

# SCIENTIFIC INQUIRY INTO HYDRAULIC FRACTURING IN THE NORTHERN TERRITORY



Geoscience Australia  
Submission #414

Dr Andrew Heap  
A/g Chief  
Resources Division  
Geoscience Australia  
GPO Box 378  
Canberra ACT 2601

Dear Dr Heap

## RE: HYDRAULIC FRACTURING INQUIRY – INFORMATION REQUEST

I refer to the *Scientific Inquiry into Hydraulic Fracturing of Unconventional Reservoirs in the Northern Territory (the Inquiry)*, which was established by the Northern Territory Government under the *Inquiries Act 1945 (NT)* in late 2016 to investigate the impacts and risks of hydraulic fracturing of onshore shale gas reservoirs and associated activities on the environmental, social, economic and cultural conditions in the Northern Territory.

The Inquiry requests a response from Geoscience Australia (**GA**) on the matters outlined below.

### **1. Future development**

In its submission, GA mapped the various basins in the Northern Territory and provided the following statement with respect to the prospectivity of each basin:

*“The Amadeus Basin was assessed to have high prospectivity with high confidence. The McArthur and Georgina basins were assessed to have moderate prospectivity with high confidence. The remaining Northern Territory basins were assessed to have lower prospectivity, lower confidence, or both.”<sup>1</sup>*

Please comment on the likelihood and timeframe for development of each basin, as well as the limitations involved in making an assessment of this kind.

### **2. Groundwater studies**

GA submitted that groundwater studies are being undertaken:

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<sup>1</sup> GA Submission, No. 296, p 11.

- (a) in the Southern Stuart Corridor between Alice Springs and Tennant Creek;  
and  
(b) in the Northern Stuart Corridor around Daly Waters.<sup>2</sup>

Please advise when these studies will be completed. Please also advise whether the studies will estimate the aquifer volumes, quality and recharge rates.

Finally, the Department of Environment and Natural Resources and has advised the Inquiry that the Tindall Limestone Aquifer has a recharge rate ranging from 100,000 ML/y to 330,000 ML/y. Please comment on these estimates.

In order to meet current reporting timeframes, please respond no later than **18 August 2017**.

Yours sincerely



THE HON JUSTICE RACHEL PEPPER  
Chair

2 August 2017

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<sup>2</sup> GA Submission, No. 296, p 13.