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3D MARINE EXPLORATION SEISMIC SURVEY IN SHALLOW WATER AREA OFFSHORE SABAH

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The Production Sharing Contract in the SB1 block, offshore Sabah was signed in mid 1987. Exploration seismic surveys commenced immediately, with a large programme of 8600 km 2D and approximately 300 sq km 3D seismic survey planned. The exploration 3D seismic in particular was planned to cover some shallow water areas over the Vernon Bank.

Shallow hazards within the 3D survey area were identified and 2-boat undershooting was initially planned to obtain requisite coverage under the shallow water parts of the prospect. A detailed hydrographic survey was conducted by Sabah Shell Petroleum Co. Ltd. to augment the available Admiralty hydrographic data over the prospect. Shortly after commencement of the seismic survey, it was reported by the crew that the vessel was not able to cover about half of the survey area due to extreme shallow water. Ensuing operational planning enabled the survey to be successfully completed to within 10% of the originally planned coverage. This was achieved in a timely manner using a combination of a regular line direction survey, orthogonal survey lines and a 2-boat undershooting programme.