

1983/67. Preliminary report on natural gamma logging of the Coles Bay borehole

J.W. Hudspeth

Abstract

The natural gamma ray log of the top 393 m of the Coles Bay borehole in Devonian granite is presented without interpretation.

INTRODUCTION

The Coles Bay borehole [approximate location FP062366] is 1000 m deep in Devonian granite. The top 393 m (the maximum capacity of the borehole logger) of the hole were natural gamma ray logged by J.W. Hudspeth and D.C. Green.

Electrical continuity between the tool and recorder was lost during the upward logging. However the downward logging is almost all on scale, is well annotated, and therefore should suffice.

RESULTS

The downward logging speed was 6 m/minute with a time constant of two seconds. Scales and scale changes are annotated on the chart. Apart from a peak at about 28 m which is just over 250 C.P.S., the entire hole to 393 m could be logged on a 0-250 C.P.S. scale.

A depth correction of 0.75 m added on to the depths shown on the chart should locate the gamma profile with an accuracy of better than 0.25 m. A correction is applied because:

- (a) the tool sensor commenced a little over 0.5 m down the hole,
- (b) the logger manufacturer quotes a maximum cable stretch of 100 mm per 100 m.

Any queries regarding log interpretation should be referred to Dr D.C. Green of the Department of Mines.

[7 December 1983]

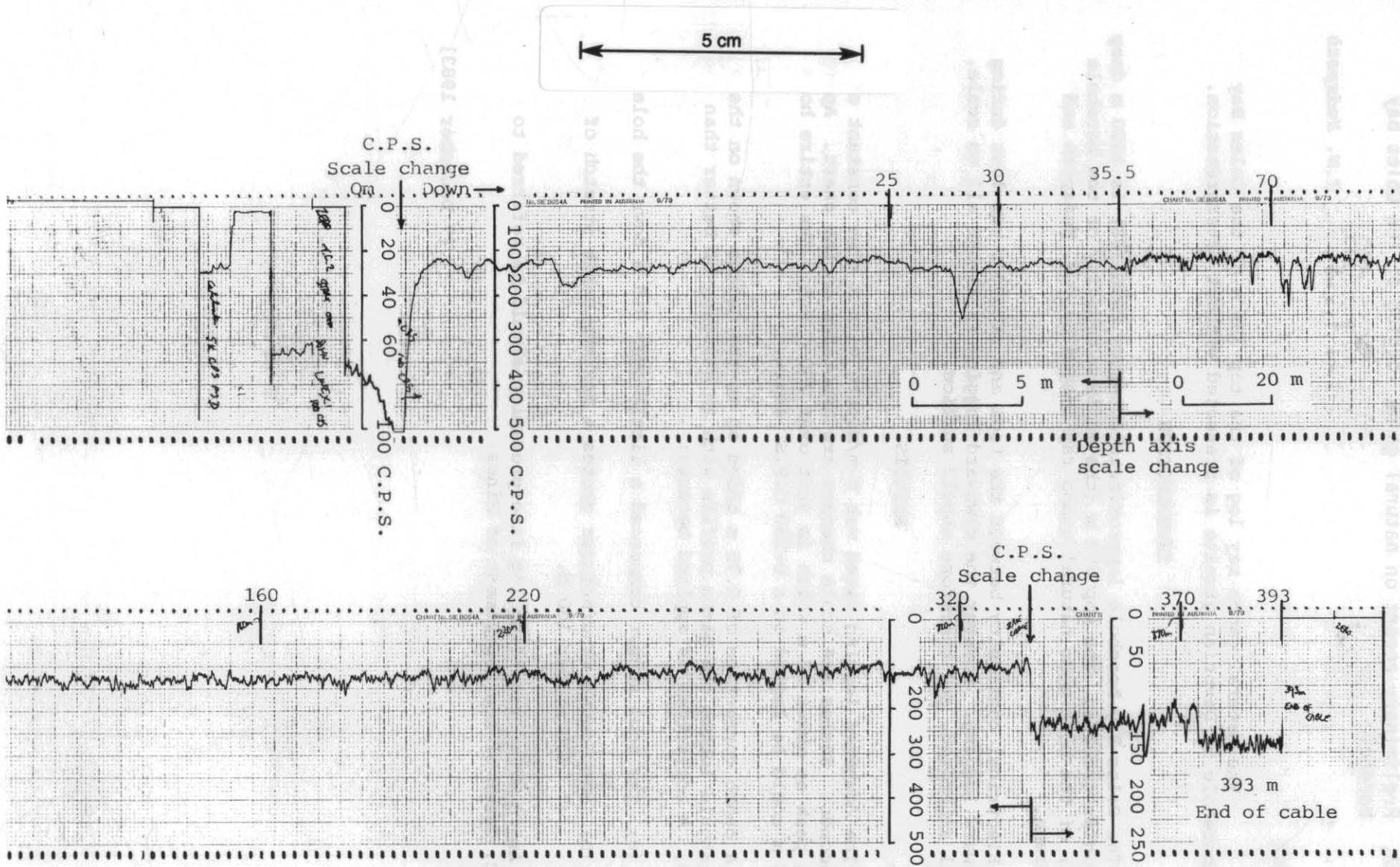


Figure 1. Natural gamma ray log, top 393 m of Coles Bay borehole