To perform the Terralog analysis, an LIS edit tape was read
and the following logs were normalised for borehole effects:

    Gamma Ray
    Neutron
    ILD-ILM
    MSFL
    SFL

The ILD-ILM logs were also corrected for mud filtrate invasion
and the MSFL was corrected for mudcake effects to get R_T and
R_{XO}. All calculations were then performed on the
environmentally corrected logs.

Water resistivities (Rw) were approximated from SP deflections
in clean, wet sands (where no shows occurred and resistivities
were low). Rw was also estimated by the Rwa method in sands
considered to be wet where porosity is known and Vsh is low.
Pickett plots were also used as a guide to Rw ranges.

Shale fractions (VSH) were estimated from the borehole
corrected gamma ray and the SP in some cases. Porosities were
calculated from several methods. The preferred porosity is
the neutron/density shale corrected crossplot porosity (N/D.SC
POR) although the Hunt/Raymer shale corrected porosity (H/R.SC
POR) usually correlates well and is used where bad hole
conditions made the N/D.SC POR unuseable. In the less
compacted sediments the H/R. SC POR calculates consistently
higher than the N/D. SC POR.

The well was zoned into five intervals on the basis of log
character, lithology, Rw changes, shale parameters and
formation boundaries. Within these zones, the cleanest,
highest resistivity sands were analysed using optimistic
parameters. Where these such sands showed no evidence of
hydrocarbons, then it was inferred that all other sands of
lower resistivity and similar porosities were also water
saturated.

The water saturations (Sw) were calculated using the Indonesia
equation as shown below. The constants a, m and n were kept
as 1.0, 2.0 and 2.0 respectively. All the results were
displayed using a Vsh cutoff of 30% to reduce the shale
effected errors.

$$Sw = (Vsh^{0.5(2-Vsh)}/(Rsh/Rt)^{0.5} + (Rt/Ro)^{0.5}) - 2/n$$

The five zones and parameters used were:

Interval 1: 825-900m, covering the Oligocene Sand. This was
a predominant sand interval with fair to good hole conditions.

    Rw from SP was indicated to be 0.096 ohm at 855m and
    41.6°C (equiv. NaCl=48,000 ppm).

    Rw from Rwa was indicated to be 0.06 to 0.105 ohm with an
    average of 0.09 ohm.