derivation. Grains are generally subrounded to well rounded.

The finer grained end members grade into carbonaceous siltstone has abundant micaeous material which is generally clear crystals of muscovite.

All of the sandstones have an argillaceous content. In the cleaner varieties this is dominantly kaolinitic (with minor illite or mixed layer clays) occurring as an authigenic interstitial pore infill. Most sands have a significant percentage of primary matrix material as well as the authigenic component.

Carbonate and glauconite are locally important constituents probably reflecting marine/paralic conditions.

3.5 Diagenesis

These submature sandstones have been significantly modified by compaction and diagenesis. Although friable sandstones are found in shallower sections of the EVCM the majority of sandstones are well consolidated. Quartz grains are generally sutured and silica remobilisation and recrystallisation has often removed all primary grain shapes. Highly deformed muscovite is evidence of strong compaction effects. In some samples, quartz grains are often rimmed by limonite, and styolitic surfaces are not uncommon.

At depths below approximately 7000' MSL dolomite may replace quartz to the extent that loss of porosity is complete.