



For Immediate Release  
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## ASX RELEASE

### **Additional potential kimberlites identified near Monax's Margaret Dam Project in S.A.**

#### **HIGHLIGHTS**

- **More potential kimberlites identified within the vicinity of Monax's Margaret Dam project (EL 5347)**
- **Monax secures further tenements to cover interpreted targets**
- **Drilling program planned to test potential kimberlites on EL 5347**

Monax Mining Limited ("Monax") (ASX:MOX) is pleased to provide an exploration update for its Kimberlite Project, located in northern South Australia (Figure 1).

Monax previously announced the discovery of a potential kimberlite on its Margaret Dam Exploration Licence 5347 (see ASX Release 13 November 2014 for details). Further review of regional aeromagnetic data has outlined numerous targets within the vicinity of the Margaret Dam tenement.

Based on the review, Monax has secured a further three tenements - Exploration Licence Application (ELA) 2014/233, ELA 2014/236 and ELA 2014/237 (see Figures 1 & 2).

Five separate targets have been identified on EL 5094 - which is part of the Company's Algebuckina Project.

These new tenements are now part of a new project – Kimberlite Project (see Figure 1).

Kimberlites occur in the Earth's crust in vertical structures known as kimberlite pipes, as well as igneous dykes and sills. Kimberlite pipes are today the most important source of mined diamonds.

Monax recently completed detailed ground magnetic and gravity surveys on EL 5347 over the circular magnetic features to check the validity of the data, and assist with modelling the dimensions and depth of the target.

The new ground magnetic data reveals a discrete elongate magnetic dipole with a SW-NE trend and a smaller magnetic anomaly located to the SW (see ASX Release 13 November, 2014 for details).

### **Background**

Macrodiamonds and kimberlitic indicator minerals have previously been found within close proximity to Monax's Margaret Dam project area. In 1894, a single ~1 carat (ct) diamond was found in alluvial gold workings at Peake Creek, north of William Creek (see Figure 2) (Morris, 2003).

In the early 1980s, eight microdiamonds were reported from loam and stream sediment samples from Edwards Creek (Figure 2), along with numerous kimberlitic indicator minerals including picroilmenite, pyrope garnet and chrome spinel (Morris, 2003).

The Margaret Dam area has been explored for diamonds by several companies, most recently by Flinders Diamonds Ltd ("Flinders") on EL 2758. Flinders considered this area prospective for kimberlites because:

- previously discovered indicator minerals from the area are fresh, suggesting the primary source rocks are in the general region;
- the interpreted palaeocurrent direction indicates fluvial flow towards the north; and
- the exploration area (now EL 5347) falls on the G2 lineament (Flinders Diamonds Ltd, 2007).

Flinders drilled 65 holes totalling 1690m with 29 samples collected for testing for indicator minerals. Holes that did not intersect the target Algebuckina Sandstone or intersected silicified rock were not sampled or tested (Flinders Diamonds Ltd, 2007).

In 1980, Kimberley Diamond Quest NL reported one stream sediment sample (KZ-11) producing six kimberlitic picroilmenites and eight chromites, all well rounded, worn and frosted, indicating transport over some distance (see Figure 2). Further sampling, aeromagnetic and ground magnetic surveys outlined several potential kimberlite targets. Two targets were drilled, however no kimberlites were discovered.

Stockdale Prospecting Ltd (1986) reported on the discovery of a broad scatter of diamond indicators and one micro-diamond near Curdlawidny Lagoon (Figure 2). Further sampling failed to locate a kimberlitic source and it was concluded that the indicator minerals were related to secondary sources.

Orogenic Exploration Pty Ltd (2004) reported on the discovery of a small diamond within sample SL-22 collected from the Mungappie Creek drainage area (Figure 2). The size of the pale greenish dodecahedral diamond recovered was 0.55 x 0.45 x 0.35 mm, with a weight of 0.0015ct. This site is located within the Red Zone (no exploration access) of the Woomera Prohibited Area and remains to be tested further.

All diamonds and indicator minerals discovered to date have been from alluvial sampling, no source to these diamonds has been discovered. Monax believes the best chance of discovery is to focus its attention directly on the discovery of kimberlitic host rock, not the weathering products of kimberlites as undertaken by past explorers.

Since the last diamond exploration boom, several government and company aeromagnetic surveys have been completed. Techniques developed to interpret this data to detect kimberlites have improved, providing Monax with data and techniques which were not available to previous explorers.

Monax has completed a regional framework study for kimberlites and acquired all possible targets in the region. The next approach (as undertaken at Margaret Dam) is to ground truth each anomaly,

collect high quality, high density magnetic data, and rank and drill test the best anomalies. The Margaret Dam anomaly appears to be a stand out, and it is the company's intention to drill this in early 2015.

### **New Exploration Licence Applications**

Monax's review of the regional aeromagnetic data has successfully identified numerous subtle magnetic features that warrant further investigation as potential kimberlite targets. The broad line spacing of the regional magnetic data is 400m, which is generally too coarse to detect kimberlites.

However, the potential kimberlite at Margaret Dam is discernible within the regional aeromagnetic data and lead to Monax applying for a further three tenements - Exploration Licence Application (ELA) 2014/233, ELA 2014/236 and ELA 2014/237 (see Figures 1 & 2).

Initial assessment is at an early stage and requires more detailed magnetic data to verify the anomalies and test their validity as a kimberlite target.

The previous exploration for diamonds has shown that most of the indicator minerals are found within the Algebuckina Sandstone, an extensive flat-lying sequence of cross-bedded grits and sands. The cross-bedded nature of the unit suggests a fluvial environment of deposition, and as such indicator minerals may have travelled a significant distance from source.

Monax is planning to drill test the potential kimberlite targets on EL 5347 early next year, and based on a positive outcome will undertake detailed ground magnetic surveys at the other potential kimberlite targets within the project area.

"The presence of diamonds and numerous indicator minerals within the region is an exciting development for Monax, and indicates the strong possibility of a diamondiferous kimberlite or kimberlites, which remain undiscovered," Monax Mining Managing Director, Mr Gary Ferris, said today.

"We will continue to review historical exploration data and add to our current database of occurrences and indicator minerals, and review all available aeromagnetic data in the search for the possible source of these diamonds and indicator minerals" he said.

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*The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr G M Ferris, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Ferris is employed full time by the Company as Managing Director and, has a minimum of five years relevant experience in the style of mineralisation and type of deposit under consideration and qualifies 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 Ferris consents to the inclusion of the information in this report in the form and context in which it appears.*

### **References**

Flinders Diamonds Ltd, 2007. Open file Envelope 9851. Government of South Australia. Department for Manufacturing, Innovation, Trade, Resources and Energy.  
Kimberley Diamond Quest NL. 1980. Open file Envelope 3562. Government of South Australia. Department for Manufacturing, Innovation, Trade, Resources and Energy  
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Figure 1. Monax tenement location plan.

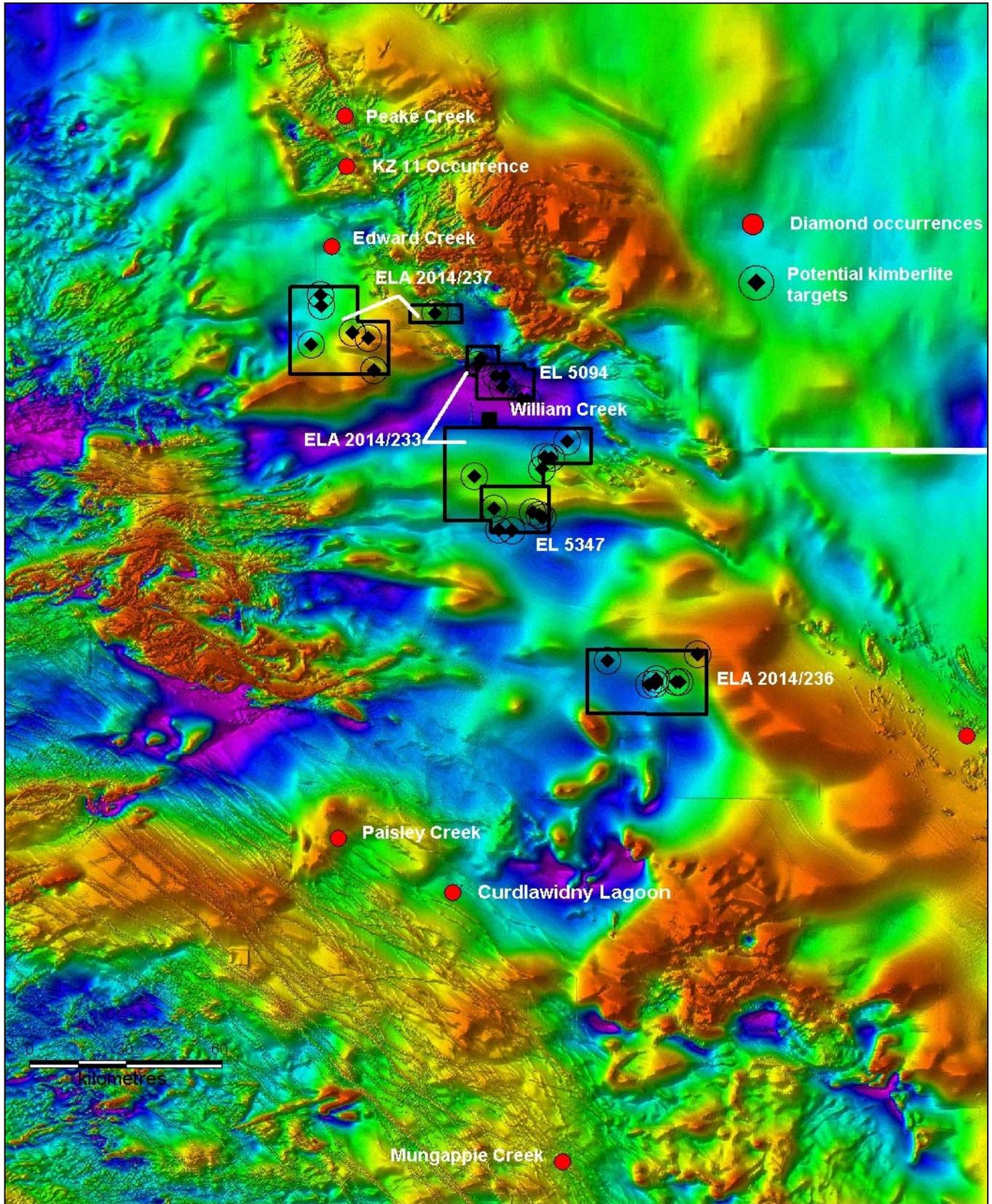


Figure 2. Location of Monax Kimberlite Project tenements and diamond occurrences on background TMI image (TMI image form Department of State Development dataset). Diamond occurrences are from SARIG and include diamonds and significant diamond indicator samples.