

020

anomalies in tin and zinc in the Exe River, and to cover the area of the X Proprietary Syndicate Mine. The grid ties in with Grid 0 to the north, and Grid 2 to the east. While the grid was cut and sampled in 1971, it was not until 1974 that follow up work was carried out (2). The grid lines west of the Exe River were geologically mapped, but not tied into the road or river mapping. Two parallel tin anomalies of >1300 ppm Sn, approximately 600m x 100m in size, were outlined within a broad zone of >44 ppm Sn which was seen to continue northwards into the Grid 0 anomaly. A costean was excavated through the tin anomaly and across the line of the X Proprietary Syndicate lode. Quartz fissure veins containing tourmaline, cassiterite, arsenopyrite and pyrite were exposed. A Crone EM survey located a conductor on line 20S at 2050E, where a limited dipole-dipole IP survey carried out on these lines indicated a zone of low resistivity coincident with a high frequency effect.

The coincident EM, IP and soil anomaly at 20S/2050E was tested with a diamond drill hole, RBE 1, collared at 20S/2250E and declined at 50° to the west. The drill hole intersected an east facing succession of finely intercalated argillites with silty argillites, sandy argillites, argillaceous siltstones and tuffaceous greywackes. The coarser grained, and consequently more porous layers were seen to be metasomatically altered with the development of tremolite-actinolite, chlorite, phlogopite, carbonate, tourmaline, prehnite and sphene. Sulphides had been introduced into the metasomatically altered units in the form of pyrite, pyrrhotite and chalcopyrite. However, the assay results were low and no tin mineralisation was indicated. Therefore the source of the anomalous tin values in the soils was not found.

3.4. Input Survey

In 1975 an airborne electromagnetic Input survey was carried out by Geoterrex Pty. Ltd. over the area. Anomalous responses were recorded as follows (see overlays TAS/2/1426 and TAS/2/1427):