

3.2.5.2. Log Resolution

The following time constants (TC) and logging speeds (S) were used:

Caliper (C): TC=1, S=9,2.

Long Spaced Density (LSD): TC=1/3, 1 S=9,2.

Bed Resolution Density (BRD): TC= 1/3, S=2.

Natural Gamma Ray (G): TC= 1,5,1 S= 9,2,2.

Neutron - Neutron (NN): TC = 1, S = 9.

Single Point Resistance (R): TC = 1/3 S = 9.

Log resolution is estimated to be:

C: 21, 5 cm

LSD: 7, 5 cm

BRD: 1.5 cm

G: 21, 24, 5 cm

NN: 21 cm

R: 7cm

All logs were used (except the Coal Quality Log), in the interpretation of the rock units encountered in the drilling; coal seam widths were taken primarily from the BRD logs (where possible), since the higher resolution and linearised format of this log permit precise definition of ply and stone band widths. The resolution of 1.5cm for the BRD logs was seen to be in accord with the interpretation of stone band widths of \approx 3cm width. Resolution of the LSD and G logs was generally satisfactory, although discrepancies between these logs and the BRD logs suggest it could be improved.

The most useful logs relating to the interpretations were the C (low resolution), LSD, BRD, G (low resolution) and NN.

The Coal Quality Log was only run over coal intersections (which were adequately covered by the BRD logs), and were consequently of little value.