Australian Carbon Credit Units Submission:

The ability to properly assess soils for carbon credits is reliant on proper measurement of edaphic soil carbon.

Without this, as an accurate measure, all accretion of soil carbon is based then on a fallacy.

To use a model, it would then be based on too many assumptions.

Modelling does not make up for the differences of total organic carbon [TOC] and the edaphic [organic portion - OC] with any degree of accuracy.

For example, in many soils TOC is around 1%. And the organic component [OC] is around 0.1%. The rest of the carbon is inactive – charcoal principally and non-organic carbon.

Hence an arithmetic increase from 1.0 to 1.1% is actually, a true doubling of the OC, but as the normal measurements are based on TOC, the increase shown is only 0.1%

We are in an entirely different situation, which grossly understates the changes and has a low level of accuracy.

Not the situation to base valid assumptions.

This must be rectified with the development of good laboratory tests that measure these changes accurately and have a high level of reliability.