



## BPH Corporate Ltd

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### Cortical Dynamics Paper Published in Anesthesiology Journal

Friday, 23 July 2010

**Cortical Dynamics, an investee company of BPH Corporate Ltd [ASX: BPH], have produced a paper which has been accepted for publication in the August issue of Anesthesiology (journals.lww.com/anesthesiology/pages/default.aspx). The paper entitled Propofol and Remifentanyl Differentially Modulate Frontal Electroencephalographic Activity was co-authored by David Liley, Nicholas Sinclair, Tarmo Lipping, Bjorn Heyse, Hugo Vereecke and Michel Struys.**

The paper reports on results obtained by 45 patients undergoing surgery, in which the physiologically motivated fixed order time series modelling of electroencephalographic activity was able to differentiate the effects of the hypnotic propofol from the analgesic remifentanyl. This approach may enable independent monitoring of a patient's level of consciousness and analgesic state.

The accompanying independent editorial Disentangling Hypnos from His Poppies written by Jamie Sleigh, M.D. Department of Anesthesia (journals.lww.com/anesthesiology/pages/futuretoc.aspx?futuretocid=14) stated "a clear scientific understanding of the causal mechanistic links among drug effect and electroencephalographic and neurobiologic function must be superior to the existing heuristically derived black-box electroencephalographic monitors".

In their editorial decision the journal Anesthesiology stated that this work was "...an interesting and novel approach to analyzing the electroencephalographic effects of anesthetic and opioid drugs. The effect of opioids on the EEG is highly relevant to neuromonitoring in anesthesia, and will be important for the development of new clinically useful monitors."

Professor David Liley believes the technology also has the potential for other diagnostic applications that could improve the understanding of mental illnesses, stroke, psychosis and Alzheimer's disease.

The Cortical Dynamics team are developing this unique depth of anaesthesia monitoring system for use during major surgery. BPH is working with Cortical Dynamics to develop and commercialise the BAR Monitor and is also working towards listing the company on the Australian Securities Exchange (ASX) later this year.

### Advent Energy Contracts Drilling Rig for PEP11

Tuesday, 20 April 2010

**MEC Resources (ASX:MMR) is pleased to advise that investee company Advent Energy Ltd ("Advent") has signed an agreement with Apache Energy Ltd and Diamond Offshore Drilling (Australia) LLC for the drilling rig Ocean Patriot.**

The Ocean Patriot has been contracted to drill PEP11 in the Offshore Sydney Basin. PEP11 is being progressed with joint venture partner Bounty Oil and Gas (ASX: BUY).

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The Ocean Patriot has been contracted to drill PEP11 in the Offshore Sydney Basin. PEP11 is being progressed with joint venture partner Bounty Oil and Gas (ASX: BUY).

An exact date for drilling is yet to be determined and is contingent upon pre-existing contracts between the other parties. The range of dates to commence

drilling in PEP 11 is within the third quarter of 2010, with operations currently planned for mid August and expected to take approximately 25 days.

Advent Energy Executive Director Mr David Breeze said the drilling program represents a significant development for natural gas exploration off the coast of New South Wales.

"This project will be the first drilling rig to explore for natural gas off the coast of NSW, and represents a major step for the company and its shareholders" Mr Breeze said.

"It is a milestone for Advent Energy and joint venture partner Bounty. Sydney could be sitting on the doorstep of what could be a new and very large hydrocarbon province prospectively of global significance".

Following revision of newly reprocessed seismic data by Tanvindh Resources, a new target has been increased to prospect status and will be the first prospect drilled in PEP11. The prospective P50 Original Gas In Place (OGIP) estimate is 6.09 Trillion cubic feet (P90 = 1.77 Tcf, P10 = 24.76 Tcf).

Further details regarding the drilling operations will be announced to shareholders and the market as they become available.

### Rig lined up for Sydney basin wildcat

Upstream staff - Tuesday, 20 April 2010

**Australia's Advent Energy said it had contracted a rig to drill the Offshore Sydney basin, which the company believes holds reserves with potential to support a new liquefied natural gas project.**

Advent Energy said today it had contracted Diamond Offshore's semi-submersible Ocean Patriot to drill a single exploration permit on the PEP 11 permit under a deal with Diamond Offshore and US independent Apache.

The rig is expected to spud the Seaclem-1 well in mid-August, with drilling expected to take about 25 days. The well will be the first natural gas well to be sunk on the Offshore Sydney basin, Advent said in a presentation to the Excellence in Oil & Gas Conference in Sydney today.

Seaclem-1 will test prospective resources of 5.67 trillion cubic feet in Cainozoic sediments.

For the full permit, resources estimate was revised down to a mean 6.09 Tcf [see correction on ASX dated 5th May 2010] from a mean 7.5 Tcf following analysis of reprocessed seismic data. If proved up the resources would represent an accumulation bigger than the Pluto find being developed by Woodside off Western Australia.

Advent holds an 85% earned stake in PEP 11.

In addition to potential as a future LNG source, Advent said the prospect was well-placed to supply rising gas demand in Australia's biggest domestic gas markets in the Sydney area.

Advent is owned 46.1% by MEC Resources, and 19.5% by BPH Corporate, while Grandbridge and Talbot Group hold smaller stakes.

### BPH to buy Advent Stake

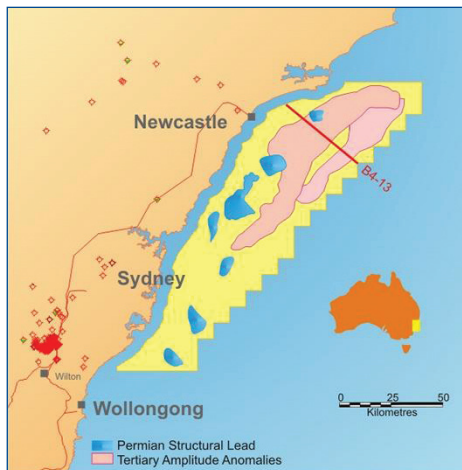
The West Australian - Thursday, 7 January 2010

BPH Corporate says it is progressing with plans to buy up nearly 20 per cent of unlisted oil and gas play Advent Energy. The WA biotech company formerly known as BioPharmica, said yesterday it would exercise an option to acquire between 9.7 per cent and 19.4 per cent of Advent at 50c a share using \$11.3 million it recently raised through a placement. BPH directors David Breeze and Hock Goh also sit on Advent's board. BPH closed unchanged at 10.5c.

**Australia: Bounty Oil and Advent Energy to drill in PEP 11 offshore Sydney Basin in 4Q 2010**

*Energy-pedia exploration - Tuesday, 27 July 2010*

**Bounty Oil & Gas and farm-in partner Advent Energy are preparing to drill PEP 11, offshore Sydney Basin, NSW early in the fourth quarter of calendar 2010.**



Farm in partner Advent Energy has advised that, following notice from Apache Energy, it anticipates commencing drilling in PEP11, early in the fourth quarter 2010. The semi submersible rig Ocean Patriot is due to drill two wells in Bass Strait, Victoria commencing in August and it is currently anticipated that the rig will be on that program until October, 2010.

Advent is currently evaluating the site survey report which covered the Great White and Marlin drilling locations 55 km offshore east of Newcastle.

The independent site survey contractor's analysis of site survey data over the Great White and Marlin Prospects stated that the geological sequence immediately above the interpreted Permo – Triassic age unconformity is 'likely' to contain zone(s) of gas. This sequence identified by the independent site survey contractor is the same sequence that was identified by the Bounty/Advent 2004 seismic surveys to contain the primary reservoir targets of the Great White and Marlin Prospects.

This interpretation is consistent with the CSIRO - PEP11 study into the same seismic sequence described in earlier ASX Releases by Advent's associated company MEC Resources. The upgrades in estimated prospective gas resources for PEP 11 issued by Advent's public release on 5 July 2010 are based on the Great White and Marlin prospects, covering significant areas estimated to be 574 km<sup>2</sup> and 761 km<sup>2</sup> respectively.

Advent has reported that they believe that reservoirs within this sequence are charged with natural gas sourced from the underlying Permo-Triassic age sequences.

PEP 11 is a very large permit covering 8,200 sq km. Bounty wishes to clarify the position with respect to the current joint venture interests in PEP 11. The current participating interests in PEP 11 are as follows: Bounty Oil & Gas: 75%; Asset Energy (a wholly owned subsidiary of Advent Energy) 25%.

**Background**

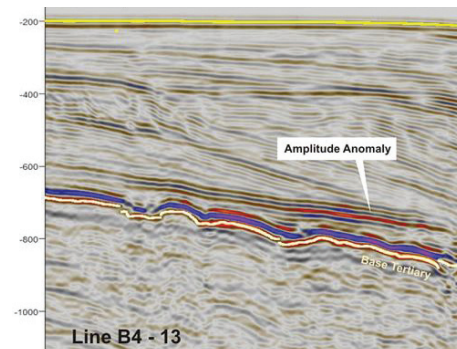
PEP 11 covers the offshore part of the Sydney Basin and lies adjacent to the largest gas market in Australia. The permit was acquired in 2002 and subsequently farmed out to MEC Resources, who through their associate Advent Energy act as the agent of Bounty who remain the operator. MEC has to drill one well to earn an additional 60% interest. With huge targets of up to 9 Tcf gas (at the lowest level of confidence) such a short distance from the Newcastle-Sydney-Wollongong market, this well will one of the most watched wildcats for many years. Its impact on Bounty is potentially enormous. With the 2004 Baleen Seismic Survey, the partners have a database of 3,798 km of 2D seismic which has been re-evaluated by MEC over the past 12 months with excellent results.

**Targets**

The Sydney Basin holds some of world's largest coal accumulations, onshore this coal is thermally mature and generates gas, some of which is the target of current coal seam gas exploration and development. Recent work by MEC has confirmed that there is an active gas generation and migration system offshore, with the location of gas seeps, gas chimneys in the seismic and hydrocarbon related diagenetic zones – areas where rising gas has chemically altered the sediments.

One target the joint venture is pursuing is culminations on a huge anticline formed on the upper plate of easterly dipping thrusts surrounded by areas where the Permian sequence is more deeply buried and mature for gas generation. The source of the gas in the gas chimneys is in the deep, gas generating parts of the Permian sequence under the thrusts. Gas rising up the thrusts can also migrate into the Permian sequence on the upside of the thrust and become trapped in the massive anticlines. There is a brightening of the seismic amplitudes over the crest of the Baleen structure, possibly indicating the replacement of formation water with gas which adds some considerable encouragement.

In the Carboniferous sequence under what is interpreted as the Basal Permian there are flat spots possibly due to gas water interfaces at the crest of the Baleen Structure. No gas seeps and indications of gas migration have been detected over the crests of



the anticlines; they are restricted to the margins of the structures, supporting the idea that the reservoirs in the structures are well sealed.

The second target is sands in the overlying Tertiary sequence where long continuous zones of amplitude anomalies, possibly associated with a gas charge to the sands, have been detected at several levels. These provide targets with prospective recoverable resources in the 1.5 - 3 Tcf range. All the work to date is pointing to an active gas generation and migration system, massive structures, with a high probability that reservoir seal pairs in the structures are impermeable and quality seals. The final proof will be in the drilling. Targets in the range 0.2 to 2.5 Tcf gas at the P50 confidence level (50% chance that they are either bigger or smaller than the figure) are present and being less than 50 km from Newcastle, a successful well would have tremendous impact.

**Current Activities**

The partners have contracted a semi-submersible drill rig and have funding for an exploration test well in the Fish - Baleen area about 20 kms offshore from Newcastle. Bounty will be free carried through the first well which is estimated to cost \$20 million.

*Source: Bounty Oil & Gas*

**BPH To Engage In Melanoma Drug Discovery**

*Monday, 26 July 2010*

**BPH Corporate Limited (BPH) is pleased to announce that Principal Researcher Dr Robin Scaife has been awarded funding from the Scott Kirkbride Melanoma Research Centre (SKMRC) to spearhead a melanoma drug discovery programme at the Western Australian Institute for Medical Research (WAIMR). The one year discovery grant was presented to Dr Scaife at the annual SKMRC fundraising luncheon.**

The SKMRC supports research that is aimed at providing crucial breakthroughs for improved diagnosis and treatment of melanomas and was established in 2005 in memory of Perth golfer, Scott Kirkbride, who lost his battle with this disease in 2004 at the age of 27.

Although melanomas have a reputation for being particularly refractory to therapeutic intervention, some types of melanoma have recently been shown to respond well to a new class of customized cancer drugs. Dr Scaife and his collaborators at WAIMR and the University of Western Australia, will use the high-content imaging and analysis platform at Molecular Discovery Systems to screen an arsenal of new drug-like molecules for inhibitors of melanoma cell survival and proliferation.

**Television Appearances**

**Channel Nine News Sydney - 6th June 2010 "Gas Mining Off Sydney's Coast"**



<http://video.au.msn.com/watch/video/gas-mining-plan-off-sydneys-coast/xen6fg7>