

quartzofelspathic groundmass containing glassy quartz phenocrysts (1 to 10mm). This rock type is common along the 2340S access track, and along the 2540S access track, overlying the siliceous pyritic zone exposed in the western costeans.

Units 1 to 3 are exposed in the western end of costeans 3350S and 2950S, thus giving a strike length of at least 1000m. It is not clear what happens to Unit 15, the silicified siltstone/shale. This unit is thought to be on the eastern limb of the syncline, but there is a significant difference in strike between it and Unit 6. This change in strike is also evident in the volcanic units above Unit 6, mainly evidenced by flow banding, contacts and poorly bedded tuffs. The same change in strike is also evident in costean 2340S in the volcanics above Unit 6. It would then appear to be a primary feature, possibly caused by folding or subsidence after the deposition of Unit 6, and a different source area for the overlying volcanics.

At the northern end of East Chester, in the original EAB grid, there are two distinct units of pyritic black siltstones/shales. The lower unit is exposed in an old costean on line 1500ft S. In this costean the andesitic unit is more tuffaceous and dacitic, with the typical weathering pattern, and iron and manganese staining. These are overlain by a thin massive, blocky, quartz eye volcanic. This unit is about 10m thick and is overlain in turn by a pyritic black shale, well bedded, poorly cleaved, which strikes 198° magnetic and dips 70° to the west. This unit is also seen on the main road, at the junction of the East Chester road, where it is only a few metres thick. Above these shales on the main Chester road, are approximately 200m true width of acid volcanics, tuffs and lavas. They are mainly quartz felspar crystal tuff, possibly reworked and poorly bedded in part. Thin section analysis (TA986) taken at the intersection of the EAB baseline and the main Chester road, describes an altered porphyritic dacite, with discontinuous/irregular quartz veinlets carrying patches of fine grained chlorite. Another thin section analysis (TA987) taken about 80m west of TA986, is a pervasively altered vitric tuff, probably an ignimbrite.