

11 August 2009

Companies Announcements Office
Australian Securities Exchange Limited
10th Floor, 20 Bond Street
SYDNEY NSW 2000

Dear Sir/Madam

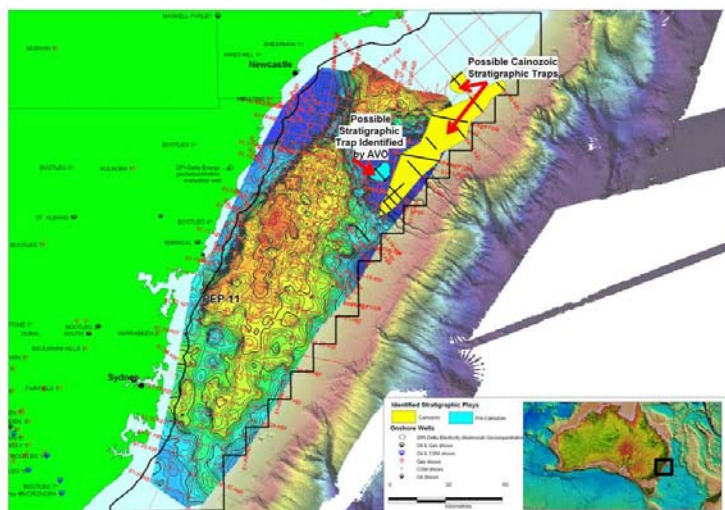
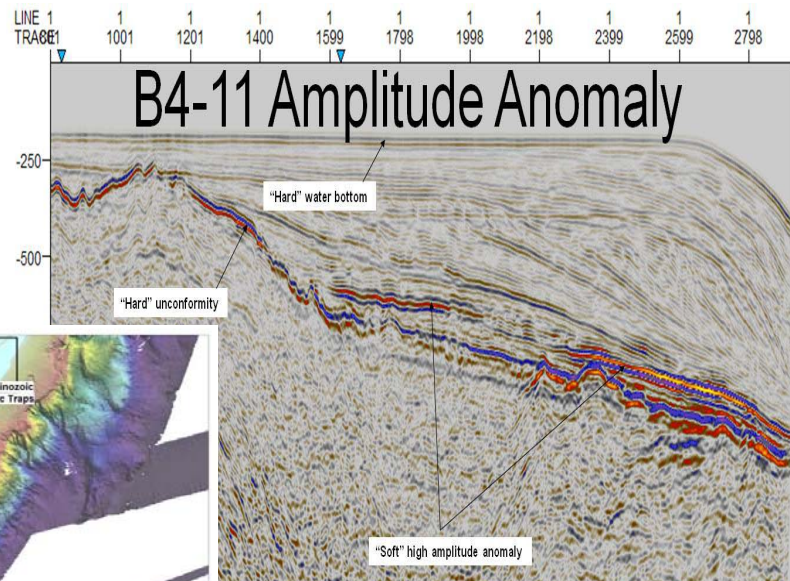
Offshore Sydney Basin – Brazilian Analogue for New Prospective Hydrocarbon Plays

MEC Resources Limited (ASX: MMR) is pleased to advise that its investee company Advent Energy Ltd (Advent) has interpreted significant new prospective multi-Tcf stratigraphic plays in an ongoing review of its exploration data for the PEP11 offshore Sydney Basin project (JV partner - Bounty Oil & Gas NL (ASX: BUY)).

Advent has previously reported the prospective P10 unrisked gas resource estimate of 16.3 trillion cubic feet for the permit (ASX: MMR 27 October 2008), as residing in deeper, structural Permo-Triassic targets associated with the Offshore Uplift.

PEP11 covers a very large area (over 8,100km²). In addition to the aforementioned prospects, further examination of features in the Cainozoic sediment wedge overlying the Permo-Triassic sediments along the Sydney Basin continental shelf has demonstrated “soft” high amplitude anomalies (reverse polarity to the water bottom reflector) that are observed along sequential seismic lines continuously over considerable (>60 km) lateral NE-SW extent.

An example of the seismic features is provided on the right from seismic line B4-11 (seismic line length is ~30 km). The zones of contiguous amplitude anomalous horizons are depicted as yellow polygons in the permit map below.



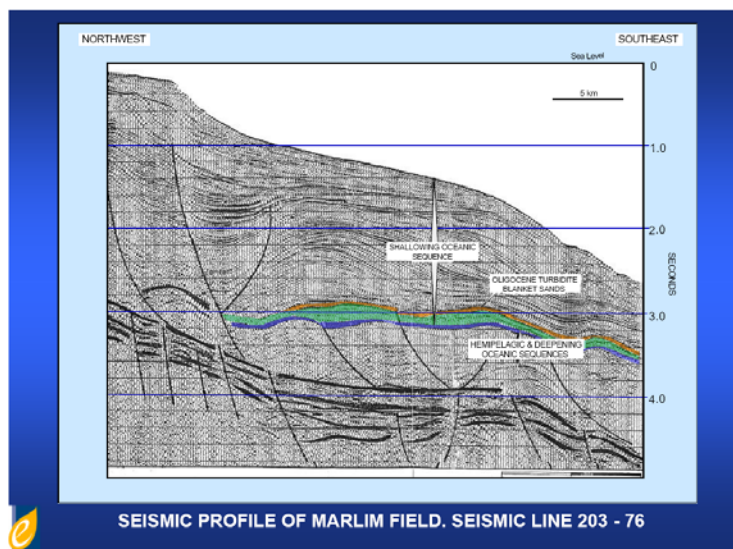
Advent notes that these newly identified prospective zones are analogous to the giant Marlim field in the Campos Basin in Brazil.



Location (left) and seismic transect (below) of the Marlim Oil Field, Campos Basin, Brazil, as used by Essential Petroleum as an analogy to their Descartes Prospect, in VIC/P50 in the offshore Otway Basin, Victoria. Essential Petroleum state that this prospect may hold 800 MMbbl oil (P50).

Modelling suggests that the hydrocarbon migration in the offshore Sydney Basin in PEP11, as described previously by Advent as manifesting in the seismic data as HRDZs, gas chimneys, chemotropic mounds and similar features, has charged the sediments of the Cainozoic wedge. The resulting accumulation of hydrocarbons in these sediments can produce the reverse polarity and amplitude anomalies as seen and mapped in the aforementioned images.

The Quaternary sediments have been described to comprise a large variation in grain size (from clay to gravel) with the dominant grain size a medium-to coarse grained sand (Sayers, 2004). It is feasible that an appropriate sorting of sediments during the progradational Cainozoic deposition resulted in an ideal package of potential reservoir and sealing units – Boyd (1998) describes similar such “forced regressive shorelines” as of considerable importance to the hydrocarbon exploration industry because of the significant potential for good reservoir development. In addition, no faults have been interpreted in the Cainozoic sediment wedge on seismic data from modern surveys, implying very low risk from a ‘fault breach’ point of view (Sayers, 2004).



In a further step towards commercial development of the project, conceptual well design and well testing planning has been completed for drilling of the Fish Prospect. Environmental approvals are in the process of being lodged. Advent is also continuing to pursue joint venture discussions and is in discussions to secure an appropriate drilling rig to test PEP11.

Yours Sincerely

David Breeze
Executive Director

Reference: Sayers, J., Kernich, A., and Dance, T., 2004, *Geosequestration investigations – offshore New South Wales, Australia*, PESA Eastern Australasian Basins Symposium II (Adelaide, 19-22 September, 2004).

Boyd, R., Roy, P., Lang, S., and Huftile, G., 1998, *RV Franklin National Facility Oceanographic Research Vessel Cruise Plan FR15/98*.