



**KALGOORLIE-BOULDER
RESOURCES LTD**

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Acquisition of Uranium Tenements in Western Australia and South Australia

Kalgoorlie-Boulder Resources Ltd (ASX Code: KAL) has made application for an additional six exploration licences in the Gascoyne region of Western Australia and a single application in the Port Lincoln area of South Australia. This complements the previously announced acquisition of the Lyndon prospect and Eudamullah and Winmar Creek applications also located in the Gascoyne region.

The Gascoyne Uranium Project now consists of ten exploration licences having a total area of 1,321km². The Company now has a significant presence in this prospective uranium province. The Port Lincoln Project has an area of 182km².

The landholdings come as a result of detailed geological review and have been selected based on conceptual geological models and examination of exploration results produced by earlier operators. In Western Australia's Gascoyne region the company has focussed on uranium deposits occurring in recent paleodrainages and structurally controlled vein systems. The South Australian application covers radiometric anomalies and documented uranium occurrences arising from work undertaken by the Geological Survey in the period 1950 to 1960.

The prospects range from the advanced exploration stage where drilling by previous holders has resulted in the delineation of defined zones of calcrete hosted mineralisation through less advanced prospects where initial reconnaissance exploration will focus on target definition.

The most recent applications are:

Western Australia

- **Nyang East, ELA 08/1551:** In 1974, Agip Nucleare Australia Pty Ltd, following regional airborne radiometric surveys and geological mapping, selected the area for further exploration. Uranium mineralisation is associated with copper bearing siliceous veins in granodiorite, potassic granite and crystalline metasediments derived from the lower Ashburton Formation. The system is reported to have a strike length of over 1,500m with surface samples of the mineralisation containing up to 430ppm uranium and 6.5% copper. Ground radiometric surveys examined 550m of the prospective structure with several zones 50-80m in length being nine times above background. 335 metres of reverse circulation drilling under anomalous zones returned a best result of 115ppm uranium. Agip surrendered the tenure in 1975 after the then Department of Mines excised much of the area of interest.

Much of the uraniferous structure remains untested and there has been little evaluation of the surrounding drainages to host secondary uranium mineralisation.

- **Bordah Well, ELA 09/1244:** Pacminex Pty Ltd originally held the ground in the mid 1970s as part of a regional uranium exploration programme. Anomalous areas were outlined by airborne scintillometer surveys undertaken in 1972 over both hard rock and calcrete occurrences. The Pacminex tenement covered some 4 hectares of anomalous calcrete with three times background radiation containing visible carnotite mineralisation. Surface samples yielded a best result of 740ppm uranium.

Pacminex recommended that calcrete zones be investigated with pattern drilling but there is no record of further work on the tenement.

- **Winmar Creek, ELA 09/1246:** This application surrounds KBRL's ELA 09/1224 and was applied for on the basis of investigating drainage systems emanating from anomalies within the smaller tenement. These were first described by Esso Exploration and Production Australia Inc in 1977 when Esso took up the ground based on a five times background radiometric anomaly within a sandstone unit. Surface samples of the sandstone have returned assays of up to 195ppm uranium. The area appears structurally complex being dominated by westerly and northeasterly trending shear systems.

There is no record of further work on the tenure and drainages from the predominantly granitic terrane have not been fully explored.

- **Mt James, ELA 52/1889, Mt Phillips, ELA 09/1249 and Jamieson Well, ELA 09/1248:** Applications have targeted potential near surface uranium accumulations in recent sediments, soils and calcrete occupying drainage systems in granitic environments associated with reported uranium occurrences and radiometric anomalies. Exploration will target low gradient drainage systems in favourable environments conducive to accumulation of secondary uranium minerals.

South Australia

- The Port Lincoln application of 182km² contains at least eight separate mineralised zones in granites, gneisses and metasediments. Six of the prospects are known as the Lomax, Ainslee South, Hospital, Fraser's, Dave Walliston and Gibson 3 whilst a further two prospects to the north as yet unnamed. Disseminated uranium mineralisation as pitchblende occurs in granites, gneisses and metasediments. Secondary uranium minerals occupy fractures and joints in the weathered country rock.

The Company has an initial 50% interest in E09/1246 and E52/1889 and with funding of exploration and other expenditure it can increase its interest to 95%. The Company holds the remaining Western Australian applications and the South Australia application 100%.

As previously announced, the Lyndon prospect, ELA 09/1180, was the subject of exploration during the early seventies, which resulted in the delineation of calcrete hosted uranium mineralisation. Subsequent work identified at least five medium to high intensity radiometric anomalies, four of which remain untested.

The Eudamullah, ELA 09/1225 and 09/1226 and Winmar Creek, ELA 09/1224, prospects are located in the Gascoyne Mineral Field, approximately 50 kilometres southeast of the Lyndon prospect. Both have been the subjects of reconnaissance style uranium exploration dating from the late seventies which has generated a number of radiometric anomalies requiring further investigation.

Yours sincerely

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Managing Director

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Lindsay Cahill, who is a Member of The Australasian Institute of

Mining and Metallurgy and the Australian Institute of Geoscientists. Lindsay Cahill is a self employed consultant. Lindsay Cahill has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Lindsay Cahill consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

