Miramar Resources Limited (ASX:M2R, “Miramar” or “the Company”) is pleased to advise that the Company has submitted an Exploration Licence Application over copper and uranium occurrences in the northern Gascoyne Region of WA.

Exploration Licence Application, E08/3676, covers part of an outcropping “Durlacher Supersuite” granite, the same unit that hosts the Yangibana (Hastings) and YIN (Dreadnought) REE deposits (Figure 1).

The tenement application also covers numerous N-S trending Mundine Well dolerite dykes, along strike from Dreadnought’s Mangaroon Ni-Cu-PGE prospect, and contains the “Chain Pool” uranium occurrence and the historic “Joy Helen” copper-lead-silver mine.

Miramar’s Executive Chairman, Mr Allan Kelly, said the Gascoyne region provided the opportunity for the discovery of multiple commodities and deposit types.

“This new application is prospective for base metal mineralisation hosted in sediments of the Edmund Basin, uranium and/or REE mineralisation associated with the Durlacher Supersuite granitoid, and potentially also Ni-Cu-PGE mineralisation associated with Mundine Well dolerite dykes,” Mr Kelly said.

“We look forward to progressing the tenement to grant and getting out on the ground,” he added.

Figure 1. Regional geology of the Northern Gascoyne region showing location of Application E08/3676.
The Chain Pool occurrence is located within the “Telfer Batholith”, part of the Durlacher Supersuite and the same geological unit that hosts the REE deposits at Yangibana and YIN (Figure 2). The batholith was first identified as being prospective for uranium mineralisation hosted within veins within the granites, similar to the Rössing and/or Phalaborwa deposits, in the 1970’s.

In the period 2009-2011, Raisama Limited conducted exploration targeting uranium mineralisation associated with the granitoid including a detailed airborne magnetic and radiometric survey across the entire granitoid batholith, followed by limited reconnaissance rock chip sampling and RC drilling.

The highest rock chip result of 1,898ppm U (i.e. 2,248ppm U₃O₈) came from a sample in what is now known as the "Chain Pool" prospect. Only two rock chip samples, approximately 1.4km apart, were ever taken within the 5km long radiometric anomaly (Figure 3).

A single RC drill hole, CP_RC05, was drilled to 80m and tested the radiometric anomaly beneath the highest rock chip result but failed to intersect significant uranium mineralisation.

The hole encountered granite intruded by thin pegmatites but the samples were only assayed for Rubidium, Thorium, Uranium and Zircon (WAMEX Reports a087098, a088661 and a089842).

Given the areal extent of the uranium anomalism, the similarities in geology to Yangibana, and the lack of any systematic sampling or drilling, the area remains prospective for uranium and/or REE mineralisation.

In addition, the Mundine Well dolerite dykes have apparently never been investigated for Ni-Cu-PGE mineralisation.
Figure 3. Radiometric uranium image for Chain Pool showing limited sampling and drilling.
Joy Helen Copper-Lead-Silver prospect

The Joy Helen Cu-Pb-Ag occurrence is hosted in the Irregully Formation, part of the Edmund Basin.

The mineralisation reportedly dips shallowly to the west and contains three separate lodes with drill intersections up to **1.5m @ 13.7% Pb and 1.6% Cu** (WAMEX report a567).

In the period 2006-2009, Quadrio Resources Pty Ltd, a subsidiary of Dominion Mining Limited, conducted exploration for SEDEX gold and base metal mineralisation within their “Edmund Project” which covered the area now held as E08/3676 (WAMEX Reports a075044, a077849 and a081694).

During 2007, Dominion collected rock chip samples, including around the Joy Helen workings (Figure 4). According to WAMEX Report a075044:

“Significant results included numerous mineralised Pb, Ag, and Cu sampled from the Joy Helen prospect workings. (Max. 33.98% Pb, 8.85% Cu, and 22.95ppm Ag). Anomalous gossan and duricrust samples were also identified proximal to regionally mapped structural features and magnetic anomalies (Max 0.93ppm Ag, 397.7ppm Co, 4225ppm Pb, 2901 ppm Zn).”

No further work was completed and the tenement was subsequently surrendered. As such, the prospect has not been subjected to any modern and/or systematic exploration, including drilling.

Once granted, the Company intends to verify the previous sampling and design a drilling campaign to test the potential of the prospect.

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**Figure 4.** Aerial imagery for Joy Helen prospect showing historic high-grade rock chips.
For more information on Miramar Resources Limited, visit the Company’s website at www.miramarresources.com.au, follow the Company on social media (Twitter @MiramarRes and LinkedIn @Miramar Resources Ltd) or contact:

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This announcement has been authorised for release by Mr Allan Kelly, Executive Chairman, on behalf of the Board of Miramar Resources Limited.

COMPETENT PERSON STATEMENT

The information in this report that relates to Exploration Results is based on information compiled by Allan Kelly, a “Competent Person” who is a Member of The Australian Institute of Geoscientists. Mr Kelly is the Executive Chairman of Miramar Resources Ltd. He is a full-time employee of Miramar Resources Ltd and holds shares and options in the company.

Mr Kelly has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to Qualify as a “Competent Person” as defined in the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’.

Mr Kelly consents to the inclusion in this Announcement of the matters based on his information and in the form and context in which it appears.

Information on historical exploration results is taken from the relevant WAMEX report as referenced.
About Miramar Resources Limited

Miramar Resources Limited is an active, WA-focused mineral exploration company exploring for gold, IOCG, Ni-Cu-PGE and REE deposits in the Eastern Goldfields, Murchison and Gascoyne regions of WA. Miramar’s Board has a track record of discovery, development and production within Australia, Africa, and North America, and aims to create shareholder value through discovery of high-quality mineral deposits.