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Boss wins competitive application to explore potential new uranium province

The highly prospective South Australian tenements granted to Boss and Coda sit just 130km from the Honeymoon uranium project

Highlights

- Under a mineral rights sharing arrangement Boss Energy and Coda Minerals (ASX: COD) has been granted four tenements considered highly prospective for uranium and copper mineralisation
- The tenements form the Kinloch Project, which is situated in the northern Murray Basin just ~130km south of the Honeymoon Uranium Mine and cover an area of ~3,184km²
- Boss is targeting palaeochannel sediments of the Renmark Group which are broadly analogous to the Eyre Formation within the Lake Eyre Basin to the north that hosts Boss' Honeymoon, Jason's, Gould's Dam, Billeroo and Sunrise uranium deposits
- The Renmark Group has never been targeted for uranium and therefore represents a highly promising new frontier for uranium exploration within close proximity to Boss' Honeymoon Uranium Mine and associated infrastructure
- Boss' exploration strategy has already been highly successful, increasing the JORC Resource at Honeymoon from 16.57Mlbs to 71.67Mlbs (~4.3x increase) since project acquisition in December 2015
- The current life-of-mine plan at Honeymoon is based on just 50% of the existing JORC Resource

Boss Energy Limited (ASX: BOE; OTCQX: BQSSF) is pleased to announce that the Government of South Australia has awarded four highly prospective exploration tenements under a minerals rights sharing arrangement to Boss and copper developer Coda Minerals (ASX: COD).

The tenements were applied for recently as part of an Exploration Release Area (ERA) process covering Cambrian-Ordovician Delamerian Orogen basement rocks and the overlying Cenozoic Murray Basin sediments in eastern South Australia.

The tenements form the Kinloch Project, which is located only ~130km south of the Honeymoon Mine in eastern South Australia.

Importantly, the geological setting of this new project area is broadly analogous to the Lake Eyre Basin to the north, where Boss is actively exploring and exploiting palaeovalley-hosted uranium deposits including Honeymoon, Jason's, Gould's Dam, Billeroo and Sunrise.

The Kinloch Project area represents a highly promising new exploration frontier for Boss, which can utilise its expertise in this deposit style and leverage the infrastructure of the Honeymoon Uranium Mine.

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Boss Managing Director Duncan Craib said: "We sincerely thank the Government of South Australia for entrusting this exceptional exploration acreage to Boss and Coda.

"Boss has a thorough understanding of the geology style and its uranium potential due to its striking similarities with the geology at Honeymoon and surrounding areas.

"Boss will apply its wealth of exploration knowledge and in-depth understanding of uranium to the Kinloch Project area with the aim of establishing a new uranium province".

Successful Award

A series of 12 drill holes were recently completed as part of the Government of South Australia's Delamerian National Drilling Initiative (NDI) using a MinEx CRC coiled tubing rig in the Quandong Vale area of eastern South Australia. The purpose of this drilling program was to provide new insights into the geological setting and prospective mineral systems of the Delamerian basement in eastern South Australia, while at the same time providing valuable insights into the geology and prospectivity of the overlying Murray Basin sediments.

Following completion of the NDI drilling, a series of ERAs were put out to competitive tender by the South Australian Department of Energy & Mining. Boss Energy, together with Coda Minerals, applied for and successfully won the four granted ERAs, which have now been processed by the Department for Energy and Mining into standard Exploration Licence Applications (ELA), prior to the grant of final exploration licences.

The Kinloch Project's four granted ELAs comprise:

- (i) ELA 2023/00049
- (ii) ELA 2023/00051
- (iii) ELA 2023/00052
- (iv) ELA 2023/00053

The Kinloch Project uranium prospectivity

Previous uranium exploration around the Kinloch Project area tenements has concentrated on the upper Murray Basin stratigraphy, whereas Boss is predominantly targeting the unexplored lower Murray Basin stratigraphy – in particular palaeochannel sequences within the Renmark Group.

The Murray Basin is a regionally extensive intracratonic sedimentary basin comprising fluvial to shallow marine sediments which extends into southeastern South Australia, western New South Wales and western Victoria (Figure 1). The northern Murray Basin within South Australia is considered prospective for sediment-hosted uranium analogous to deposits within the Lake Eyre Basin to the north, which hosts Boss' Honeymoon, Jason's and Gould's Dam uranium deposits.

The occurrence of uranium-rich basement rocks in the surrounding highlands (including the historic Radium Hill uranium deposit) provide an excellent potential source of uranium while reduced, carbonaceous fluvial sequences within the Renmark Group represent potentially suitable trap sites for uranium-rich groundwaters moving through the palaeochannels.

Several of the recently completed MinEx CRC drill holes intercepted interpreted Renmark Group sands within the newly granted project area, while several historic gold exploration drill holes also intercepted likely Renmark Group sands in the western part of the project area. This is highly encouraging given the overall lack of drilling across the project area.

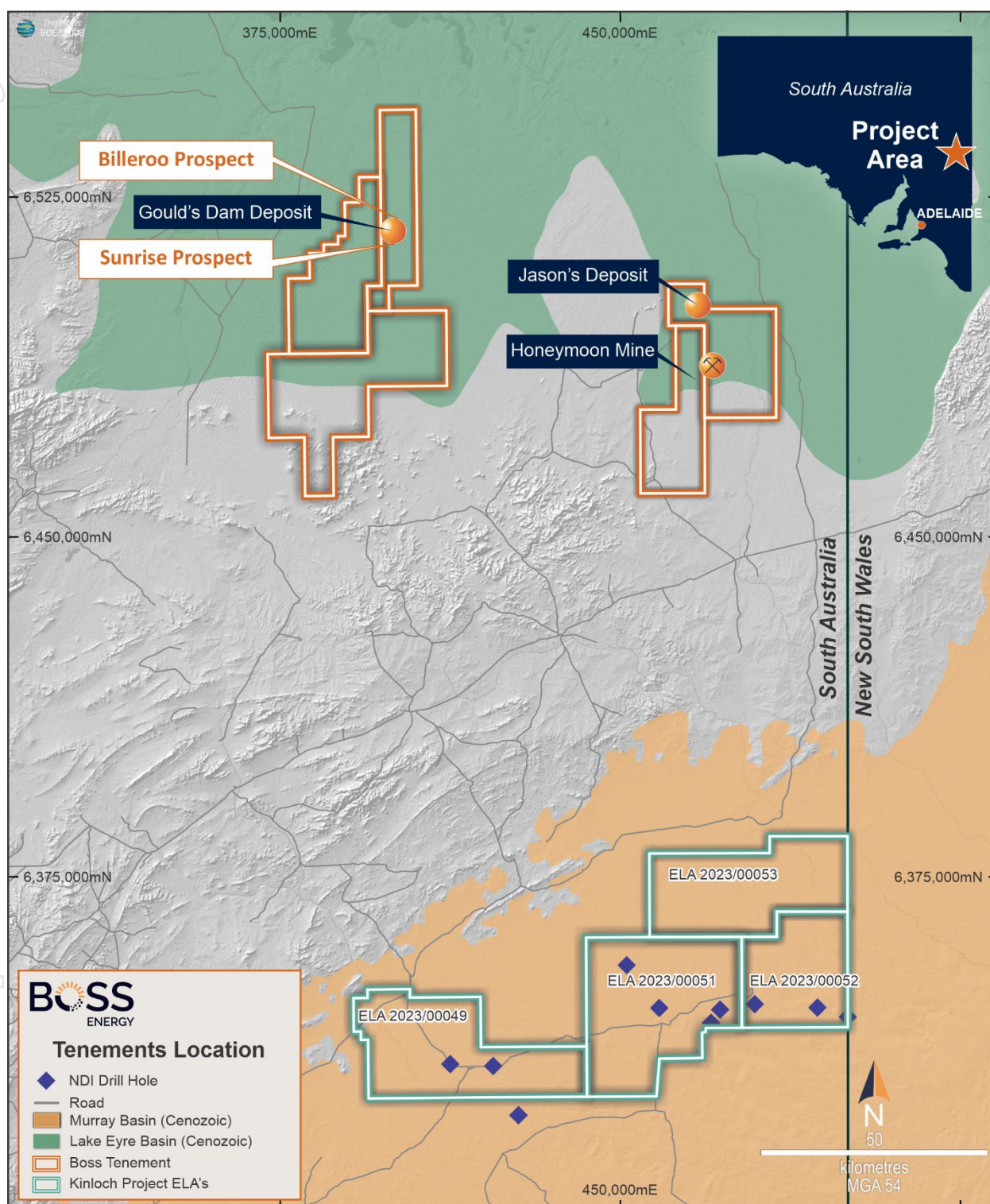


Figure 1. Location of the Kinloch Project areas granted ELAs

Mineral Rights Sharing Arrangements with Coda Minerals

Boss and Coda will now progress the mineral rights sharing arrangements under which Boss will be operator for uranium exploration and entitled to 100% of the uranium rights, and Coda will be operator for base metals exploration and be entitled to 100% of the base metal rights. It is expected that the parties will enter into a mineral rights agreement on customary terms.

Next steps

Boss and Coda will now commence extensive stakeholder engagement in preparation for on ground exploration activities, along with the preparation of an exploration PEPR and compilation/interpretation of all available geological and geophysical data. This will feed into the planning for significant regional geophysical surveys designed to define basement architecture and identify potential palaeochannel sequences within the Renmark Group.

This ASX announcement was approved and authorised by the Board of Boss Energy Limited.

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