A sequence of black siltstones/shales, with a true outcrop width of approximately 80m, is exposed on the main Chester road, stratigraphically above the acid volcanics described above. This sequence consists of grey to black, well bedded, weakly sheared siltstones and shales, with possibly some tuffaceous interbeds. Poorly developed load casts give a west facing, coincident with the observed dips. Overall strike is about 210° magnetic, with a dip of 60° to 80° west. The sediments are overlain by, and interdigitate with, coarse porphyritic rhyolite rocks, possibly tuffs. The sequence is obscured to the west by thick glacial overburden.

These two shale units are correlated with the Unit 6 and Unit 15 shales in costean 2540S. However, there is an obvious displacement and change in strike, and this is thought to be due to faulting.

The west limb of the syncline is exposed along the main Chester road, east and west of the Silver Falls road intersection, in the 2540S access track, and in the western costeans. The evidence for this west limb is rather tenuous, based on limited structural data and "best-fit" regional structures. The dominant feature of this area is the presence of some base metal sulphides associated with variably silicified sericitic lapilli tuffs.

Mapping of the road exposure has failed to reveal any true shale horizons comparable to those in the east limb of the syncline. Between the Silver Falls road and the Pinnacles base line, the sequence is essentially tuffaceous, with crystal tuffs and ash flow tuffs being dominant, usually altered to sericite schist. There are some silicified shale fragments in one zone, vaguely orientated about magnetic north. The overall bedding (?) of these rocks dips east from 70° to 80°.

The sulphide bearing unit, fortuitously exposed in the 2540S access track, about 20m from the junction of the track with the main Chester road, is underlain by very altered sericitic quartz felspar crystal tuff. The mineralised unit is characterised by silicification, and the presence