results appear as contoured total magnetic intensity plans at 1:10,000 with a 10 gamma contour interval. There is no accompanying report. This survey covered only the northern and southern sections of the Natone area.

9.4. GROUND MAGNETICS (FIG. 7)

A ground magnetic survey using a fluxgate magnetometer was carried out over the Colebrook Grid in 1973. Readings were taken at 100' intervals. Results appear as magnetic profiles in Plate 20 in Reinhardt (1973); no base station reading is indicated. The magnetic profiles show good correlation with serpentinite indicated on the geological plan (Plate 19). The magnetics also strongly reflect pyrrhotite in the Colebrook Mine workings. Thus this method should be very useful in exploration for the Sn-pyrrhotite replacement style of mineralisation.

10. DIAMOND DRILLING (Fig. 2)

Three diamond drill holes have been drilled within the Natone area; two by E.Z. and one by the Mines Department. All are in the Natone Valley. Both E.Z. holes tested I.P. anomalies whereas the Mines Department hole was apparently for stratigraphic information.

E.Z. drilled NP 104 (bearing 306½° (true); declination -45°) at co-ords 100S 19W (Natone Grid) in 1962; total depth was 923' (218.3m). A 20' (6.0m) mineralised zone averaging 11% pyrite, 1.9% Zn and trace Cu, Pb, Ag was intersected. Assays from this interval are:

	Interval	Width (ft)	Core Recovery %	Cu%	Pb%	Zn%	Ag(oz)	Sn%	Fe%	S%
	767-773	6	94	0.13	0.1	3.8	0.8	0.03	13.4	7.7
	773-775	2	96	0.20	0.2	0.8	0.2	0.03	30.5	4.3
	775-780	5	100	0.10	0.2	0.8	0.3	0.03	15.3	6.1
	780-782	2	83	0.35	0.3	0.8	0.3	0.04	17.6	8.4
	782-787	5	40	0.10	0.1	1.6	0.1	0.03	13.0	7.2
Av.	767-787	20	81	0.14	0.2	1.9	0.4	0.03	15.9	6.9