

PDAC 2023 - Australia Minerals

Tuesday 7 March 2023

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Managing Director



AIM/ASX: THR
OTCQB: THORF

Powering the Future:
Exploration of Uranium and
Copper in Australia and the USA





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Competent Person Statement

The information in this report that relates to exploration results and exploration targets is based on information compiled by Nicole Galloway Warland, who holds a BSc in 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 formation in the form and context in which it appears.



Thor Energy: Targeted exploration focus

Near-term and highest value projects

Energy Metals – South Australia (SA) and Western Australia (WA)

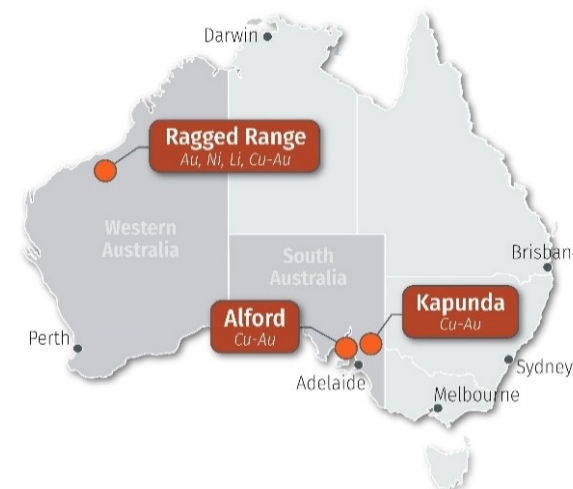
Copper/Gold/Lithium – Australia

- ❑ Global demand for copper increasing with electrification and renewables
- ❑ Interest in three advanced copper projects, SA
- ❑ Ragged Range Project, Pilbara, WA – early-stage greenfields copper, gold, lithium play

USA Uranium Exposure

Uranium and Vanadium – Utah and Colorado, USA

- ❑ Three 100% owned assets in a proven mining region
- ❑ Uranium demand driven by USA desire for security of supply
- ❑ Geophysics and drilling preparations underway





Energy Metals and Uranium: Global demand

Environment

World is transitioning to 'greener' economy - more than 130 countries have set net zero carbon emission targets by 2050

Copper

Global demand predicted to grow up to 10x by 2050

- Electronics
- Electric vehicles
- Renewable energy revolution



Net Zero carbon mission targets

Uranium

Global demand

- Electrification
- Energy security
- Climate change initiatives – nuclear green energy emission green base is a carbon free base load energy source

Supply chain

- Geopolitical uncertainty
- USA largest consumer of uranium (28%)
- Infrastructure/reactor growth



A fully electric vehicle 83kg of copper
A standard combustion uses 20kg of copper



Single wind turbine uses 4.7t of Copper



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Copper Projects South Australia



Copper in South Australia

Geology

South Australia has substantial near surface oxidised copper mineralisation, usually malachite or azurite trending at depth to readily leachable chalcocite above primary chalcopyrite. Leachable gold can also be present.

Infrastructure

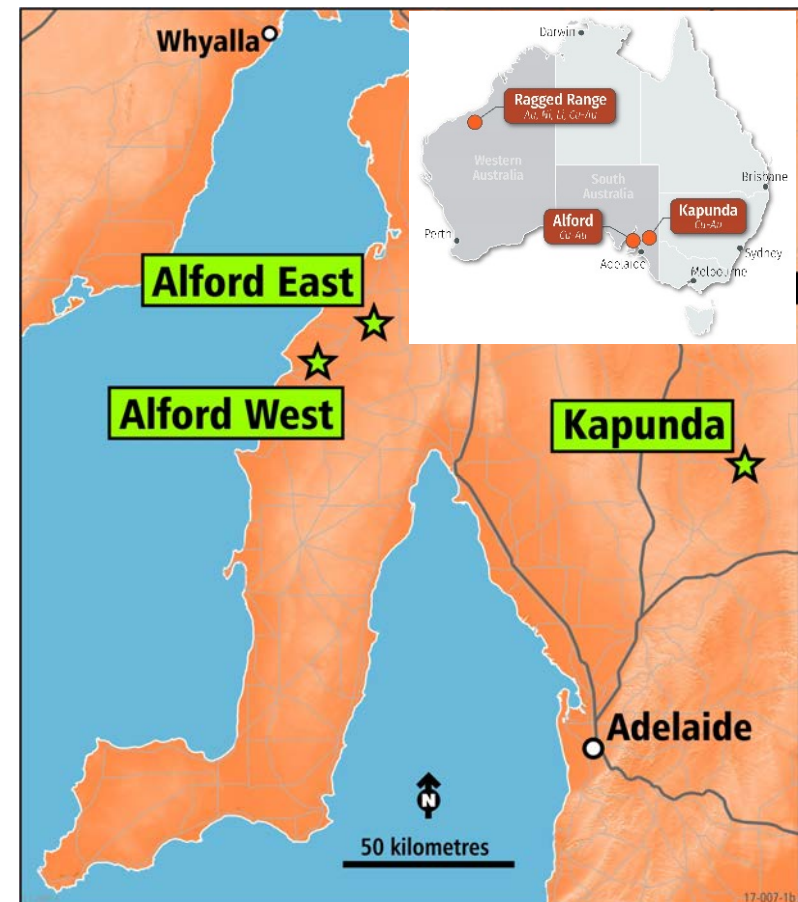
Many deposits are located adjacent to mains electricity and sealed highways and nearby towns that can provide a workforce on a daily commute basis.

Objective

Production of copper (with some gold credits) using low-impact In Situ Recovery (ISCR) techniques with a very small environmental footprint.

Thor Energy has a 30% interest in a private company EnviroCopper Limited (ECR) that is specialised in developing ISCR projects.

Thor Energy is seeking a Joint Venture Partner to accelerate resource extension and project development at the Alford East Project.



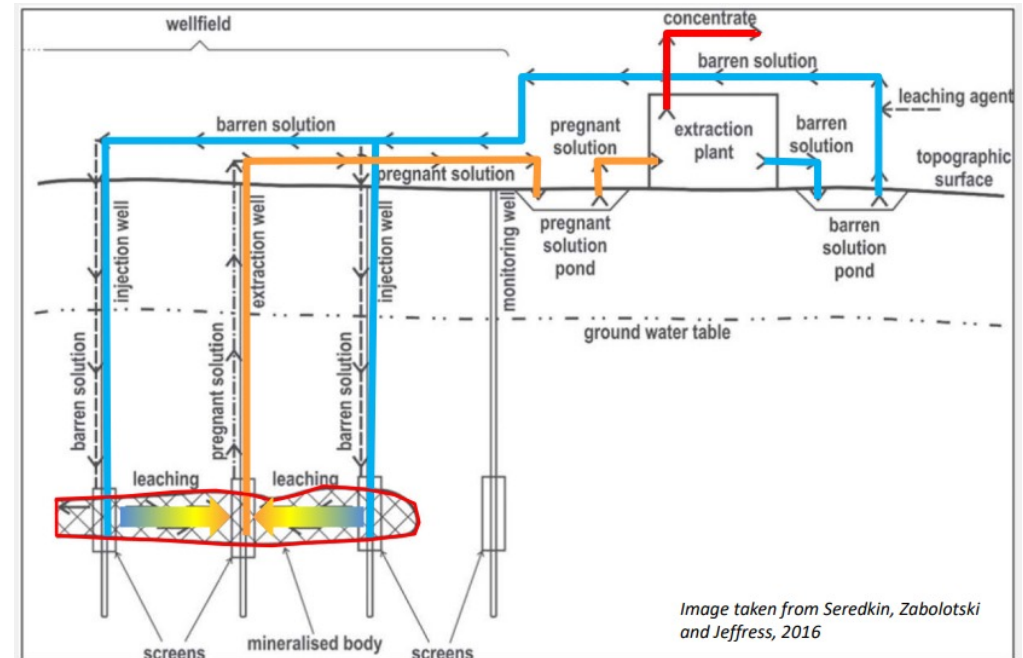


In Situ Copper Recovery (ISCR)

- ESG – Favourable alternative to traditional mining
- Low-cost / low environmental impact metal production
- Chemical process rather than a high-cost mining operation (no large pit / no crushing or grinding / no waste dumps etc)
- ISR techniques have been utilised commercially in South Australia for >15 years – Thor has the expertise locally

ISR – ISCR Copper Projects (Arizona, USA)

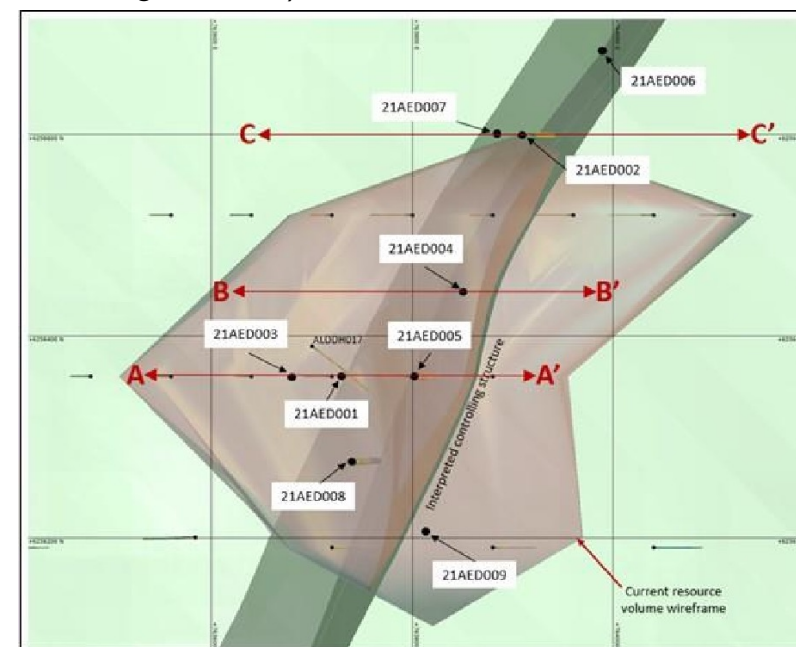
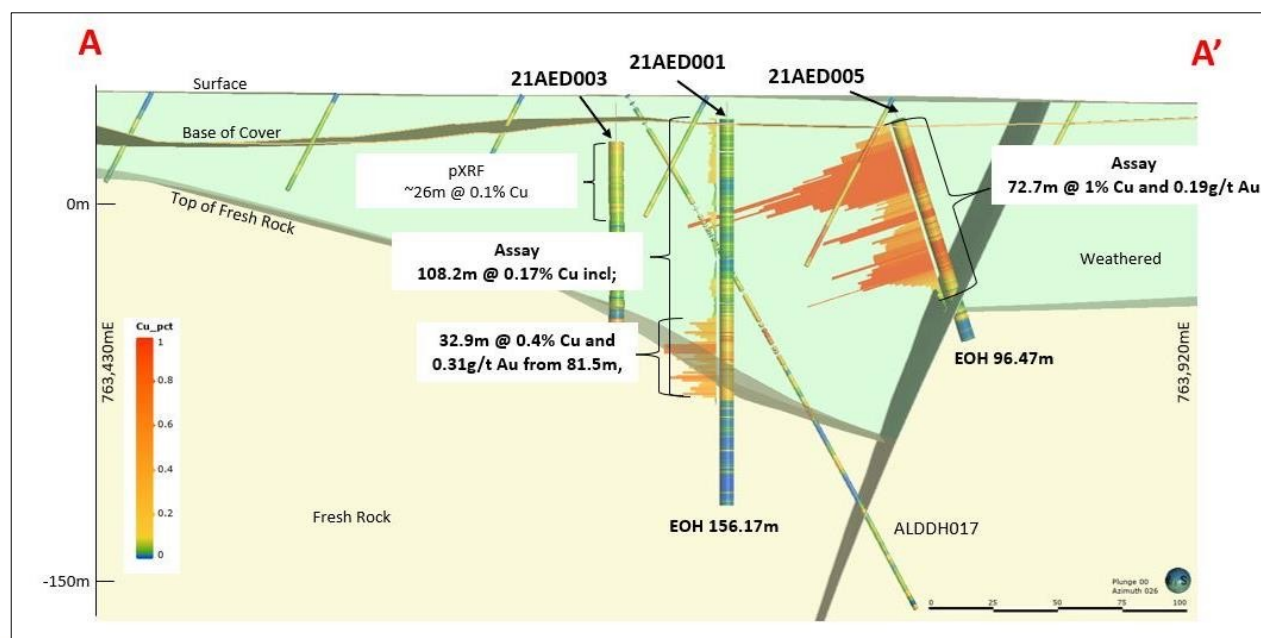
- Florence Project – Taseko Mines
- Van Dyke Project Copper Fox Metals
- Gunnison Project, Excelsior Mining Corp





Alford East Copper-Gold Project: High grade results

- Broad high-grade copper-gold results (>500ppm) – ideal for ISCR
- **Diamond drilling Phase 1 results included:**
 - 21AED005: 72.7m @ 1.0 % Cu and 0.19g/t Au from 6.3m, including 18.2m @ 2.0% Cu and 0.34g/t Au
 - 21AED001: 32.9m @ 0.4% Cu and 0.31g/t Au from 81.5m (ASX:THR 31 August 2021)





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Ragged Range Project Western Australia



Ragged Range – Pilbara, WA

Location

Located in an area of proven gold and lithium production with significant resource potential

Geology

East Pilbara Granite-Greenstone Terrane, Archean Pilbara Craton

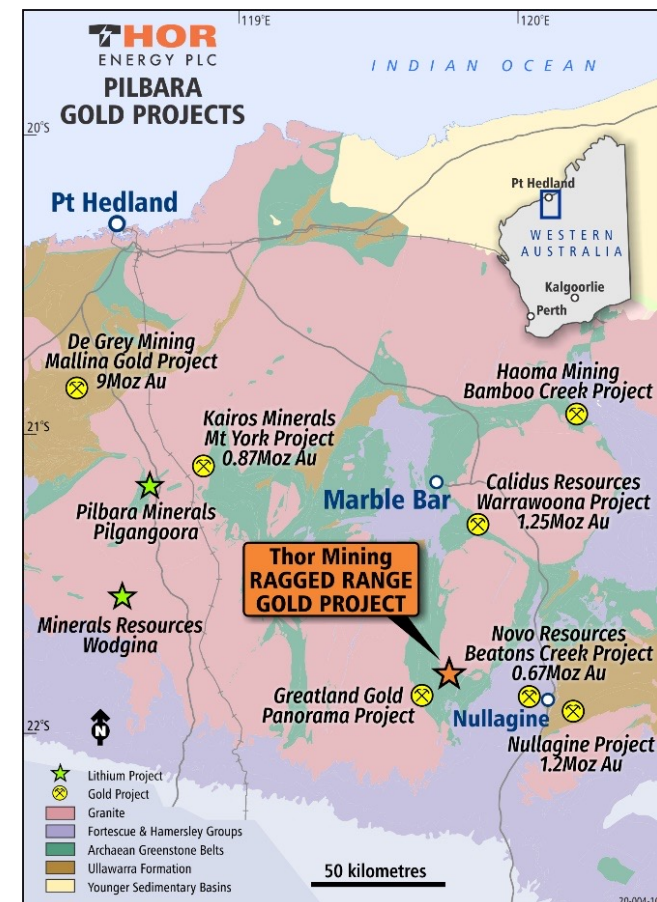
100% control of the Kelly's Greenstone Belt (KGB)

Gold:

- Proximity to large scale gold deposits in similar geological setting
- Prospective Archean host rocks - Warrawoona Group
- Favourable structural setting - thrust faulted mafic/ultramafic contact
- Targeting Shear-hosted gold

Lithium:

- Proximity to world class lithium deposits – Wodgina and Pilgangoora
- Prospective host rocks – Split Rock Supersuite
- Targeting Lithium-Caesium-Tantalum pegmatites



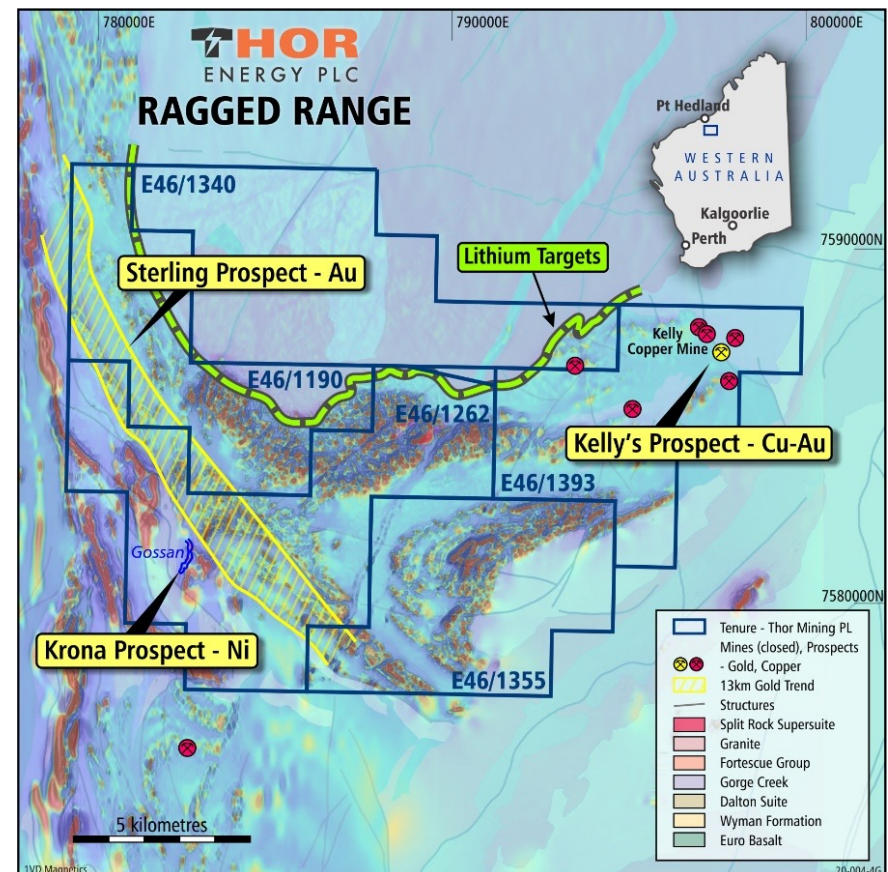


Unexplored terrain

Greenfields exploration area within fertile greenstone belt. Only very limited exploration since the early 1970's despite many gold and lithium discoveries nearby. Structural controls are similar to other areas with gold mines now in production

Activities completed to date:

- Geophysics – airborne magnetics and radiometrics flown over full tenure
- Stream and soil sampling over the Sterling Prospect
- Rockchip and mapping over Krona nickel and Kelly's Prospects
- Preliminary RC drilling at Sterling and Kelly's Prospect
- Pipeline of targets generated



Magnetics (1VD) over 1:250K Split Rock geology (DMIRS)



Prospective for Gold, Lithium, Nickel and Copper

Gold - 13km of strike potential – Sterling Prospect

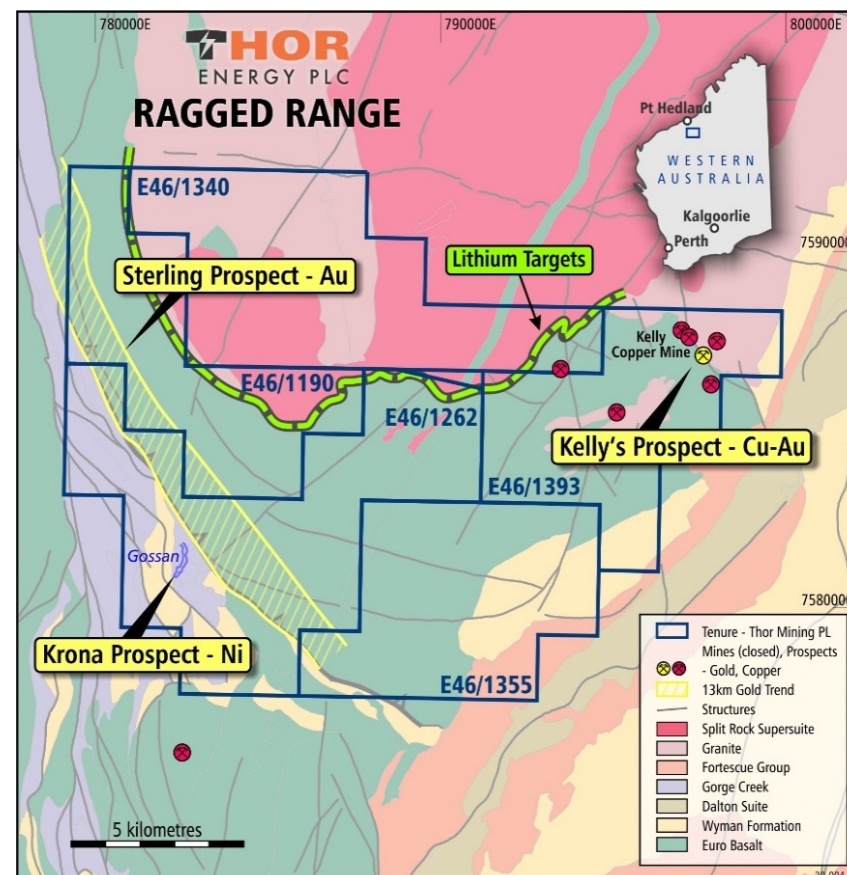
- High tenor stream sediment samples draining SW-NE from interpreted ultramafic/mafic thrust faulted contact
- Anomalous gold reported in pan up to 74.1g/t Au, in BLEG samples and -2mm samples, assayed by aqua regia – up to 2.2g/t Au (AIM/ASX:THR 1 December 2020)

Nickel – nickel gossan – Krona Prospect

- Extends over 1km x 200m wide
- 66m @ 0.2% Ni from 81m (AIM/ASX: 20 September 2022)

Copper-Gold – historic workings – Kelly's Prospect

- High grade rock chip samples – up to 15.5g/t Au and 535g/t Ag (AIM/ASX:THR 10 October 2022)
- Historical small-scale copper-gold workings (1955-1970 producing - 610t @ 19.47% Copper (AIM/ASX:THR 23 June 2021)
- Best intercepts to date:
 - 8m @ 1.31% Cu and 0.1g/t Au from 4m (22RRRC056), including
 - 3m @ 2.9% Cu and 0.17g/t Au





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USA Uranium



Overview

Location

- Located in Uravan Mineral Belt, Utah and Colorado, USA
- Three projects – 100% owned by Thor
 - a) Wedding Bell, Colorado
 - b) Radium Mountain, Colorado
 - c) Vanadium King, Utah
- Nearby processing plant with available capacity for toll treatment of uranium and vanadium ore (White Mesa Mill, Energy Fuels)

History

- Colorado claims were extensively mined throughout 20th century
- Historic high-grade uranium and vanadium production in excess of 85 million lbs of U_3O_8 and over 660 million lbs of V_2O_5 with average grades reported of 0.25% (2500ppm) U_3O_8 (Thamm. et al., 1981^b)

Thor's Current Exploration

- “High grade” sampling up to 1.25% U_3O_8 and vanadium up to 3.4% V_2O_5 (ASX/AIM:THR 21 July 2020)
- Initial drilling confirmed uranium mineralization at shallow depth. Preparation for next phase of drilling underway





“Saltwash” style Uranium and Vanadium

Geology

- “Saltwash Style” - sandstone filled paleochannels hosting uranium and vanadium
- Laterally extensive deposits, hosted mainly in the Salt Wash member of the Morrison Formation (Jurassic)
- Mineralisation can be traced along strike and laterally over meters to kilometres
- Uranium and vanadium form together with vanadium forming larger halo – 5:1 ratio

Field sampling

- Returned high grade uranium (up to **1.25% U_3O_8**) and vanadium (up to **3.4% V_2O_5**)





Drilling confirms shallow uranium mineralisation

- Drilling confirms shallow uranium mineralisation at three prospects, with results including: (ASX/AIM 22 December 22):

- **Rim Rock**

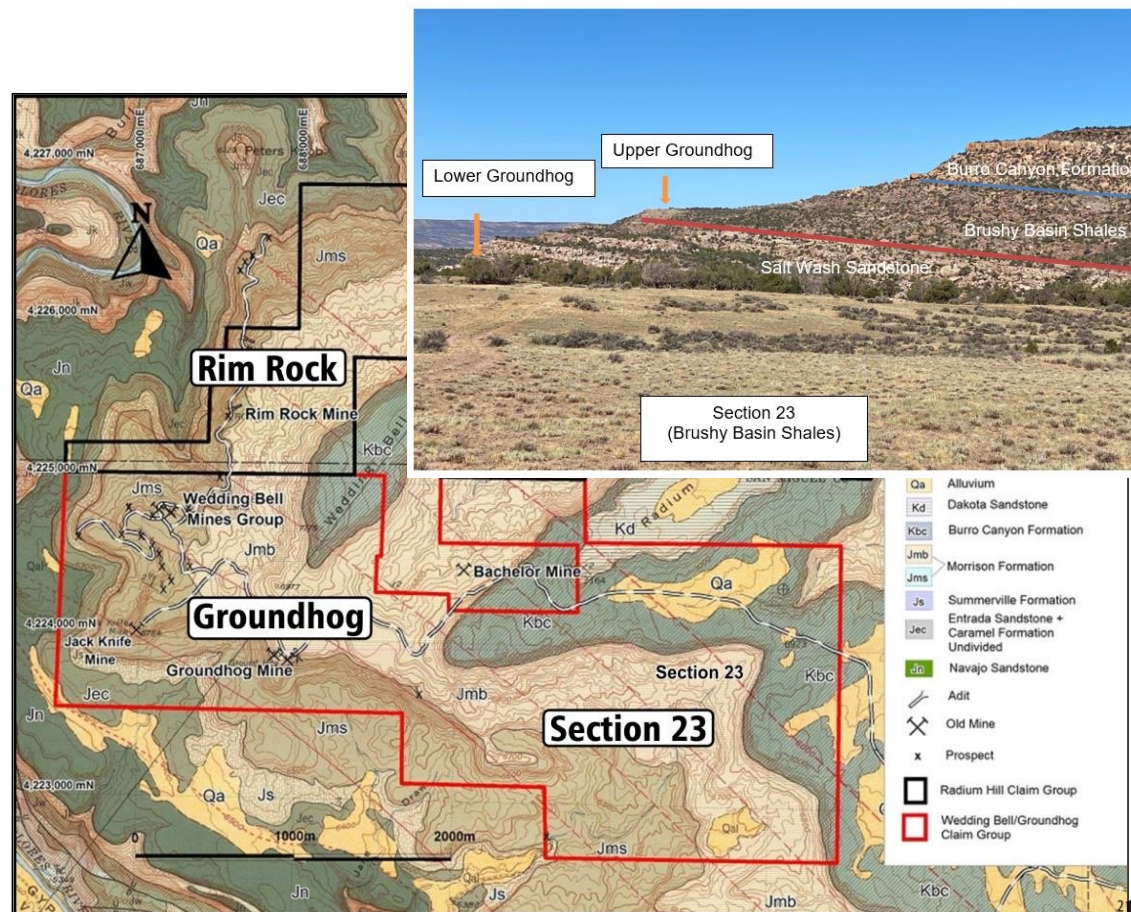
- 0.3m @ 720ppm eU_3O_8 from 59.7m (22WBRA014)

- **Groundhog**

- 2.1m @ 360ppm eU_3O_8 from 85m (22WBRA012A), including
 - 0.3m @ 1400ppm eU_3O_8

- **Section 23** (previously untested)

- 0.5m @ 510ppm eU_3O_8 from 102.6m (22WBRA002)
 - Awaiting uranium and vanadium assay results





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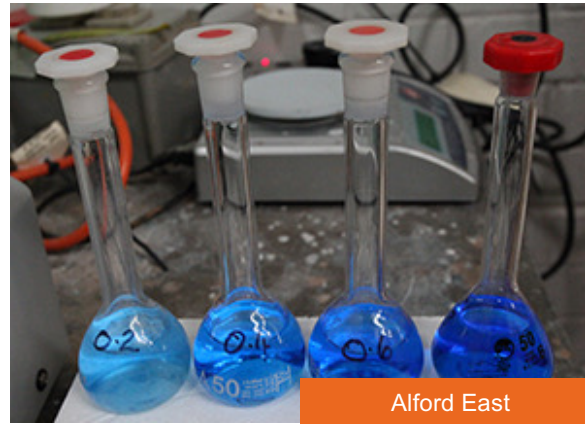
Future Growth



On ground exploration activities



Wedding Bell



Alford East



Ragged Range

Uranium- USA

Wedding Bell, Radium Mountain and Vanadium King

- Airborne magnetics and radiometrics
- Drilling preparations and permitting underway

Copper Gold – South Australia

Alford East

- Hydrometallurgical studies (column test for copper recovery)

Alford West

- Passive Seismic geophysics

Kapunda

- Lixiviant Trials (inground copper recovery trials)

Copper/Gold/Lithium- Western Australia

Ragged Range, Pilbara

- IP survey over Kelly's Prospect
- Regional exploration - lithium, nickel and copper



Summary and Investment Opportunity



Uranium-Copper-Gold - high value commodities with favourable fundamentals



Mining friendly jurisdictions – no sovereign risk



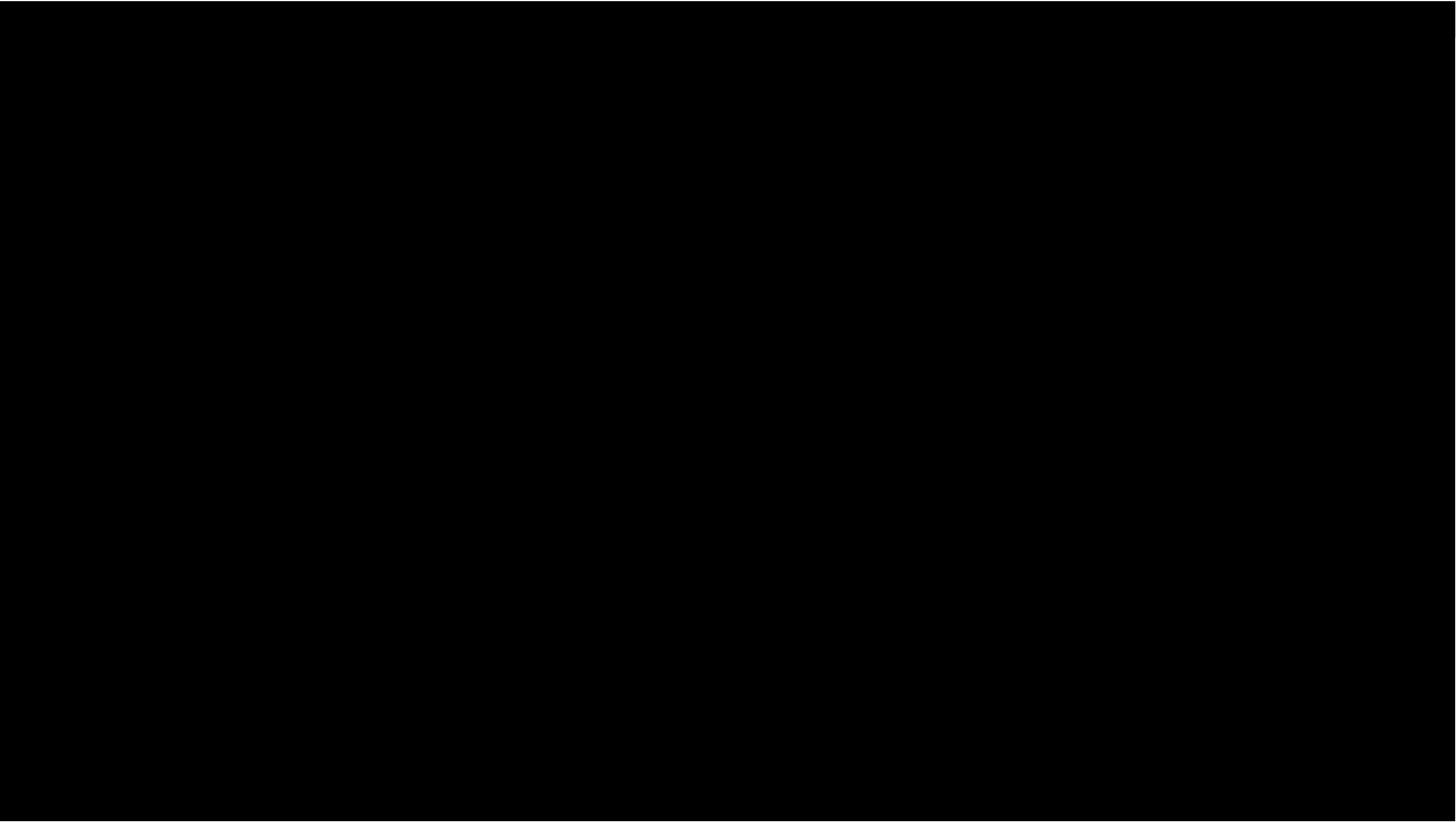
Strong pipeline of targets to follow-up



Divestment opportunities



Experienced Board and management





Experienced Board and management

Uranium and Energy Metal exploration and development expertise



Alastair Clayton
Chairman Non-Executive

25 years of experience in the mining and exploration industry, identifying, financing, and developing mineral, energy and materials processing projects in Australia, Europe and Africa.



Nicole Galloway Warland
Managing Director

More than 30 years in mining & exploration in Australia, Eastern Europe & South America.

Experience spans from grass roots exploration to project evaluation to open cut and underground mining with a commodity focus of gold, copper-gold, nickel, uranium and lithium.

Involved in the Discovery of Samphire uranium deposit, SA.

Director - Australian Institute of Geoscientists (AIG) and Councillor of AMEC.



Mark McGeough
Non-Executive Director

An experienced geologist who has explored for gold, IOCG copper-gold, silver-lead-zinc and uranium.

Involved in the discovery of the White Dam gold deposit in South Australia and the Theseus uranium deposit in WA.

Career includes Chinova Resources, Toro Energy, Xstrata Copper, Mount Isa Mines and AGIP Australia. He was also the Manager of the SA Geological Survey.



Ray Ridge
CFO & Joint Company Secretary

A chartered accountant with over 20 years accounting and commercial management experience.

Roles include Senior Audit Manager with Arthur Andersen, Divisional CFO with Elders Ltd, and GM Commercial & Operations at engineering and construction company Parsons Brinckerhoff.



Corporate snapshot

| | |
|--------------------|---------|
| AIM/ASX code | THR |
| OTCQB code | THORF |
| Market cap | A\$14 |
| Cash (30 Dec 2022) | A\$2.7M |
| Debt | NIL |



Strong corporate position
with focus on advancing
projects towards discovery
and development success
– creating shareholder value



Bachelor Mine – Historic Uranium Workings

Thank You

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