



ABN 53 132 857 008

28 November 2013

Ms Julia Knight
Committee Secretary
Committee on the Northern Territory's Energy Future
GPO Box 3721
DARWIN NT 0801

Dear Ms Knight

I am writing in support of the submission by the Australian Petroleum Production and Exploration Association (APPEA) to the Committee on the Northern Territory's Energy Future.

I also take this opportunity to provide the Committee with some views of Falcon Oil & Gas Australia Ltd (Falcon) on the exploration process and the particular circumstances that apply in the Northern Territory.

Falcon is an Australian company which is 98% owned by Falcon Oil & Gas Ltd, listed on the Toronto, London and Dublin stock exchanges. Falcon holds four exploration permits in the Beetaloo Basin (EPs 76, 98, 99 and 117) covering approximately seven million acres which it acquired in 2009. The permits are on pastoral leasehold land and were the first petroleum permits granted under the *Native Title Act*.

Since the granting of the permits a significant amount of work has been undertaken including the re-assessment of historical data (in the late 1980s and early 1990s a number of wells were drilled around the perimeter of the Basin for which a large amount of data is available), the acquisition of seismic data and the drilling and testing of the Shenandoah No1 exploration well. Total exploration expenditure so far has been \$106.4 million (\$80 million on seismic data collection and analysis, \$21.4 million on the Shenandoah No. 1 well and \$5 million on other exploration activities).

Geological information from the Basin indicates there is potentially a large volume of oil and gas available for recovery. In January 2013 Falcon announced that a report by independent resource analysis company RPS Energy, which considered the potential of the whole of the on-block basin, estimated recoverable resource volumes of 162 TCF of gas and 21 billion barrels of oil.

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Falcon is sufficiently confident of the quality and extent of the hydrocarbons in the Beetaloo Basin to continue vigorously with its exploration activities. Its approach to exploration is to identify areas with significant potential and to work with a major industry player to undertake the exploration activities which are expensive and involve a range of risks. This is a common model in the industry and assists in spreading exploration risks for all the participants. Currently, we are in advanced negotiations with a number of potential partners about undertaking the next stage of exploration. It is expected that these arrangements will be finalised and announced by the end of 2013 at which time a comprehensive work program will be finalised with the Department of Mines and Energy.

The work completed provides the platform for the next stage of exploration. This will involve the drilling of a number of wells to locate the 'sweet spots' for further appraisal work and where the geology and science support it, the appraisal of wells for production. Successful transition to production will depend on a number of factors including establishing that there are sufficient hydrocarbons, the shale is able to produce at sufficient flow rates to justify commercial development and the cost of producing any oil and gas will produce an economic return.

Establishing whether the resources in the Beetaloo Basin are able to support development will require significant additional scientific work and a large amount of expenditure over the next five years. It is important to note that there is no *Eureka!* moment in unconventional oil and gas exploration as sometimes occurs during conventional exploration.

To be commercially successful, the Beetaloo Basin will need to produce very large volumes of hydrocarbons and it could be expected to have an extended life of potentially 100 or more years. It needs to be recognised that development costs are extremely high in all parts of the world and in the Northern Territory these are compounded by a range of factors including:

- As all shales have different properties, it will be necessary to do extensive work to assess the nature and properties of the Beetaloo shales. Factors that need to be assessed include the amount and location of hydrocarbon bearing shale, the ability of the shale to release the hydrocarbons and the rate at which the hydrocarbons can be produced. Experience in other parts of the world, in particular the United States, will be relevant but that can only be a guide to how the shales in the Territory will produce.

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- The work to assess the potential for production relies on high levels of skill and sophisticated technical capacity including people, facilities and equipment. As the industry is in its infancy, these are not yet generally available in the Territory and have to be brought in from elsewhere in Australia and, most often, from overseas. The remoteness of operations and the climatic conditions (the field season is effectively limited to about half the year) creates additional costs and logistical difficulties.
- The need to develop infrastructure to enable any hydrocarbons produced to be transported for processing and delivery to end-users. In the Beetaloo Basin there is existing quality infrastructure including a pipeline, sealed roads and the nearby railway. However, this infrastructure will not necessarily be able to handle the volume of gas and traffic if development proceeds (there are capacity issues with the current pipeline, for example). It is unlikely that the resources will be located adjacent to the infrastructure necessitating significant new investment and there will be a need to establish markets of sufficient size to enable development to proceed.

Resolution of all these issues will require significant additional time and resources once it has been established that the resources are commercially sustainable. In the United States, for example, the drivers behind shale gas development included the volumes of oil produced, the existence of a comprehensive network of pipelines to transport gas and an existing market that could easily use the gas produced. Yet it still took many years for the industry to develop.

All these issues need to be addressed and we are confident they can be resolved. In addition, successful exploration has the potential to bring significant benefits to the Territory, including:

- Unlike offshore production, onshore development provides royalties to both the Northern Territory Government and the native title holders.
- The creation of many jobs in regional areas requiring a wide range of skills from unskilled labour to highly sophisticated technical jobs, presenting many opportunities for regional development and local communities. It would also underpin the further expansion of the initiatives undertaken by Charles Darwin University to position the Territory as a leader in oil and gas industry skills.
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- A wide range of business opportunities and the development of new industries based on servicing the oil and gas industry. The development of these industries could be expected over time to create a more competitive marketplace reducing the costs of doing business in the Territory. It would also provide capacity for the development of existing industries and facilitate the emergence of new industries.

In this context, it is worth noting that in the United States it has been documented that the 'shale gale' has created 70,000 new jobs in North Dakota alone.

For the industry to be successful in the Territory it needs to have the support of its stakeholders and the community generally, appropriate regulatory frameworks within which to operate and a Government which is supportive.

A key element is certainty and continuity as the large amounts of capital required to achieve development will have to be sourced externally. Investors need to know that the conditions under which they have invested will be allowed to operate and that the rules will not change in a way that will increase uncertainty or risks.

Falcon works closely with its stakeholders including the Department of Mines and Energy, the Northern Land Council as the Representative Body for the native title holders and the pastoral leaseholders. We understand the wider community concerns about the nature of the industry and concerns about potential impacts on the environment from well construction, well stimulation and surface activities. Falcon actively supports and participates in community information provision through its membership of APPEA, by attending public meetings and providing information directly to members of the public when requested.

Falcon has a commitment to world's best practice in all its activities and is committed to the standards required by APPEA members.

As a modern and transparent framework that reflects best practice and provides the necessary safeguards is an essential precondition for successful exploration and development, we fully support the current initiatives of the Northern Territory Government in reviewing and updating the regulatory frameworks for onshore petroleum. As the industry's technology is developing at a rapid pace and becoming more sophisticated, the regulatory framework must be sufficiently flexible to accommodate developments when they occur. The Government's practice of consulting with industry about proposed changes and their implementation benefits all concerned and should continue. The management of the regulatory framework requires departmental staff with the requisite knowledge and skills in sufficient numbers to enable the industry to obtain its approvals and be supervised in a timely manner.

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The Northern Territory Government recognises the early stage of development of the onshore oil and gas industry and has created an environment which is conducive to investment in this industry. The understanding and recognition of the nature and the requirements of unconventional oil and gas at all levels of the Government have been crucial in arriving at the position the industry has now achieved.

These comments are not exhaustive and Falcon will provide any additional information it can to assist the Committee with its inquiries. Further information about our activities and approach to exploration is at our website <http://www.falconaustralia.com.au/>. I can be contacted on 8948 1432 or at jcarroll@falconoilandgas.com.

Yours sincerely

A handwritten signature in black ink, consisting of several overlapping loops and a long horizontal stroke that ends in a small loop and a tail extending to the right.

John Carroll
Country Manager Australia