



## Report Cover Sheet

<b>Tenure:</b>	EL29848
<b>Title:</b>	EL29848 Annual and Final Report - 24 February 2015 to 30 April 2016
<b>Period:</b>	24 February 2015 to 20 April 2016
<b>Project Name:</b>	Arnhem Land Project
<b>Title Holder:</b>	Alcoa of Australia Limited
<b>Title Operator:</b>	Alcoa of Australia Limited
<b>Personal Author:</b>	Alex Hatch
<b>Report Type:</b>	Annual and Final
<b>250K Mapsheet/s:</b>	Arnhem Bay-Gove
<b>100K Mapsheet/s:</b>	Howard
<b>Geological Province:</b>	Arafura Basin
<b>Stratigraphic Name:</b>	Wessel Group, Elcho Island Formation
<b>Keywords:</b>	Bauxite
<b>Commodity:</b>	Bauxite
<b>Drilling:</b>	Nil
<b>Geochem Sampling:</b>	Nil
<b>Geophysics:</b>	Nil
<b>Work Done:</b>	No work was done on this Licence.
<b>Results:</b>	The results from a 2015 vacuum drilling program, completed on EL3350, in the centre of Howard Island were disappointing and failed to intersect significant bauxite.
<b>Conclusions:</b>	Due to the poor results from drilling in EL3350 and given the proximity and analogous geological settings of the two areas, Alcoa of Australia Limited believes that EL29848 holds little potential to host an economic bauxite deposit. EL29848 will be surrendered.
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## **Location, title history, physiography and access**

The subject of this report, EL29848, covers an area of 6.59km<sup>2</sup> on Howard Island and was initially granted on February 24<sup>th</sup> 2015 for a period of 6 years.

Howard Island is Aboriginal Freehold Land and is located about 550km east of Darwin just off the East Arnhem Land coast. Access is only possible by light aircraft or boat but there are no scheduled services of either to the island. A gravel airstrip adjacent to the settlement of Langarra on the north coast Howard Island is suitable for single engine aircraft. Shallow draft barges are able to access the beach adjacent to Langarra during high tide. Traditional owners of the land that is covered by EL29848 requested that access to the tenement be by beach landing only and while it is believed that this is possible, it was not tested.

EL29848 occupies Point Guy on the western end of Howard Island (see Figure 1). It represents the smaller of two areas, for which consent was received, from an exploration license application that covered the whole of Howard Island. The license area, initially applied for in 1981, was the subject of a number of periods of consultation and moratorium before consent areas were agreed following consultation meetings held in 2012. These were passed by the full council of the Northern Land Council (NLC) in May 2014 prior to the approval of the Federal Minister of Indigenous Affairs and the subsequent grant of exploration licenses. A work program was proposed to traditional owners at a meeting facilitated by the NLC in June 2014 and subsequently limited geological reconnaissance was planned. Agreement for the reconnaissance was confirmed during a work program meeting in September 2015 but logistics scheduling issues delayed work.

EL3350 forms part of Alcoa's Arnhem Land project consisting of five semi-contiguous applications, being Elcho Island, Howard Island and three mainland applications immediately to their south (see Figure 1). Authorisation 0865-01 and the associated Mine Management Plan is current for exploration activities on EL22821, EL3350 and EL29848 on Elcho and Howard Islands.

## **Geological setting, exploration history and exploration rationale**

Geologically, Elcho Island and Howard Island sit in the onshore portion of the Arafura Basin. A detailed description of the geology of the Arafura Basin can be found in Rawlings (1997). Beneath cover, the geology of Howard Island is dominated by the Elcho Island Formation with limited exposure of the younger Jigaimara Formation on the north coast of the island.

No record of previous mineral exploration within EL29848 has been found. Two bauxite occurrences on the eastern side of Elcho Island, recorded by Plumb (1965), provided the impetus for exploration of Elcho and Howard Islands. The occurrences are essentially untested and Ferenczi (2001) suggested that the area "may host bauxite deposits comparable to those on Marchinbar Island".

## **References**

Ferenczi P, 2001. Iron ore, manganese and bauxite deposits of the Northern Territory. *Northern Territory Geological Survey, Report 13*.

Plumb KA, 1965. *Wessel Islands-Truant Island, Northern Territory. 1:250 000 geological map series and explanatory notes, SC 53-15, 16*.

Bureau of Mineral Resources, Geology and Geophysics, Australia, Canberra.

Rawlings DJ, 1997. *Arnhem Bay-Gove, SD 53-3, 4. 1:250 000 geological map series explanatory notes*. Northern Territory Geological Survey, Australia.

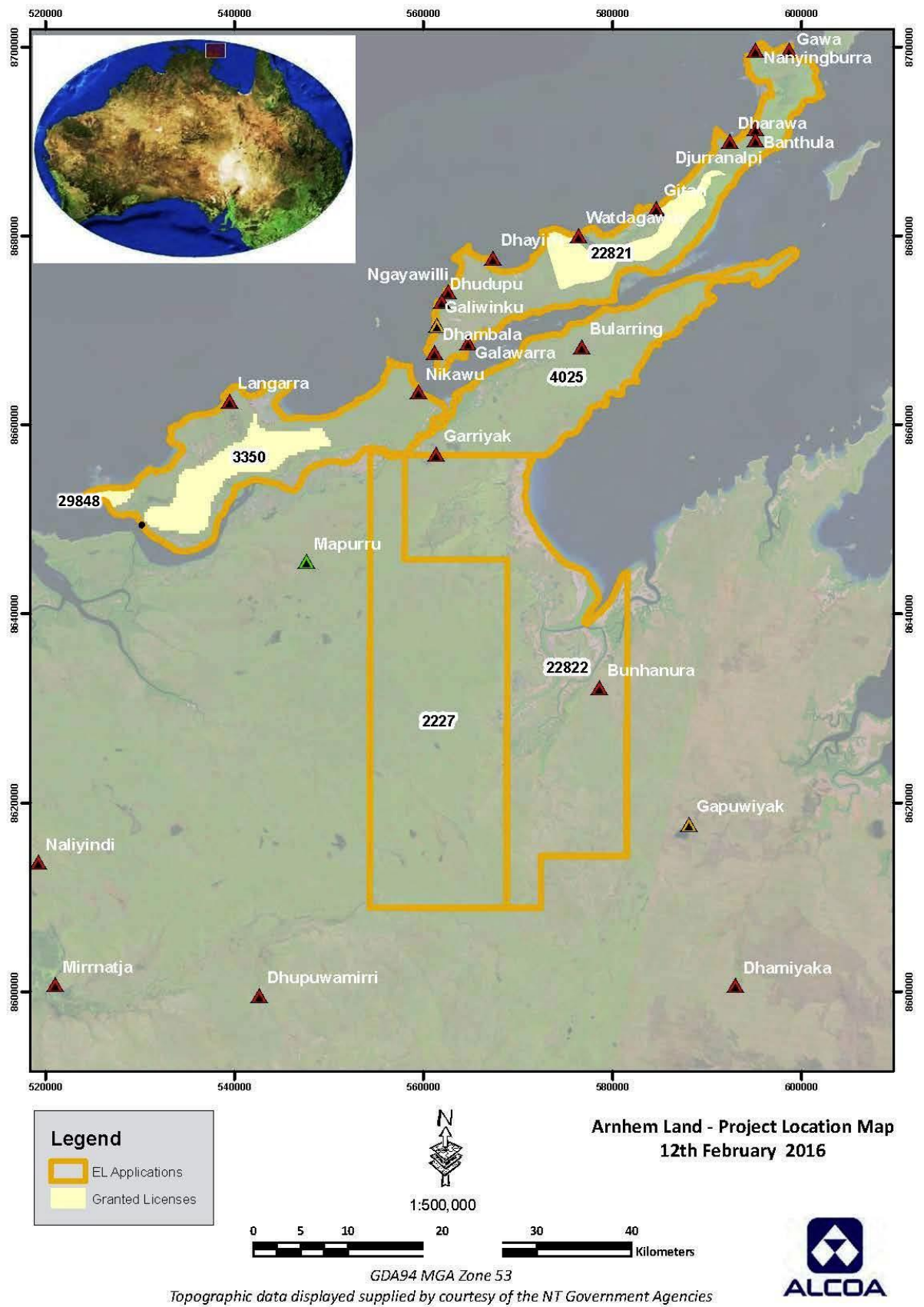


Figure 1. Location map showing license boundaries relative to Exploration License Applications