ASX Announcement

29 January 2024

URANIUM AT ODESSA'S LYNDON PROJECT GASCOYNE REGION, WESTERN AUSTRALIA

Odessa Minerals Limited (ASX:ODE) ("Odessa" or the "Company") is pleased to announce that it has recently completed a first pass review for the excellent uranium potential on its **Lyndon Project**, located approximately 200km south of Onslow and 200km northeast of Carnarvon in Western Australia.

Exploration planning underway for on-ground reconnaissance in the coming weeks.

Highlights of historic data* include:

- Reported **Uranium grades** (WAMEX/MINEDEX) **up to 3,420ppm U_3O_8**
- **Ten** individual uranium occurrences (MINEDEX) **on the Lyndon Project**
- **Lyndon Project immediately adjoins Paladin Energy's Carley Bore Uranium Project, within 1.3km of the 15.6MLbs U_3O_8 announced resource**[1]
- Calcrete-hosted uranium mineralisation in carnotite (an oxide of uranium and vanadium and an important ore mineral) present at surface at the **Jailor Bore, Baltic Bore** and **Ben Hur** Prospects (**Figure 1**)
- Historic surface **high-grade** uranium rock chip samples
- Historic **drilling** and pre-JORC mineral resource reported in MINEDEX at the **Jailor Bore** Prospect
- **Extensive** radiometric uranium anomalies largely untested by drilling
- Paleochannel-hosted roll-front uranium target **extends from Paladin Energy's Carley Bore Project** with significant VTEM anomalies at the **Relief Well** Prospect

Figure 1: Carnotite (uranium) mineralisation (yellow mineral) in porous sandy limestone from the Ben Hur prospect.[2]

*Comment on using historic data

All assay information in this release has been compiled from historic data reported in Geological Survey of Western Australia's MINEDEX Database, public filing by previous explorers or publicly available mineral exploration reports (the WAMEX archive). In the case of Jailor Bore, a historic mineral resource is presented in MINEDEX, but cannot be reported here as it is non-JORC compliant. Information is considered as historic by nature, and while all care has been taken to review and compile previous reports, ground testing and confirmation works are yet to be completed. Further information is contained in the End note/References section of this report and JORC Table 1.

David Lenigas, Executive Director of Odessa, said:

"With the Uranium Price recently hitting a 15 year high at around $105 a pound, we pushed the button on a review of historic uranium work at Lyndon. The proximity of Lyndon to Paladin Energy's Carley Bore Project is noted, and we believe our project has strong potential for uranium exploration and discovery. Most of these uranium targets at Lyndon are on granted tenements with heritage agreements and site surveys already in place. This will help to get exploration efforts for uranium going soon and we look forward to following up on this historic work in coming weeks."

Lyndon Project Uranium Targeting

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 1,000 square kilometres of exploration licenses and applications. The Company has previously conducted detailed airborne magnetics and radiometrics over a large part of the project area. As well as uranium occurrences, there are several known occurrences of pegmatites for lithium mineralisation targeting and the project has the potential for copper-gold, nickel-copper, and rare earth elements.

Project Geology & Previous Exploration

The Project area encompasses the unconformity between the eastern margin of the Phanerozoic Carnarvon Basin overlying Precambrian basement of the Gascoyne Province (**Figure 2**). 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 glacigene sediments of the Lyons Group; and the siliciclastic sequences of the Cretaceous Winning Group that were deposited coincident with NW-SE rifting.

Uranium mineralisation is found across multiple styles (**Figure 3**). Mineralisation at Paladin Energy's Carley Bore Project is Roll Front-Type, hosted within the Cretaceous Birdrong Sandstone and concentrated at redox boundaries. VTEM (Versatile Time-Domain ElectroMagnetic Survey) data suggests the Birdrong Sandstone extends across the Odessa Lyndon Project, in which the Relief Well prospect is situated.[3] Jailor Bore, Baltic Bore and Ben Hur prospects express calcrete-type mineralisation, where uranium is concentrated in surficial deposits of carbonate-rich material. Langer-Heinrich Mine in Namibia (Paladin Energy) and Yeelerrie Deposit in Western Australia are calcrete type deposits.[4]

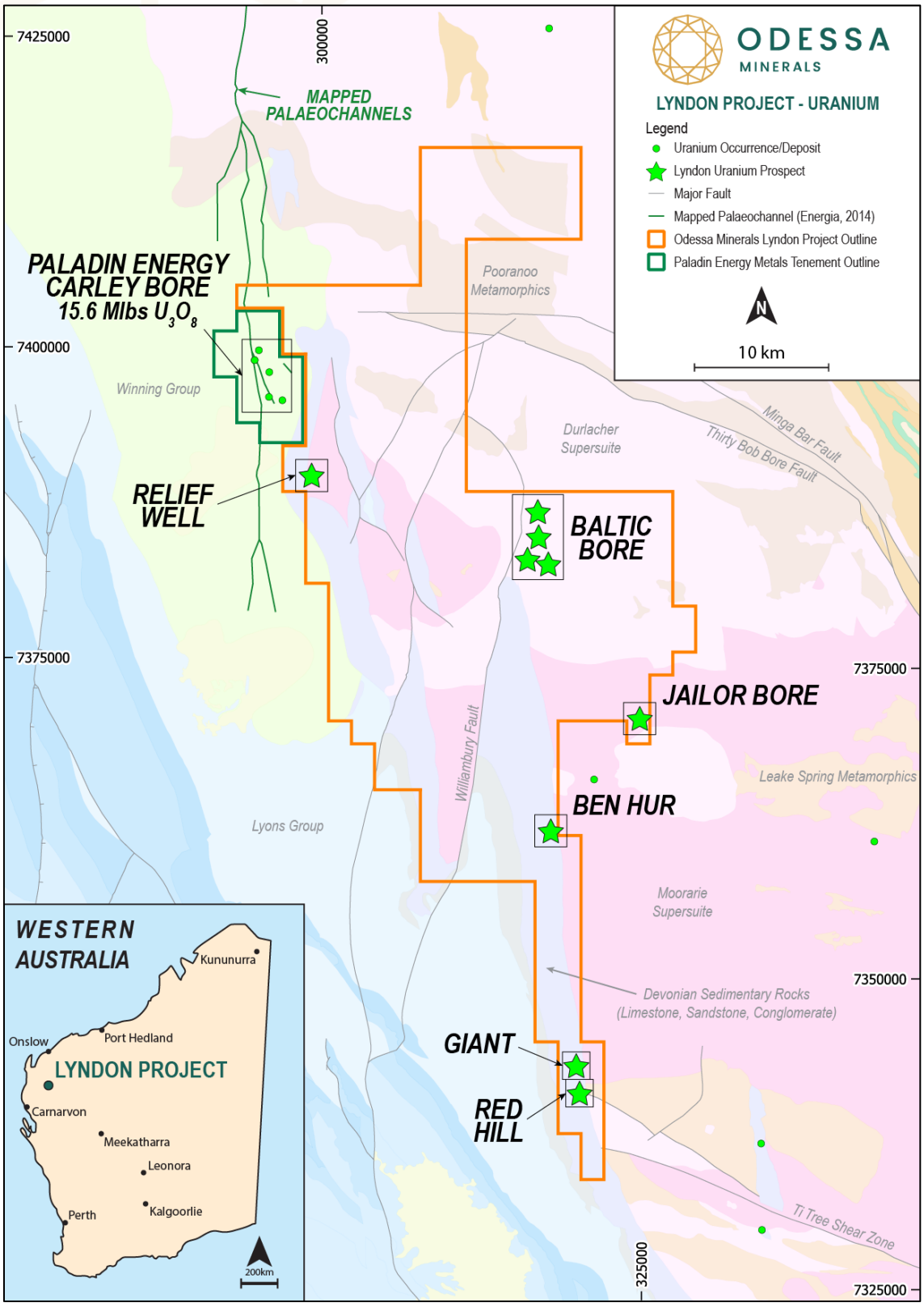

Figure 2: Lyndon Project uranium MINEDEX occurrences in relation to the Carley Bore Project (Paladin Energy). Underlain with GSWA 1:500k bedrock geology and structure (pinks = Proterozoic granitoids/gneisses; pale brown = Proterozoic meta-sediments; blues & greens = Palaeozoic/Mesozoic Sediments).

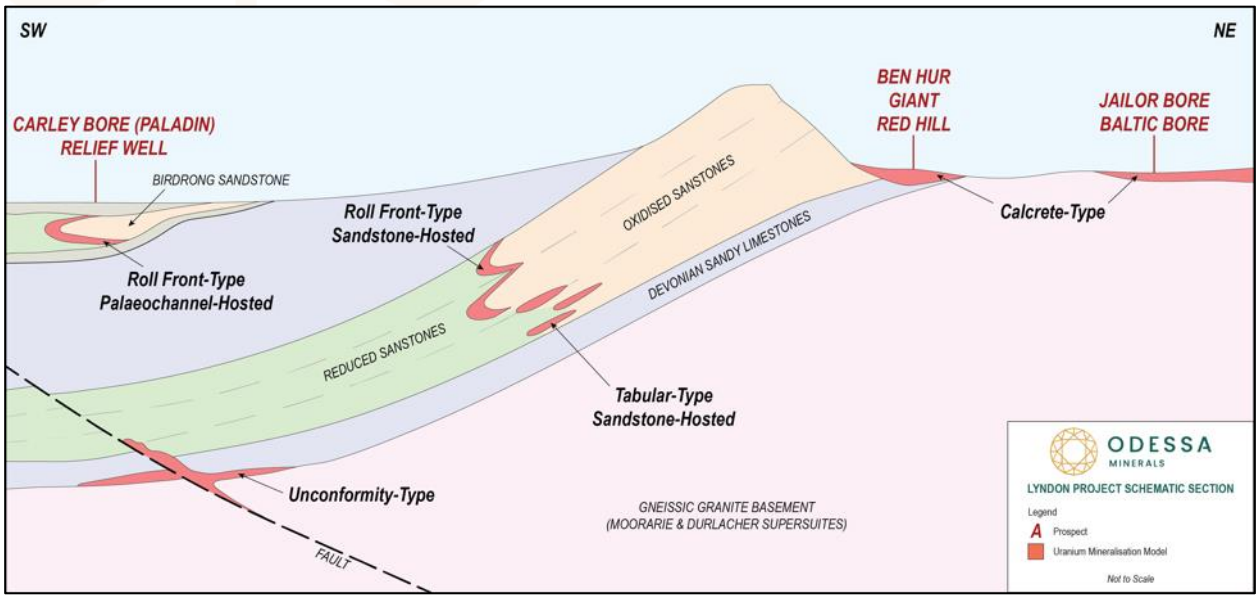

Figure 3: Schematic model section of potential uranium mineralisation styles across the Lyndon Project area. The relative position of prospects are displayed. Modified after Newera Resources, 2014.[5]

Between 1972 and 1974 Pacminex Ltd conducted regional reconnaissance and the first radiometric survey over the region, which included the discovery of the Carley Bore mineralisation and other prospects.[6] Several other explorers including Samantha Mines NL, Uranerz Pty Ltd, Westfield Minerals, Minatome Australia, Aquitaine Mining, Acclaim Uranium, Metex Resources, Raisama Ltd and Newera Resources have intermittently conducted exploration between 1974 and 2014.

Relief Well / Paleochannel Uranium Target[7]

- **5km** of VTEM geophysical anomaly potentially mapping out paleochannel target horizons as hosts to uranium mineralisation.
- Historic drilling up to **2m @ 206ppm U_3O_8** from 58m

Relief Well is directly along strike from Paladin Energy's Carley Bore deposit and is interpreted as being an upstream extension of the paleochannel host. Stratigraphy consists of a sequence of paleochannel sandstone sediments (the Birdrong Sandstone) of the Winning Formation.

In 2007, Newera Uranium Ltd conducted a VTEM survey to map out potential paleochannels (**Figure 4**). Newera completed two RC drill holes to test the anomaly during 2008-2009 with peak results being 2m @ 206ppm U_3O_8 from 58m (**Table 1**). This work highlighted a target zone of highly conductive material spanning >5km strike, with drilling confirming the presence of uranium mineralisation and intercepting channel-shales of between 10 and 50m wide.[3]

With most of the >5km trend currently untested, Relief Well provides a drill-ready Roll Front-Type uranium target that remains open to the south and is located adjacent to Paladin Energy's existing Carley Bore deposit.

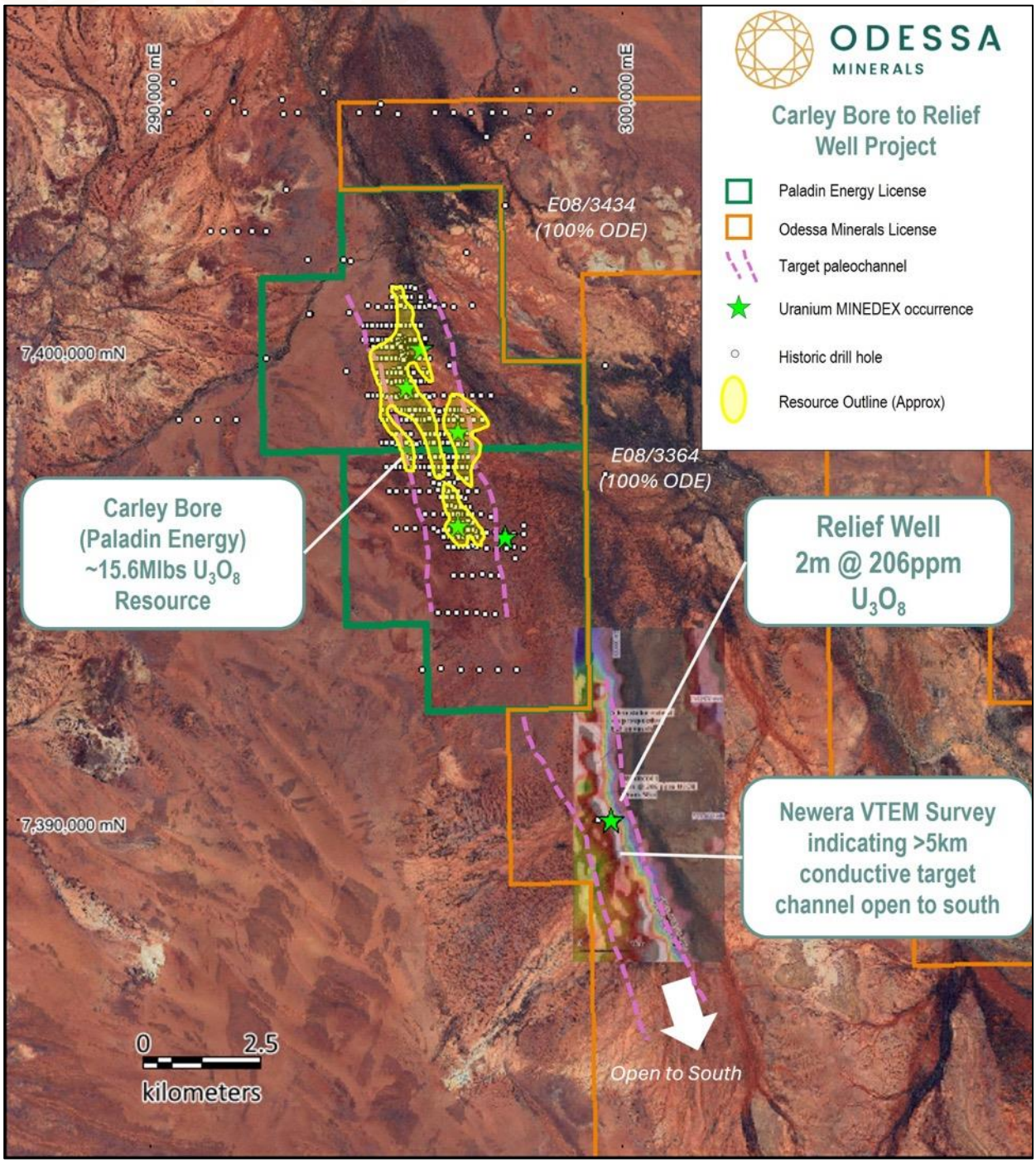

Figure 4: Relief Well VTEM survey from Newera Resources.[3] The hotter colours, red to white, indicate the inferred paleochannel extension, a principal target for uranium mineralisation along strike of the Carley Bore deposit.

Table 1: Relief Well Drill hole results[3]

Hole Details					Significant Intercept			
Hole ID	Depth (m)	Type	Easting	Northing	From (m)	To (m)	Width (m)	U_3O_8 (ppm)
RWRC001	69	RC	299,752	7,390,002	58	60	2	206
RWRC002	100	RC	299,459	7,390,003	No significant result			

Baltic Bore Uranium Target[8]

- **4 individual** MINEDEX Occurrences
- Multiple strong uranium anomalies in radiometrics data covering >4km strike length
- Calcrete rock samples up to **3,420ppm U_3O_8**
- Historic shallow drilling up to **1m @ 1,217ppm U_3O_8** from 3m

The Baltic Bore prospect area consists of radiogenic granitoids overlain by Cenozoic calcrete terraces and alluvial drainage channels. In 1977, Samantha Mines NL reported rock chip results with visible carnotite in calcrete with grades up to 3,420ppm U_3O_8 (**Figure 5**; **Table 2**).[9] Raisama Ltd reported drill results up to 1m @ 1,217ppm U_3O_8 in 2010 and further determined that the calcrete extends beneath the alluvial cover, with potentially blind, thicker portions remaining to be tested (**Figure 5**; **Table 3**).[10]

A subsequent radiometric survey completed in 2022 by Odessa identified multiple uranium anomalies (**Figure 5**). Given the findings by Raisama and that even a thin layer of alluvial cover will obscure the uranium radiometric signature, the Company believes this prospect area has considerable untested potential for additional calcrete-type uranium mineralisation.

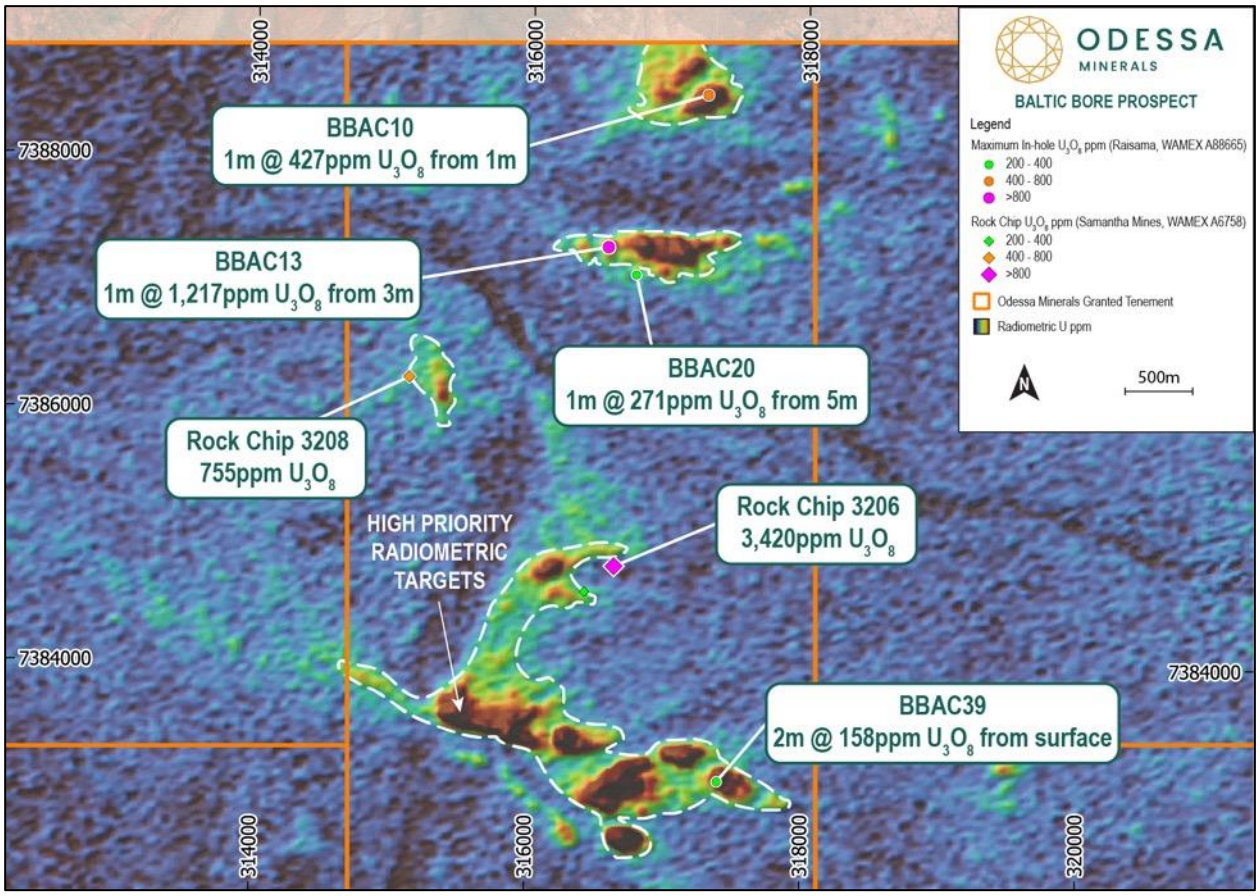

Figure 5: Baltic Bore Uranium Prospect area displaying Raisama significant drilling intercepts coded by maximum in-hole U_3O_8 ppm,[10] and rock chip samples collected by Samantha Mines NL,[9] underlain by Uranium-band radiometric data (red = high uranium in airborne radiometric data).

Table 2: Rock chip samples at Baltic Bore. Coordinates in GDA94 Zone 50S obtained via georeferenced image with +/-100m accuracy.[9]

Sample Details				
Sample ID	Type	Easting	Northing	U_3O_8 (ppm)
3205	Rock Chip	316,800	7,384,600	200
3206	Rock Chip	317,000	7,384,800	3,420
3208	Rock Chip	315,400	7,386,300	755

Table 3: Significant intercepts at Baltic Bore. Coordinates in GDA94 Zone 50S. Raisama Ltd.[10]

Hole Details						Significant Intercept			
Hole ID	Depth (m)	Type	Easting	Northing	RL	From (m)	To (m)	Width (m)	U_3O_8 (ppm)
BBAC10	12	AC	317,270	7,388,497	211	1	2	1	427
BBAC13	8	AC	316,558	7,387,290	211	3	4	1	1,217
BBAC20	9	AC	316,762	7,387,073	214	5	6	1	271
BBAC39	9	AC	317,390	7,383,086	214	0	2	2	158

Jailor Bore Uranium Target[11]

- Calcrete-Type uranium mineralisation
- Historic mineral resource reported on MINEDEX
- Significant drilling intercepts include:
  - **6m @ 1,099ppm U_3O_8**
  - **3m @ 1,533ppm U_3O_8**
  - **2m @ 1,165ppm U_3O_8**
- 2km x 300m strong uranium radiometric anomaly

Jailor Bore consists of over 2km of strike length of uranium radiometric anomalies (**Figure 6**). Surface mineralisation has been identified as carnotite hosted in vugs within calcrete. Pacminex historically completed the majority of drilling at Jailor bore in 1973, returning up to 3m @ 1,533ppm U_3O_8 and 699ppm V_2O_5 (**Table 4**; **Figure 6**).[6] The GSWA MINEDEX database reports a non-JORC compliant mineral resource on the project from historic.[11]

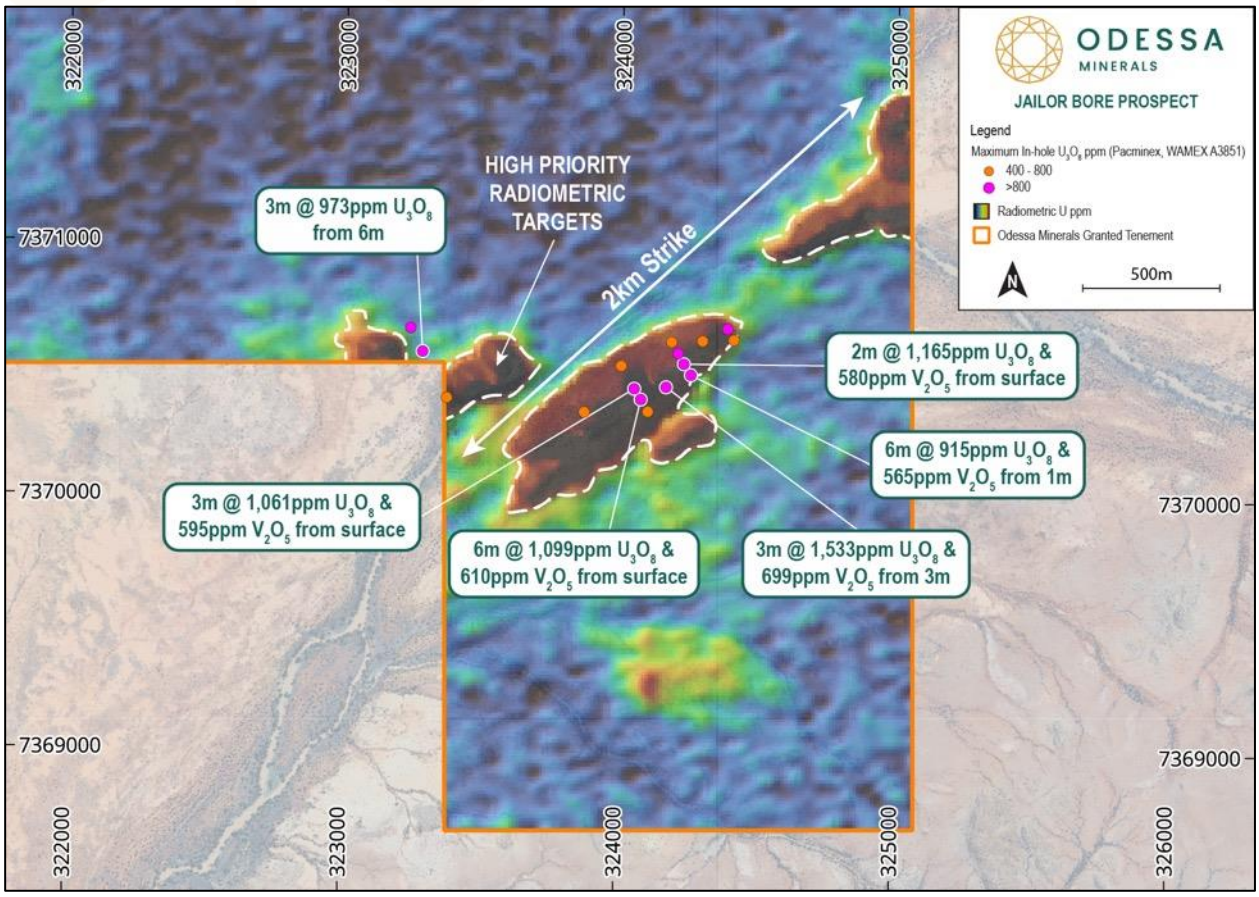

Figure 6 Jailor Bore Uranium Prospect area displaying historic Pacminex significant drilling intercepts coded by maximum in-hole U_3O_8 ppm,[6] underlain by Uranium-band radiometric data (red = high uranium in radiometric data).

Table 4: Significant intercepts at Jailor Bore. Coordinates in GDA94 Zone 50S. Pacminex Ltd.[6]

Hole Details					Significant Intercept				
Hole ID	Depth (m)	Type	Easting	Northing	From (m)	To (m)	Width (m)	U_3O_8 (ppm)	V_2O_5 (ppm)
88	12.75	Rotary	324,415	7,370,624	5	6	1	495	625
89	11.5	Rotary	324,392	7,370,668	6	7	1	1,037	759
97	4.5	Rotary	324,301	7,370,619	1	3	2	582	402
98	12.7	Rotary	324,213	7,370,571	0	1	1	946	536
99	3.7	Rotary	324,189	7,370,615	0	1	1	410	223
101	7.4	Rotary	324,234	7,370,528	0	2	2	1,165	580
					5	6	1	1,031	714
102	8.4	Rotary	324,260	7,370,485	1	7	6	915	656
104	10.1	Rotary	324,170	7,370,437	3	6	3	1,533	699
105	13.5	Rotary	324,079	7,370,387	0	6	6	1,099	610
106	8	Rotary	324,055	7,370,430	0	3	3	1,061	595
108	5.1	Rotary	324,007	7,370,519	1	2	1	473	312
110	7.6	Rotary	324,105	7,370,340	4	5	1	570	402
146	16.3	Rotary	323,241	7,370,662	7	8	1	903	Not Assayed
147	11	Rotary	323,286	7,370,569	6	9	3	973	Not Assayed
149	9	Rotary	323,375	7,370,388	2	3	1	413	Not Assayed

Ben Hur, Giant and Red Hill Uranium Targets[12,13]

- Calcrete-Type uranium mineralisation in carbonate (limestone) host
- Up to **2m @ 411ppm U_3O_8** in drilling
- Trench assays up to **895ppm U_3O_8**
- **Untested VTEM anomalies spanning >35km strike length**

The Ben Hur, Giant and Red Hill prospects exhibit Calcrete-Type uranium mineralisation overlying Devonian carbonate sediments of the Gneudna Formation (**Figure 3**). The mineralisation style is similar to the Calcrete-Type deposits of Jailor Bore and Baltic Bore but with wide stratigraphic control, as such there is potential for thicker mineralisation over greater strike extents.

The project area was first explored by Uranerz Pty Ltd in 1974 who reported trench samples up to 850ppm U_3O_8 at the Giant-Red Hill region.[14] Previous rock chips, by Newera Resources (2008), confirmed the presence of uranium mineralisation in carnotite at the Ben Hur prospect (**Figure 1**).[2]

During 2008-2010, VTEM surveys and interpretation completed by Newera Resources returned a series of conductive anomalies spanning over 35km strike of the Devonian Gneuda Formation and overlying Cretaceous units. (**Figure 7**).[15] These anomalies are yet to be fully tested and represent potential paleochannel-hosted Roll Front-Type targets within the Cretaceous units, as well as Roll Front/Tabular-Type targets within the Devonian (**Figure 3**; **Figure 7**).

Newera Resources conducted drilling during 2011 at the Giant-Red Hill Prospects and reported intersections up to 2m @ 411ppm U_3O_8 from 4m, with 64 drill holes generated 69 significant intersections above 100ppm U_3O_8 (Newera Resources annual report 2011-12).[16]

Table 5: ***Significant intercepts at Giant and Red Hill. Coordinates in GDA94 Zone 50S. Newera Resources.***[3,16]

Hole Details					Significant Intercept			
Hole ID	Depth (m)	Type	Easting	Northing	From (m)	To (m)	Width (m)	U_3O_8 (ppm)
GTRC004	70	RC	319686	7343343	1	3	2	157
GTRC005	110	RC	319849	7343358	1	3	2	229
GTRC007	100	RC	320161	7343364	6	7	1	129
GTRC019	20	RC	320085	7340486	2	4	2	158
GTRC020	20	RC	320238	7340492	2	3	1	103
GTAC045	No record	AC	320644	7340477	1	6	5	282
GTAC046	No record	AC	320634	7340477	4	6	2	222
GTAC047	No record	AC	320624	7340477	4	6	2	411
GTAC060	No record	AC	320492	7340476	4	5	1	336
GTAC061	No record	AC	320482	7340476	2	3	1	210
GTAC064	No record	AC	320452	7340478	1	3	2	373
GTAC128	No record	AC	320646	7339838	2	5	3	251
GTAC129	No record	AC	320635	7339838	3	7	4	221
GTAC134	No record	AC	320585	7339838	1	2	1	238
GTAC177	No record	AC	320120	7339838	1	3	2	238

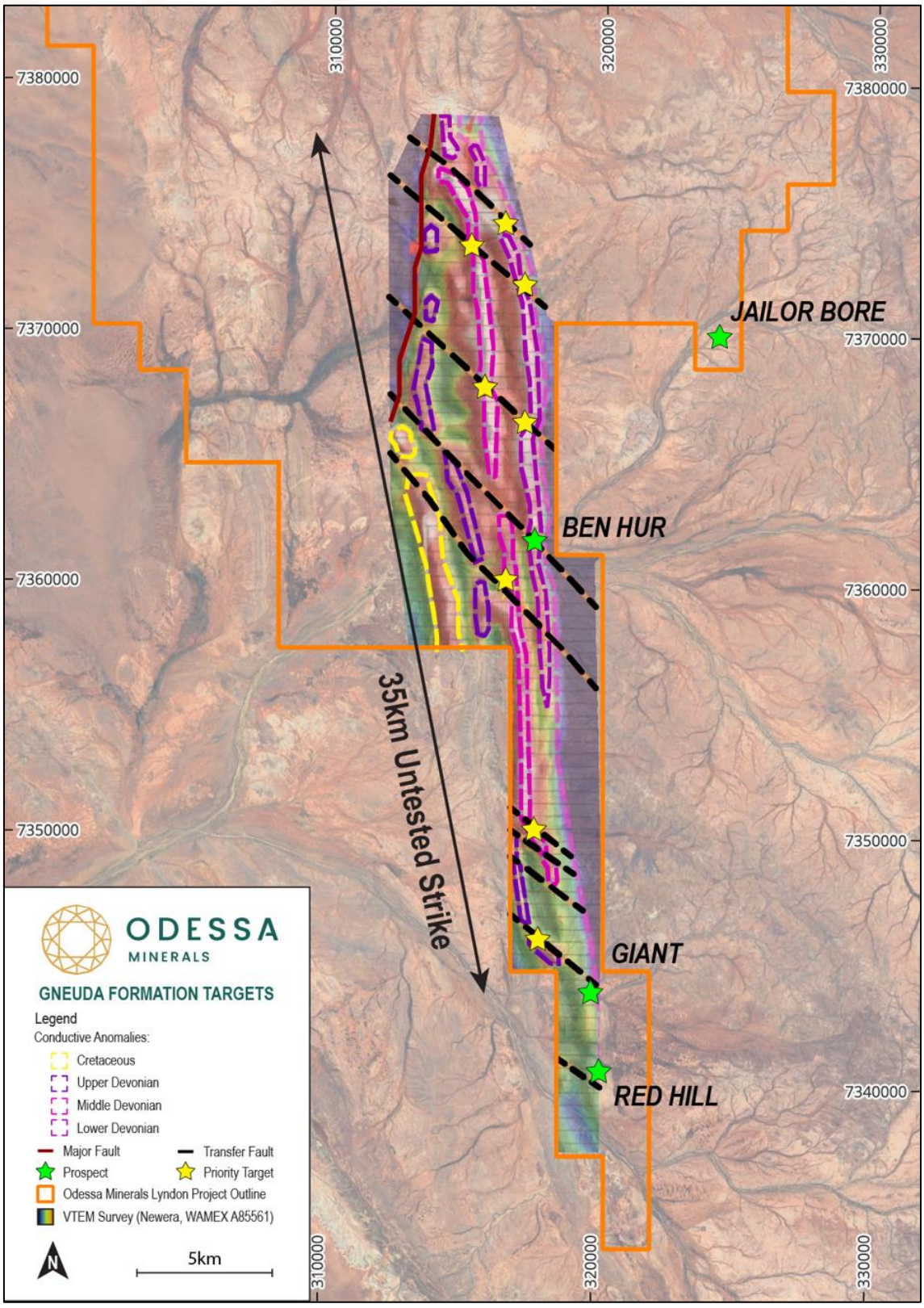

Figure 7: VTEM imagery overlain with interpreted conductive anomalies and faults, with priority targets displayed relative to known prospects. Modified after Newera Resources.[15]

Lyndon Project Uranium Targeting – next steps

The Company is currently working with its exploration team at Omni GeoX Pty Ltd to devise exploration plans on the extensive uranium anomalies. It is likely that field work will consist initially of reconnaissance verification sampling of historic results and surveying of drill collars. Following this, exploration target ranking will be conducted for prioritisation of drilling.

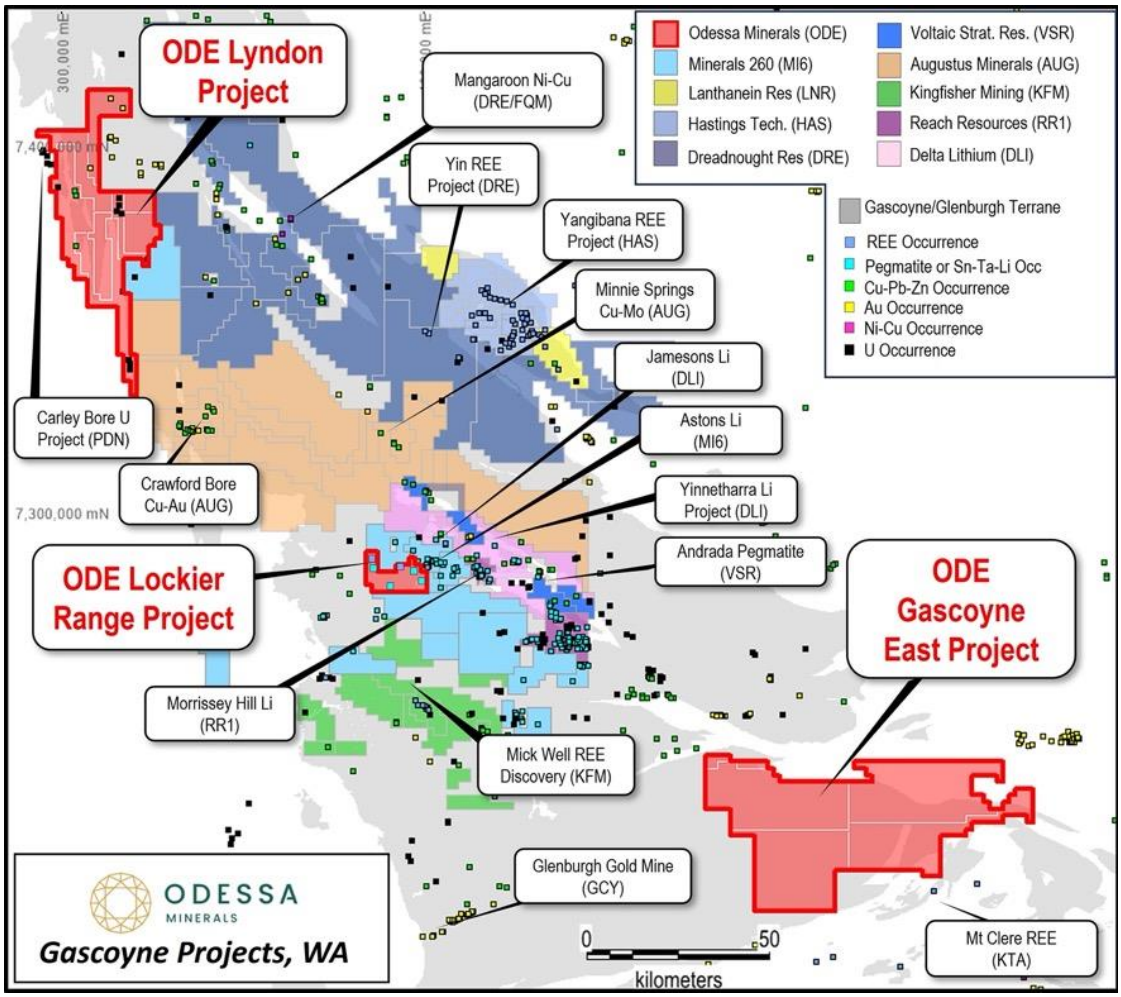

Figure 8 Odessa Minerals regional Gascoyne Project location map overlain with Geological Survey WA Minedex Occurrences.

ENQUIRIES

Zane Lewis – Chairman
zlewis@odessaminerals.com.au

General enquiries:
info@odessaminerals.com.au

David Lenigas – Executive Director
dlenigas@odessaminerals.com.au

Please visit our website for more information and to sign up to receive corporate news alerts:
www.odessaminerals.com.au

About Odessa Minerals

Odessa Minerals Ltd is an ASX listed company (Ticker: ODE) that holds exploration licenses over 3,000 sq km 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.

Competent Persons Statement

Information in this report relating to exploration information is based on historic data compiled 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.

REFERENCES / ENDNOTES

[1] Includes 5Mt @ 420ppm U_3O_8 in Indicated Resource and 17.4Mt @ 280ppm U_3O_8 in Inferred Resource. Source Paladin Energy News Release 1 June 2015. https://cdn-api.markitdigital.com/apiman-gateway/ASX/asx-research/1.0/file/2995-01629709-6A721273

[2] Newera Resources, 2007, WAMEX A76714
https://geodocs.dmirs.wa.gov.au/Web/documentlist/10/Report_Ref/A76714

[3] Relief Well,Newera Resources, 2009, WAMEX A81885
https://geodocs.dmirs.wa.gov.au/Web/documentlist/10/Report_Ref/A81885

[4] Geoscience Australia https://www.ga.gov.au/ausgeonews/ausgeonews201109/exploring.jsp

[5] Newera Resources, 2009, WAMEX A100811,
https://geodocs.dmirs.wa.gov.au/Web/documentlist/10/Report_Ref/A100811

[6] Pacminex, 1973, WAMEX A3851,
https://geodocs.dmirs.wa.gov.au/Web/documentlist/10/Report_Ref/A3851
Pacminex, 1974, WAMEX A5104
https://geodocs.dmirs.wa.gov.au/Web/documentlist/10/Report_Ref/A5104

[7] GSWA MINEDEX on **Relief Well**
https://minedex.dmirs.wa.gov.au/Web/common/jump.jsp?jumpType=SITE&id=S0224006

[8] GSWA MINEDEX on **Baltic Bore**
https://minedex.dmirs.wa.gov.au/Web/common/jump.jsp?jumpType=SITE&id=S0030777
https://minedex.dmirs.wa.gov.au/Web/common/jump.jsp?jumpType=SITE&id=S0030778
https://minedex.dmirs.wa.gov.au/Web/common/jump.jsp?jumpType=SITE&id=S0224856
https://minedex.dmirs.wa.gov.au/Web/common/jump.jsp?jumpType=SITE&id=S0225075

[9] Samantha Mines, 1977, WAMEX A6758
https://geodocs.dmirs.wa.gov.au/Web/documentlist/10/Report_Ref/A6758

[10] Raisama ltd, 2010, WAMEX A88665
https://geodocs.dmirs.wa.gov.au/Web/documentlist/10/Report_Ref/A88665

[11] GSWA MINEDEX on **Jailor Bore**
https://minedex.dmirs.wa.gov.au/Web/common/jump.jsp?jumpType=SITE&id=S0000960

[12] GSWA MINEDEX on **Ben Hur**
https://minedex.dmirs.wa.gov.au/Web/common/jump.jsp?jumpType=SITE&id=S0230109

[13] GSWA on **Giant/Red Hill**
https://minedex.dmirs.wa.gov.au/Web/common/jump.jsp?jumpType=SITE&id=S0224003
https://minedex.dmirs.wa.gov.au/Web/common/jump.jsp?jumpType=SITE&id=S0224004
https://minedex.dmirs.wa.gov.au/Web/common/jump.jsp?jumpType=SITE&id=S0224005

[14] Uranerz PL, 1974, WAMEX A4638
https://geodocs.dmirs.wa.gov.au/Web/documentlist/10/Report_Ref/A4638

[15] Newera Resources, 2009, WAMEX A85561
https://geodocs.dmirs.wa.gov.au/Web/documentlist/10/Report_Ref/A85561

[16] Newera Resources Annual Report (2011-12).
https://announcements.asx.com.au/asxpdf/20121029/pdf/429s52dwqql83b.pdf

Table 6: Principal WAMEX Archive Reports noted in this release

Project	Company	Year	AReport	Link
Jailor Bore	Pacminex	1973	A3851	https://geodocs.dmirs.wa.gov.au/Web/documentlist/10/Report_Ref/A3851
Jailor Bore (regional)	Pacminex	1974	A5104	https://geodocs.dmirs.wa.gov.au/Web/documentlist/10/Report_Ref/A5104
Relief Well	Newera Resources	2009	A81885	https://geodocs.dmirs.wa.gov.au/Web/documentlist/10/Report_Ref/A81885
Relief Well	Newera Resources	2014	A104029	https://geodocs.dmirs.wa.gov.au/Web/documentlist/10/Report_Ref/A104029
Baltic Bore	Samantha Mines	1977	A6758	https://geodocs.dmirs.wa.gov.au/Web/documentlist/10/Report_Ref/A6758
Baltic Bore	Raisama ltd	2010	A88665	https://geodocs.dmirs.wa.gov.au/Web/documentlist/10/Report_Ref/A88665
Ben Hur/Red Hill/Giant	Uranerz PL	1974	A4638	https://geodocs.dmirs.wa.gov.au/Web/documentlist/10/Report_Ref/A4638
Ben Hur/Red Hill/Giant	Newera Resources	2007	A76714	https://geodocs.dmirs.wa.gov.au/Web/documentlist/10/Report_Ref/A76714
Ben Hur/Red Hill/Giant	Newera Resources	2009	A85561	https://geodocs.dmirs.wa.gov.au/Web/documentlist/10/Report_Ref/A85561

Table 7: Other WAMEX reports reviewed as part of this study

Year	Company	Report
1973	Pacminex	A3852
1973	Aquitaine Aust	A5354
1973	Aquitaine Aust	A5355
1974	Aquitaine Aust	A5847
1975	Aquitaine Aust	A5702
1975	Aquitaine Aust	A5703
1975	Aquitaine Aust	A5704
1975	Aquitaine Aust	A6101
1979	Cra Exploration	A8400
1979	Minatome Australia	A8668
1980	Cra Exploration	A8870
1981	Minatome Australia	A10503
1981	Minatome Australia	A9634
1982	Minatome Australia	A11720
1983	Total Mining	A13240
1985	Total Mining	A14697
1985	Minatome Australia	A16342
1988	Cove Mining	A22931
1988	Regional Resources	A23712
1989	Norgold	A27275

Year	Company	Report
2009	Newera Uranium	A80723
2009	Carbon Energy	A81488
2009	Richmond W	A84703
2009	Newera Uranium	A85304
2010	Newera Uranium	A86098
2010	Energia Minerals	A86302
2010	Newera Uranium	A87079
2010	Newera Uranium	A87080
2011	Newera Resources	A88859
2011	Energia Minerals	A89818
2012	Newera Resources	A92350
2012	Energia Minerals	A93366
2012	Newera Resources	A94211
2012	Newera Resources	A94214
2012	Newera Resources	A94217
2012	Newera Resources	A96191
2013	Newera Resources	A100333
2013	Newera Resources	A96394
2013	Energia Minerals	A96829
2013	Newera Resources	A97192

Year	Company	Report
1989	Electrolytic Zinc	A27454
1990	Aberfoyle Resources	A21070
1991	Dominion Mining	A34571
1992	Majestic Resources	A35284
1992	Cra Exploration	A36625
1993	Cra Exploration	A38374
1993	Cra Exploration	A39332
1994	Cove Mining	A43198
1995	Riverglen	A43783
1996	Dominion Mining	A48431
1997	Dominion Mining	A51986
1998	Helix Resources	A53666
1999	Acclaim Uranium	A47846
1999	Dominion Mining	A58563
2002	Dominion Mining	A64361
2005	Fox Resources	A70547
2005	Fox Resources	A71534
2005	Fox Resources	A71535
2007	Newera Uranium	A74302
2007	Burey Gold	A75780
2007	Newcrest Mining	A77609
2008	Metex Resources	A77268
2008	Metex Resources	A77453
2008	Newera Uranium	A78570
2008	Burey Gold	A79345

Year	Company	Report
2013	Newera Resources	A97194
2013	Energia Minerals	A97345
2013	Cauldron Energy	A99343
2014	Newera Resources	A100811
2014	Cauldron Energy	A101213
2014	Energia Minerals	A101265
2014	Energia Minerals	A101642
2014	Newera Resources	A102091
2014	Newera Resources	A102266
2014	Newera Resources	A102701
2014	Newera Resources	A103921
2014	Newera Resources	A104029
2014	Cooper R	A104058
2014	Newera Resources	A104090
2014	Integrated Resources	A104114
2014	Energia Minerals	A104799
2015	Newera Resources	A104529
2015	Energia Minerals	A105057
2015	Cooper R	A107263
2016	Paladin Energy	A108383
2017	Cauldron Energy	A112398
2018	Cauldron Energy	A116017
2018	Armstrong	A118169
2018	Energia Minerals	A122142
2019	Paladin Energy	A118820

JORC CODE, 2012 EDITION – TABLE 1 REPORT

1.1 Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g., 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g.,* *submarine nodules) may warrant disclosure of detailed information.*	• All sample reported in this release is based on a compilation of historic data as referenced in the body of this release. In historic reports, the accuracy and description of sampling techniques cannot be independently verified and are considered as a guideline only and subject to further validation • **Relief Well Project:** Newera Uranium Resources reported RC drilling with sampling at 2m and 4m intervals. WAMEX (A104029) • **Baltic Bore** Raisama Ltd reported aircore drilling with samples collected every 1m WAMEX (A088665) • **Jailor Bore** Historic drilling without description of sampling reported by PacMinex in WAMEX A3852, and re-reported by Newera Uranium. Newera followed up with aircore drilling • **Ben Hur** Trenching reported by Uranerz with variable sample spacing reported by Uranerz (WAMEX A4638), with further rock sampling and reconnaissance by Newera (WAMEX A81885) • **Giant/Red Hill** Trenching reported by Uranerz with variable sample spacing reported by Uranerz (WAMEX A4638), with further rock sampling and reconnaissance by Newera (WAMEX A81885)
Drilling techniques	• *Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Historic drilling only. In the case of some reports, the drill technique is not described. Newera, Raiasama reported both Aircore, Rotary (RAB) and RC drilling as noted in the body of the release (WAMEX A81885, A88665)

Criteria	JORC Code explanation	Commentary
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Historic drilling only with WAMEX archive not reporting drill-recoveries.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Reporting of historic results only. The geological data compilation is still on-going at the time of this release.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• No core drilling reported from historic work, in this release. • WAMEX archive reports generally do not report detail on sub-sampling techniques. • Quality control procedures are not derived from WAMEX archive reports, and the quality and verification cannot be reported here. However, anomalous uranium results are consistent with geophysical uranium (radiometric) anomalism and considered as reasonable within the context as presented.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.*	• In the case of **Jailor Bore** and **Relief Well** drilling noted by Newera, laboratory (WAMEX A104029 as example) assaying completed on samples pulverised to 75um using XRF_U_EXP technique at SGS Laboratories Perth. • In the case of **Baltic Bore** with drilling conducted by Raiasama (WAMEX A88665) samples are reported that QA/QC and check samples were utilised, however, without description of QA/QC outcomes. Samples were assayed at Genalysis Laboratories in Perth. • For other prospects including results from the 1970s, laboratory information has not necessarily been presented. As in the case of all historic sampling, QA/QC and verification is not possible, and all assay results are subject to further checking and confirmatory work.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Verification of sampling and assaying</td><td>• The verification of significant intersections by either independent or alternative company personnel.
• The use of twinned holes.
• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.
Discuss any adjustment to assay data.</td><td>• This report contains a compilation of historic results.
• On-going verification, including on-ground checking is pending.
• The oxides U_3O_8 and V_2O_5 are the industry accepted form of reporting Uranium and Vanadium assay results. Where historic results were reported in U ppm and V ppm, assay results were converted to stoichiometric oxides (U_3O_8 and V_2O_5) using the element-to-oxide stoichiometric conversion factors in the table below:
<table>
<tr><th>Element</th><th>Conversion Factor</th><th>Oxide</th></tr>
<tr><td>U</td><td>1.1792</td><td>U_3O_8</td></tr>
<tr><td>V</td><td>1.7852</td><td>V_2O_5</td></tr>
</table></td></tr>
<tr><td>Location of data points</td><td>• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.
• Specification of the grid system used.
• Quality and adequacy of topographic control.</td><td>• Historic work by Uranerz, Samantha Mines and Pacminex do not contain accurate survey information. The Company is relying upon the MINEDEX database locations for general description of the historic work and has digitised locations from maps presented in WAMEX reports using known geographical points (e.g. water bores, airfields and creeks) as reference.
• In the case of data presented by Newera and Raiasama, survey is under the control of hand-held GPS with an assumed accuracy of +-5m.
• The Company converts historic data and uses MGA94 Zone 50 in this report.</td></tr>
<tr><td>Data spacing and distribution</td><td>• Data spacing for reporting of Exploration Results.
• Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.
• Whether sample compositing has been applied.</td><td>• As presented in the body of this release in maps compiled from historic data, the sample and drill spacing is variable.</td></tr>
<tr><td>Orientation of data in relation to geological structure</td><td>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.
• If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</td><td>• Drilling is vertical for flat-lying deposits, particularly those presented as calcrete deposits.</td></tr>
<tr><td>Sample security</td><td>• The measures taken to ensure sample security.</td><td>• Historic work only and sample security not reported.</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data*	• This report contains historic information compiled from open file reports. The work is on-going and field checking is pending.

1.2 Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	Lyndon Project • The Lyndon Project consists of granted exploration licenses under the name of Odessa Lyndon Pty Ltd, a 100% owned subsidiary of Odessa Minerals Ltd. Tenement numbers are. E 08/3217, E 08/3364, E 08/3434, E 09/2435, E 09/2605 • One exploration license is in application E 09/2938 applied for on 2/8/2023 and is pending grant. • Relief Well is on granted exploration license E 08/3364 • Baltic Bore and Jailor Bore are on granted exploration license E 09/2435 • Ben Hur and Giant/Red Hill projects are on exploration license application E 09/2938
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	As noted in the body of this release, this project has undergone successive campaigns for uranium exploration from the early 1970s until 2014.
Geology	*Deposit type, geological setting and style of mineralisation.*	The Project area encompasses the unconformity between the eastern margin of the Phanerozoic. Carnarvon Basin overlying Precambrian basement of the Gascoyne Province (Figure 1). The basement consists of Proterozoic granites, metamorphic gneisses and schists. The western parts of the Project include the Paleozoic-Mesozoic basin margin sedimentary sequences of the Southern Carnarvon Basin: the Merlinleigh Sub-Basin, marked by Devonian sedimentary carbonates; Carboniferous-Permian glacigene sediments of the Lyons Group; and a thin veneer of the siliciclastic sequences of the Cretaceous Winning Group that were deposited coincident with NW-SE rifting.

Criteria	JORC Code explanation	Commentary
		Uranium mineralisation is found across multiple styles. Mineralisation at Paladin Energy's Carley Bore Project is roll-front type, hosted within the Cretaceous Birdrong Sandstone and concentrated at redox boundaries. VTEM data suggests the Birdrong Sandstone extends across the Odessa Lyndon Project, in which the Relief Well prospect is situated. Jailor Bore, Baltic Bore and Ben Hur prospects express calcrete-type mineralisation,
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• Drill hole information presented in the body of this release includes relevant information where applicable and where available/compiled. In some cases, including historic Pacminex and Uranerz results, accurate survey information is not available.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Data reported as reported in historic reports as referenced. • Uranium assays are converted to the oxide U308 using conversion factor of 1.1792 (U_3O_8 is ~84.8% uranium by weight).

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Historic drilling reported. However, mineralisation is considered as relatively flat lying with drilling predominantly with vertical holes. Hence true width and drill width are approximately equivalent.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Maps included in the body of this release.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Appropriate disclosure on reporting historic results is provided within this release. All reported results are to be considered as historic and are subject to verification and confirmation works by the Company.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Odessa Minerals completed an airborne radiometric survey in 2022. The uranium band anomalism is broadly consistent with the reporting of historic results and coincides with MINEDEX mineral occurrences, thus providing confidence in the presence of significant uranium mineralisation as presented.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• All results presented are considered historic. The Company is in the planning stage to conduct field work to check mineral exploration results reported by previous explorers on this project. The style of mineralisation and the potential for substantial discovery is yet to be determined.