

29 April 2024

ASX Release

ORANGE MINERALS TARGETS URANIUM AND CRITICAL METALS WITH NEW APPLICATIONS IN THE EASTERN GOLDFIELDS WA

HIGHLIGHTS

- Six exploration license applications totalling 1,234 km² made which surround Deep Yellow Limited (ASX: DYL) advanced Mulga Rock deposit in WA.
- Mulga Rock has great potential for further development given its total Resources of 104.8 Mlb U₃O₈ hosted in paleochannels (see DYL ASX announcement 26 February 2024).
- Tenements applied for by Orange are highly prospective for uranium and rare earth metals.
- Historical drill results with significant uranium assay values within the tenement application areas.
- Limited historical exploration and drilling within tenement application areas.

Orange Minerals NL (ASX: OMX) ("**Orange**" or "the **Company**") is pleased to announce that it has applied for six exploration tenements which surround Deep Yellow's Mulga Rock deposit in WA. The tenements applied for are considered to have strong prospectivity for paleochannel hosted uranium/rare earth mineral deposits in addition to base and precious metals.

Commenting on the tenement applications, Managing Director David Greenwood stated:

"We are extremely excited by the land package applied for in the vicinity of Deep Yellow's advanced Mulga Rock uranium deposit. Mulga Rock shows great potential for further development, and the tenements applied for by Orange have significant potential for the discovery of further uranium and associated critical metal deposits. The ongoing development activities at Mulga Rock by Deep Yellow add to the attractiveness of this ground".

Background

The Mulga Rock uranium deposit owned by Deep Yellow Ltd contains a total Resource of 115.1Mt @410ppm for 104.8Mlb U₃O₈ (see DYL ASX Announcement 26 February 2024). This positions Mulga Rock as one of the largest, undeveloped uranium projects in Australia. Deep Yellow have also identified significant project value upside at Mulga Rock through the potential recovery of critical minerals including Rare Earth Oxides. Deep Yellow are currently undertaking a revised DFS, expected to be completed in Quarter 2, 2024.

Orange has applied for six tenement applications (E 39/2479, E 39/2480, E 39/2481, E 39/2482, E 28/3449 and E 28/3450) surrounding the Mulga Rock Deposit, in relatively underexplored areas considered to have significant potential to host similar paleo-deposits (Figure 1).



Geology

Mulga Rock is a series of paleo-channel uranium deposits located within a regionally extensive paleo-drainage system. Mineralogy is diverse with a number of critical minerals being present in addition to uranium. The main uranium accumulation within each deposit occurs as a sub-horizontal body found mainly in carbonaceous sediments of lignite and clays. It is hypothesised that uranium and base metals were transported laterally from source materials by acid rich meteoric flow, with metals deposited in favourable host rocks close to the water table. At Mulga Rocks mineralisation typically commences at shallow depths of 30-60m. The main exploration techniques used to locate the deposits in the Mulga rock area are geochemistry, geophysics (downhole, surface and airborne) and drilling (mainly AC/RC).

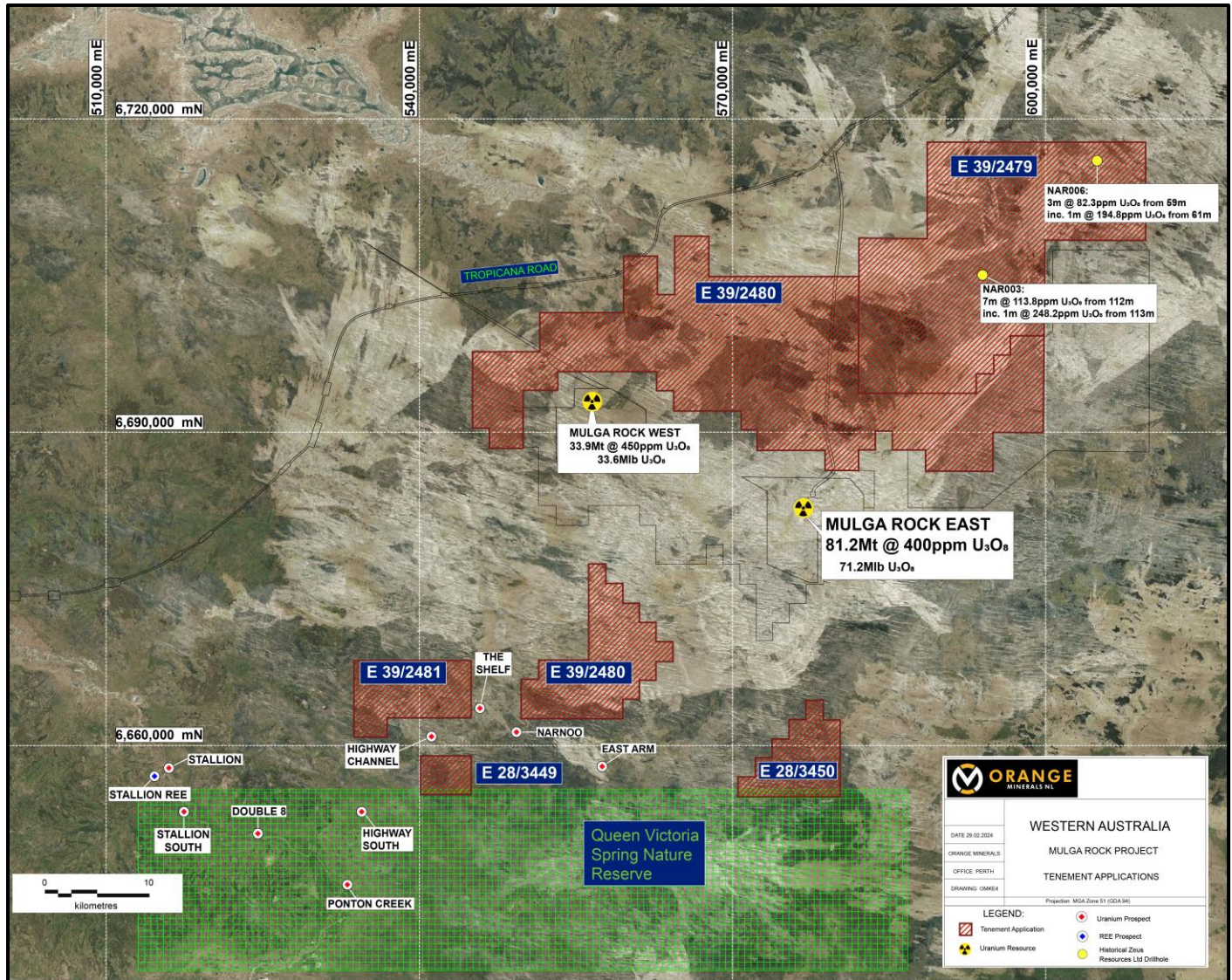


Figure 1 – Location Map of Tenement applications and significant historical drillholes

Tenement applications

Previous exploration in the area of Mulga Rock has identified a number of paleochannels and tributaries believed to be responsible for carrying the uranium and metals rich fluids. Orange made the applications around Mulga Rock as it believes that extensive paleochannels may exist within these tenement applications. Much of these areas are underexplored, however in desktop work undertaken to date there are a number of significant historical drill intersections containing uranium which have not been followed up (see Figure 1). Previous significant drill intercepts by Zeus Resources Ltd has been previously reported to the ASX: "Quarterly Activities Report – for the period ending 30th September 2014". Figure 2 below highlights potential paleochannel positions within the tenement applications.

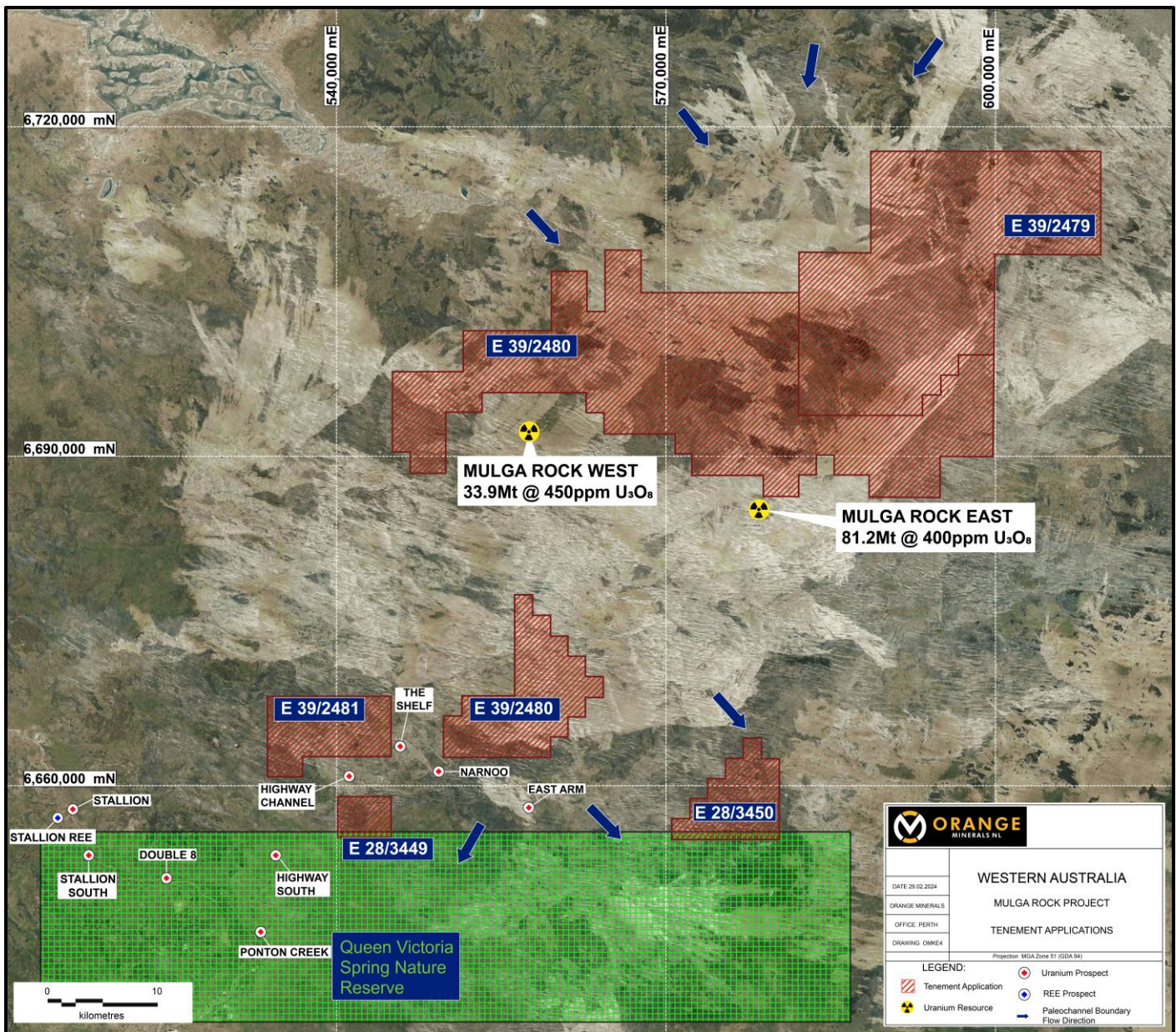


Figure 2 – Interpreted positions of paleochannels within OMX lease applications

Future Exploration

Exploration programs to investigate the uranium and critical metal potential of the tenement applications are currently being developed in preparation for on ground activities to commence once the applications are granted. The initial step in gaining an improved understanding of the uranium mineralisation in the project area will be a study of historical geochemical and geophysical data. Modelling of basement architecture and locating paleochannel positions in tandem with reviewing all available drill data will be a priority to identify suitable drill targets.

Consultant payments

Orange has agreed to issue consultant, B & B Resources, 2 million options (each exercisable at 5 cents per share and expiring 3 years after grant) as its fee for assisting the Company with the tenement applications. Options are to be issued at a later date subject to shareholder approval.

This ASX announcement has been authorised for release by the Board of Orange Minerals NL.

-ENDS-

About Orange Minerals NL

Orange Resources NL is an exploration company listed on the ASX (ASX: OMX) with Australian-based projects in the Lachlan Fold Belt (LFB) of NSW and Eastern Gold Fields of WA, both world-class mineral provinces. The LFB of NSW hosts major mines including Cadia/Ridgeway, North Parkes and Lake Cowal and the tenements in the Eastern Goldfields of WA are close to the Daisy Milano gold mine and Black Cat Resources Majestic Project. The Orange Minerals exploration team plan to rapidly explore its tenement packages with aggressive exploration programmes at its key properties. The company is currently focussing on the Calarie & Wisemans Creek Projects in NSW and the Majestic/Kurnalpi and Lennon's Find tenements in WA.

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Competent Persons Statement

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Phil Shields, a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr. Shields is an employee of Orange Minerals NL and has sufficient experience that is relevant to the style of mineralisation and type of deposit 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. Shields consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Forward Statement

This release includes forward – looking statements which involve a number of risks and uncertainties. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and are based on current assumptions. Should one or more of the uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward looking statements if these beliefs or opinions should change.

