THOR ENERGY PLC

ASX: THR

ASX Announcement
31 January 2024

Quarterly Activities and Cash Flow Report

September to December 2023

Highlights	Outlook for next quarter (31 March 2024)
URANIUM & VANADIUM **Wedding Bell & Radium Mountain, Colorado, USA** **Vanadium King, Utah, USA** • Completion of 23 RC drillholes, totalling 2,737m at Section 23, Rim Rock and Groundhog, Wedding Bell Project • High-grade uranium up to **6885ppm (0.69%) eU_3O_8** intercepted. • Uranium spot price breaks through **US$100/lb,** 16-year high	• Uranium and vanadium assay results from the Wedding Bell and Radium Mountain drilling program • Maiden drilling at Vanadium King Project • Preparation for resource drilling at Groundhog, Rim Rock, and Wedding Bell Projects
COPPER – RARE EARTH ELEMENTS (REE) **Alford East, SA, Australia** • Thor acquired 80% interest in the Alford East Copper Oxide Project (**Figure 1**) from Spencer Metals Pty Ltd • Ambient Noise Tomography ("ANT") surveys completed in collaboration with Fleet Space Technologies • Preliminary 3D ANT model highlights low velocity zones representing deep structural troughs hosting copper-REE-gold mineralisation • 72.2% copper recoveries from hydrometallurgical Mini Column Tests (MCT's) on drill samples from 21AED05 **EnviroCopper ("ECL") (now via 26.4% equity holding)** • Andromeda Agreement to transfer ownership of EL5984 to ECL was finalised • Alligator Energy invested an **initial A$0.9m** for 7.8% of ECL **Kapunda, SA, Australia** • Site Environmental Lixiviant trials ("SELT") underway **Alford West, SA, Australia** • Modelling of geophysical data including ANT and seismic data	• Completion of new constrained 3D ANT and mineralisation models • Hydrogeology In-Situ Recovery ("ISR") assessment continuing • Copper-gold recoveries from lixiviant trials • Continuing to assess the amenability of Alford West for ISR
GOLD/NICKEL **Ragged Range, Pilbara region, WA Australia** • Seeking divestment or joint venture partner	

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AIM & ASX Listings
Shares: THR

OTCQB Listing
Shares: THORF

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Key Projects:
USA
Uranium / Vanadium
Wedding Bell, Colorado
Radium Mountain, Colorado
Vanadium King, Utah
Australia
Gold
Ragged Range, Pilbara, WA
Copper
Alford East, SA

Nicole Galloway Warland, Managing Director, Thor Energy Plc, commented:

"Finishing the year with consistent high-grade uranium results from our 2023 drilling program highlights the significant potential and exciting growth opportunities of our Wedding Bell and Radium Mountain uranium projects. We are now preparing for an exciting 2024 drilling program, including resource drilling, and continuing brownfields exploration over our highly prospective projects.

"Thor is encouraged by the growth opportunities in the uranium sector, with the uranium spot price recently reaching a 16-year high, supported by strong supply and demand fundamentals, climate change initiatives and the US Government investing up to $500m to develop domestic supply of nuclear energy from uranium. This reconfirms our strategic focus on energy metals and our commitment to advancing our USA uranium projects."

"The successful completion of the hydrometallurgical mini-column tests; returning favourable copper recoveries of up to 72.2% are above the standard range of 60-70% for an ISR operation. These are considered an excellent result, as Thor advances the ISR assessment of the Alford East Copper-REE-Gold Project."

"The Company implemented Glyleach™ as a lixiviant during the ISR process to help drive the Company's sustainable strategy. Glyleach™ is economical and environmentally friendly compared to the traditional lixiviant of sulphuric acid, helping Thor to develop a low-cost, low-environmental footprint ISR copper operation."

"We are pleased with the ongoing relationship with Fleet Space Technologies. Its assistance has enabled Thor to merge the ANT 3D model with Thor's 3D geological model. The resultant 3D model highlighted low-velocity drill targets, which potentially represent higher-grade copper-REE-Gold targets, associated with deep structurally controlled troughs. We are working to enhance our existing 3D model and we expect the completion of the updated model to be completed in Q1 2024."

"Another significant step change in the Company was the multiple parties ECL engaged with in Q4 2023 as Thor held a 30% interest in ECL before engagement to dilute our holdings in ECL to 26.4%. ECL received an initial A$0.9m investment from Alligator Energy, along with an agreement with Andromeda Metals to acquire the Alford West EL 5984 tenement. Thor's investment into ECL is looking promising with in-ground lixiviant trials now underway at Kapunda, with copper recoveries to be reported in the next quarter."

"*The Company is looking to divest from its Ragged Range project as it seeks to execute its primary focus on the drilling programs at Wedding Bell, Radium Mountain, and Vanadium King in 2024."*

Photo 1: Downhole gamma logging at Section 23, Wedding Bell Project

URANIUM AND VANADIUM PROJECTS (USA)

Thor holds a 100% interest in two US companies with mineral claims in Colorado and Utah, USA (**Figure 1**). The claims host uranium and vanadium mineralisation in an area known as the Uravan Mineral Belt, which has a history of high-grade uranium and vanadium production.

Within an economical transport distance is the only uranium and vanadium processing facility in the region (Energy Fuels White Mesa Mill), which enables a low-hurdle processing option for any production from these projects.

Details of the projects may be found on the Thor website.

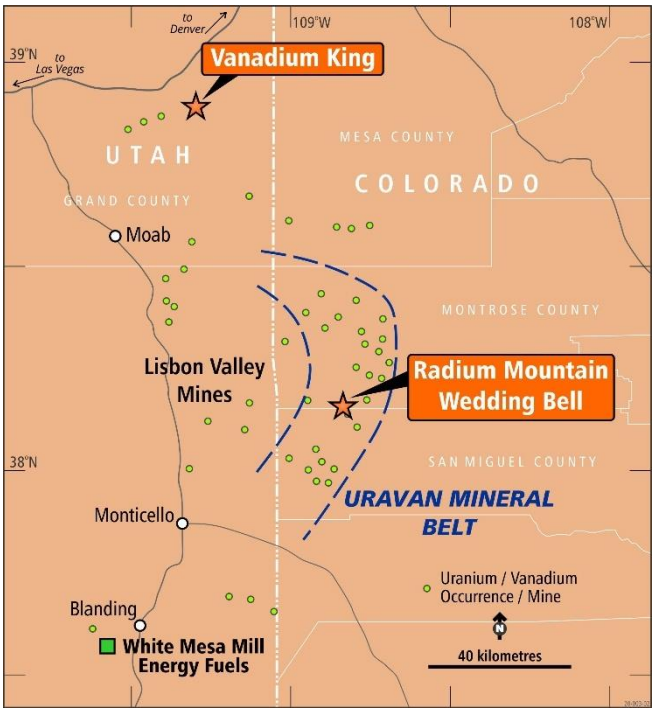

Figure 1: Uravan Mineral Belt showing project locations and nearby White Mesa processing plant

Wedding Bell and Radium Mountain Project, Colorado:

Drilling commenced at Wedding Bell /Radium Mountain Projects on 18 October 23 (ASX/AIM: 18 October 2023). The RC drill program comprised 23 shallow drillholes, totalling 2,737m. It was designed to target uranium and vanadium mineralisation within the Salt Wash Sandstone Member (sandstone/mudstone) of the Morrison Formation **(Figure 2)**. This is the primary lithology for historic uranium and vanadium production in the Uravan Mineral Belt.

The program successfully identified shallow, uranium mineralisation (visual geological logging and downhole gamma) in all holes drilled at Section 23, Rim Rock Mine and Groundhog Mine **(**

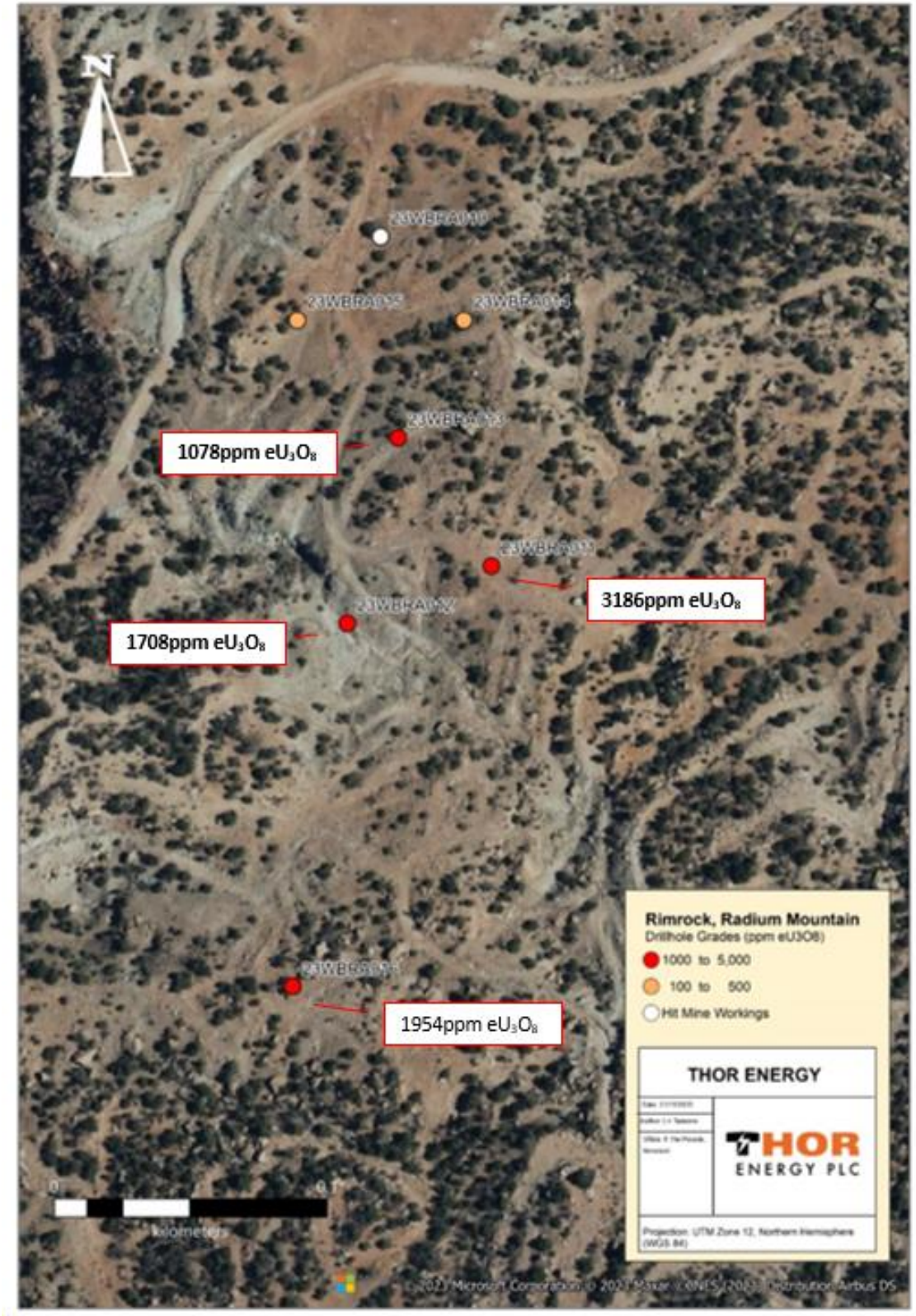

Figure 5: Rim Rock Mine Area Collar location plan showing uranium grade distribution

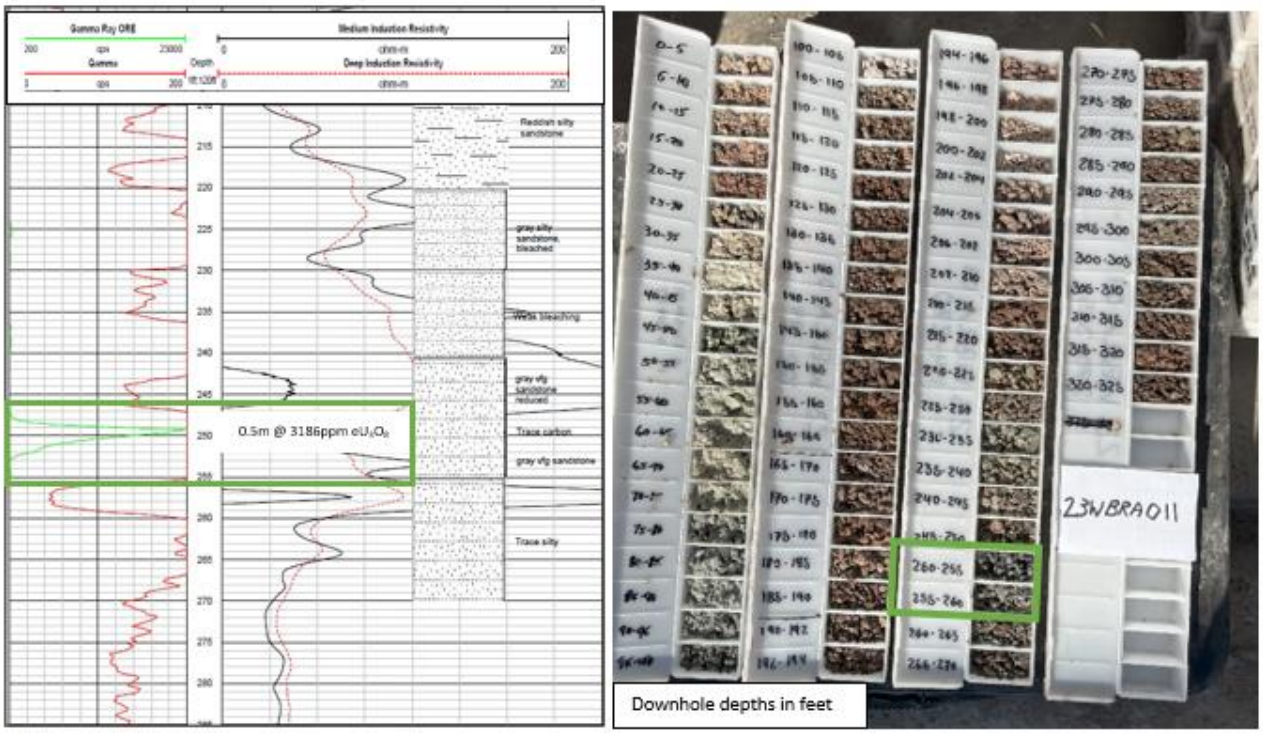

Figure 6: 23WBRA011 Downhole gamma log (left) with corresponding chip tray photographs (right)

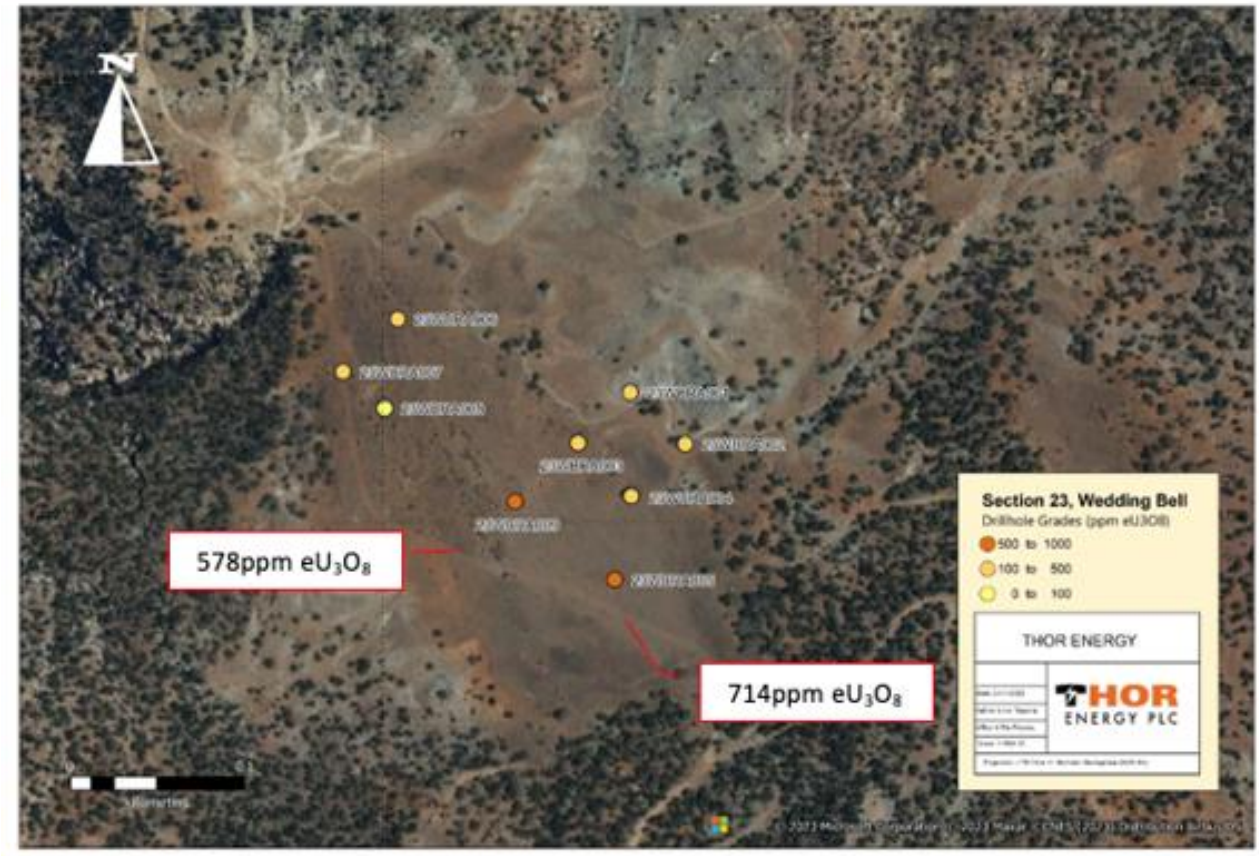

Figure 7: Section 23 Area Collar Location Plan with uranium grade distribution

Table 1**)**. Uranium mineralisation is hosted within the reduced sandstone, close to the oxidation/reduction contact, with vanadium mineralisation to be determined by follow-up sample analysis of the anomalous zones.

Significant uranium downhole gamma results above 2000ppm (0.2%) eU_3O_8 include:

- **23WBRA020 0.9m @ 6885ppm (0.69 %) eU_3O_8 from 82.66m**
- 23WBRA019 0.3m @ 3362ppm (0.34 %) eU_3O_8 from 90.22m
- 23WBRA011 0.5m @ 3186ppm (0.32 %) eU_3O_8 from 76.2m
- 23WBRA016 0.8m @ 1954ppm (0.20%) eU_3O_8 from 67.4m

Groundhog Mine area drilling comprising seven drillholes **(Figure 2** and **Figure 3)**, was designed to test areas along strike of historic mine workings predominately in the second and third sandstone rim. 23WBRA020 returned the highest uranium intercept of **0.69% eU3O8** within a grey-reduced sandstone **(**Figure 4: 23WBRA020 Downhole gamma log (left) with corresponding chip tray photographs (right)**Figure 4)**. Further work is required on correlating these results with historic mine workings and 2022 drilling, to delineate mineral resources.

Drilling at **Rim Rock Mine area** (seven drillholes) has identified high-grade zones of up to **0.32% eU_3O_8** uranium adjacent to, as well as along strike from the historic workings **(Figure 6** and **Figure 5)**. Uranium mineralisation appears here to be concentrated in the third sandstone rim of the Salt Wash Sandstone, approximately 60m below surface. Further work is required on correlating these results with historic mine workings and 2022 drilling, to delineate mineral resources.

Section 23 is an underexplored area with no historic workings. Nine drillholes were designed to test stratigraphic extensions to mineralisation in the Salt Wash Sandstone, targeting the uranium mineralisation identified from the first pass drilling program in 2022, as well as testing a portion of the airborne radiometric anomalies **(Figure 7)**. The initial data review has identified uranium mineralisation in all four sandstone rims (massive, laterally continuous, ledge-forming sandstone layers, interbedded by thin siltstone and clay layers) within the Salt Wash Sandstone Member, increasing the potential for multiple mineralised zones in this area **(Figure 2)**.

Samples from anomalous zones in each drillhole are now at Australian Laboratory Services (“ALS”) in Canada for full geochemical analysis including uranium and vanadium assays.

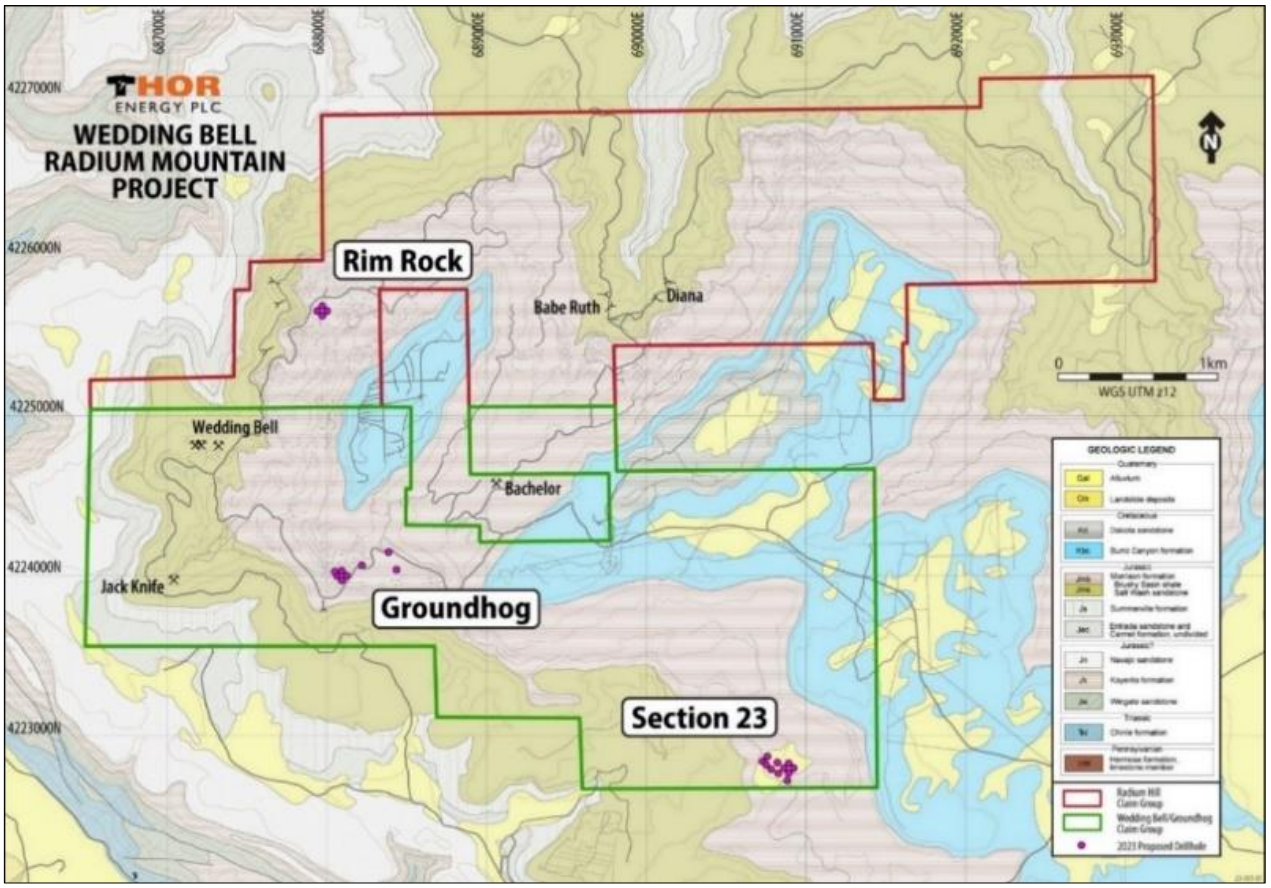

Figure 2: 2023 Drill Collars, Wedding Bell, and Radium Mountain Project

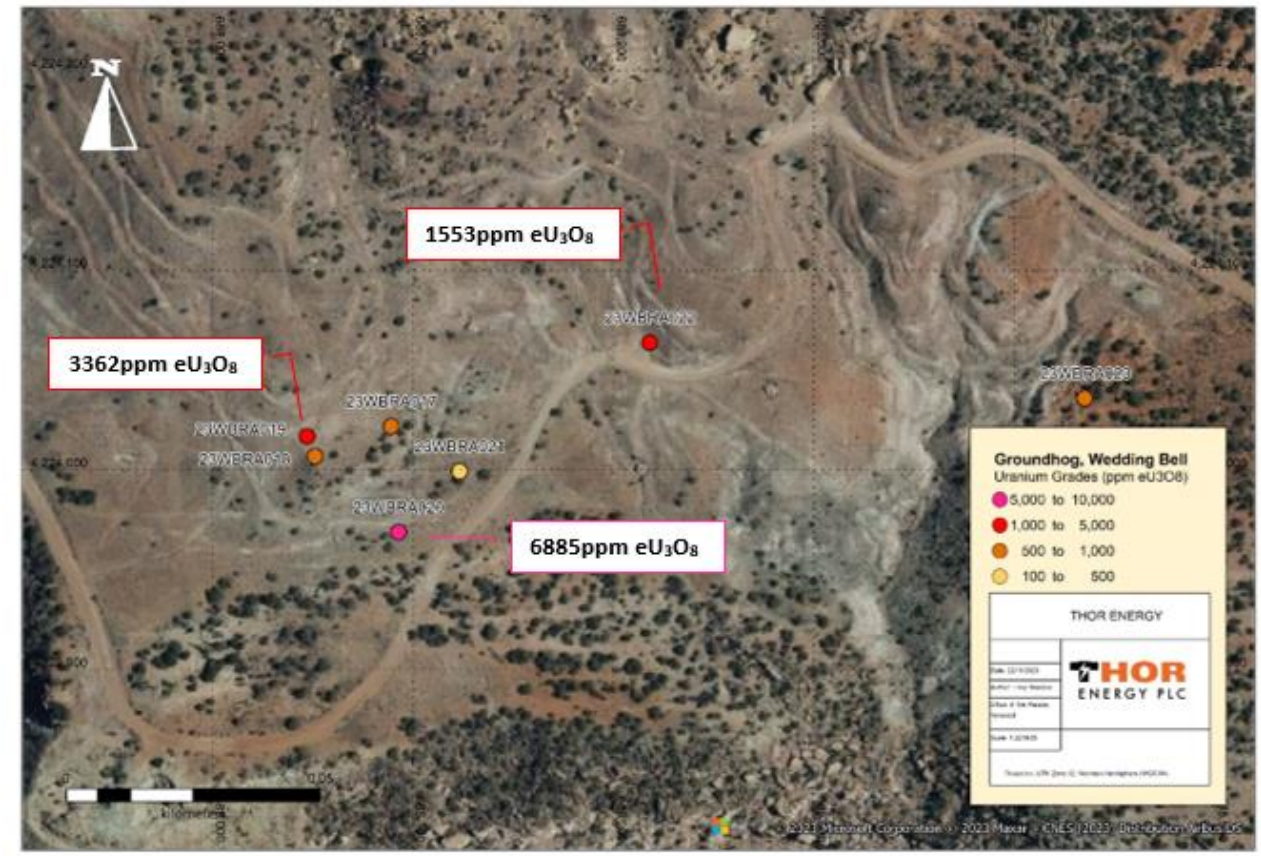

Figure 3: Groundhog collar location plan showing uranium grade distribution

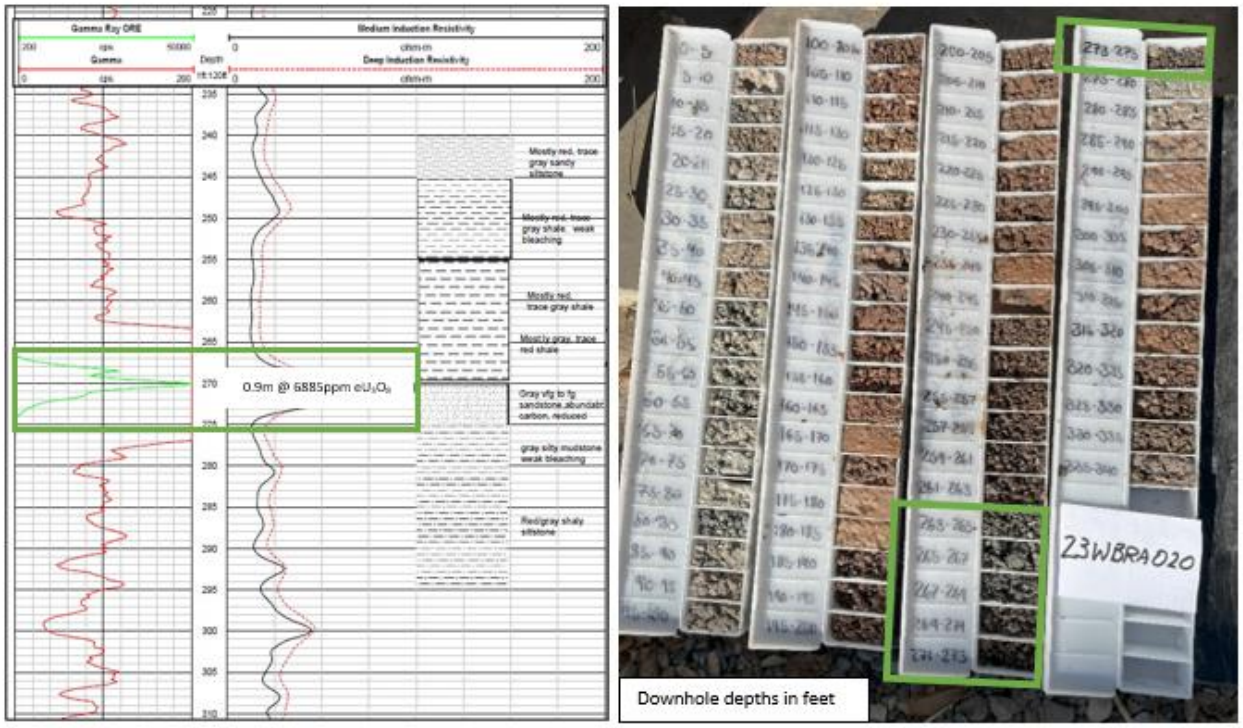

Figure 4: 23WBRA020 Downhole gamma log (left) with corresponding chip tray photographs (right)

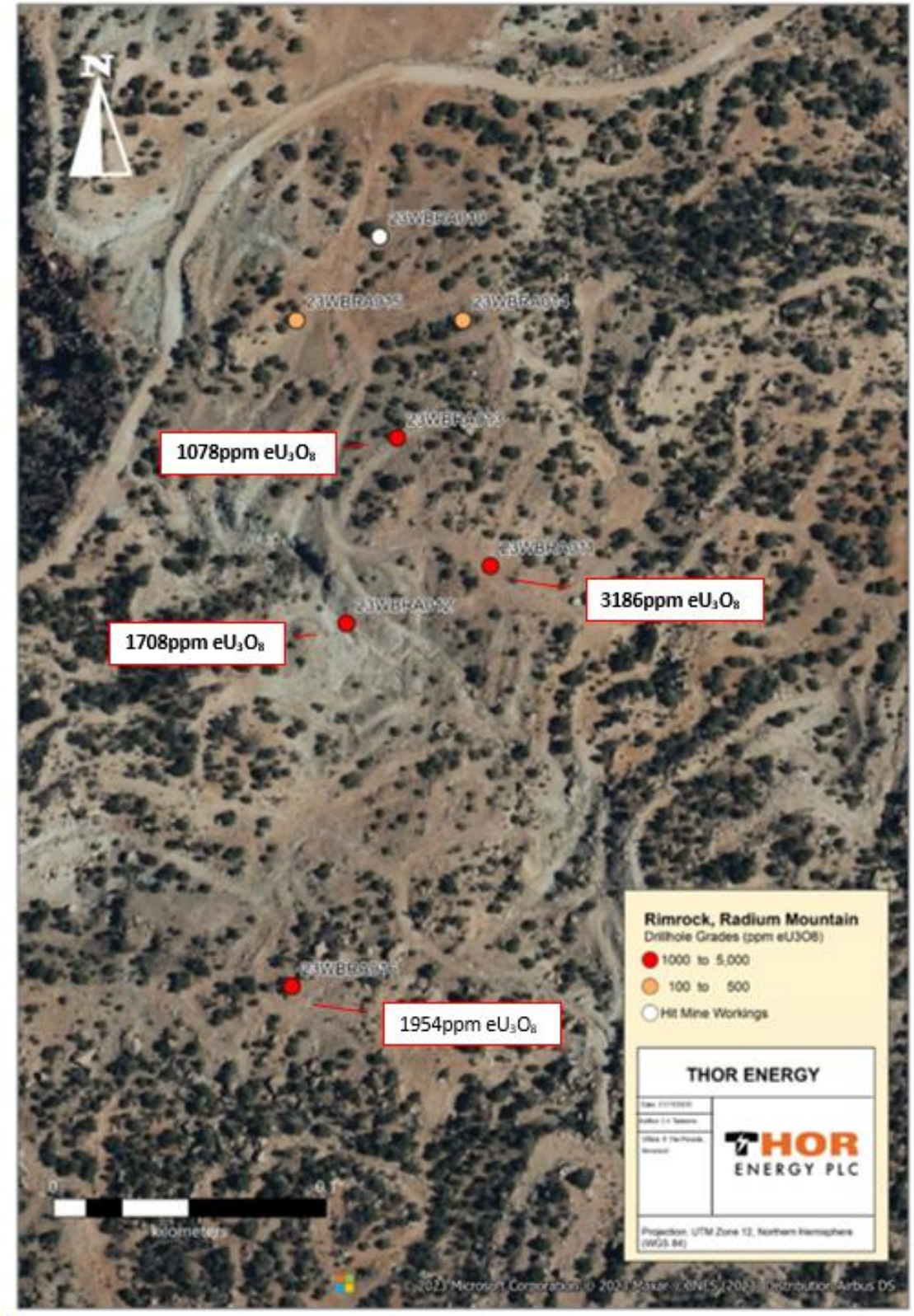

Figure 5: Rim Rock Mine Area Collar location plan showing uranium grade distribution

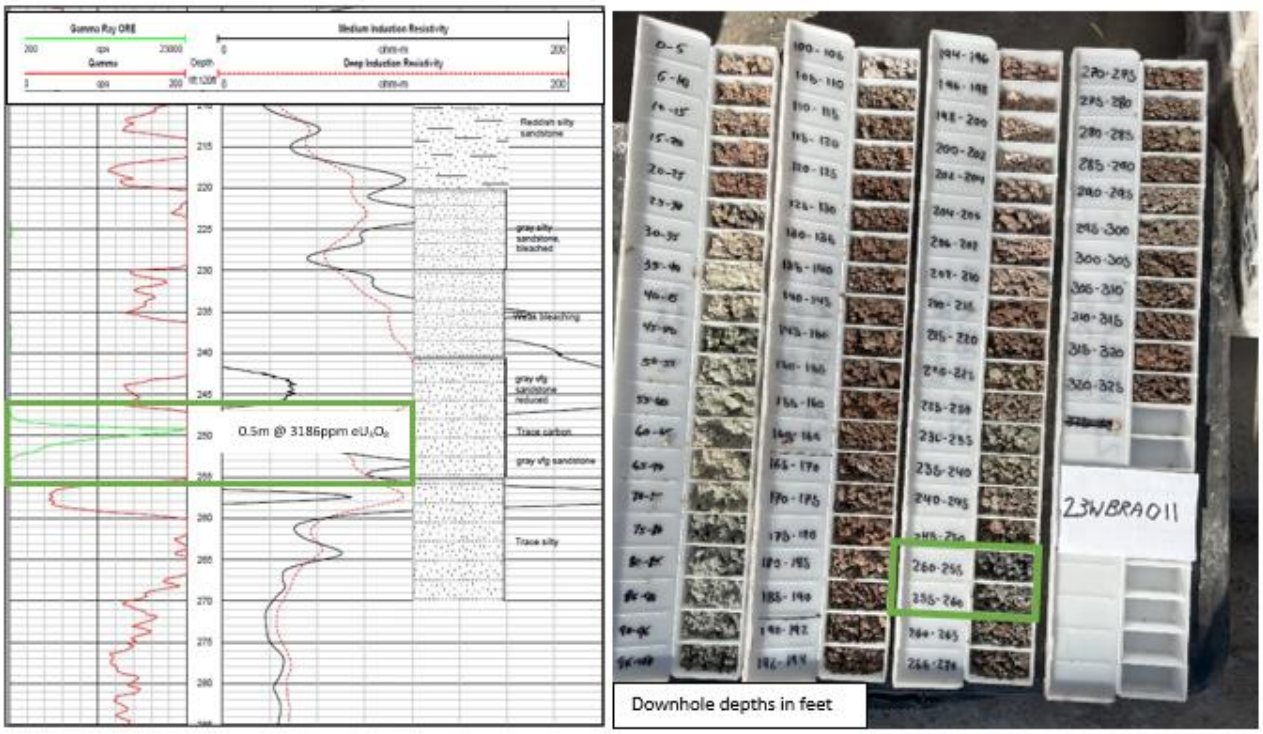

Figure 6: 23WBRA011 Downhole gamma log (left) with corresponding chip tray photographs (right)

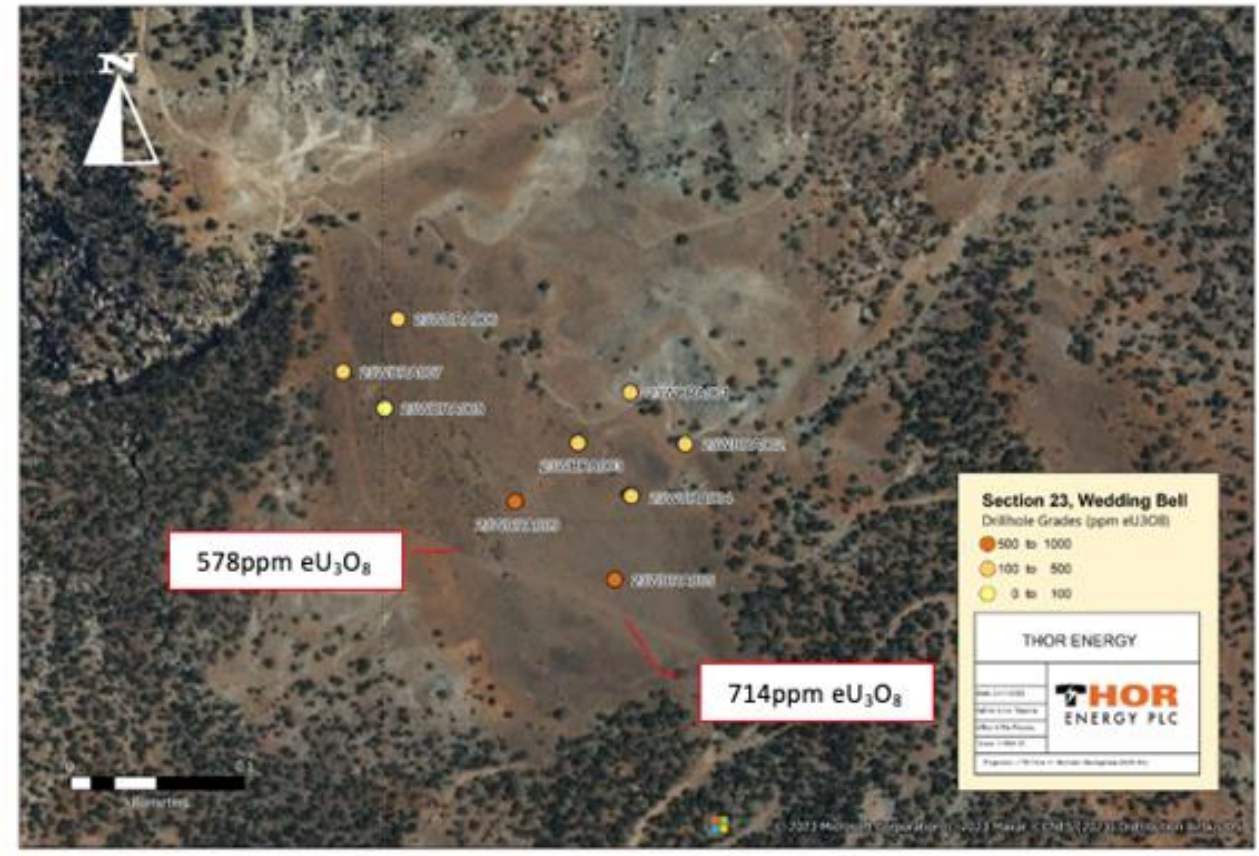

Figure 7: Section 23 Area Collar Location Plan with uranium grade distribution

Table 1: Uranium Intercepts above 100ppm U_3O_8 (Downhole gamma- = eU_3O_8)
(ASX/AIM Announcement 4 December 2023)

Prospect	Hole ID	Interval (m) *	eU_3O_8 ppm	eU_3O_8 %	GT (m x ppm)	Depth (m)
Section 23	23WBRA001	0.3	280	0.028	84	133
Section 23	23WBRA002	0.5	175	0.017	88	101.35
Section 23	23WBRA003	0.6	100	0.010	60	99.5
Section 23	23WBRA004	0.6	324	0.032	194	100.0
Section 23	**23WBRA005**	**0.5**	**714**	**0.071**	**357**	**101.2**
Section 23	23WBRA006	0.3	427	0.043	128	121.9
Section 23	23WBRA007	0.6	110	0.011	66	121.3
Section 23	And	0.3	485	0.049	146	122.6
Section 23	23WBRA008	*Multiple Intercepts < 100ppm*				
Section 23	**23WBRA009**	**0.9**	**578**	**0.059**	**520**	**124.3**
Rim Rock	23WBRA010	*Hole hit historic workings at Rim Rock*				
Rim Rock	**23WBRA011**	**0.5**	**3186**	**0.319**	**1593**	**76.2**
Rim Rock	**23WBRA012**	**0.6**	**1708**	**0.172**	**1025**	**63.1**
Rim Rock	**23WBRA013**	**0.3**	**1075**	**0.108**	**323**	**61.45**
Rim Rock	23WBRA014	0.6	487	0.049	292	56.9
Rim Rock	And	0.6	450	0.045	270	57.0
Rim Rock	23WBRA015	1.2	268	0.027	322	58.55
Rim Rock	**23WBRA016**	**0.8**	**1954**	**0.2**	**1563**	**67.54**
Groundhog	23WBRA017	0.8	687	0.07	550	89.18
Groundhog	23WBRA018	0.3	786	0.08	236	88.67
Groundhog	**23WBRA019**	**0.3**	**3362**	**0.34**	**1009**	**90.22**
Groundhog	**23WBRA020**	**0.9**	**6885**	**0.69**	**6197**	**82.66**
Groundhog	23WBRA021	0.6	308	0.03	185	85.53
Groundhog	**23WBRA022**	**0.5**	**1553**	**0.16**	**777**	**85.22**
Groundhog	23WBRA023	0.3	914	0.09	274	91.99

Next Steps:

- Anomalous uranium and vanadium samples to be sent to ALS Canada (results expected in February 2024), with review and assessment of the results expected shortly thereafter
- Detailed mineralisation and geological interpretations combining the 2022 results
- Preparation for 2024 resource - infill and extension - drilling at Rim Rock and Groundhog mine areas, plus continuing brownfield exploration drilling across tenure

COPPER – REE PROJECTS (SA)

Thor holds direct and indirect interest in over 400,000 tonnes of Inferred copper resources in South Australia, via its 80% farm-in interest in Alford East copper-gold Project and its 30% equity interest in EnviroCopper Ltd in Kapunda and Alford West **(Figure 8)**.

Each of these projects is considered by the Thor directors to have significant growth potential, and each is being advanced towards development via low-cost, environmentally friendly ISR techniques.

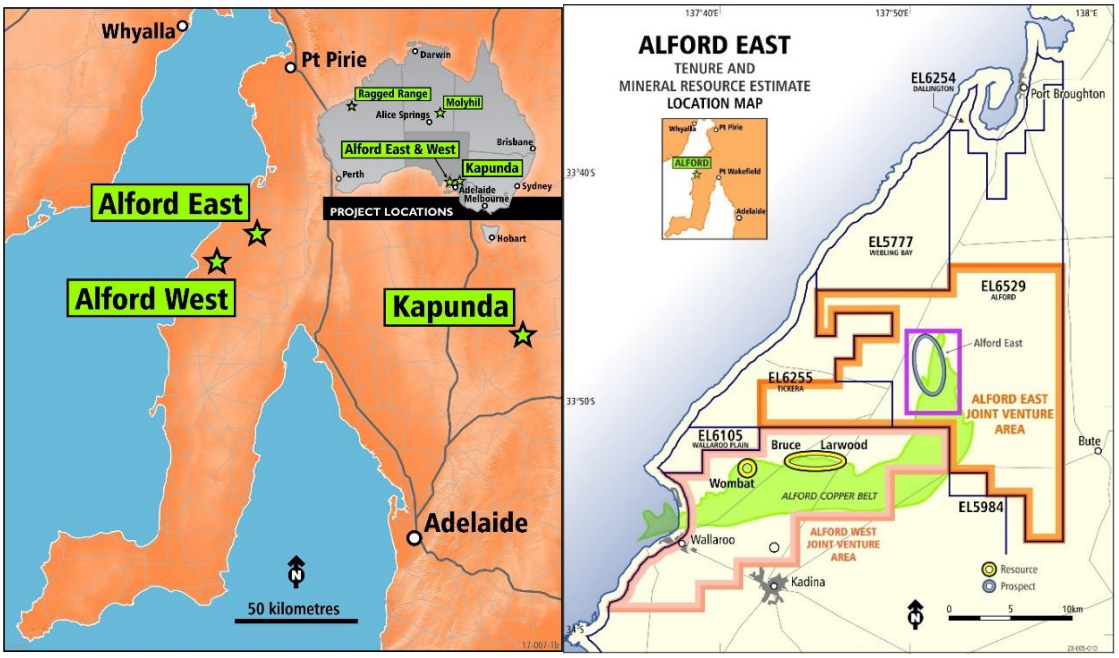

Figure 8: Location Map -Copper Projects (left) and Tenement Map (right) with Thor's Alford East Project

Alford East Copper-Gold Project

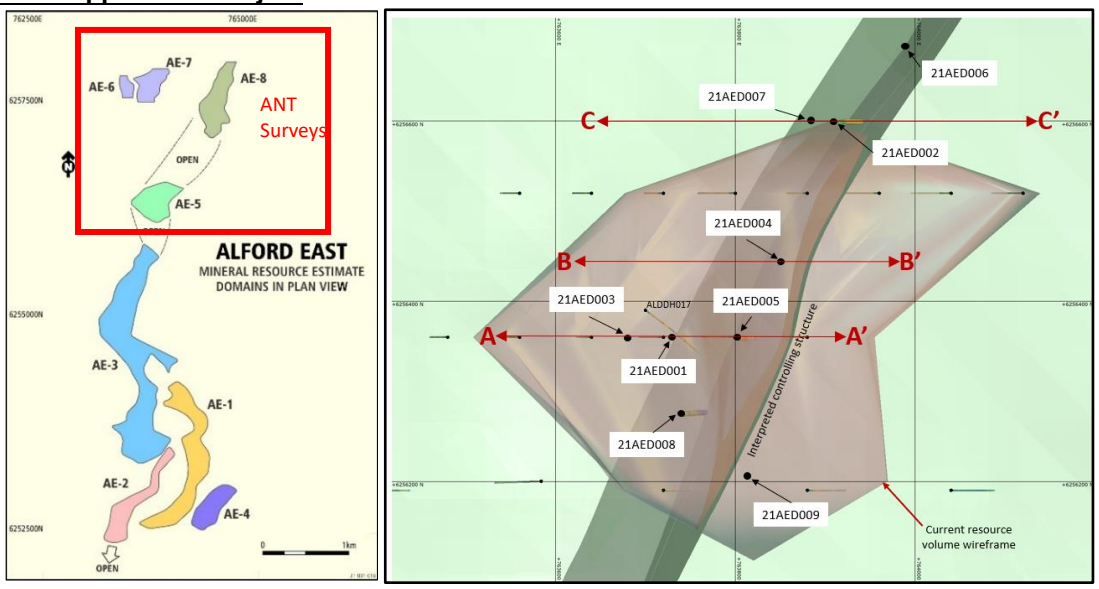

Figure 9: Alford East Inferred Minerals Resource Domains (left) and 2021 Drill Collar Map (right)

Thor Acquires 80% Interest in Alford East

During Q4 2023, Thor fulfilled its Stage 2 expenditure obligations at the Alford East Copper-Gold-REE Project. Completing Stage 2 of the earn-in, entitles Thor to increase its interest from 51% to 80% in the copper oxide mineral rights from Spencer Metals Pty Ltd ("Spencer").

Under the terms of the November 2020 Agreement, Thor was granted the right to explore for minerals on the agreed portions of the exploration licences (EL6255 and EL6529). The agreement enabled the conduct of feasibility and development activities in respect thereto, and via funding expenditure on these activities, earn an interest in oxide minerals of up to 80% over two stages, which have now been achieved as follows:

Stage 1: Thor triggered Stage 1 on 17 November 2021, earning 51% interest by funding AUD$500,000 of expenditure. The Company issued the Stage 1 consideration of AUD$250,000 in fully paid Thor shares, at the 5-day ASX VWAP on the date immediately before allotment, together with two free attaching options per share issued, exercisable at $0.03 within 5 years from the date of issue (ASX/AIM: 17 November 2021). The exercise of these Stage 1 options has since been amended to $0.30 under the Company's share capital consolidation of 10:1 effective on 31 August 2023.

Stage 2: Thor has earned a further 29% interest (80% in total) by funding an additional AUD$750,000 of expenditure over a subsequent two years and for an additional consideration of AUD$250,000 in fully paid Thor shares, issued at the 5-day ASX VWAP on the date immediately before allotment and two free attaching options per share issued, exercisable at AUD$0.30 within 5 years from the date of issue (Stage 2 expenditure).

Upon Thor completing the acquisition of an 80% interest in the project, Spencer will hold a free carried 20% interest until the decision to mine.

Ambient Noise Tomography Survey

Two comprehensive ANT surveys were executed at the Alford East Project, covering the northern portion of the Mineral Resource Estimate Domains **(Figure 9)**. The surveys were designed to delineate the low-velocity, weathered 'troughs' that are known to host the oxide copper-gold and REE mineralisation within the Alford Copper Belt **(Figure 8)**. The oxide copper-gold and REE mineralisation within the Alford Copper Belt is associated with rocks that are significantly less dense with lower seismic velocity than the surrounding fresh units.

The surveys referred to as the East and West field surveys used a total of 96 Fleet's space-enabled geodes for each deployment. These surveys covered substantial areas, encompassing 1.13 square kilometres in the Eastern Field and 1.81 square kilometres in the Western Field.

The Eastern Field survey commenced on September 28 and concluded on October 5. Subsequently, the geodes were seamlessly transitioned to the neighbouring Western Field, where the survey operations began on October 6 and were completed on October 17. In the Eastern Field, the inter-geode spacing was 150 metres in both the easting and northing directions, allowing for subsurface imaging down to a depth of 500 metres, with an impressive resolution of approximately 30 metres. Conversely, in the Western Field, the inter-geode spacing was 115 metres along the easting direction and 130 metres along the northing direction, providing the capability to image the subsurface down to a depth of 400 metres while maintaining a resolution of 36 metres.

The data collected from these two surveys was subject to extensive processing, leading to the development of a high-resolution 3D seismic velocity model of the subsurface. This model has revealed key features, such as regions with slower velocity within a high-velocity basement, inferring a 3D geometry of the interpreted variably weathered trough and a sheared metasedimentary basement, which is expected to host

mineralisation **(Figure 10)**. This newfound understanding of the subsurface will play a pivotal role in guiding and optimising the upcoming drilling activities in the Alford East Copper project.

The survey will compare and integrate the subsurface ANT results with geological information (surface geochemistry, drilling, and historic geophysics) that has been compiled by Thor. The resultant 3D model will provide a refined targeted strategy, focusing future drilling on areas with potential high-grade oxide copper-gold and REE mineralisation.

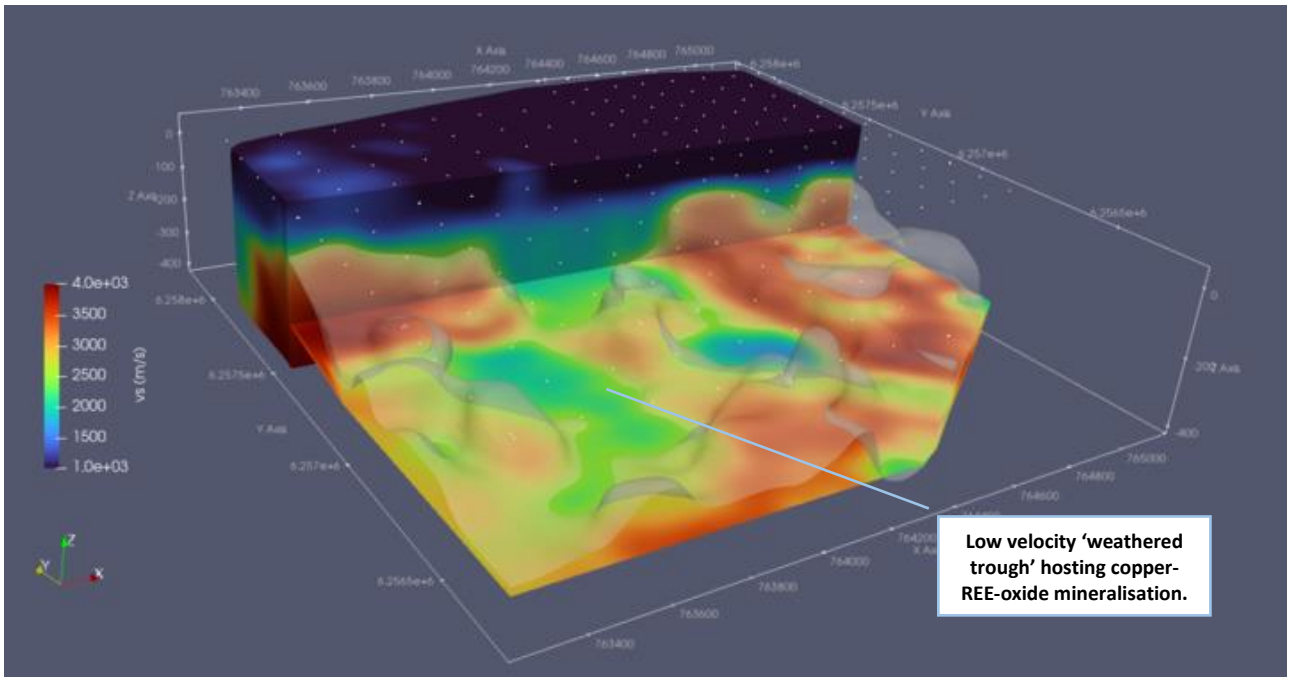

Figure 10: 3D model showing low velocity weathered troughs hosting oxide copper mineralisation

Mini Column Leach Testing (MCLT's)

Thor engaged Draslovka to undertake a *program of work* to evaluate Draslovka's GlyLeach™ process, focusing on copper extraction from a 7.3m intersection selected from drillhole 21AED005 **(Figure 9** and

Table 2). This sample was selected as representative of copper oxide mineralisation within Mineral Resource Estimate Domain Area 5 (MRE 5) from Thor's 2021 drill program (ASX/AIM: 26 April 2023).

GlyLeach^{TM} is an environmentally benign, hydrometallurgical process that can leach copper, nickel, cobalt and zinc from oxide, mixed oxide and supergene ores, and even primary sulphide ores. In the right conditions, it can also leach gold.

Glycine is the simplest amino acid and is available in bulk quantities. Its unique properties can offer substantial advantages over conventional lixiviants:

- **Environment/safety:** Glycine is non-toxic to humans as well as wildlife
- **Selectivity:** Glycine will solubilise copper, nickel, cobalt, and zinc, while iron, manganese, silicates, and carbonates remain in the solid phase
- **Alkalinity:** Leach conditions are at high pH, allowing simple and inexpensive materials for construction
- **Mild conditions:** Leaching is typically at ambient temperature, with no heating cost or pressure vessels
- **Low consumption:** Glycine is non-volatile (unlike cyanide, ammonia, and hydrochloric acid) and stable under process conditions
- **Recycle:** Glycine is not chemically consumed in the overall process. It is easily recovered and recycled, and process losses can be minimised by good design

The metallurgical test work included a copper sequential analysis, diagnostic Leach Tests (DLTs) (ASX/AIM: 22 February 2022) and Mini Column Leach Tests (MCLT's) on the sample provided **(Figure 11)**. This test work determines which copper species can be leached by different solutions. For instance, sulphuric acid (used in copper leaching projects) will easily leach most of the green and blue copper species; however, it will take time to leach native copper, chalcocite, and covellite. Copper sulphide species will eventually be taken into solution by sulphuric acid, but the time frame is considered too long for ISR-type operations.

Based on the copper sequential analysis by ALS **(**

Table 3), Drasloka anticipated the *GlyLeach*^{TM} process is likely to leach all the cyanide soluble copper, a portion (20-80%) of the acid soluble copper and minor amount (<10%) of silicate locked copper, depending on the mineralogy where **22% to 67%** would be expected to be leach from the supplied sample**.** Refer ASX/AIM Announcement 11 December 2023.

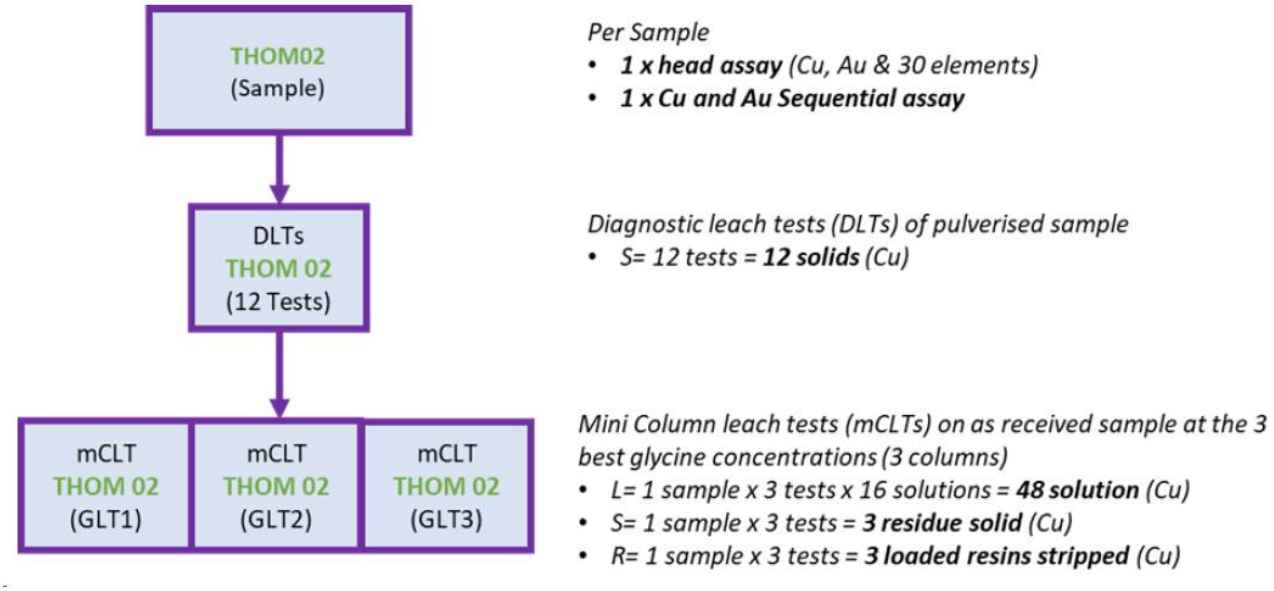

Figure 11: Draslovka Test work Flowsheet

Table 2: Head Grade - Gold (fire assay) and Copper (4 acid digest)- 21AED005 20-27.3m

Sample	Au (ppm)	Cu (%)
THOM-02-001	0.34	2.81

Table 3: Copper Sequential Analysis

Sample	Acid Soluble (%)	Cyanide Soluble Locked (%)	Silicate Locked (%)	Total (%)
Minerals	Malachite; Azurite; Tenorite; Cuprite; Neotocite; Dioptase; Atacamite; Brochantite; Chalcanthite; $CuCl_2$; Goethite; Chrysocolla (silicates)	Chalcocite; Native Cu; Covellite; Digenite; Djurleite	Chalcopyrite; Bornite; Silicates; Goethite	
THOM-02	2.28	0.127	0.393	2.8
	81.4%	4.5%	14.1%	100%

Mini Column Leach Tests were undertaken by Drasloka, designed to give a preliminary indication of extractions for typical heap or ISR conditions at Alford East. Small acrylic columns (ID: 45mm) were used to allow visual observation of the sample charge as the leach solution percolates. Each column is around 1m high and held 1.3kg per column of agglomerated sample percolated at 10 L/m^2/hr in close circuit, where the PLS was sampled and then put through resin before returning to feed tank.

Four MCLT's were carried out with conditions given below:

- **Test 1**: Agglomerated with 10.0 kg/t of Normal Portland Cement ("NPC") and leached with *GlyLeach*^{TM} using 36.78 g/L of glycine in total, column was started with Gly:Cu molar ratio of 2:1
- **Test 2:** Agglomerated with 10.0 kg/t of NPC and leached with *GlyLeach*^{TM} using 55.15 g/L of glycine in total, column was started with Gly:Cu molar ratio of 3:1
- **Test 3:** Agglomerated with 10.0 kg/t of NPC and leached with *GlyLeach*^{TM} using 55.15 g/L of glycine in total, column was started with Gly:Cu molar ratio of 3:1, column was also heated to 40°C using heating strips
- **Test 4:** Agglomerated with 10.0 kg/t of NPC and leached with *GlyLeach*^{TM} using 55.15 g/L of glycine in total, column was started with Gly:Cu molar ratio of 3:1 and converted to *GlyCat*^{TM} after two weeks by adding 1.92 g/L of cyanide

Overall, the highest copper extraction was observed in column 2 at **72.2% copper recovery (Figure 12)**. Column 1 achieved 69.3%, column 3 achieved 71.7% and column 4 achieved 66.8% based on the residue analysis.

Referring to **Figure 12**, the best gold recovery was achieved in column 4 at 25.0%, column 1 achieved 21.5%, column 2 achieved 20.5%, and column 3 achieved 22.7% gold extraction based on residue analysis. Given the

extraction had plateaued after 42 days, an additional 15% more glycine was added into the feed solution of each test to see if this would increase copper recovery, but the results indicated no further change. Column 3, which was heated, showed no benefit over column 2 as it performed under ambient temperature. It was found that adding cyanide (Test 4) improved the gold extraction by approximately 5%.

The test work demonstrates *GlyLeach*^{TM} ability to recover copper with excellent recoveries, up to 72.2%. The temperature had negligible impact and whilst the addition of cyanide improved the gold extraction, it was considered a marginal improvement. Under these leach conditions, it was determined that a copper extraction of 72.2% is achievable. It is recommended that a larger sample is tested to validate what extraction can be achieved at a coarser crush or ISR environment.

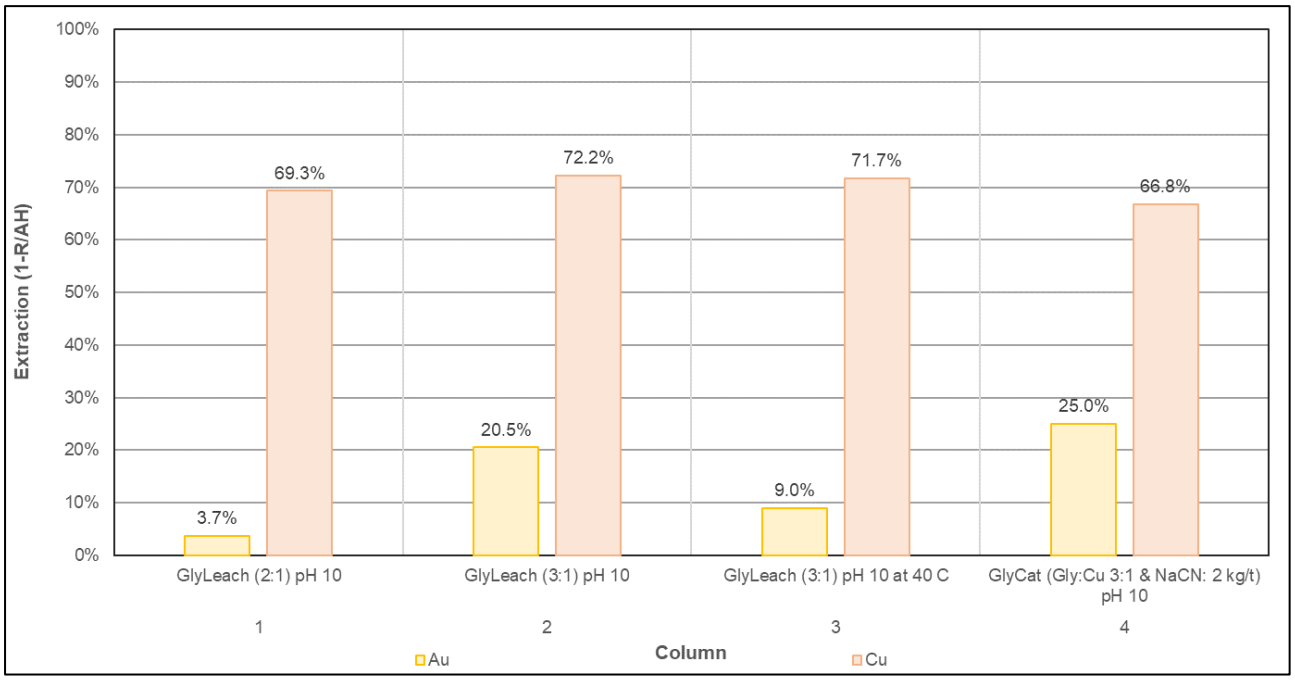

Figure 12: THOM-02 Metal Extraction – Mini Columns Summary (A-1-Residual (R) /Assayed Head (AH))

GlyLeach^{TM} ability to recover copper with good recoveries, up to 72.2%, supersedes the accepted range of 60-70% for ISR operations **(Figure 13)**. Based on CAPEX and OPEX costs, recovering metal in an ISR operation in comparison to conventional mining (open cut or underground operation) enables lower metal recoveries whilst maintaining equal or similar profit margins.

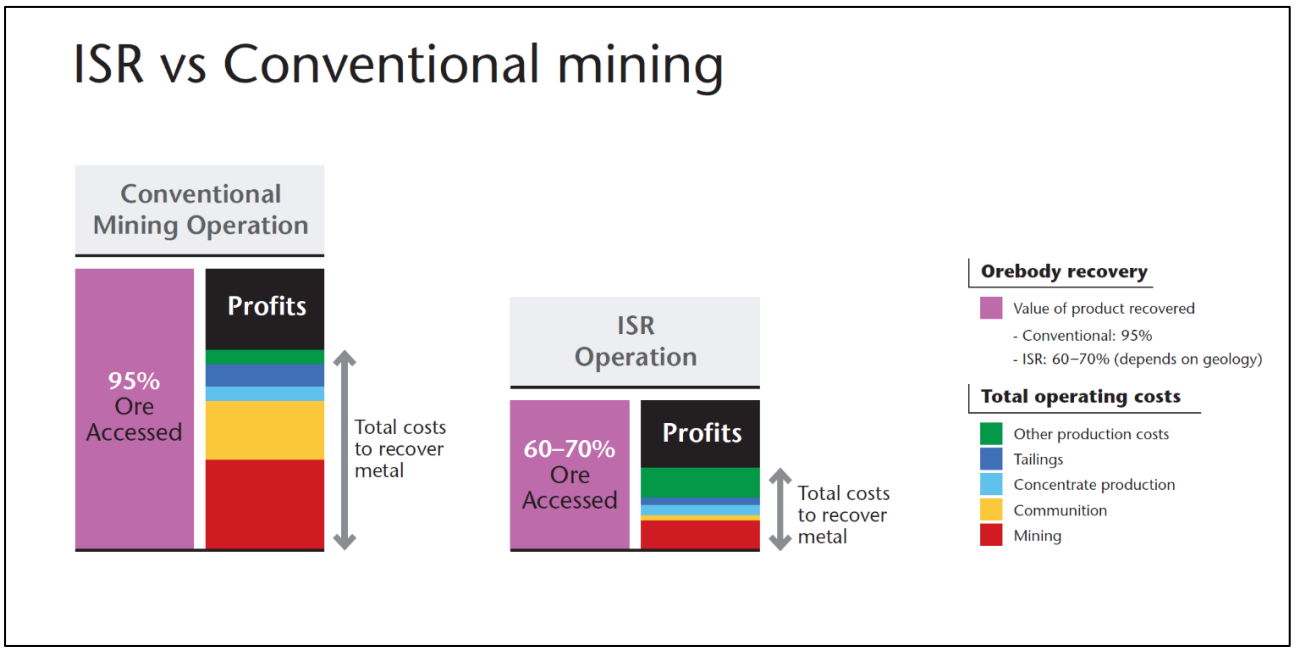

Figure 13: Comparison of ISR and Conventional Mining *after Chris du Plessis, AMIRA presentation 2014*

Next Steps:

- Modelling of ANT results incorporating Thor's 3D model and using artificial intelligence to extrapolate controlling structures along the Alford Copper Belt
- Target generation from the final 3D Model
- Drill preparations and drilling
- REE samples to be submitted to ANSTO for recovery potential from kaolin clays.
- Pump testing and preparations for push/pull connectivity testing, followed by Site Environmental Lixiviant Trial

Background:

The Alford East Copper-Gold Project is located on EL6529, where Thor has 80% interest with unlisted Australian explorer Spencer Metals Pty Ltd, covering portions EL6529 (ASX/AIM: 20 November 2020).

The Project covers the northern extension of the Alford Copper Belt, located on the Yorke Peninsula, SA **(Figure 8)**. The Alford Copper Belt is a semi-coherent zone of copper-gold oxide mineralisation, within a structurally controlled, north-south corridor consisting of deeply kaolinised and oxidised troughs within metamorphic units on the edge of the Tickera Granite, Gawler Craton, SA.

Utilising historic drill hole information, Thor completed an inferred Mineral Resource Estimate (MRE) by JORC *(*2012) classification as at 22 January 2021 **(Figure 9)**, reporting for oxide material only, at a cut-off grade of 0.05% Copper which is consistent with the assumed ISR technique, (ASX/AIM: 27 January 2021), consisting of:

- 125.6Mt @ 0.14% Cu containing 177,000t of contained copper
- 71, 500oz of contained gold

Maiden Mineral Resources Estimate Release: (27 January 2021)

KAPUNDA and ALFORD WEST COPPER PROJECTS

Thor now holds a 26.4% equity interest in private Australian company, EnviroCopper Limited. In turn, ECL has agreed to earn, in two stages, up to 75% of the rights over metals which may be recovered via ISR contained in the Kapunda deposit from Australian listed company, Terramin Australia Limited ("Terramin" ASX: "TZN"), and rights to 75% of the Alford West copper project comprising the northern portion of exploration licence EL5984 held by Andromeda Metals Limited (ASX: ADN).

Information about EnviroCopper Limited and its projects can be found on the EnviroCopper website:

EL5984

EnviroCopper Ltd and Andromeda Metals Ltd ("Andromeda") signed an agreement in December 2023 to acquire the Exploration Licence 5984 on the Yorke Peninsula which covers the Alford West Project, **(Figure 8)**. Thor currently a holds 30% equity interest in ECL.

Agreement Highlights (AIM/ASX: 18 December 2023):

- Consolidation of the Alford West Joint Venture ("JV") (In-Situ Recovery JV) and other ISR amenable targets within Exploration Licence 5984 with 100% of the ownership transferring to ECL
- Andromeda is to receive 5% of the current ECL capitalisation (203,008 shares), plus A$50,000 in cash
- Andromeda will also receive deferred consideration as a 10% share of any successful mining operations 'Royalty Tenement Operating Cashflow' on the Alford West Project area (not exceeding A$15m) and Moonta Project area (not exceeding A$15m)
- Upon successful completion of a Site Environmental Lixiviant Test ("SELT"), Andromeda will be issued a further 2.5% of ECL capitalisation (101,504 shares)
- Once a mining lease is granted, Andromeda will receive a further cash payment of A$150,000 with royalty payments from operating cash flow
- Thor held a 30% equity in ECL, with the initial 5% payment to Andromeda diluting Thor to 28.6%, before further dilution to 26.4% as announced on (ASX/AIM: 25.01.24)

Strategic Investment

Alligator Energy Limited ("Alligator") in December 2023 made a strategic investment into EnviroCopper Ltd to further develop ISR copper projects.

Investment Highlights (AIM/ASX: 18 December 2023):

- Alligator will make an initial investment of A$0.9m for 7.8% of ECL, with the exclusive option to make further staged strategic investments to increase its ownership in ECL to 50.1%
- ECL is currently advancing ISR trials for environmentally sustainable copper extraction at its flagship Kapunda copper project and has similar plans at its Alford West copper project to help meet copper demand for the green energy transition **(Figure 8)**
- BHP Ltd (previously OZ Minerals) continues to fund part of ECL's field investigations, including a Site Environmental Lixiviant Trial ("SELT") of Copper ISR at Kapunda (AIM/ASX: 9 August 2022)
- ISR has been successfully (and economically) used to extract copper in several projects both in Australia and the US. It offers distinct economic advantages and environmental benefits over conventional open pit/crush/heap leach for shallow oxide copper projects

- ECL's experienced ISR team has undertaken significant research and exploration funded under a Commonwealth Govt CRC-P grant of A$2.8m, for R&D and approvals for test work into ISR of shallow fractured rock aquifer hosted oxide copper deposits.
- A technical advisory committee will be formed, enabling Alligator to assist ECL with its planned In-Situ trial work across all projects and an ability to jointly apply any intellectual property ("IP") that is developed.

Kapunda

The first phase of the Site Environmental Lixiviant Trial ("SELT") is underway, involving mixing a biodegradable solution called a "Lixiviant" with groundwater for placement within the copper orebody. The lixiviant will reside in-situ for a period while being sampled and monitored **(**Error! Reference source not found.**)**, it will then be extracted, and the site rehabilitated.

The results are anticipated to be announced in Q1 2024.

GOLD/COPPER PROJECT

Ragged Range Project (WA)

The Ragged Range Project, located in the prospective Eastern Pilbara Craton, Western Australia is 100% owned by Thor - E46/1190, E46/1262, E46/1355, E46/1340 and E46/1393 **(Figure 14)**.

Since the acquisition, Thor has conducted several programs of stream sediment and soil sampling to delineate drill targets. Thor has also flown an airborne magnetics survey over the tenement area to better define the structural features of the area.

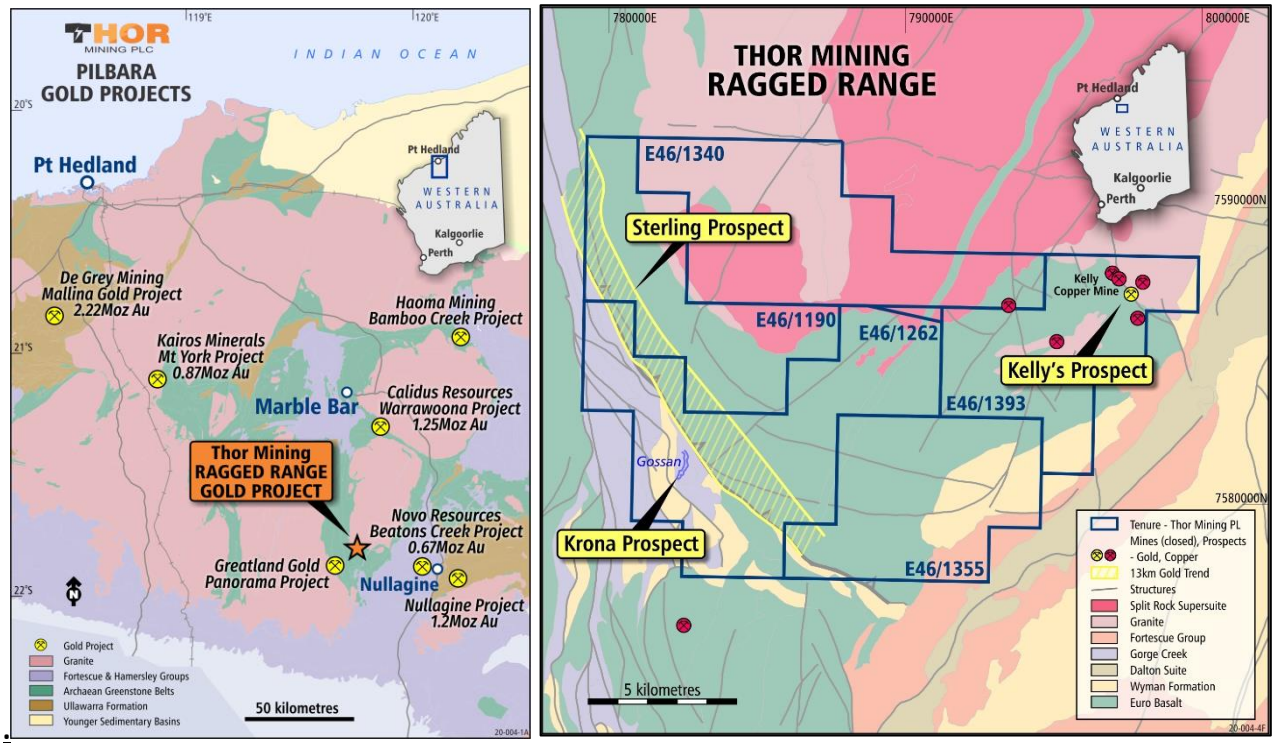

Figure 14: Ragged Range Project Location map (left) and Tenement Map (right) showing priority targets.

As Thor focuses on its Uranium and Energy Metal projects, a divestment or joint venture partner is being sought for the Ragged Range Project. This project has potential for gold, copper-gold, lithium, and nickel. With the change in focus of Thor Energy towards critical minerals in the energy and green economy, this group of tenements is no longer considered core in Thor's exploration portfolio.

TUNGSTEN PROJECT

MOLYHIL TUNGSTEN – MOLYBDENUM-COPPER PROJECT - NT (100% Thor)

The Molyhil tungsten-molybdenum-copper deposit is 100% owned by Thor and is located 220km north-east of Alice Springs (320km by road) within the prospective polymetallic province of the Proterozoic Eastern Arunta Block in the Northern Territory **(Figure 15)**.

The deposit consists of two adjacent outcropping iron-rich skarn bodies, the northern 'Yacht Club' lode and the 'Southern' lode. Both lodes are marginal to a granite intrusion; both lodes contain scheelite ($CaWO_4$) and molybdenite (MoS_2) mineralisation (Figure 12). Both the outlines of the lodes and the banding within the lodes strike approximately north and dip steeply to the east.

Thor executed A$8m Farm-in and Funding Agreement with Investigator Resources Limited (ASX: IVR) to accelerate exploration at the Molyhil Project on 24 November 2022 and the sale of Thor's interest in the Bonya tenement (EL29701) (ASX/AIM: 24 November 2022).

A full background on the project is available on the Thor website.

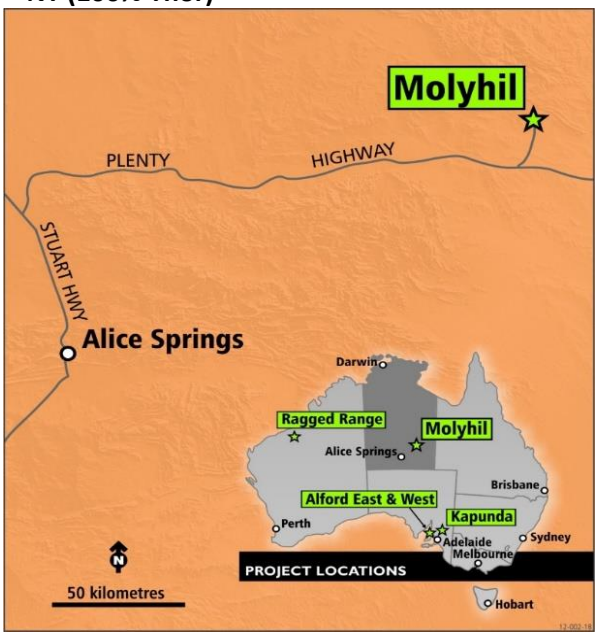

Figure 15: Molyhil Project Location map

During the quarter, IVR carried out a 12-hole drilling program at Molyhil Project to verify and update the Mineral Resource Estimate; assays are anticipated in February 2024 (ASX/AIM: 9 November 2023).

Bonya JV- Jervois Vanadium Projects (40% Thor)

The Bonya copper, tungsten and vanadium deposits are located approximately 30km to the northeast of Molyhil **(**Error! Reference source not found.**)**. Thor, in a joint venture with Arafura, holds a 40% equity interest in the resources. Thor's interest in the Bonya tenement EL29701 (copper and tungsten deposit) is planned to be divested as part of the Farm-in and Funding agreement with Investigator Resources Limited.

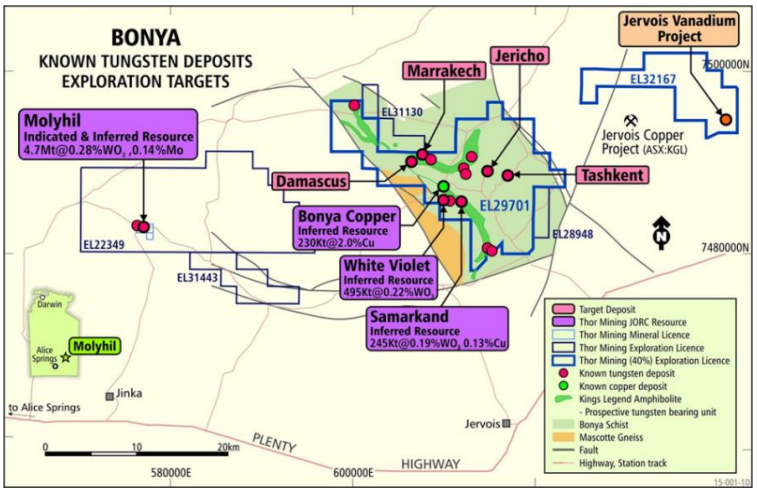

Figure 16: Molyhil Project location showing adjacent Bonya tenements.

CORPORATE, FINANCE, AND CASH MOVEMENTS

For the Quarter, the Company had total net cash outflows of $1,180,000, comprising:

- Net cash outflows from Operating and Investing activities for the quarter of $1,133,000 which included outflows of $822,000 directly related to exploration activities.
- Cash outflows from financing activities for the quarter were $42,000, related to repayments of lease liabilities and some costs associated with a capital raise undertaken in the prior quarter.
- Providing an ending cash balance of $978,000.

Cashflows for the quarter include payments of $88,000 to Directors, comprising the Managing Director's salary, and Non-Executive Directors' fees.

The Board of Thor Energy Plc has approved this announcement and authorised its release.

Nicole Galloway Warland
Managing Director
Thor Energy Plc

Competent Person's Report
The information in this report that relates to exploration results is based on information compiled by Nicole Galloway Warland, who holds a BSc Applied geology (HONS) and who is a Member of The Australian Institute of Geoscientists. Ms Galloway Warland is an employee of Thor Energy PLC. She has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which she is undertaking 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'. Nicole Galloway Warland consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.

Updates on the Company's activities are regularly posted on Thor's website https://thorenergyplc.com which includes a facility to register to receive these updates by email, and on the Company's twitter page @thorenergyplc

About Thor Energy Plc

The Company is focused on uranium and energy metals that are crucial in the shift to a 'green' energy economy. Thor has a number of highly prospective projects that give shareholders exposure to uranium, nickel, copper, lithium and gold. Our projects are located in Australia and the USA.

Thor holds 100% interest in three uranium and vanadium projects (Wedding Bell, Radium Mountain and Vanadium King) in the Uravan Belt Colorado and Utah, USA with historical high-grade uranium and vanadium drilling and production results.

At Alford East in South Australia, Thor has earnt an 80% interest in oxide copper deposits considered amenable to extraction via In-Situ Recovery techniques (ISR). In January 2021, Thor announced an Inferred Mineral Resource Estimate[1]. Thor also holds a 30% interest in Australian copper development company EnviroCopper Limited, which in turn holds rights to earn up to a 75% interest in the mineral rights and claims over the resource on the portion of the historic Kapunda copper mine and the Alford West copper project, both situated in South Australia, and both considered amenable to recovery by way of ISR.[2][3]

Thor holds 100% of the advanced Molyhil tungsten project, including measured, indicated and inferred resources[4], in the Northern Territory of Australia, which was awarded Major Project Status by the Northern Territory government in July 2020. Thor executed a $A8m Farm-in and Funding Agreement with Investigator Resources Limited (ASX: IVR) to accelerate exploration at the Molyhil Project on 24 November 2022.[6]

Adjacent to Molyhil, at Bonya, Thor holds a 40% interest in deposits of tungsten, copper, and vanadium, including Inferred resource estimates for the Bonya copper deposit, and the White Violet and Samarkand tungsten deposits.[5] Thor's interest in the Bonya tenement EL29701 is planned to be divested as part of the Farm-in and Funding agreement with Investigator Resources Limited.[6]

Thor owns 100% of the Ragged Range Project, comprising 92 km^2 of exploration licences with highly encouraging early-stage gold, copper, lithium and nickel results in the Pilbara region of Western Australia. Thor is now looking for a JV partner or divestment of these group of tenements.

Notes

[1] https://thorenergyplc.com/investor-updates/maiden-copper-gold-mineral-resource-estimate-alford-east-copper-gold-isr-project/

[2] www.thorenergyplc.com/sites/thormining/media/pdf/asx-announcements/20172018/20180222-clarification-kapunda-copper-resource-estimate.pdf

[3] www.thorenergyplc.com/sites/thormining/media/aim-report/20190815-initial-copper-resource-estimate---moonta-project---rns---london-stock-exchange.pdf

[4] https://thorenergyplc.com/investor-updates/molyhil-project-mineral-resource-estimate-updated/

[5] www.thorenergyplc.com/sites/thormining/media/pdf/asx-announcements/20200129-mineral-resource-estimates---bonya-tungsten--copper.pdf

[6] https://thorenergyplc.com/wp-content/uploads/2022/11/20221124-8M-Farm-in-Funding-Agreement.pdf

TENEMENT SCHEDULE

At 31 December 2023, the consolidated entity holds an interest in the following Australian tenements:

Project	Tenement	Area kms^2	Area ha.	Holders	Company Interest
Molyhil	EL22349	228.10		Molyhil Mining Pty Ltd	100%
Molyhil	EL31130	9.51		Molyhil Mining Pty Ltd	100%
Molyhil	ML23825		95.92	Molyhil Mining Pty Ltd	100%
Molyhil	ML24429		91.12	Molyhil Mining Pty Ltd	100%
Molyhil	ML25721		56.2	Molyhil Mining Pty Ltd	100%
Molyhil	AA29732		38.6	Molyhil Mining Pty Ltd	100%
Molyhil	MLS77		16.18	Molyhil Mining Pty Ltd	100%
Molyhil	MLS78		16.18	Molyhil Mining Pty Ltd	100%
Molyhil	MLS79		8.09	Molyhil Mining Pty Ltd	100%
Molyhil	MLS80		16.18	Molyhil Mining Pty Ltd	100%
Molyhil	MLS81		16.18	Molyhil Mining Pty Ltd	100%
Molyhil	MLS82		8.09	Molyhil Mining Pty Ltd	100%
Molyhil	MLS83		16.18	Molyhil Mining Pty Ltd	100%
Molyhil	MLS84		16.18	Molyhil Mining Pty Ltd	100%
Molyhil	MLS85		16.18	Molyhil Mining Pty Ltd	100%
Molyhil	MLS86		8.05	Molyhil Mining Pty Ltd	100%
Bonya	EL29701	204.5		Molyhil Mining Pty Ltd	40%
Bonya	EL32167	74.54		Molyhil Mining Pty Ltd	40%
Panorama	E46/1190	35.03		Pilbara Goldfields Pty Ltd	100%
Ragged Range	E46/1262	57.3		Pilbara Goldfields Pty Ltd	100%
Corunna Downs	E46/1340	48		Pilbara Goldfields Pty Ltd	100%
Bonney Downs	E46/1355	38		Pilbara Goldfields Pty Ltd	100%
Hamersley Range	E46/1393	11		Pilbara Goldfields Pty Ltd	100%
Alford East	EL6529	315.1		Hale Energy Pty Ltd	80%

On 31 December 2023, the consolidated entity holds 100% interest in the uranium and vanadium projects in USA States of Colorado and Utah as follows:

Claim Group	Serial Number	Claim Name	Area	Holders	Company Interest
Vanadium King (Utah)	UMC445103 to UMC445202	VK-001 to VK-100	100 blocks (2,066 acres)	Cisco Minerals Inc	100%
Radium Mountain (Colorado)	CMC292259 to CMC292357	Radium-001 to Radium-099	99 blocks (2,045 acres)	Standard Minerals Inc	100%
Groundhog (Colorado)	CMC292159 to CMC292258	Groundhog-001 to Groundhog-100	100 blocks (2,066 acres)	Standard Minerals Inc	100%

Appendix 5B

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity	
THOR ENERGY PLC	
ABN	**Quarter ended ("current quarter")**
121 117 673	31 DECEMBER 2023

Consolidated statement of cash flows		Current quarter $A'000	Year to date (6 months) $A'000
1.	**Cash flows from operating activities**		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation		
	(b) development		
	(c) production		
	(d) staff costs	(33)	(80)
	(e) administration and corporate costs	(354)	(563)
1.3	Dividends received (see note 3)		
1.4	Interest received	11	27
1.5	Interest and other costs of finance paid	(4)	(6)
1.6	Income taxes paid		
1.7	Government grants and tax incentives		
1.8	Other	6	9
1.9	**Net cash from / (used in) operating activities**	**(374)**	**(613)**

2.	**Cash flows from investing activities**		
2.1	Payments to acquire or for:		
	(a) entities		
	(b) tenements		
	(c) property, plant and equipment		
	(d) exploration & evaluation	(882)	(1,565)

Consolidated statement of cash flows		Current quarter $A'000	Year to date (6 months) $A'000
	(e) equity accounted investments		
	(f) other non-current assets (bonds)	-	(29)
2.2	Proceeds from the disposal of:		
	(a) entities		
	(b) tenements (bond refunds)	36	36
	(c) property, plant and equipment		
	(d) investments	-	229
	(e) other non-current assets		
2.3	Cash flows from loans to other entities		
2.4	Dividends received (see note 3)		
2.5	Other (Government grants)	87	87
2.6	**Net cash from / (used in) investing activities**	**(759)**	**(1,242)**

3.	**Cash flows from financing activities**		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	1,250
3.2	Proceeds from issue of convertible debt securities		
3.3	Proceeds from exercise of options		
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(30)	(97)
3.5	Proceeds from borrowings		
3.6	Repayment of borrowings (lease liability)	(12)	(23)
3.7	Transaction costs related to loans and borrowings		
3.8	Dividends paid		
3.9	Other (funds received in advance of a placement)		
3.10	**Net cash from / (used in) financing activities**	**(42)**	**1,130**

Consolidated statement of cash flows		Current quarter $A'000	Year to date (6 months) $A'000
4.	**Net increase / (decrease) in cash and cash equivalents for the period**		
4.1	Cash and cash equivalents at beginning of period	**2,158**	**1,711**
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(374)	(613)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(759)	(1,242)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(42)	1,130
4.5	Effect of movement in exchange rates on cash held	(5)	(8)
4.6	**Cash and cash equivalents at end of period**	**978**	**978**

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	**Current quarter $A'000**	**Previous quarter $A'000**
5.1	Bank balances	978	2,158
5.2	Call deposits		
5.3	Bank overdrafts		
5.4	Other (provide details)		
5.5	**Cash and cash equivalents at end of quarter (should equal item 4.6 above)**	**978**	**2,158**

6.	Payments to related parties of the entity and their associates	Current quarter $A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	88
6.2	Aggregate amount of payments to related parties and their associates included in item 2	

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.

The amount at item 6.1 above represents fees paid to Non-Executive Directors, and remuneration paid to the Managing Director.

7.	Financing facilities *Note: the term "facility' includes all forms of financing arrangements available to the entity.* *Add notes as necessary for an understanding of the sources of finance available to the entity.*	Total facility amount at quarter end $A'000	Amount drawn at quarter end $A'000
7.1	Loan facilities		
7.2	Credit standby arrangements		
7.3	Other (please specify)		
7.4	**Total financing facilities**		

7.5	**Unused financing facilities available at quarter end**	
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.	

8.	Estimated cash available for future operating activities	$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(374)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(882)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(1,256)
8.4	Cash and cash equivalents at quarter end (item 4.6)	978
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	978
8.7	**Estimated quarters of funding available (item 8.6 divided by item 8.3)**	0.8

Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.

8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:

8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer: No. The current quarter included $0.9m for exploration expenditure which is expected to be less in the next quarter. The majority of this quarterly expenditure is discretionary and is subject to available funding.

8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer: As at 31 December 2023, the Company holds cash of $1.0m together. The Company regularly monitors cashflow needs against available cash and seeks to raise capital through equity placements as and when needed. The Company has a history of successful capital raising.

8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: Yes, on the basis of available cash of $1.0m, reduced spending commitments in the coming quarter, together with capital raising alternatives (refer 8.8.2).

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

Compliance statement

1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.

2 This statement gives a true and fair view of the matters disclosed.

Date: 31 January 2024.....

Authorised by: the Board.....
(Name of body or officer authorising release – see note 4)

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.

2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.

3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [*name of board committee – eg Audit and Risk Committee*]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".

5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.