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# OTCQB Code: "THORF"



Highlights	Outlook for June Quarter 2022	THOR MINING PLC
GOLD, LITHIUM, NICKEL Ragged Range, Pilbara region, WA Australia		Registered Numbers: United Kingdom 05 276 4 Australia 121 117 673
<ul> <li>Field programs recommenced following the opening of the WA border.</li> <li>Lithium mapping and sampling program underway; testing potential lithium- caesium-tantalum (LCT) pegmatite targets associated with the Split Rock Supersuite.</li> </ul>	<ul> <li>Results from a Fixed Loop Electromagnetic Survey (FLEM) over the Krona Prospect, nickel gossan.</li> <li>Follow up RC drilling program for gold mineralisation at the Sterling Prospect.</li> <li>Regional mapping and stream sediment sampling results, targeting additional gold and lithium pegmatites.</li> <li>Airborne magnetics survey over the eastern portion of newly granted tenure.</li> </ul>	Registered Office: 58 Galway Avenue MARLESTON, SA, 5033 Australia Ph: +61 8 7324 1935 Email: <u>corporate@thormining.com</u> Website: <u>www.thormining.com</u>
URANIUM & VANADIUM USA		@ThorMinir
<ul> <li>Received permitting approval from San Miguel County for proposed drill testing at the Wedding Bell Project, Colorado.</li> <li>The uranium spot price is at an 11-year high, with geopolitical tensions, strong demand, constrained supplies, and underinvestment continuing to drive the price up.</li> </ul>	<ul> <li>Final authorisation for proposed drilling at Wedding Bell Project.</li> <li>Drilling preparations underway to test Groundhog, Rim Rock and Section 23 at Wedding Bell Project, Colorado.</li> </ul>	Enquiries: Nicole Galloway Warland Managing Director Thor Mining PLC +61 8 7324 1935 Jessica Cave Nominated Advisor WH Ireland Ltd +44 (0) 20 7220 1666
COPPER		AIM & ASX Listings:
<ul> <li>Alford East, SA Australia</li> <li>All assays now received from Phase 1 diamond drilling program highlighting based high grade copper-gold zones</li> <li>3D geological model demonstrates the lithological and structural controls on mineralisation, highlighting key areas to drill test potential higher grade copper-gold intercepts.</li> </ul>	<ul> <li>Continue In-Situ Recovery (ISR) assessment and development of the project.</li> <li>Phase 2 diamond drilling is being designed to target potential high-grade copper zones along strike.</li> </ul>	Shares: THR OTCQB Listing Shares: THORF Directors: Nicole Galloway Warland Mark Potter Mark McGeough Alastair Clayton
Kapunda, SA Australia (via 30% equity holding	g in EnviroCopper Ltd)	
<ul> <li>ISR push-pull trials underway, with tracer bromide component completed.</li> </ul>	<ul> <li>Copper-gold recoveries from lixiviant trials and integration into Scoping Study.</li> </ul>	
TUNGSTEN & MULTI COMMODITIES		
<ul> <li>Molyhil, NT Australia</li> <li>Successful diamond drilling program completed, confirming magnetic target adjacent to deposit is mineralised magnetite skarn.</li> </ul>	<ul> <li>Assay results from diamond drilling program.</li> <li>Review strategic plans for Molyhil.</li> </ul>	

as part of the Sale Agreement of the Pilot Mountain Tungsten Project in Nevada, USA.

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## Managing Director's Comments:

"The start of 2022 has seen positive progress made across Thor's projects.

Our team is back on the ground for the 2022 field season at our 100% owned Ragged Range Project, WA, with a mapping and sampling program currently underway to test potential lithium-caesium-tantalum pegmatite targets associated with the Split Rock Supersuite. Preparations are being finalised to commence the second phase of RC drilling at the Sterling Gold Prospect, with a ground based electromagnetic survey, designed to detect any conductive anomalies at depth that may indicate the presence of nickel sulphide mineralisation, scheduled for May 2022.

In the US, we were delighted to receive approval from San Miguel County for the proposed drill testing at the Wedding Bell Project, Colorado during the period. Preparations are now underway to test the project's priority areas, Groundhog, Rim Rock and Section 23. Thor's Board notes the heightened demand for uranium in the US as the country seeks to secure domestic supply in order to replace its reliance on Russian imports.

At the Alford East copper-gold project, SA, Australia, we reported encouraging results for copper and gold from our first phase of drilling. A second phase of drilling, which will include hydrogeology and hydrometallurgical studies, is now being designed. This program will target further high-grade zones and aid our assessment of the project's ISR potential.

After a successful first quarter, Thor looks forward to updating the market on progress made across its portfolio in 2022."



Nicole Galloway Warland, Managing Director, Thor Mining Plc

Ragged Range – mapping and sampling of potential Lithium

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#### RAGGED RANGE PROJECT

The Ragged Range Project, located in the prospective Eastern Pilbara Craton, Western Australia (Figure 1) is 100% owned by Thor Mining - E46/1190, E46/1262, E46/1355, E46/1340, plus the recently granted E46/1393 Figure 1.

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.

Further details of the projects may be found on the Thor website: <u>www.thormining.com/projects/ragged-range-pilbara-project</u>

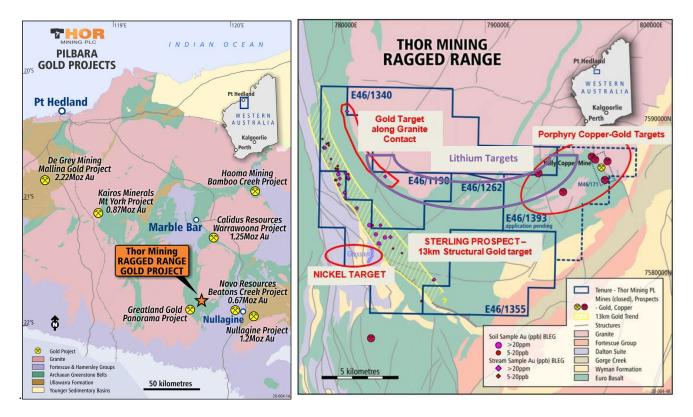


Figure 1: Ragged Range Project Location map (left) and Tenement Map (right) showing priority targets.

#### Lithium Program

The Thor team are back on the ground following the reopening of the WA border, mapping and sampling several lithium targets, including potential lithium-caesium-tantalum (LCT) pegmatites which have been identified within the prospective 10km radius of the Split Rock Supersuite at Thor's Ragged Range Project (Figure 1).

The Pilbara Craton is highly prospective for LCT enriched pegmatites and hosts two large and globally significant spodumene deposits at Wodgina (Mineral Resources Ltd) and Pilgangoora (Pilbara Minerals). The Wodgina lithium project is considered the largest hard rock, spodumene deposit in the world (<u>https://www.carbonart.com.au</u>) (Figure 2).

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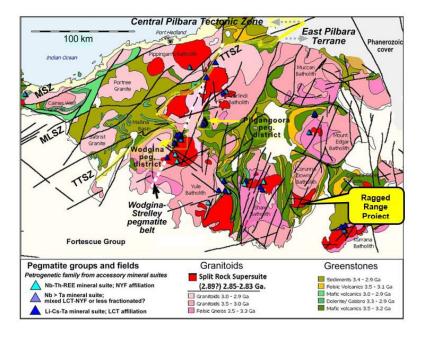


The lithium-rich pegmatites in the Pilbara are spatially and appear to be genetically related to the Split Rock Supersuite (2.85 to 2.83Ma) (Sweetapple, M, 2017). Within Thor's tenure, the Mondana Monzogranite part of the Split Rock Supersuite, mapped in the northern portion of tenure, is untested for lithium potential (Figure 1).

Thor's exploration strategy is to ground-truth the 10km halo around the Mondana Monzongranite, considered the most favourable position for the spatial zonation of LCT enriched pegmatites.

The current field program, utilising Thor's radiometrics and aster data, has highlighted several priority areas for mapping and sampling, including:

- 1) The northeast corner of E46/1262, where small pegmatites and granitic bodies have been identified and which is considered a potential roof zone of the Mondana Monzogranite, making it the most prospective area for lithium enriched pegmatites within the tenement package (Figure 1).
- 2) The second target area is on E46/1393 where numerous structures cut the older Euro Basalt, providing conduits for pegmatites emanating from the adjacent Mondana Monzogranite (Figure 1).
- 3) The third area of interest is a small enclave of greenstone at the contact of the Mondana Monzogranite in E46/1340 (Figure 1).



**Figure 2:** Geological map of the units and terranes comprising the North Pilbara Craton (adapted from Sweetapple and Collins, 2002 and Hickman, 2016), highlighting the distribution of the Split Rock Supersuite (~2.85-2.83 Ga) and pegmatite fields and groups of LCT (Li-Cs-Ta), NYF (Nb-Y>F) and mixed (LCT-NYF) petrogenetic families of Cerny and Ercit (2005). Ragged Range tenure is shown covering the southern portion of the Split Rock Supersuite and Corunna Downs Batholith (after Sweetapple., 2017).

#### Next Steps

Following the current initial lithium mapping and sampling program, the following activities are proposed at Ragged Range, targeting priority lithium, nickel and gold targets:

- Investigation of all small granitic and pegmatitic bodies in the lithium target area. Samples are to be assayed for lithium and key pathfinder elements including Ce, Rb, Sn, Ta and W.
- Reconnaissance soil sampling and prospecting within the 10km halo of the Mondana Monzogranite (E46/1262, E46/1190, E461393 and E46/1340) (Figure 1).
- A high-powered Fixed Loop Electromagnetics (FLEM) ground geophysics survey is scheduled for early May

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over the nickel gossan located in the western portion of tenure. The survey is designed to detect any conductive anomalies at depth that may indicate the presence of nickel sulphide mineralisation. The survey is anticipated to take one week to complete.

- Continuation of RC drilling at Sterling prospect following up on structurally controlled anomalous gold in streams and soils.
- Airborne magnetic/radiometric survey to be flown over the eastern portion of the tenure including E46/1340 and E46/1393.

### URANIUM AND VANADIUM PROJECTS

Thor holds a 100% interest in two US companies with mineral claims in Colorado and Utah, USA. 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 (Figure 3).

Within probable economic transport distance is a processing plant (Energy Fuels White Mesa Mill) which may be a low hurdle processing option for any production from these projects.

Details of the projects may be found on the Thor website: <u>www.thormining.com/projects/us-uranium-and-vanadium.</u>

Thor has systematically worked through the San Miguel County, Colorado approvals process, with the Board of County Commissioners (BOCC) approving the proposed Wedding Bell drilling program at a public hearing on 30 March 2022.

The proposed initial drilling program is designed to test the three Wedding Bell prospects: Groundhog, Rim Rock and Section 23 (Figure 3). The Wedding Bell Project lies within the Uravan Mineral Belt, considered highly prospective for shallow 'Saltwash' type sandstone-hosted, high-grade uranium-vanadium mineralisation (Figure 4).

Field sampling by Thor returned assay results of high-grade uranium, up to **1.25%** (12,500ppm)  $U_3O_8$  and vanadium, up to **3.47%**  $V_2O_5$  (THOR ASX, AIM: 21 July 2020).

#### Next Steps:

- Complete the sign off process with the Federal Bureau of Land Management (BLM) and the Colorado Division of Reclamation Mining and Safety (DRMS).
- Finalise environmental management plan in line with approvals for drilling and reclamation bond.
- Complete drilling preparations, including engaging drilling contractors.
- Drilling is anticipated to commence mid-year.

#### Uranium Market

Spot uranium prices are trading near an 11-year high, the Directors believe this is as a result of geopolitical tension, strong demand, constrained supplies and underinvestment.

Potential US sanctions on Russian uranium imports has resulted in an increased importance on US domestic uranium supply.

The 'green wave' is impacting the uranium sector, with the US and now UK in particular turning to nuclear energy in order to generate reliable, safe and carbon free base load power.

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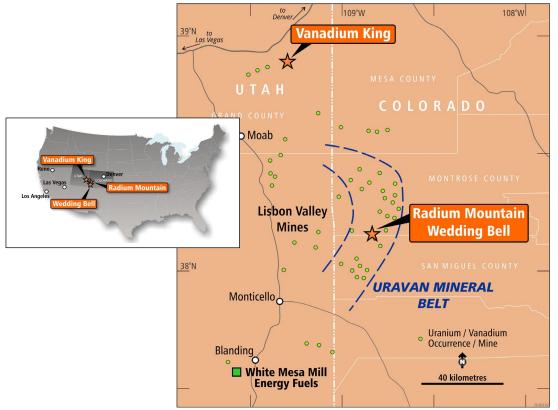


Figure 3: Location map showing projects, infrastructure and nearby White Mesa processing plant.

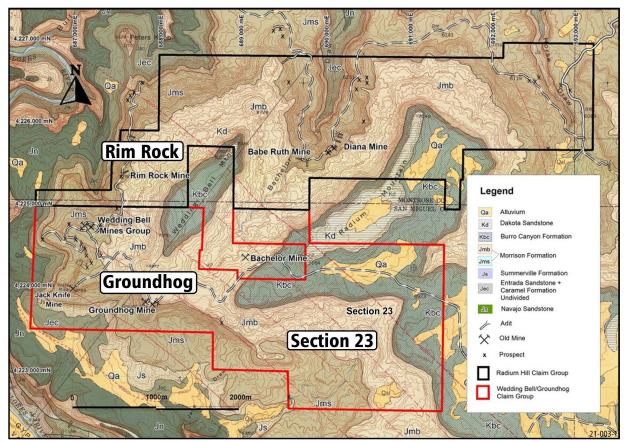


Figure 4: Map of Colorado Wedding Bell Project showing priority areas – Section 23, Groundhog and Rim Rock.

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#### **COPPER PROJECTS**

Thor holds direct and indirect interests in over 400,000 tonnes of Inferred copper resources (Tables A, B, & C) in South Australia, via its 80% farm-in interest in the Alford East copper project and 30% interest in EnviroCopper Ltd.

Each of these projects are considered by Thor directors to have significant growth potential. Both are also advancing towards development via low cost, environmentally friendly In Situ Recovery (ISR) techniques.



*Figure 5:* SA Copper projects location map.

#### ALFORD EAST COPPER-GOLD PROJECT - SA

The Alford East Copper-Gold Project is located on EL6529.Thor is earning up to 80% interest in the project from unlisted Australian explorer Spencer Metals Pty Ltd, covering portions of EL6255 and EL6529 (THR:ASX 23 November 2020).

The Project covers the northern extension of the Alford Copper Belt, located on the Yorke Peninsula, SA (Figure 5). 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 (Figure 6).

Utilising historic drill hole information, Thor completed an inferred Mineral Resource Estimate (MRE), (THR:ASX 27 January 2021), consisting of:

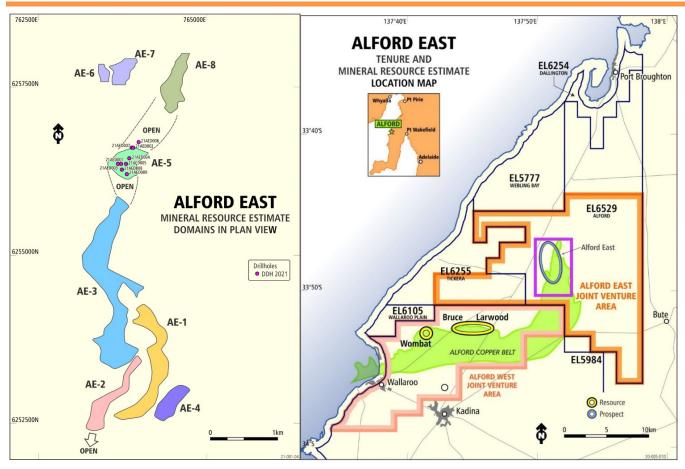
- 125.6Mt @ 0.14% Cu containing 177,000t of contained copper
- 71, 500oz of contained gold

www.thormining.com/sites/thormining/media/pdf/asx-announcements/20210127-maiden-copper.goldestimate-alford-east-sa.pdf

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*Figure 6:* Alford East Project showing the eight mineralised domains (Plan View) (left) and Tenement & Prospect Location Plan (right).

## Alford East Diamond Drilling Program Update

The first phase of drilling comprised nine diamond drillholes totalling 878m, with all assays now received for all drillholes. This initial program for Thor focussed only on the northern portion of the Alford East coppergold deposit, around the AE-5 mineralised domains (Figure 6 and 7), with drilling targeting areas open at depth and along strike.

Significant intercepts including:

21AED001	32.9m @ 0.4% Cu and 0.31g/t Au from 81.5m (ASX:THR 31.8.21)
21AED002	59.9m @ 0.3% Cu from 21.9m (ASX:THR 31.8.21)
21AED003	32.4m @ 0.2% Cu from 15m21
21AED004	55.9m @ 0.53% Cu from 7m, including
	11.7m @ 1.0%Cu from 17.3m, including
	5.7m @ 1.23% and 0.16g/t Au from 17.3,
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 from 15.8m (ASX:THR 31.8.21)

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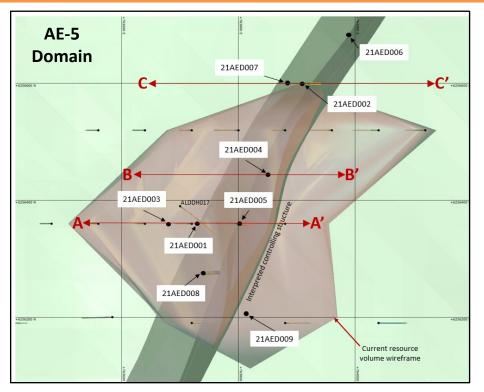


Figure 7: Alford East Project AE-5 domain showing drillhole location plan.

For ISR purposes, drilling was limited to the deeply weathered lithological profile, testing the extent of the oxide zone and the depth boundary of the Top of Fresh Rock (TOFR). The copper-gold oxide mineralisation is hosted within deeply kaolinised (clay) and metasomatic altered units on the contact between the Olympic Domain Wallaroo Group metasediments and the Hiltaba Suite Tickera Granite, Gawler Craton (Figure 6). Copper oxide mineralogy is dominated by malachite and chalcocite.

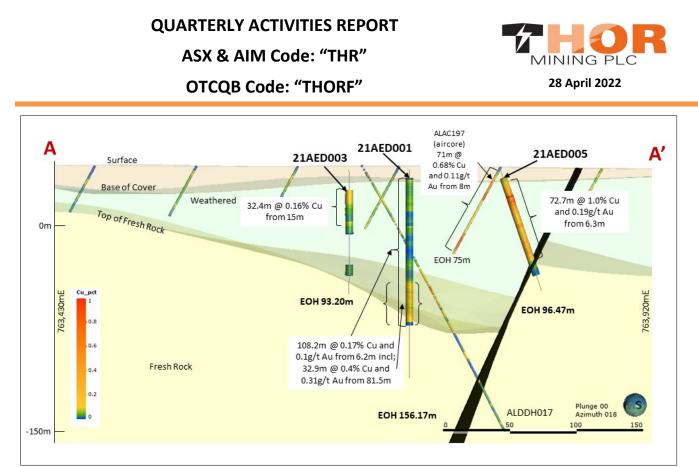
Drill targeting, vectoring in on the hanging wall side of the north-south trending controlling structure, now referred to as Netherleigh Park Fault, intercepted zones of high-grade copper and gold grades, resulting in significant grade uplift in comparison to the MRE (Figure 7).

Drillholes 21AED001, 21AED003 and 21AED005 (Section A-A' 6,256,360mN) were drilled through the central portion of AE-5 (Figures 7 and 8), designed to validate the geological model and test areas open at depth. The high-grade copper and gold intercepts in 21AED001 opens the mineralisation up at depth, whilst 21AED005 highlights the significant grade uplift along the Netherleigh Park Fault.

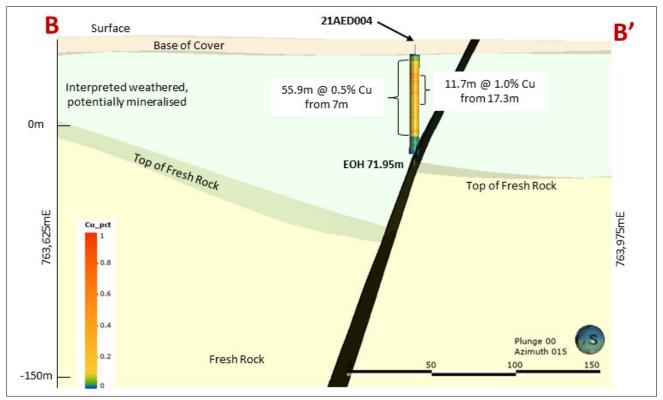
21AED004 (Section B-B' 6,235,440mN) was drilled along strike to the north 21AED005, a continuation of higher copper grades along fault (Figure 7 and 9).

21AED002, 21AED006 and 21AED007 (Section C-C' 6,235,600mN) were all drilled to the north of the AE-5 MRE domain, with assay results extending the known copper mineralisation along strike towards AE-8 (Figure 2, 3 and 6).

Multi-element analysis of the assay results highlights two distinct higher-grade zones of copper-gold mineralisation within a broader mineralised envelope. The lower of the two has a distinct IOCG geochemical signature: elevated Cu, Au, Mo, Co, Se, Bi & REE (Figure 6 log plot). This potentially reflects sulphide oxidation of primary mineralisation; whilst the upper zone has a more amorphous distribution typical of a supergene mineralised system.



*Figure 8:* Cross section 6,256,360mN looking NNE, showing 21AED001, 21AED003 and 21AED005. Copper assays shown as cylinder down hole trace.

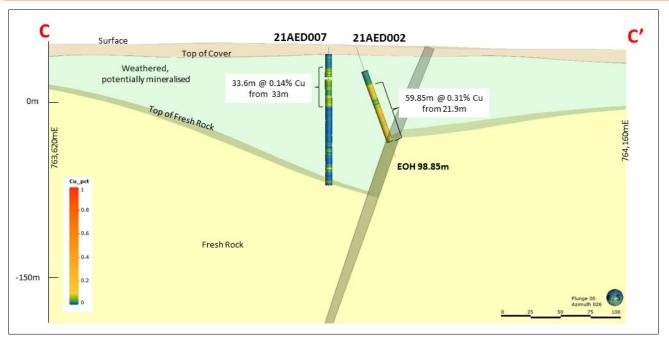


*Figure 9:* Cross section 6,256,4400mN looking NNE, showing 21AED004, with copper assays shown as cylinder downhole trace.

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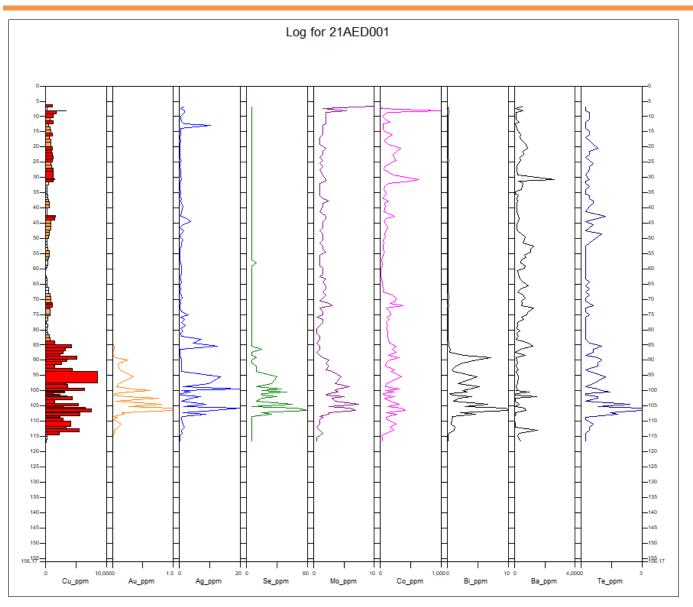


*Figure 10:* Cross section 6,256,600mN showing 21AED002 and 21AED007, with copper assays shown as cylinder downhole trace.

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*Figure 11:* Multi-element log plot for 21AED001 showing two distinct higher grade copper zones with the lower gold rich zone reflecting IOGC geochemical signature. Also showing metallurgical samples.

## New Alford East Geological Model

Based on the recent diamond drilling, a new robust 3D geological model was generated using a combination of weathering, lithology, assay and structural data from logging, and regional geology, structural and geophysics (magnetics and gravity) data (Figure 7).

Key geological outcomes:

- The highest grade oxide mineralisation seems to occur where a fault has facilitated a more deeply weathered profile.
- Some faults appear to have had minor vertical offset on them post-development of the weathering profile (for example, the north-east trending Netherleigh Park Fault, central to the project area).
- Mineralisation shows a preference to be hosted in metasediments.
- A Sulphidic-Magnetic-Shale (SMS) stratigraphic-alteration unit, appears as a marker unit in the regional

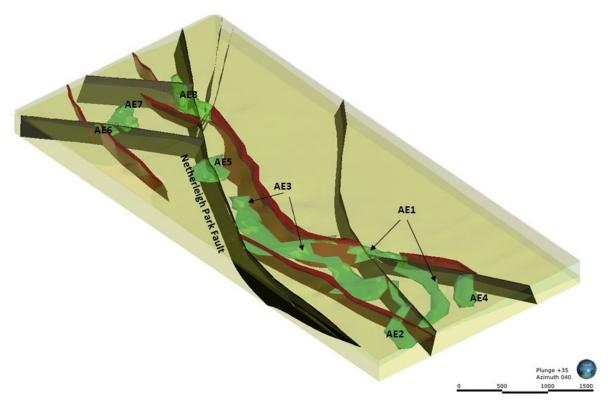
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and more local magnetics images, as well as in the regional 3D magnetics and gravity inversions.

- The SMS unit was modelled using the above information, showing an overall synformal shape with AE3 sitting in the core or trough of overlying metasediments formed by the synform.
- Most supergene mineralisation appears to occur in the hanging wall of the SMS, whilst the weathered primary mineralisation (such as in the deeper sections of AE8 and AE5) seems to be associated with major faults, such as the central Netherleigh Park Fault.



*Figure 12:* 3D Geological Model – showing the major faults in black, cover in translucent brown, weathered rock in translucent green, fresh rock in translucent yellow, sulphidic-magnetic-shale (SMS), and the resource domains in green (labelled).

## Hydrometallurgy

Thor's objective is to identify an in-situ recovery pathway ideally for both the copper and gold mineralisation at the Alford East Project that is both socially and environmentally friendly, rather than using conventional acid in-situ recovery (ISR).

This has led to Thor engaging Mining Processing Solutions (MPS) in trialling their alkaline Glycine Leaching Technology (GLT), branded as their  $GlyCat^{TM}$  and  $GlyLeach^{TM}$  processes, that have the capability to selectively leach base and precious metals using glycine as the principal, eco-friendly, reagent.

A preliminary 'discovery' metallurgical test program has been carried out to determine the amenability of the Alford East mineralisation to metal recovery using GLT. The test work has involved two rounds of Diagnostic Leach Tests (DLTs), and one round of Bottle Roll Tests (BRTs) (Figure 8) on the two samples from 21AED001 (Table D). The two zones are highlighted in Figure 6. Ground water collected from Alford East was

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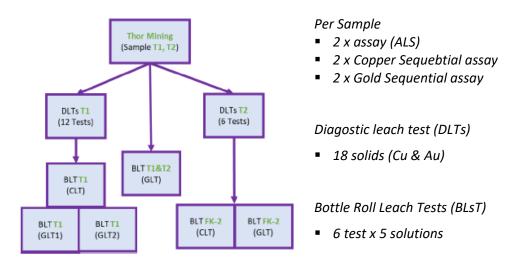
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used in the laboratory test work to ensure water characteristics, especially pH, were tailored to Project conditions.

Table D: Samples selected	for testina - Fire and 4	4 acid diaest assav results
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Hole ID	Sample	Assay ID	Cu (ppm)	Au (ppm)
21AED001	AE Upper Zone	THOM-01-002	1,080	0.02
21AED001	AE Lower Zone	THOM-01-001	4,920	1.10
21AED001	Combined	THOM-01-003	2,950	0.51

#### Figure 13: Overview of test work



#### Initial Findings:

- Based on copper sequential analysis (identifies leachable copper mineralogy) 15% of the copper from the upper zone and up to 50% from the lower zone should be theoretically leachable with GLT.
- Based on the gold diagnostic leach assays, extraction from the lower zone of up to 73.4% should be theoretically leachable with Glycine Leaching Technology (GLT). The upper zone had negligible gold.
- Diagnostic Leach Test designed to be initial comparison tests to ascertain the response to a range of conditions including a baseline cyanidation test.
- Bottle Roll tests (6):
  - The composite sample performed very well with GLT, extracting 98.1% of the gold and over 40% of the copper.
  - Lower zone using GLT extracted 78.3% of the gold and 33.5% of the copper, whilst the lower zone using cyanide extracted 64.1% Au and 48.2% of the copper.
  - The alkaline GLT has slower leaching dynamics than cyanidation, so if given more time higher extractions would be expected.

#### Next Steps:

Based on the new geological model, approximately 10 diamond drill holes have been designed to test potential high-grade zones (Figure 14):

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- Along strike and up-dip of deeply weathered zones.
- Targeting controlling key structures including the Netherleigh Park Fault at depth especially where there are large gaps in existing data.
- Targeting intersection of SMS and Liaway offset Fault.
- Targeting intersection of Netherleigh Park Fault and Liaway Fault.
- Targeting subordinate splays off Netherleigh Park Fault where there is evidence of a deep weathering trough.

In addition, hydrogeological water bores and pump testing are being planned to determine aquifer connectivity between holes, with an initial focus on the northern area of the mineralisation.

Concurrent to drilling, hydrometallurgical work will continue to investigate and optimise both copper and gold metal extraction using environmentally friendly lixiviants.



*Figure 14: Phase two proposed drillholes, targeting potential higher-grade zones open at depth and along strike* This work is co-funded by the SA Government Accelerated Discovery Grant (ADI) of A\$300,000.

In conjunction with the technical assessment, Thor will continue ongoing stakeholder and community engagement, and regulatory activities.

Based on the nature of the oxide mineralisation, the deposit is considered amenable to In Situ Recovery (ISR) techniques. For further information on ISR please refer to Thor's website via this link for an informative video: <a href="http://www.youtube.com/watch?v=eg\_12GD0Wlw">www.youtube.com/watch?v=eg\_12GD0Wlw</a>

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#### KAPUNDA and ALFORD WEST COPPER PROJECTS – SA

Thor holds a 30% equity interest in private Australian company EnviroCopper Limited ("ECL"). In turn, ECL has entered into an agreement to earn, in two stages, up to 75% of the rights over metals which may be recovered via In-Situ Recovery ("ISR") contained in the Kapunda deposit from Australian listed company Terramin Australia Limited ("Terramin" ASX: "TZN"), and the 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:

www.envirocopper.com.au

#### KAPUNDA

EnviroCopper Ltd ("EnviroCopper" or "ECL") has completed the installation of test well arrays and has commenced in-situ recovery trials ("ISR"), including tracer and push-pull test work (Figure 5). These tests are the final hydrometallurgical assessments before ECL commences Site Environmental Lixiviant Trials (SELT).

The purpose of lixiviant trials (or "push-pull tests") is to assess the solubility of copper mineralisation and, therefore, copper recovery, using a specially designed solution called a lixiviant under in-situ conditions. The trial is to be undertaken in two stages: the first stage involves injecting and extracting a tracer solution (Sodium Bromide - NaBr) from the same well to demonstrate hydraulic connectivity between the observation and environmental monitor well network. This is followed by injecting and extracting lixiviant from the same well to test copper solubility from the mineralisation.

Key outcomes anticipated from lixiviant trials:

- Hydraulic connectivity between wells
- Copper solubility and recovery
- Establish lixiviant and time parameters for design of the Site Environmental Lixiviant Trials (SELT).

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#### TUNGSTEN PROJECTS

#### MOLYHIL TUNGSTEN / MOLYBDENUM PROJECT - NT (100% Thor)

The Molyhil tungsten-molybdenum-copper deposit is 100% owned by Thor Mining and is located 220km northeast 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 10). Both the outlines of the lodes and the banding within the lodes strike approximately north and dip steeply to the east.

A full background on the project is available on the Thor Mining website: www.thormining.com/projects.

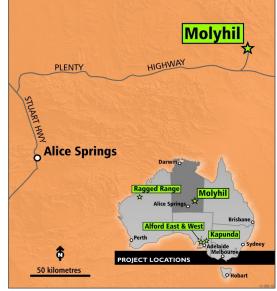


Figure 15: Molyhil project location map

#### **Diamond Drilling Program**

During a 3D geological and geophysical modelling exercise completed over March and April 2021, a potential extension to the known Molyhil tungsten-molybdenum-copper mineralisation was defined by a large magnetic target (Figures 16 and 17). It was noted that previous drilling in this area had not tested the newly identified magnetic body.

Three diamond drillholes (21MHDD001 - 21MHDD003), totalling 995.4m, were successfully tested, and confirmed the newly identified magnetic target, which represents a massive magnetite skarn hosting disseminated tungstenmolybdenum-copper mineralisation, located to the south of the Molyhil Critical Minerals Project (ASX: THR 7 December 2021).

Both 21MHDD002 and 21MHDD003 intercepted disseminated mineralisation, consisting of scheelite-molybdenite and chalcopyrite within massive magnetite skarn. Drillhole 21MHDD002 intercepted over 45m of disseminated mineralisation (Figure 16), whilst 21MHDD003 intercepted two zones over 29m of disseminated mineralisation. It appears 21MHDD001 intersected the edges of the magnetite skarn drilling over the top of the magnetite skarn lode with negligible mineralisation. Initial interpretation of data highlights a potential south-east plunging lode extending southeast of the Southern lode, with a possible offset (yet to be determined) (Figure 16). Drilling data is now being compiled in order to revise the 3D model.

Previous 3D geological modelling of the Molyhil deposit identified two prominent structures – the Yacht Club fault and South Offset fault (Figure 15 and 16). Based on the geological timing of these faults, they appear to have had a significant impact on mineralisation, such as offsetting the Yacht Club mineralisation from the Southern Lode, hence creating targets for potential extensions. Modelling of the South Offset Fault, relative to the magnetics, strongly implies an offset of the now confirmed magnetite skarn, host to the tungsten-molybdenum-copper mineralisation, south of the South Offset fault.

The drilling program is co-funded by the Geophysics and Drilling Collaborations (GDC) program as part of the 'Resourcing the Territory' initiative, with Thor Mining granted A\$110,000 (ASX: THR 4 June 2021). Full details can be found on the NTGS website: <a href="http://www.resourcingtheterritory.nt.gov.au/about/gdc">www.resourcingtheterritory.nt.gov.au/about/gdc</a>.

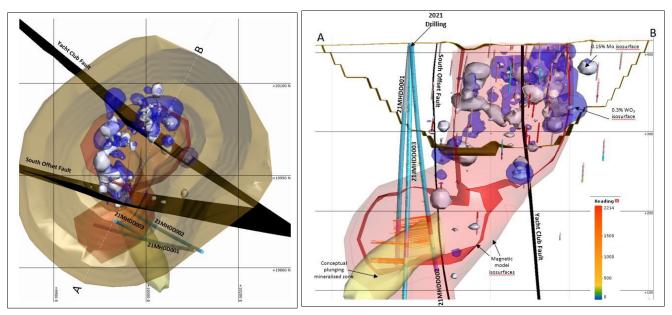
The newly discovered extension of the tungsten-molybdenum-chalcopyrite mineralisation to the south of the Molyhil deposit has validated the successful 3D modelling of the geology, magnetics and mineralisation. The newly

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acquired data will be used to enhance the 3D model prior to follow up potential resource drilling.



**Figure 16:** Plan view, looking down at the conceptual pit shell (brown), with the 0.3% WO<sub>3</sub> isosurface in blue, 0.15% Mo isosurface in silver, and modelled 3D magnetics in transparent red. The yellow dashed line shows the location of the long section (Figure 3). 21MHDD001 and 21MHDD002 completed with DD Hole C underway.

**Figure 17:** Long section of the Molyhil project looking west-northwest, showing two drilled holes and a third planned hole. Drilled holes, 21MHDD001 and 21MHDD002, were targeted into the magnetic anomaly where it appears offset at depth by faulting. The next planned hole, DD Hole C, is planned to intersect the geological plunge of the mineralised intercept in 21MHDD002. The conceptual pit shell is shown in brown, 0.3% WO<sub>3</sub> isosurface in blue, 0.15% Mo isosurface in silver, and modelled 3D magnetics in red (0.175 SI), and as a transparent red envelope (0.15 SI) and a conceptual shape representing the down-plunge mineralised zone in yellow.

## Bonya (Tungsten, Copper) and Jervois Vanadium Projects (40% Thor)

The Bonya tungsten, copper and vanadium deposits are located approximately 30km to the north-east of Molyhil (Figure 17). Thor, in joint venture with Arafura, holds a 40% equity interest in the resources.

A full background on the project is available on the Thor Mining website: www.thormining.com/projects.

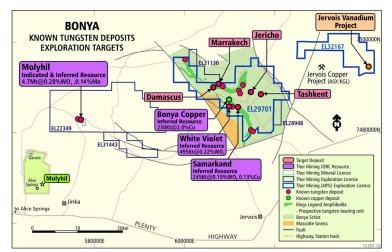


Figure 18: Molyhil Project location showing adjacent Bonya tenement

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#### CORPORATE, FINANCE, and CASH MOVEMENTS

Agreement with Power Metal Resources Plc (AIM: POW) for a Variation of the Tail Benefit as part of the Sale Agreement of the Pilot Mountain Tungsten Project in Nevada, USA, which resulted in an immediate cash payment of £50,000 to Thor and ordinary shares in POW to the value of £100,000. The sale of Pilot Mountain completed on 24 January 2022.

For all terms of the Sale Agreement can be viewed via announcement link:

https://www.thormining.com/sites/thormining/media/pdf/asx-announcements/20220125-pilot-mountain-tail-benefitvariation-and-sale-completion.pdf

Net cash outflows from Operating and Investing activities for the quarter of \$194,000 included inflows of \$310,000 related to the sale of the Pilot Mountain Project, sale of 4.5 million Power Metal Resources Plc (POW) shares, and government grants. Of the remaining \$504,000 net cash outflows, \$241,000 directly related to exploration activities.

Net cash inflow from Financing activities for the quarter \$109,000, relating to the exercise of options held by the Company's broker PAS Partners.

Providing an ending cash balance of \$2,780,000.

Thor continues to hold 48,118,920 POW Shares which are released from a trading restriction at the rate of 25% each quarter, with the first release on 30 April 2022. The market value of the POW shares currently held is £794,000 (approximately \$1,393,000) based on the closing price of the POW Shares as traded on the London Stock Exchange on 27 April 2022

Cashflows for the quarter include related party payments of \$98,000 to Directors, comprising the Managing Director's salary, and Non-Executive Directors' fees.

#### Yours faithfully,

THOR MINING PLC Nicole Galloway Warland Managing Director

#### 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 Mining 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 <u>www.thormining.com</u>, which includes a facility to register to receive these updates by email, and on the Company's twitter page @ThorMining.

#### About Thor Mining PLC

Thor Mining PLC (AIM, ASX: THR; OTCQB: THORF) is a diversified resource company quoted on the AIM Market of the London Stock Exchange, ASX in Australia and OTCQB Market in the United States.

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The Company is advancing its diversified portfolio of precious, base, energy and strategic metal projects across USA and Australia. Its focus is on progressing its copper, gold, uranium and vanadium projects, while seeking investment/JV opportunities to develop its tungsten assets.

Thor owns 100% of the Ragged Range Project, comprising 92 km<sup>2</sup> of exploration licences with highly encouraging early stage gold and nickel results in the Pilbara region of Western Australia, for which drilling is planned in the second half of 2021.

At Alford East in South Australia, Thor is earning an 80% interest in copper deposits considered amenable to extraction via In Situ Recovery techniques (ISR). In January 2021, Thor announced an Inferred Mineral Resource Estimate of 177,000 tonnes contained copper & 71,000 oz gold<sup>1</sup>.

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.<sup>23</sup>

Thor holds 100% interest in two private companies with mineral claims in the US states of Colorado and Utah with historical high-grade uranium and vanadium drilling and production results.

Thor holds 100% of the advanced Molyhil tungsten project, including measured, indicated and inferred resources<sup>4</sup>, in the Northern Territory of Australia, which was awarded Major Project Status by the Northern Territory government in July 2020.

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. <sup>5</sup>

<u>Notes</u>

<sup>1</sup> <u>www.thormining.com/sites/thormining/media/pdf/asx-announcements/20210127-maiden-copper.gold-estimate-alford-east-sa.pdf</u>

<sup>2</sup> <u>www.thormining.com/sites/thormining/media/pdf/asx-announcements/20172018/20180222-clarification-kapunda-copper-resource-estimate.pdf</u>

<sup>3</sup> <u>www.thormining.com/sites/thormining/media/aim-report/20190815-initial-copper-resource-estimate---moonta-project---</u> <u>rns---london-stock-exchange.pdf</u>

<sup>4</sup> <u>www.thormining.com/sites/thormining/media/pdf/asx-announcements/20210408-molyhil-mineral-resource-estimate-updated.pdf</u>

<sup>5</sup> <u>www.thormining.com/sites/thormining/media/pdf/asx-announcements/20200129-mineral-resource-estimates---bonya-</u> <u>tungsten--copper.pdf</u>

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#### **TENEMENT SCHEDULE**

At 31 March 2022, the consolidated entity holds an interest in the following Australian tenements:

Project	Tenement	Area kms <sup>2</sup>	Area ha.	Holders	Company Interes
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%

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At 31 Marc	At 31 March 2022, the consolidated entity holds an interest in the following tenements in the US State of Nevada:						
Claim Group	Prospect	Claim Name	Area	Holders	Company Interest		
	Desert Scheelite	NT #55 - 64					
Platoro	Garnet NT #9 - 18 45 blocks (6)		45 blocks (611ha or	Pilot Metals Inc	100%		
FIGLUIU	Gunmetal NT #19 - 22, 6, 7 1,510 acres)		100%				
	Good Hope	NT #1 - 5, 41 - 54					
BFM 1	Black Fire Claims	BFM1 - BFM109	109 blocks (1,481ha or 3,660 acres)	BFM Resources Inc	100%		
BFM 2	Des Scheel East	BFM109 - BFM131	22blocks (299ha or 739Acre)	BFM Resources Inc	100%		
Dunham Mill	Dunham Mill	MS1 – MS4	4 blocks	BFM Resources Inc	100%		

On 31 March 2022, the consolidated entity holds 100% interest in a Uranium and Vanadium projects in US 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 MINING PLC

ABN

121 117 673

Quarter ended ("current quarter")

31 MARCH 2022

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation	-	(48)
	(b) development		
	(c) production		
	(d) staff costs	(97)	(160)
	(e) administration and corporate costs	(166)	(900)
1.3	Dividends received (see note 3)		
1.4	Interest received		
1.5	Interest and other costs of finance paid	-	(2)
1.6	Income taxes paid		
1.7	Government grants and tax incentives		
1.8	Other	-	59
1.9	Net cash from / (used in) operating activities	(263)	(1,051)

2.	Cash flo	ws from investing activities		
2.1	Payments	s to acquire or for:		
	(a) entiti	es		
	(b) tener	nents		
	(c) prope	erty, plant and equipment	-	(16)
	(d) explo	ration & evaluation	(241)	(2,557)
	(e) equit	y accounted investments		
	(f) other	non-current assets		

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	88	246
	(b) tenements		
	(c) property, plant and equipment		
	(d) investments	102	102
	(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)	120	328
2.6	Net cash from / (used in) investing activities	69	(1,897)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	4,375
3.2	Proceeds from issue of convertible debt securities		
3.3	Proceeds from exercise of options	109	109
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	(120)
3.5	Proceeds from borrowings		
3.6	Repayment of borrowings (lease liability)	-	(19)
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	109	4,345

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	2,936	1,442
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(263)	(1,051)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	69	(1,897)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	109	4,345

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$A'000	
4.5	Effect of movement in exchange rates on cash held	(71)	(59)	
4.6	Cash and cash equivalents at end of period	2,780	2,780	

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	2,780	2,936
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)	2,780	2,936

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	98
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.	<b>Financing facilities</b> 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 qu	arter 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.	Estim	nated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)		(263)
8.2		ents for exploration & evaluation classified as investing es) (item 2.1(d))	(241)
8.3	Total r	elevant outgoings (item 8.1 + item 8.2)	(504)
8.4	Cash a	and cash equivalents at quarter end (item 4.6)	2,780
8.5	Unused finance facilities available at quarter end (item 7.5)		-
8.6	Total a	available funding (item 8.4 + item 8.5)	2,780
8.7	Estima item 8	ated quarters of funding available (item 8.6 divided by 3.3)	5.5
	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?		
	Answe	er:	
	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?		
	Answe	эг:	
	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?		
	Answe	er:	
	Note: wi	here item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 abo	ve 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.

#### 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.