

# ASX Announcement

22 August 2024



## COMPLETION OF HERITAGE SURVEY AT LYNDON

### Highlights:

- **Completion of Heritage Survey across multiple uranium targets at the Lyndon Project**
- **Areas of focus for clearance include the Relief Well palaeochannel roll front uranium target and multiple calcrete-type uranium targets at the Baltic Bore prospect**
- **Relief Well Uranium Prospect immediately adjoins Paladin Energy's Carley Bore Uranium Project (15.6MLbs U<sub>3</sub>O<sub>8</sub> announced resource)**

**Odessa Minerals Limited (ASX:ODE) ("Odessa" or the "Company")** is pleased to provide an update on uranium potential of the Relief Well Uranium Project ("Project") at Lyndon, located approximately 200km northeast of Carnarvon in Western Australia.

### Heritage Survey

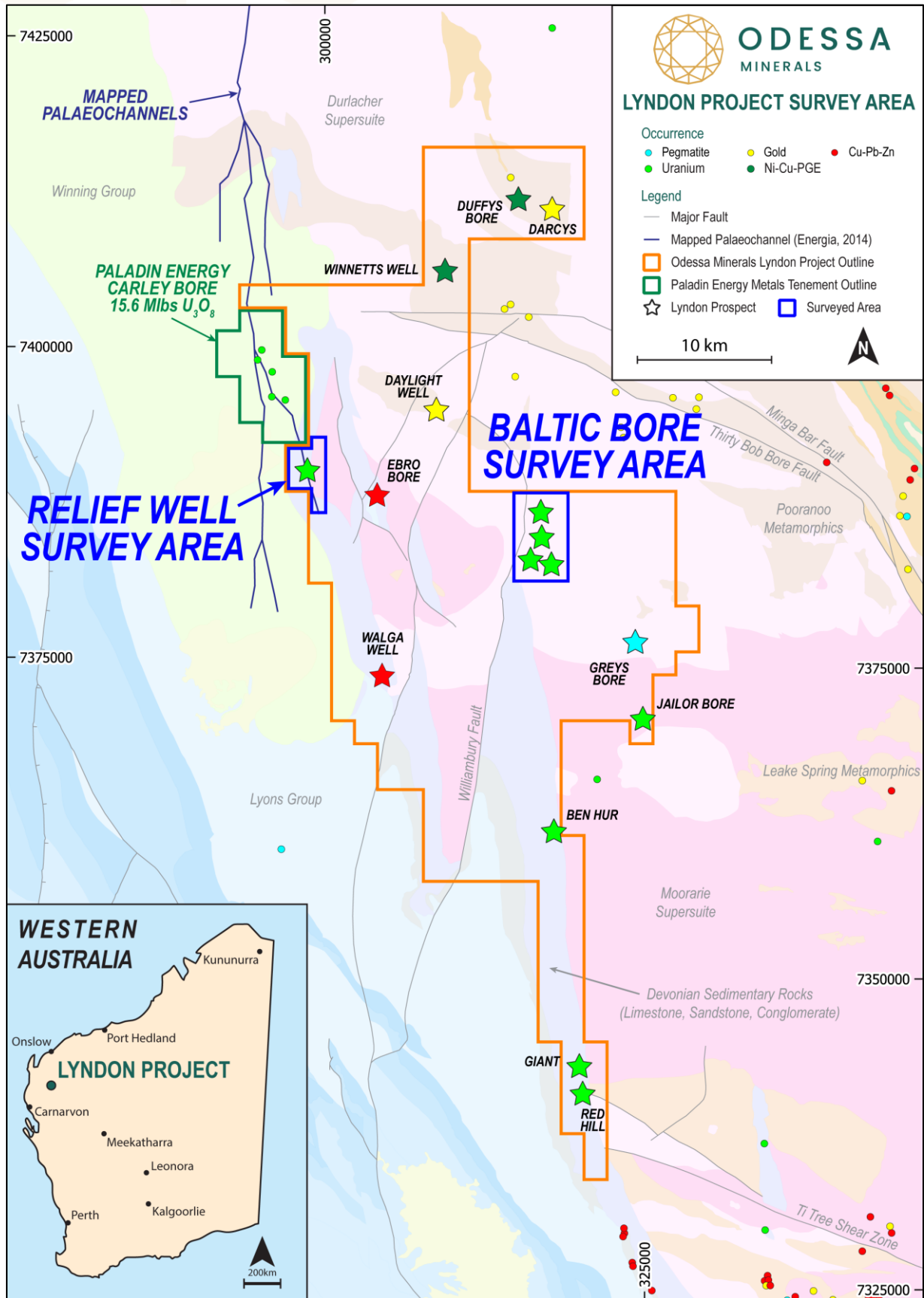
The Heritage survey commenced at the Company's Lyndon Project on 14th August 2024 and aims to seek clearances across the emerging uranium prospects, including the Relief Well palaeochannel-hosted roll front-type target, and multiple calcrete-type targets at the Baltic Bore prospect (Figure 1).

Heritage clearance will allow the Company to complete drilling to follow-up on the exceptional rock-chip results received from the initial field program at the Project in April 2024, including up to **6,612ppm U<sub>3</sub>O<sub>8</sub> and 2,132ppm V<sub>2</sub>O<sub>5</sub>** in sample XT0970 at the Baltic Bore prospect (Refer to ASX Announcement Dated 22 April 2024).

Additionally, Heritage Clearance will enable the Company to conduct drilling across the Relief Well palaeochannel that is prospective for roll front-type uranium mineralisation. Relief Well is directly along strike, and an upstream extension of, the palaeochannel that is host to Paladin Energy's Carley Bore 15.6MLbs U<sub>3</sub>O<sub>8</sub> resource (Figure 1).

#### **David Lenigas, Executive Director of Odessa, said;**

*"The Company has now successfully completed a Heritage Survey at Lyndon and expects to receive the survey outcome in mid-September. Once received, Odessa will be set to commence drilling at the Lyndon Project, with an initial program designed to test multiple, highly-prospective uranium targets. Drilling will focus on two main areas that are largely untested to date: Relief Well – a direct extension to Paladin Energy's 15.6MLbs U<sub>3</sub>O<sub>8</sub> resource at the Carley Bore Project; and the calcrete-type uranium targets at Baltic Bore. Odessa is excited to get drilling underway and begin to unravel the untapped potential of the Lyndon Project."*



## Relief Well Uranium Prospect

VTEM survey data has confirmed the presence of a palaeochannel at the Relief Well prospect with a strike length of >8km that remains open to the south, and is a direct extension to Paladin Energy’s Carley Bore uranium resource. Depth-slice analysis of re-processed VTEM imagery has delineated the deepest portions of the palaeochannel that are most likely to host significant roll front-type uranium mineralisation (Refer to ASX Announcement Dated 15 April 2024). Stratigraphy is interpreted to consist of the Birdrong Sandstone of the Winning Formation with interfingering shale units that act as an aquitard ‘trap’ for roll front-type uranium mineralisation.

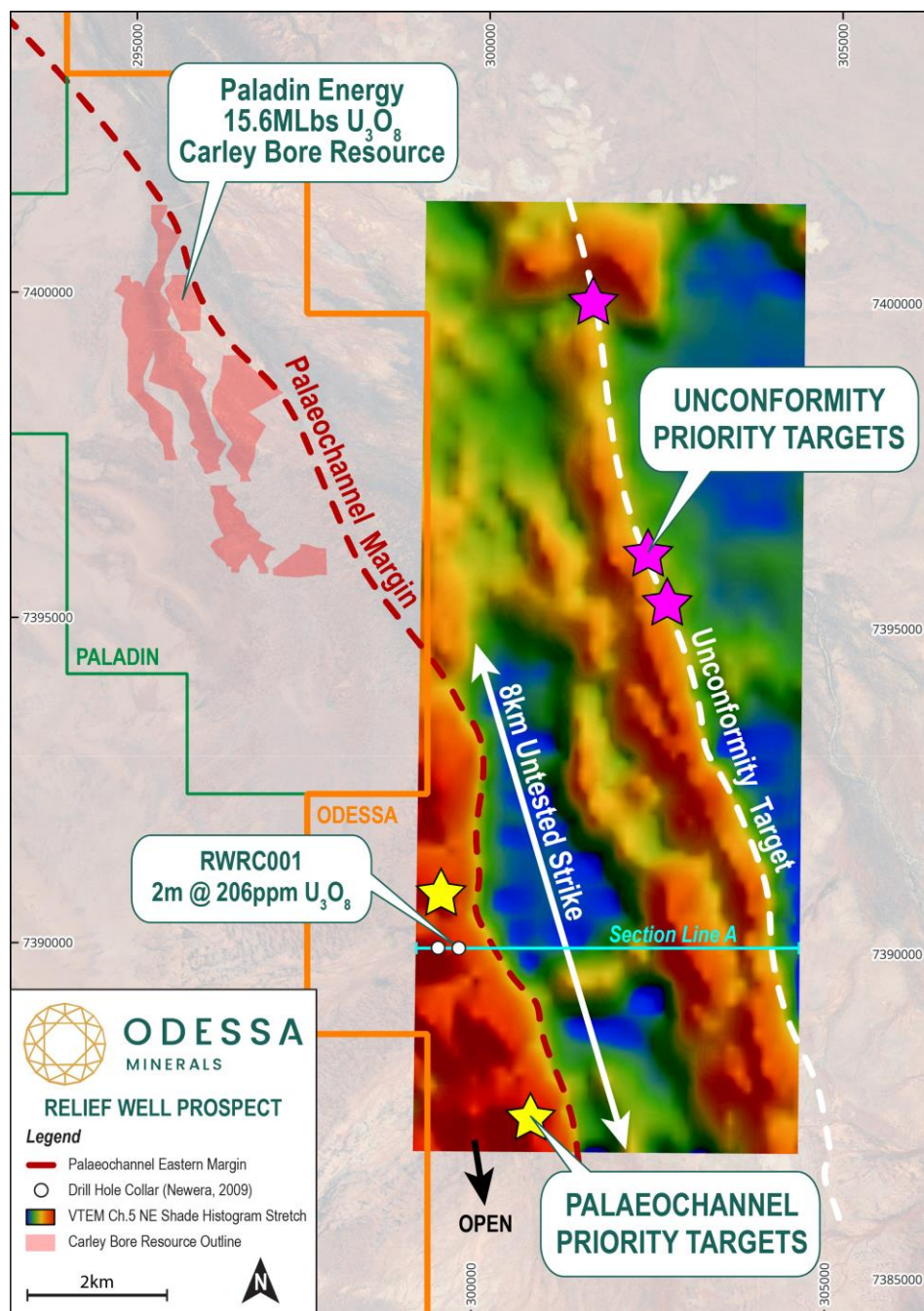


Figure 2: Relief Well Prospect interpreted palaeochannel extension from the Carley Bore Uranium Deposit<sup>2</sup>. Newera drill holes displayed<sup>3</sup>.



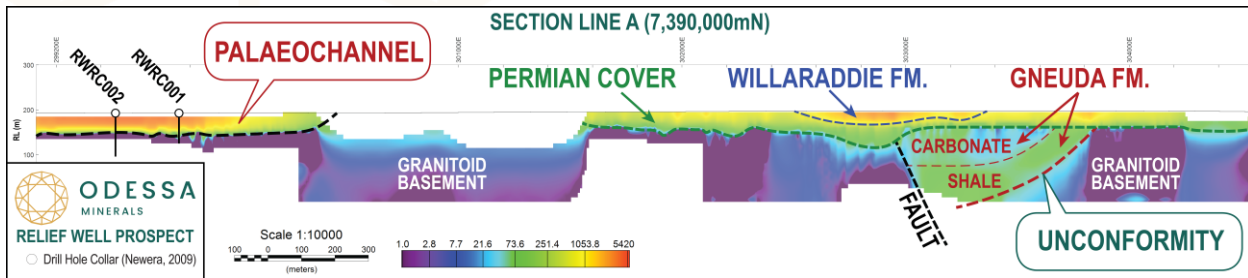


Figure 3: Conductivity Cross Section through Relief Well Palaeochannel. Newera drill holes displayed<sup>3</sup>.

### Baltic Bore Uranium Prospects

Following the exceptional uranium rock chip results from the first field campaign at the Lyndon Project in April 2024, the Company will drill test the from-surface, high grade calcrete-type uranium targets across the Baltic Bore prospects (Figure 4; 5). Uranium mineralisation at Baltic Bore is hosted in carnotite, a uranium vanadate mineral, that fills voids in calcrete overlying the source Moorarie Supersuite granitoids (Figure 5; 6).

Historic drilling across the region only tested the highest-order radiometric uranium anomalies, however, high resolution radiometric data and rock chip sampling by Odessa has shown uranium-hosting calcrete to be present across a greater area than historically thought. The calcretes are covered by a thin veneer of transported material that attenuates the radiometric signal. Odessa’s drilling will focus on testing calcrete below the thin transported cover for uranium mineralisation.

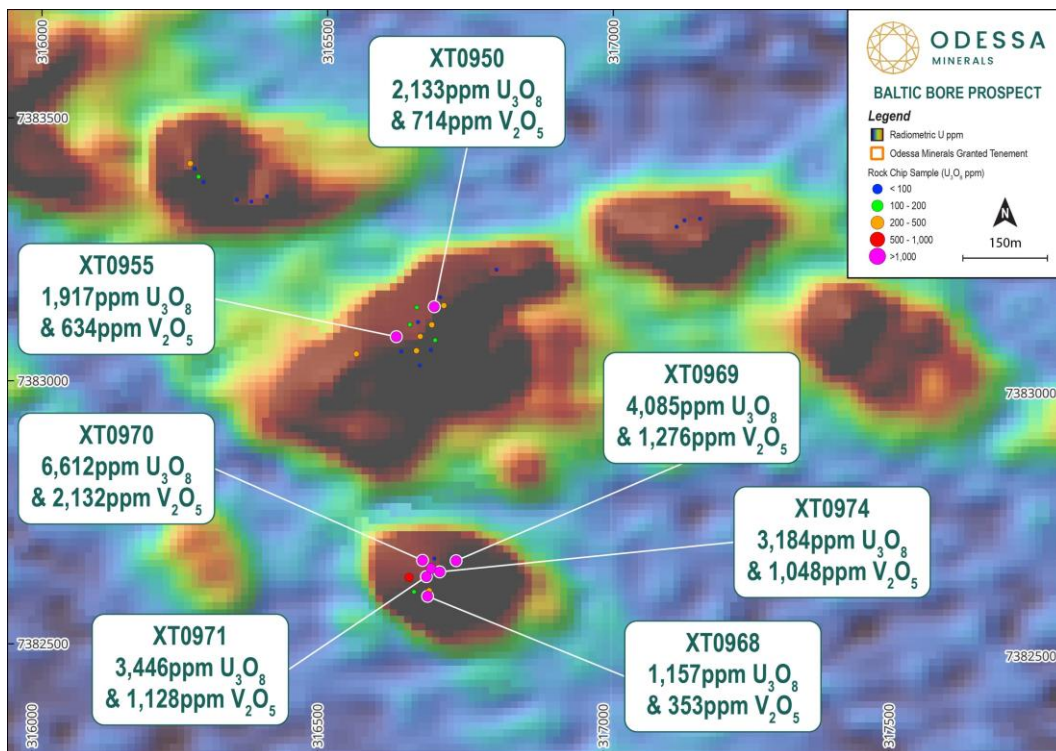


Figure 4: Baltic Bore prospect showing rock chip assay results underlain by radiometric U ppm imagery.

ROCK CHIP SAMPLE XT0971



Figure 5: Uranium-bearing carnotite mineralisation in rock chip sample XT0971 at the Baltic Bore prospect.

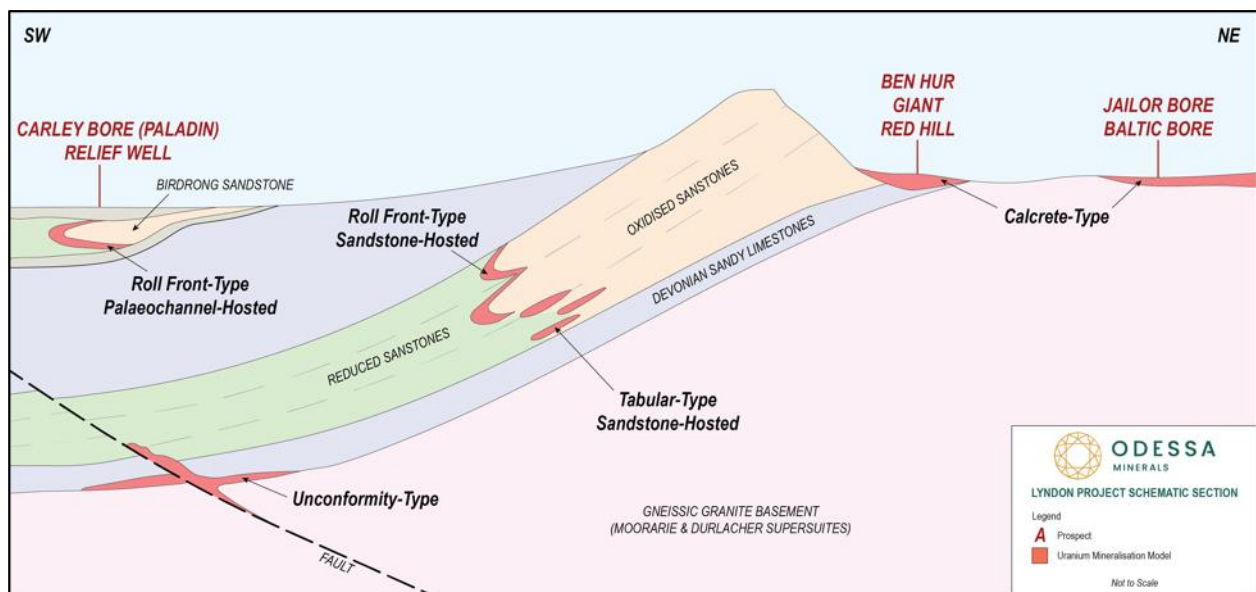


Figure 6: Schematic model section of potential uranium mineralisation styles across the Lyndon Project area. The relative position of prospects are displayed.



## Next Steps

Newera Uranium Ltd completed two RC holes (prefix RWRC) to test the VTEM palaeochannel anomaly at Relief Well during 2008-2009, confirming the presence of uranium mineralisation as well as shale horizons within the palaeochannel ranging from 10m to 50m in thickness<sup>3</sup>. Since then, no further drilling was undertaken to test the remaining 8km trend.

First-pass drilling by Odessa will be conducted in transverses to locate REDOX boundaries within the Relief Well palaeochannel, with a particular focus on the deepest portions of the palaeochannel. Upon review of the results of first-pass reconnaissance drilling, infill drilling will be required to map the extents of REDOX boundaries and continuity of the shale ‘trap’ horizons throughout the palaeochannel. Any discovered roll-front uranium mineralisation will be systematically tested during infill drilling.

Drilling at Baltic Bore will focus on defining the extents of calcrete that is concealed beneath a thin veneer of transported material through wide-spaced aircore drilling. The Company will then focus on infilling around any discovered areas of high-grade calcrete-type uranium mineralisation.

## Lyndon Project Overview

The Lyndon Project is located on the margin of the Carnarvon Basin and Gascoyne Complex approximately 200km south of Onslow and 200km NE of Carnarvon, in Western Australia. The project consists of over 1,000km<sup>2</sup> of exploration licenses and applications.

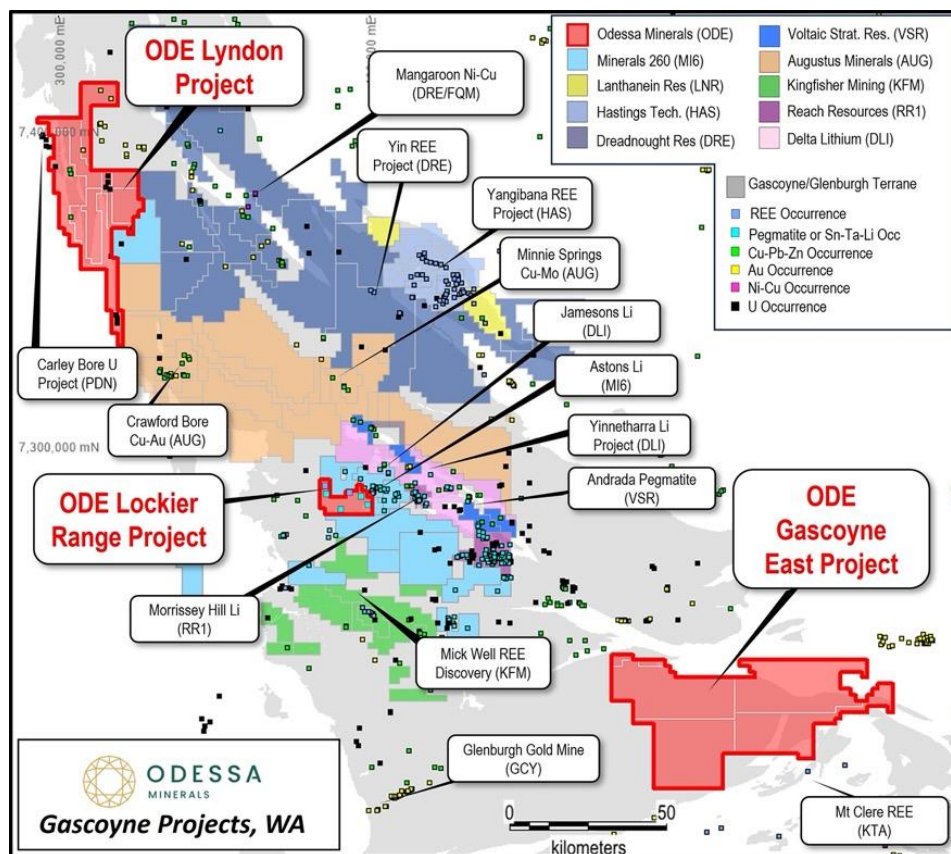


Figure 3: Odessa Minerals regional Gascoyne Project location map overlain with Geological Survey WA Minedex Occurrences.

The Company has previously conducted detailed airborne magnetics and radiometrics over a large part of the project area. The Project encompasses multiple MINDEX occurrences and is prospective for Lithium-pegmatites, uranium, rare earth elements, intrusive Ni-Cu-PGE, orogenic gold and sedimentary-hosted Cu-Pb-Zn mineralisation (Figure 3).

The Project area covers the unconformity between the eastern margin of the Phanerozoic Carnarvon Basin overlying Precambrian basement of the Gascoyne Province. The basement consists of Proterozoic granites, metamorphic gneisses and schists of the Gascoyne Complex. The western parts of the Project include the Palaeozoic-Mesozoic basin margin sedimentary sequences of the Southern Carnarvon Basin including the Merlinleigh Sub-Basin, marked by Devonian sedimentary carbonates; Carboniferous-Permian glaciogene sediments of the Lyons Group; and the siliciclastic sequences of the Cretaceous Winning Group that were deposited coincident with NW-SE rifting.

### Referenced Data

1. WAMEX Report A78570, Newera Uranium Ltd
2. ASX Announcement Dated 12<sup>th</sup> February 2014, Energia Minerals Ltd
3. WAMEX Report A81885, Newera Uranium Ltd

### About Odessa Minerals

Odessa Minerals Ltd is an ASX listed company (ASX: ODE) that holds exploration licenses over 3,000km<sup>2</sup> of highly prospective ground in the highly sought-after Gascoyne region of Western Australia. Odessa's Projects are located in close proximity to significant recent lithium/pegmatite discoveries and lie in a north-south corridor of recent world class REE carbonatite discoveries.

## ENQUIRIES

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**Zane Lewis – Chairman**  
[zlewis@odessaminerals.com.au](mailto:zlewis@odessaminerals.com.au)

**General enquiries:**  
[info@odessaminerals.com.au](mailto:info@odessaminerals.com.au)

**David Lenigas – Executive Director**  
[dlenigas@odessaminerals.com.au](mailto:dlenigas@odessaminerals.com.au)

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### Competent Persons Statement

Information in this report relating to exploration information is based on historic data compiled historic data along with sampling and mapping completed by Odessa Minerals and reviewed by Peter Langworthy, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Langworthy is Managing Director (Principal Consultant) of Omni GeoX Ltd and 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 by the 2012 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Langworthy consents to the inclusion of the data in the form and context in which it appears.



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The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement



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**Odessa Minerals Limited**  
ABN 99 000 031 292

**E:** [info@odessaminerals.com.au](mailto:info@odessaminerals.com.au) **P:** +61 8 6665 2950  
Suite 1, 295 Rokeby Road, Subiaco WA 6008

**ASX Code**  
**ODE**