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HIGH RESOLUTION SITE SURVEYS USING WATERGUNS WITH SEMI-EXPLORATION OBJECTIVES

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Seismic site surveys have traditionally concentrated almost exclusively on very shallow targets usually down to a few hundred metres. Spreads have been short and sources have been rich in high frequencies and low in energy. It has often been impractical to consider both shallow and deep targets in one survey due to the increasingly great depths of target reflectors.

In Block PM1 offshore Malaysia, we have a target at around 2000 metres which was imaged by the deep seismic survey as a weak but relatively uncomplicated unconformable reflector. An extended site survey was designed to explore potential shallow hazards and rig anchor characteristics, but also to investigate the target reflector with more resolution, both spatial and temporal.