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ASX Announcement – Drilling Update

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MCARTHUR BASIN OPERATIONS – PETROLEUM EXPLORATION DRILLING TO COMMENCE

Background

Imperial Oil & Gas Pty Ltd (**IOG**), the Company's 100% owned subsidiary, is to commence preliminary petroleum exploration drilling in EP 184 in the McArthur Basin, Northern Territory.

In summary:

- Based on drilling programs undertaken by exploration companies from the 1980's through to today, it is apparent that there is attractive potential for undiscovered hydrocarbons within the Proterozoic organic black shales of the McArthur Basin and associated petroleum traps. IOG will be targeting these shales with its planned drilling program.
- Onsite setup for this Stage 1 drilling program is due to commence next week.
- Work programs have been approved by the Northern Land Council (**NLC**) and relevant government authorities.
- This initial program will entail the drilling of 4 to 6 shallow stratigraphic core holes targeting black shales in the Saint Vidgeon Formation, which is thought to be a chronostratigraphic equivalent to the Barney Creek Formation. The latter contains organic black shales of up to 10% Total Organic Carbon and is a known petroleum source rock elsewhere in the basin.
- Shale beds within these formations have been shown to be widespread, thick and buried deep enough to generate oil and gas.
- Research conducted by the shale research group of the University of Adelaide in 2013, on behalf of IOG, confirmed that these shale beds commonly contain sufficient organic material, porosity, and fracability characteristics, and are of sufficient age and thermal maturity, that they could hold significant recoverable petroleum reserves.

Objectives

- To characterise the petroleum source rock potential of organic shales within the Saint Vidgeon Formation. This formation is prevalent throughout the central portion of the McArthur Basin in an area known as the Urapunga Fault Zone.

- Obtain fresh-rock core samples for analysis from the targeted shales, and compare these with the geochemical and source rock analyses ('SRA') conducted by the Company in 2013 in relation to historical Barney Creek Formation core samples.
- To collect fresh-rock samples, it is proposed to drill through the upper weathered (oxidised) zone and then into fresh (unweathered) shale to obtain core samples suitable for mineralogical, petrophysical and geochemical analysis.
- To further strengthen the geological model and support the geological prognosis for deeper, more extensive follow-up step-out exploration wells.

Exploration strategy and methodology

- Surface outcrops of the Saint Vidgeon Formation are intensely weathered, and are therefore not representative of fresh rock at depth. Historical core analysis of the equivalent Barney Creek Formation, which has confirmed the presence of a mature petroleum province within the McArthur Basin, was always from fresh rock, taken sufficiently far down the hole so to avoid the effects of surface weathering.
- To assess the potential of these targeted source rocks to produce sufficient and commercially viable hydrocarbons, geochemical and SRA characterisation must be done on fresh rock.
- The Company believes that this can be carried out in a very cost effective way by:
 - stepping back from the known outcrops and drilling to depths of 100m to 200m, to reach below the weathered zone;
 - drilling shallow core holes that are quickly drilled;
 - the cost of drilling each core hole will be approximately \$170,000;
 - for core drilling in the weathered and non-hydrocarbon bearing formations it is planned to use a multipurpose rig that will use a rotary open-hole drilling method down to fresh rock, and then core drill from there to a depth of 100 m \pm 20 m, to obtain the required core samples for analysis and formation typing.
- To increase the chance of representative results, multiple locations will be sampled down each hole where black shales are encountered, as these shales can be laterally, as well as vertically, discontinuous.
- Core holes will also provide information on the actual depth of the top of Saint Vidgeon Formation, which in combination with the outcropping top of the formation, provides a more accurate dip of the target formation.
- Core will be logged on site, split with one half to be dispatched to the University of Adelaide for analysis.
- Results will provide additional data for the Company's 3D modelling program for the Company's entire land holding in the McArthur Basin.
- On completion of the laboratory analysis all remaining core and samples will be sent to the Northern Territory Geological Service core library and the results of analysis will be provided to the NT Department of Mines and Energy in accordance with the Petroleum Act requirements.

Bruce McLeod, Chairman and CEO said:

“The Company has experienced a number of delays until recently with getting on ground in the Northern Territory. We are now pleased to begin this core-drilling phase. Currently there is an increasing interest in the Northern Territory in relation to the potential development of both conventional and unconventional oil and gas petroleum resources. While there have been these delays, we have continued to develop strong relationships with both the Traditional Owners and the NLC, which we believe will have very positive benefits for our future programs.

The Northern Territory Geological Survey is a partner in this exploration program and the Company is excited to have them co-funding a portion of the core-drilling program. It provides further evidence of the confidence in the McArthur Basin and the petroleum resource potential.

An underlying objective of the Company is to work closely with the local community, especially in terms of the cultural significance of the region and the provision of employment opportunities. As results of the Company’s initial work programs are received we will be able to further progress initiatives with the local community and potential partners seeking unconventional oil and gas opportunities”.

The below map shows the locations for the initial core drill sites within EP184.



US OPERATIONS – DRILLING UPDATE

- As recently announced, the Company has identified an undefined, shallow Bradford Sands oil field (satellite to the Bradford Oil Field) in Allegany County, New York. Two wells have been drilled with initial estimates of recoverable oil (EUR) of 15-20Mbbbl per well and with an IP ~15bbl/d. Costs are approximately \$110,000/well. As the field is connected to electricity and natural gas takeaway pipeline additional wells are being drilled. It is expected that the Company will have in total 6 to 7 wells drilled by the end of June 2014.
- Following the completion of the Stice #8 well in Rook County, Kansas, in May 2014, IP has averaged ~20 Bbl/d. A further 5 locations have been identified with 2 wells being drilled or spudded by the end of June 2014.
- The Company has a portfolio of over 165 oil drilling locations in Appalachia and the Mid-Con.
- Drilling success rate for the past 4 years has been around 88%.
- The following table shows historical drilling expenditure and the expected increase in capital expenditure on drill bit growth:

Wells Drilled	2011	2012	2013	2014E*
Gross	6	6	5	21**
Net	4	4	4	16
Cost	\$1.3mm	\$1.4mm	\$1.3mm	\$5.0mm
Strategy	Focus on land banking, work overs, upgrades, polymer and seismic programs			Focus now on drill-bit growth

** 11 oil wells in New York and a minimum of 10 wells in Kansas for 2014

ABOUT EMPIRE ENERGY GROUP LIMITED

In early 2007, the Company established Empire Energy USA, LLC a wholly owned subsidiary. Empire Energy USA is an oil and natural gas producer with operations in Appalachia (New York and Pennsylvania) and the Central Kansas Uplift (Kansas). Current production is around 1,350Boe/d.

The Company holds approximately 214,000 net acres of Marcellus Shale and 136,000 net acres of Utica Shale in western New York State and Pennsylvania. In addition, the Company has Exploration Licence Applications over 14.6 million acres in the McArthur Basin, Northern Territory, Australia, which is considered prospective for oil and gas shale.

Empire Energy holds a US\$200 million credit facility with Macquarie Bank Limited, which can be utilised for the acquisition and development of oil and gas assets in the USA. This facility has around US\$41m of the debt facility currently drawn.