

## Location MT20

SO 751 613

## Penny Hill Quarry

This is a very large former quarry. Most of it has been used for landfill and only a few faces remain.

The quarry is PRIVATE property, so unless you have arranged to obtain permission for access, you should NOT enter the quarry, but you can use the photos and information below to help you gather the data you need.

### *Photo A*



Photo A shows the exposures on the east side of the quarry. The rock is well-bedded. The dip and strike here have been recorded as 194 / 48E

The rock has a steeper dip than that seen at Location MT18, and mineral veins, formed in a similar way and of similar type to that seen at Location MT17, are present here. This suggests proximity to a fault / faults active in the geological past.



*Photo B*

On the west side of the quarry, bedding surfaces are easily accessible, but are not to be climbed or excavated. The dip and strike here are 167 / 50E

So the readings for the east and west sides of the quarry are approximately similar.

Fossil corals have been found in this western face of the quarry in their growth positions, *but upside down*.

The beds on the eastern side of the quarry do not have these upside down corals, and are the right way up. What does this suggest about deformation of the rocks here at Location MT20? Choose:

(a) The rocks, deposited originally as horizontal layers, were compressed and folded downwards and then over towards the west. This downward fold is known as a 'syncline'.

(b) The rocks, deposited originally as horizontal layers, were compressed and folded upwards and then over towards the west. This upward fold is known as a 'anticline'.