

#### **EMPIRE ENERGY GROUP LIMITED**

Level 7, 151 Macquarie Street Sydney NSW 2000

T: 02 9251 1846 F: 02 9251 0244 (ASX: EEG)

(OTCQX: EEGNY)

# ASX Announcement McArthur Basin Update - Exploration Licencing Update

18 October 2012

#### **Highlights**

- > 3.5 mmcfpd flow rate achieved in Barney Creek Shale in block adjacent to Imperial ELA.
- ➤ NT Government establishes Strategic Action Group to identify gas sources for power generation.
- ➤ Licence negotiations with Traditional Owners progressing.
- ➤ Geological studies underway to assist in formulation of 2013 exploration program.
- ➤ The potential of Northern Territory petroleum systems and particularly shale basins being closely reviewed by global petroleum corporations.
- ➤ Dr Telm Bover-Arnal will present the research paper, "Proterozoic rocks that retain organic compounds: insights from the McArthur Basin (Nth Territory, Australia)" at the 17<sup>th</sup> Australian Organic Chemistry Conference.

#### The Barney Creek Formation Petroleum System

The Directors of Empire Energy Group Limited (the "Company") are pleased to provide shareholders with an update on recent progress of its wholly owned subsidiary Imperial Oil & Gas Pty Ltd ('Imperial') in terms of finalising exploration licences for its Northern Territory project.

Imperial holds a 100% working interest in seven petroleum exploration license areas ('ELA') that cover approximately 14.6 million acres (59,172 km²) onshore Northern Territory (refer to attached figures). Imperial's leases enclose ~75% of the prospective central McArthur Basin Trough (Walker & Batten Fault Zones) where the principal exploration target is unconventional gas & oil in thick Palaeo-Proterozoic carbonaceous black shales of the Barney Creek Formation. This target shale formation is up to 900m thick and has been proven to contain producible oil and gas.

Although recent well results nearby have proven that the McArthur Basin is prospective for oil and gas, the basin remains very lightly explored for petroleum.

Recent drilling in a block adjacent to Imperial's acreage has demonstrated the existence of a working petroleum system in the Barney Creek Formation. The Glyde-1 well flowed gas to surface at rates of approximately 3.5-4.5 million standard cubic feet per day equivalent based on open flow conditions at the flare line and without any induced fracture stimulation of the wellbore.

### Northern EP(A)'s

In his media release of 11<sup>th</sup> September 2012 Mr Terry Mills, Chief Minister of the Northern Territory, confirmed the establishment of a 'strategic action group' charged with identifying gas sources that can be used in the East Arnhem Land region for power generation.

Leading from this initiative, Imperial has engaged in discussions with stakeholders involved in the strategic action group. Imperial will work with the relevant authorities to accelerate the licensing process, thereby allowing Imperial to fast track the forward exploration program.

In addition, Imperial has participated in five successful initial 'on-country' meetings with senior Traditional Owners in its large East Arnhem EP(A) 180, 181 and in the smaller EP(A) 183 areas. The Company has been well received and further such meetings are planned in EP(A) 182 and 183 ahead of the wet season that commences in early November. The majority of the senior Traditional Owners have expressed a desire for the Northern Land Council ('NLC') to progress further consultations on their behalf with a view to granting Exploration Agreements to Imperial in a timely manner.

#### Southern EP(A)'s

Imperial continues working closely with the NLC to finalise negotiated Exploration Agreements with the aim of securing the grant of up to three of its southernmost Exploration Permit Applications EP(A) 184, 187 & 188 in the next year. The sacred site survey commissioned by Imperial has now been completed. As anticipated, some parts of the EP(A)'s are likely to be categorised as non-consent areas and Imperial will avoid these during its initial exploration activities.

In addition, a portion of Imperial's EP(A) 184 is over the newly declared Limmen National Park. Exploration activities are permitted in the National Park and Imperial has engaged in discussion with the Parks & Wildlife Commission of the Northern Territory to implement an exploration program once the licence for EP(A) 184 is issued.

#### **Geological Studies**

On 25<sup>th</sup> May 2012 Empire Energy announced that Imperial had entered into an Agreement with the Kennedy Research Group ('ASCS'), based at the University of Adelaide, South Australia. Under the Agreement ASCS is conducting predictive geological studies of the McArthur Basin to identify the most prospective areas for shale oil and gas drilling in Imperial's EP(A)'s.

Since entering into the Agreement, ASCS has undertaken sampling & detailed geological description of relevant existing core material from the prospective black shale formations. Geochemical analysis is being undertaken to better constrain the nature and distribution of the hydrocarbons in these shales. Once the study programs have identified predicted petroleum 'sweet spots' within Imperial's acreage, the Company intends to commence its 2013 exploration program in the basin.

At the 17<sup>th</sup> Australian Organic Chemistry Conference to be held at Macquarie University, Sydney, on 2 - 4<sup>th</sup> December 2012, Dr Telm Bover-Arnal, is to present on behalf of ASCS and the Company the joint research paper "Proterozoic rocks that retain organic compounds: insights from the McArthur Basin (Nth Territory, Australia)".

## **About Empire Energy Group Limited**

In early 2007, the Company established Empire Energy USA, LLC and currently holds around 96% of its issued capital. Empire Energy USA is an oil and natural gas producer with operations in Appalachia (New York and Pennsylvania) and the Central Kansas Uplift (Kansas). In addition it holds approximately 360,000 acres of Marcellus and Utica shale formations in New York State USA.

Through its 100% owned subsidiary, Imperial Oil & Gas, Empire Energy holds around 14.6 million acres of potential shale formation in the Northern Territory, Australia. Attached are maps showing the Exploration Licence Applications held by Empire Energy.

Empire Energy implemented a US\$100 million credit facility with Macquarie Bank Limited in early 2008 for the sole purpose of acquiring and developing oil and gas assets in the USA. This facility has been increased to US\$150 million. At present the facility is drawn to US\$51 million.

For more information:

Bruce McLeod Executive Chairman Empire Energy Group Limited +61 2 9251 1846