

2.8 Engineering and Economic Evaluation of Pelican Field 2

2.8.1 Introduction

The BMR Record of the Pelican Field (Kurlowicz and Ellis 1980) indicated that "the initial production rate is only 3.27 MMCFD/well of raw gas.... thus the field will be less economic to develop than previously envisaged."

Most certainly, if the actual performance of the reservoirs is as described above, then any appraisal or development expenditure will be uneconomical. Massive front end development expenditure could only be supported by well deliverabilities considerably in excess of this BMR estimate.

Flow rates and gas composition are critical to the economic evaluation for the Pelican Field appraisal programme. These parameters are reviewed and Field economic evaluation developed using a number of simplifying assumptions.

2.8.2 Well Deliverability

Core analysis conducted by the BMR on 13 samples from two conventional cores in Pelican 4 yielded an average permeability of 1.7 md with a range from 0.1 to 4.8 md. In the subsurface, under overburden pressure, effective permeability would be less than indicated by these numbers. As the two cores were cut on either side of the major "F" reservoir it is questioned whether

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