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ABSTRACT

**SEISMIC ACQUISITION IN BLOCK 22: OPERATIONAL ISSUES, LESSONS LEARNT
AND RESULTS OF DATA ACQUISITION AND PROCESSING**

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Petro-Canada acquired the license to operate Block 22 in July, 2005 and as part of the bid application the company committed to acquiring full block 3D seismic data. Prior to the acquisition the only data available covering Block 22 was a series of 2D lines of various vintages.

This paper will describe the processes followed from conception of the 3D seismic acquisition project through to delivery of field data to the processing contractor. It will detail processes necessary to fulfil statutory, commercial, technical, HSE and quality requirements with particular emphasis on practical project management issues.

The survey totalled in excess of 3000 km² and was shot during December 2005 to March 2006, during a period of continuous poor to marginal weather conditions. Innovative design parameters enabled costs of acquisition to be reduced and onboard processing quality control and post processing techniques allowed swell noise effects to be minimised, thus maximising available time for acquisition. The project utilised wide tow techniques which had a positive impact on the overall project economics whilst maintaining data quality.

Whilst marine traffic was not an issue during the survey, considerable efforts were spent in minimising the disturbance to local fishermen, the fishing liaison strategy (and subsequent results) will be discussed.

Lessons learnt from the process will be reviewed together with examples of the data from field plots through fast track processing to final interpreted product. The new 3D data is a substantial improvement in data quality and comparisons of selected lines with older 2D lines will be shown.