

**POSTER PRESENTATION****Papua New Guinea's Northern Basins: A Fresh Look at the Bougainville Basins**

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The Bougainville Basin is one of the three frontier sedimentary basins offshore NE Papua New Guinea (the others being the Cape Vogel and New Ireland Basins). The Solomon Sea 2D Multiclient Survey comprising 3768 km of (mostly) long offset, deep tow seismic data was acquired by Searcher Seismic and project partner BGP in early 2017. The majority of the survey is situated in the New Ireland Basin, but the survey also includes a number of lines covering the Bougainville and Cape Vogel Basins.

The Bougainville Basin is located southwest of Bougainville Island. The last exploration activity in the area occurred over 40 years ago, when Shell and Amoco acquired 2D seismic data and drilled one well, L'Etoille-1 (1975). The well encountered volcanoclastic sediments rather than the prognosed carbonate reef and failed to encounter any indications of petroleum. However, there appears to be a significant depocentre in the basin that could contain more than 10 kms of sediment. A number of alternative potential play types have been identified, but they cannot be effectively assessed further due to the poor data quality of the available vintage data. The new data acquired over this area is expected to clarify the nature and extent of some of the main plays and structural elements in the basin.

The new data is currently being processed and will be available in late 2018. Modern acquisition and processing techniques are anticipated to provide a significant improvement over the vintage data in these areas and should provide new insights into the deep structure, stratigraphy and evolution of this frontier area.