A survey was carried out which related three surface stations to the workings underground at the (approx.) 60m level.

## Station Marking

On the surface, Stations A & B marked with long white survey pegs with aluminium tag designations whilst Station C is a steel peg, low in the ground.

Underground twelve short pegs, with aluminium tag designations, were placed in the backs of drives.

## Instrument

A Wild Level and tri-pod was used both for surface & underground readings.

## Calculations

The surface plan was plotted directly from readings, apart from the position of Station C, which was obtained using the isosceles triangle ACPs.

Surface & underground stations were tied in by dropping two phumb-bobs,  $(P_5 \notin P_N)$  & relating all underground readings to them. The positions of Ps &  $p_N$  on the surface were fixed mainly from Station C.

## Plotting

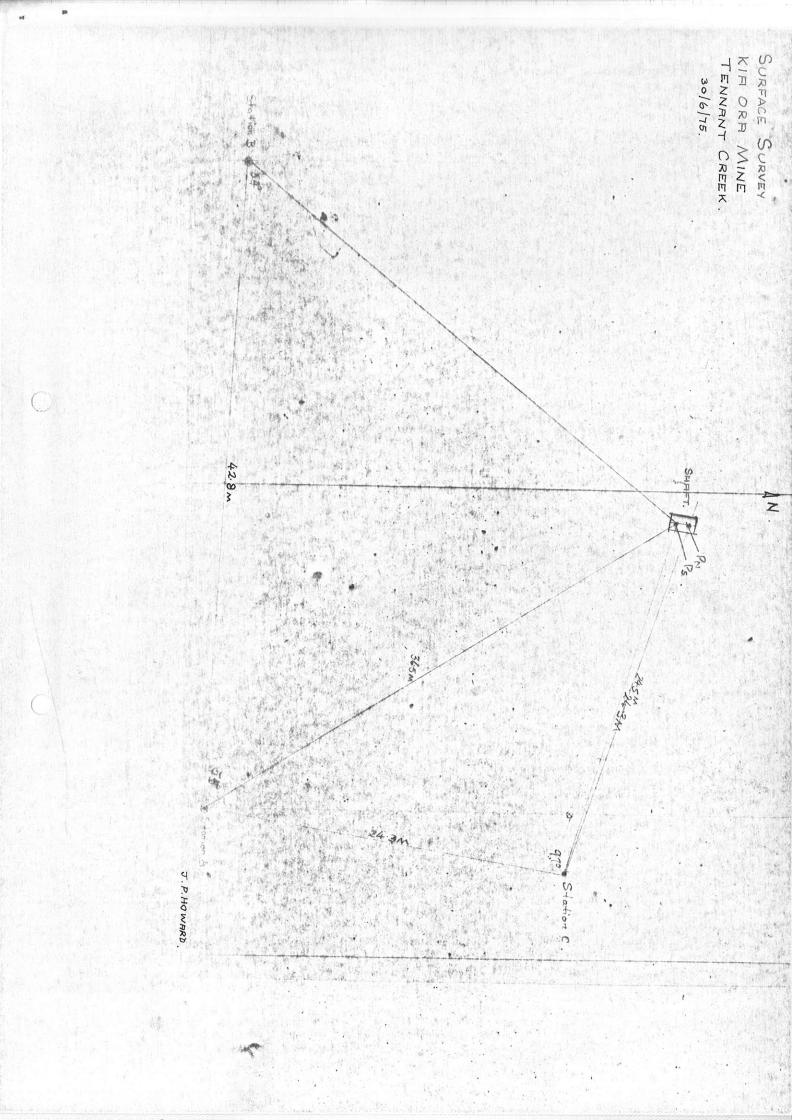
Both plans were plotted on a scale of 1:250. Drive outlines are approximated.

J.P. HOWARD

Resident Geologist

R1975 017





UNDERGROUND SURVEY
KIR ORR MINE.

- OPP. (180') 60M LEVEL.

BO/6/16

Scale: 1:250

