

3.2.
LOG ANALYSIS

Log analysis for the zones of interest was performed using the Terrasciences Terralog System.

The logs used in the analysis had been digitised by Wiltshire Geological Services.

All the logs used in the analysis have had full sets of corrections made to them. S_w was calculated using the Simandoux equation. Porosities were calculated using the cross-plot method for Pelican 4 and 5. No density log was available in Pelican 1, so porosity was calculated from the sonic log using the Hunt-Raymer transform. Input data for porosity calculations was corrected for the effect of shale.

The constants m and n were assigned a value of 2 and the tortuosity factor 'a' was taken to be 0.81.

As in all log analysis the singular most important variable is R_w selection. Its accurate determination has to be considered a major priority. However, there is insufficient data available to obtain accurate values and this compromises the analysis. A discussion on R_w selection follows.