



PARTIAL RELINQUISHMENT REPORT ELR45

WALBIRI JOINT VENTURE PROJECT

18 July 2014 to 29 May 2020

ELR45_2020_P_01.pdf

1:250K Map Sheet: Mount Doreen SF52-12
1:100K Map Sheet: Yuendumu 5253

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31 July 2020

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SUMMARY

Exploration Licence in Retention ELR45 (Walbiri Joint Venture) is a joint venture project operated by Energy Metals Ltd in partnership with Northern Territory Uranium Pty Ltd (NTU; a wholly-owned subsidiary of Marenica Energy Ltd, MEY). Energy Metals holds a 77.12% beneficial interest in the joint venture. The licence is situated approximately 300km northwest of Alice Springs and 55km southeast of the Bigrlyi uranium project.

ELR45 was granted on 18th July 2014 for a period of five years and was subsequently renewed for a further five-year period. ELR45 covers part of the Walbiri uranium deposit. A JORC (2012) mineral resource estimate was announced for the deposit in 2015 confirming Walbiri as the second largest sandstone-hosted deposit in the Ngalia Basin after Bigrlyi. Following a project review in late 2019, 203 hectares of the 800 hectare licence, located outside resource areas, was deemed non-prospective for future discoveries and was surrendered on 29 May 2020.

Exploration work on the relinquished blocks during Energy Metals' period of tenure was limited by sacred site access restrictions and no on-ground field visits were conducted to the surrender area. The main activity was an aerial geophysical radiometric and magnetic survey undertaken in 2007. The survey data is open-file and publicly available.

INTRODUCTION

Exploration Licence in Retention ELR45 (Walbiri Joint Venture) is a joint venture project operated by Energy Metals Ltd in partnership with Northern Territory Uranium Pty Ltd (NTU; a wholly-owned subsidiary of Marenica Energy Ltd, MEY). Energy Metals holds a 77.12% beneficial interest in the joint venture. The licence is situated approximately 300km northwest of Alice Springs and 55km southeast of the Bigrlyi uranium project (Figures 1, 2).

ELR45 was granted on 18th July 2014 for a period of five years and was subsequently renewed for a further five-year period. ELR45 covers part of the Walbiri uranium deposit with the remainder located on Energy Metals' 100% owned EL32113 which is part of the Ngalia Regional Project (Figures 2, 3). A JORC (2012) mineral resource estimate was announced for the deposit in 2015 confirming Walbiri as the second largest sandstone-hosted deposit in the Ngalia Basin after Bigrlyi. Following a project review in late 2019, 203 hectares of the 800-hectare licence, located outside resource areas, was deemed non-prospective for future discoveries and was surrendered on 29 May 2020 (Figure 3). This report summarises historical exploration activities and documents exploration work that Energy Metals conducted on the surrender area during the tenure period.

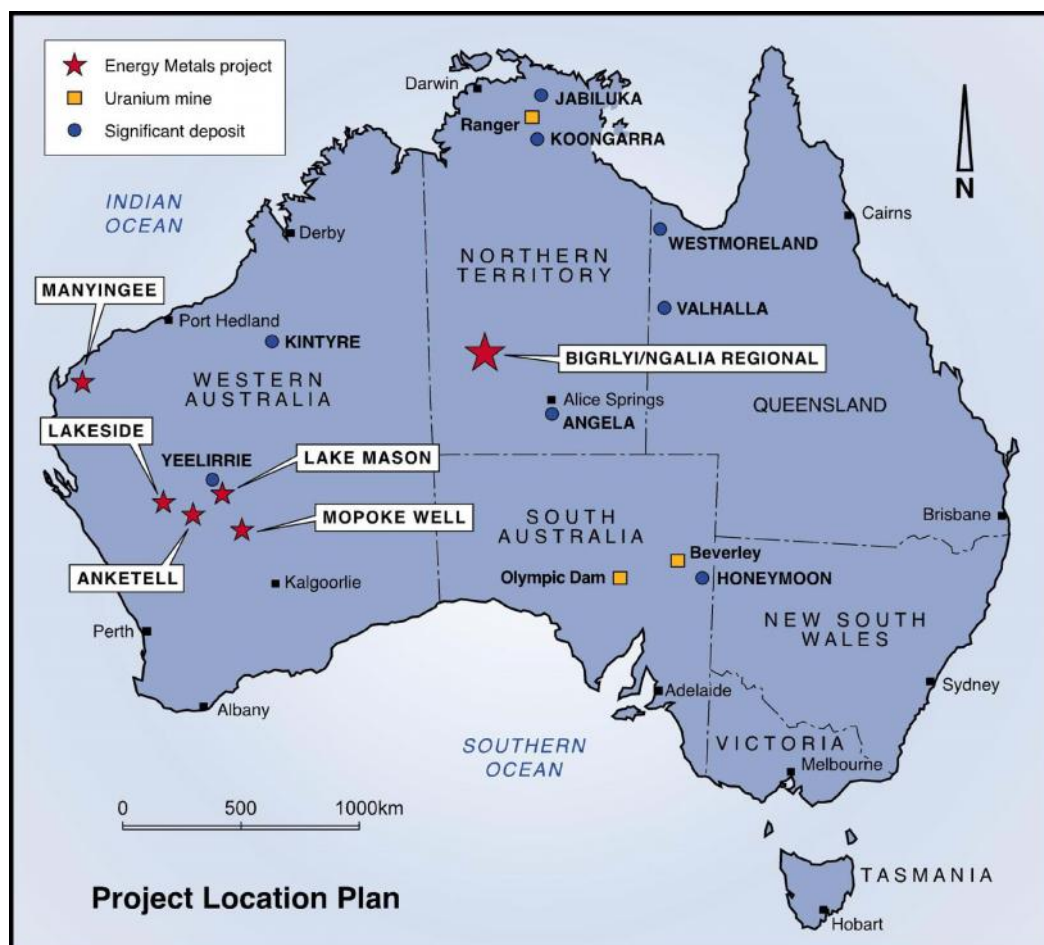


Figure 1: Location of the Bigrlyi/Ngalia Regional Projects (NT).

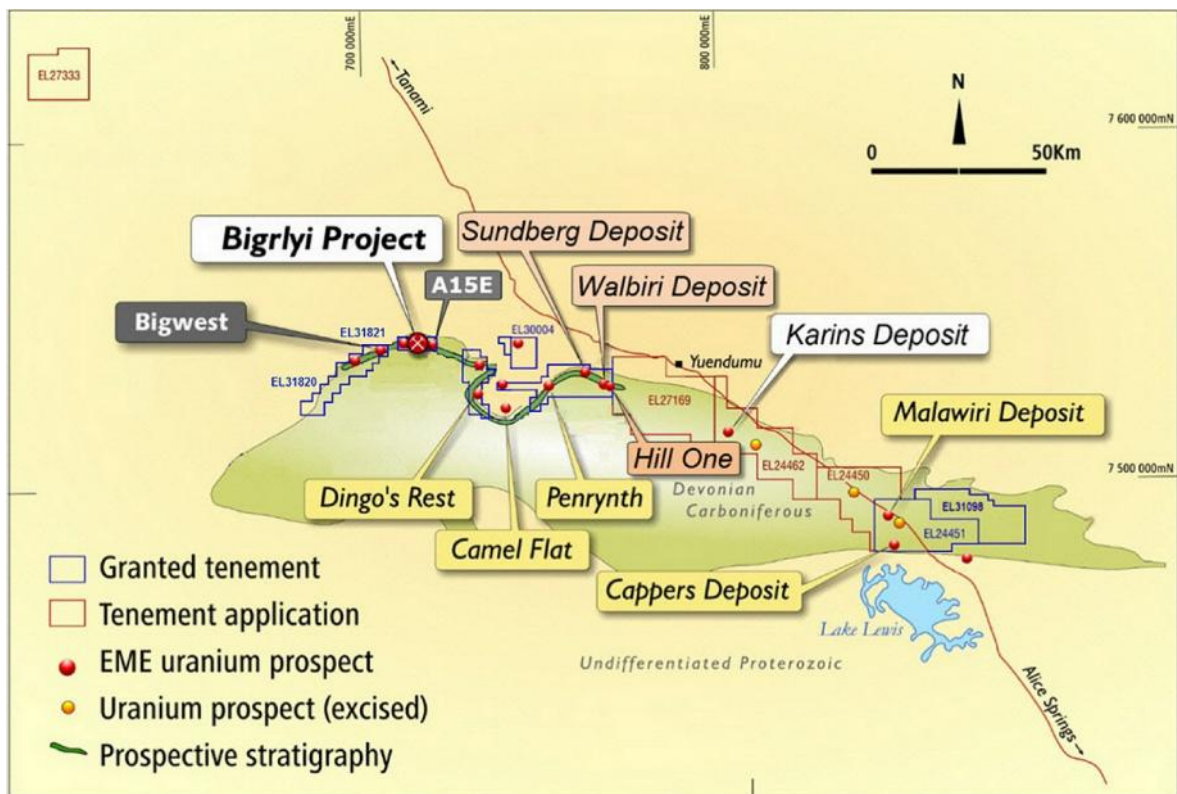


Figure 2: Bigrlyi and Ngalia Regional Project deposits and prospects map (NT).

Geology and Physiography

ELR45 lies on the northern margin of the Ngalia Basin, which is an elongate, intracratonic depression filled by Late Proterozoic to Palaeozoic sedimentary successions, surrounded by a basement of Precambrian crystalline and metasedimentary rocks (Figure 2). The Walbiri uranium deposit is hosted in the Carboniferous Mt Eclipse Sandstone, the youngest unit of the basin.

Mount Eclipse Sandstone on ELR45 consists of an immature sequence of interbedded, medium to very coarse grained, lithic arkose, conglomerate, siltstone and shale overlain by an oxidised mature sequence of medium-grained sandstone and interbedded shales. In the Walbiri deposit uranium is present as stacked tabular sheets and occurs within a stratigraphic horizon that dips to the SW at about 15° and plunges to the SE. The surface mineralisation crops out as two lenses 1-5m thick within the Walbiri Ranges on EL32113 and has a strike length of 2.8km. The sedimentary sequences that encapsulate mineralisation strike at approximately N55W.

The surrender area lies 1-2km south of the Walbiri deposit and comprises rugged hill country of the Walbiri Ranges. The area is only accessible on foot.

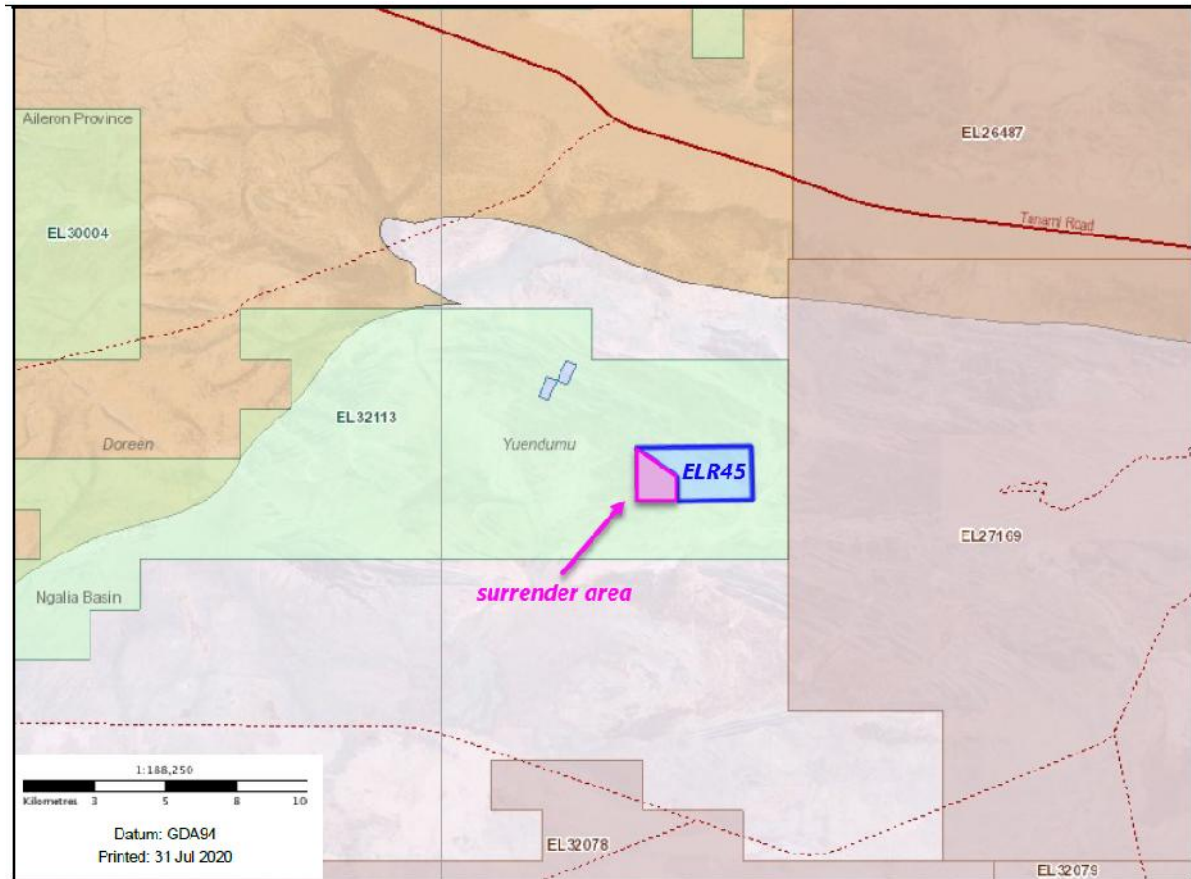


Figure 3: Overview map showing partial surrender area in pink on ELR45.

Historical Work (1971 - 1982)

The northern margin of the Ngalia Basin has been the focus of substantial regional exploration since the discovery of uranium mineralisation in the region in the early 1970s. Exploration in this area commenced in August 1971 on Exploration Licence 605, which was renewed annually until October 1977. Exploration was managed by Central Pacific Minerals NL on behalf of various joint venture partners including Magellan Petroleum Australia Ltd, Agip Nucleare Pty Ltd, Urangesellschaft mBH & Co. and the Atomic Energy Commission.

The first surficial carnotite mineralisation at Walbiri was found in shallow-dipping Mt Eclipse Sandstone in September 1971 by CPM geologists. Uranium exploration at Walbiri occurred over the period 1972 to 1976 with trenching and drilling of approximately 55 diamond core and/or percussion holes on wide spacings. CPM established a detailed stratigraphic column of the Walbiri prospect. The discovery of carnotite at Bigryli in 1974 by CPM saw a shift in exploration focus away from the Walbiri deposit and only limited work was undertaken by CPM after 1976.

CPM applied for ELR45 in 1983 but the project remained dormant until Energy Metals purchased the project in 2006 and pursued grant of the title in 2014.

WORK COMPLETED BY ENERGY METALS

Geophysical Survey 2007

An airborne geophysical survey, providing radiometric, magnetic and topographic data, was conducted over Energy Metals' Ngalia Regional Project tenements in October 2007 by UTS Geophysics in conjunction with Scimitar Resources and Toro Energy over their adjacent tenements (refer open file report CR2008-0067). A total of 5,189 line-kilometres were flown.

Uranium channel radiometric imagery is shown in Figure 4 over ELR45 and the adjacent area. A feature of note is the Walbiri surface mineralisation anomaly located north of ELR45. No significant surficial radiometric anomalies are present on the relinquished ground despite excellent outcrop.

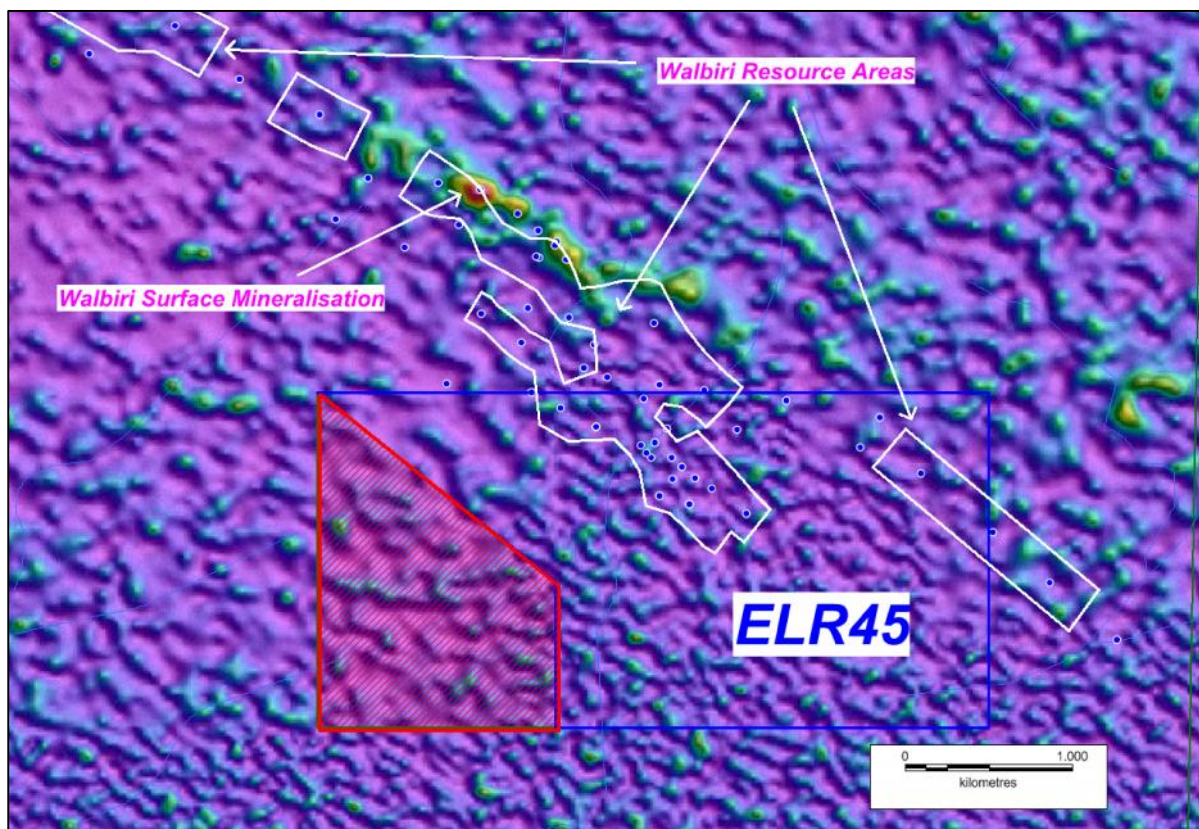


Figure 4: Uranium radiometric imagery showing the absence of any significant anomalies over the surrender area (red stripe) despite excellent outcrop. Walbiri surface mineralisation anomaly is shown for comparison.

Sacred Site Survey

Energy Metals commissioned the AAPA to undertake a heritage survey over the Walbiri project areas in mid-2014 to identify sacred sites and provide a Clearance Certificate. All the hill country of the Walbiri Ranges, including the surrender area, is part of a large sacred site complex of high heritage value and access and exploration works are highly restricted. Due to these restrictions the surrender area was not visited during the tenure period and no on-ground exploration was conducted.

Project Review

A prospectivity and tenement review was completed in late 2019, with recommendations made for the surrender of ground with limited exploration potential.

In the western part of ELR45 areas of outcropping Mt Eclipse Sandstone are located higher in the stratigraphy than the prospective mineralised horizon. This horizon has been located undercover south of the ELR (on the south limb of the Mt Eclipse Syncline) by IP geophysics and its location is considered to be well understood in 3-dimensions (Kerr & Liu, 2015). As this area also contains excellent outcrop of Mt Eclipse Sandstone yet no uranium anomalies of any significance (Figure 4) the southwest part of ELR45 was recommended for surrender.

Digital Data

Digital data from Energy Metals' 2007 geophysical survey has open-file status and is available publicly. No other work requiring submission of digital data has been conducted on the surrendered ground.

CONCLUSIONS

Due to assessed low potential for uranium mineralisation, an area of 203 hectares in the SW part of ELR45 was recommended for relinquishment with the remainder to be retained (see Figure 3); the partial relinquishment was approved by NT DPIR in 29 May 2020.

REFERENCES

Kerr, S. & Liu, J., 2015: Group Annual Report EL24451, EL24453, EL24533, EL24463, EL24806 & EL24807, Ngalia Regional Project. Period Ending 6 February, 2015.