

# QUARTERLY ACTIVITIES REPORT

ASX & AIM Code: "THR"

OTCQB Code: "THORF"



## QUARTERLY REPORT APRIL TO JUNE 2022

### THOR MINING PLC

Registered Numbers:  
United Kingdom 05 276 414  
Australia 121 117 673

Registered Office:  
58 Galway Avenue  
MARLESTON, SA, 5033  
Australia

Ph: +61 8 7324 1935

Email:  
[corporate@thormining.com](mailto:corporate@thormining.com)

Website:  
[www.thormining.com](http://www.thormining.com)



@ThorMining

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

AIM & ASX Listings:  
Shares: THR  
OTCQB Listing  
Shares: THORF

**Directors:**  
Nicole Galloway Warland  
Alastair Clayton  
Mark McGeough

### Highlights

### Outlook for September Quarter 2022

#### GOLD, LITHIUM, NICKEL

##### Ragged Range, Pilbara region, WA Australia

- Mapping and sampling programs continuing; testing potential gold, copper-gold and lithium-caesium-tantalum (LCT) targets across tenure. Initial results from sampling highlight up to **6g/t gold** and **4.8 % copper**.
- Electromagnetic (EM) conductor identified beneath nickel gossan from Fixed Loop Electromagnetic Survey (FLEM) over the Krona Prospect.
- 3120m RC drilling program completed in early July at Sterling and Krona Prospects.

- An Airborne Magnetism Survey to commence early August over eastern portion of tenure.
- RC drilling assays results.
- Potential follow up drilling of drill targets generated from RC assay and rock chip results.
- Full results from regional mapping and sampling programs, targeting additional gold, copper and LCT pegmatites.
- Down Hole Electromagnetic Survey in cased Krona drillhole.
- Interpretation of airborne magnetism and radiometrics data.

#### URANIUM & VANADIUM USA

- Final authorisation for proposed drilling program at Wedding Bell Project received.
- Drilling preparations underway to test Groundhog, Rim Rock and Section 23 at Wedding Bell Project, Colorado.

- Commence drilling program.
- Downhole radiometric logging of drillholes.

#### COPPER

##### Alford East, SA Australia

- Government approvals received for Phase 2 diamond drilling program, targeting potential high-grade copper zones along strike.
- Hydrogeology quarterly water characterisation sampling undertaken.

- Review drill targets highlighted in recent 3D modelling exercise.

##### Kapunda, SA Australia (via 30% equity holding in EnviroCopper Ltd)

- ISR push-pull trials underway, with tracer bromide component completed.
- Copper-gold recoveries from lixiviant trials received and integration into Scoping Study.

#### TUNGSTEN & MULTI COMMODITIES

##### Molyhil, NT Australia

- Assay results from 2021 drilling identified a 46m intersection of weakly disseminated tungsten-molybdenum-copper mineralisation in magnetite skarn.
- Review strategic plans for Molyhil.

#### CORPORATE & FINANCE

- Mark Potter Non-Executive Chair resigned from the Board on 30 June 2022, with Alastair Clayton taking on the Non-Executive Chair role.

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### Managing Director's Comments:

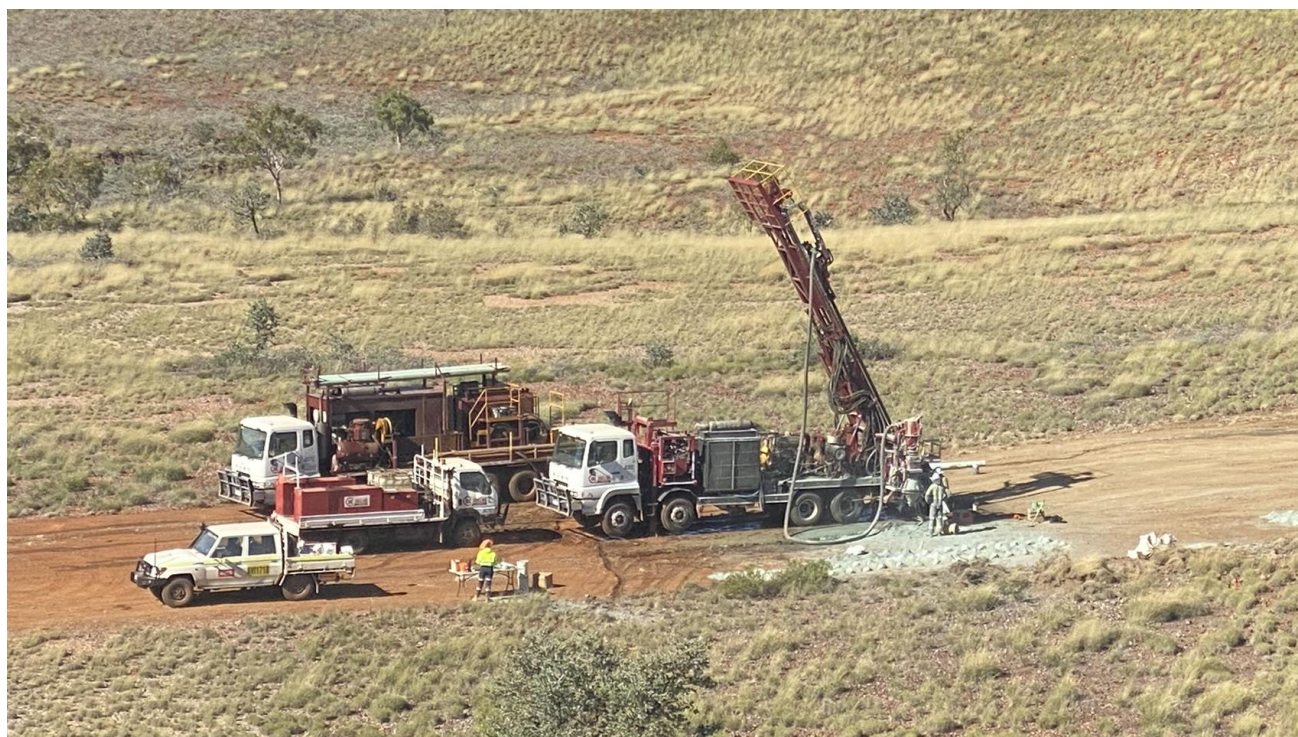
*"The June quarter has seen a flurry of on-ground activities, with our exploration focus on advancing the Ragged Range Project (WA), including the completion of a c3000m RC program and organising upcoming drilling for our Uranium and Vanadium Wedding Bell Project in Colorado, USA.*

*At our 100% owned Ragged Range Project, Thor is continuing to build on and develop our geological understanding, with particular emphasis on structural controls on mineralisation at both the Sterling gold prospect and Kelly's copper-gold prospect. Activities include our latest sampling programs, which have highlighted highly encouraging high-grade gold (6/t Au) and copper values (4.8% Cu) along newly identified structures at Sterling and Kelly's Prospects and the completion of the c3000m RC drilling program, which included drill testing of a FLEM Conductor at Krona nickel-copper prospect*

*In the US, we were delighted to receive full authorisation from federal, state and counties for the upcoming proposed drill testing at the Wedding Bell Project, Colorado, during the period. Drilling preparations are now underway to test the project's priority areas, Groundhog, Rim Rock and Section 23.*

*We look forward to receiving the RC drill results at Ragged Range and being on the ground drilling at our Wedding Bell project during the September quarter."*

**Nicole Galloway Warland, Managing Director, Thor Mining Plc**



**Photo 1:** Reverse Circulation drilling at Sterling Prospect, Ragged Range, WA

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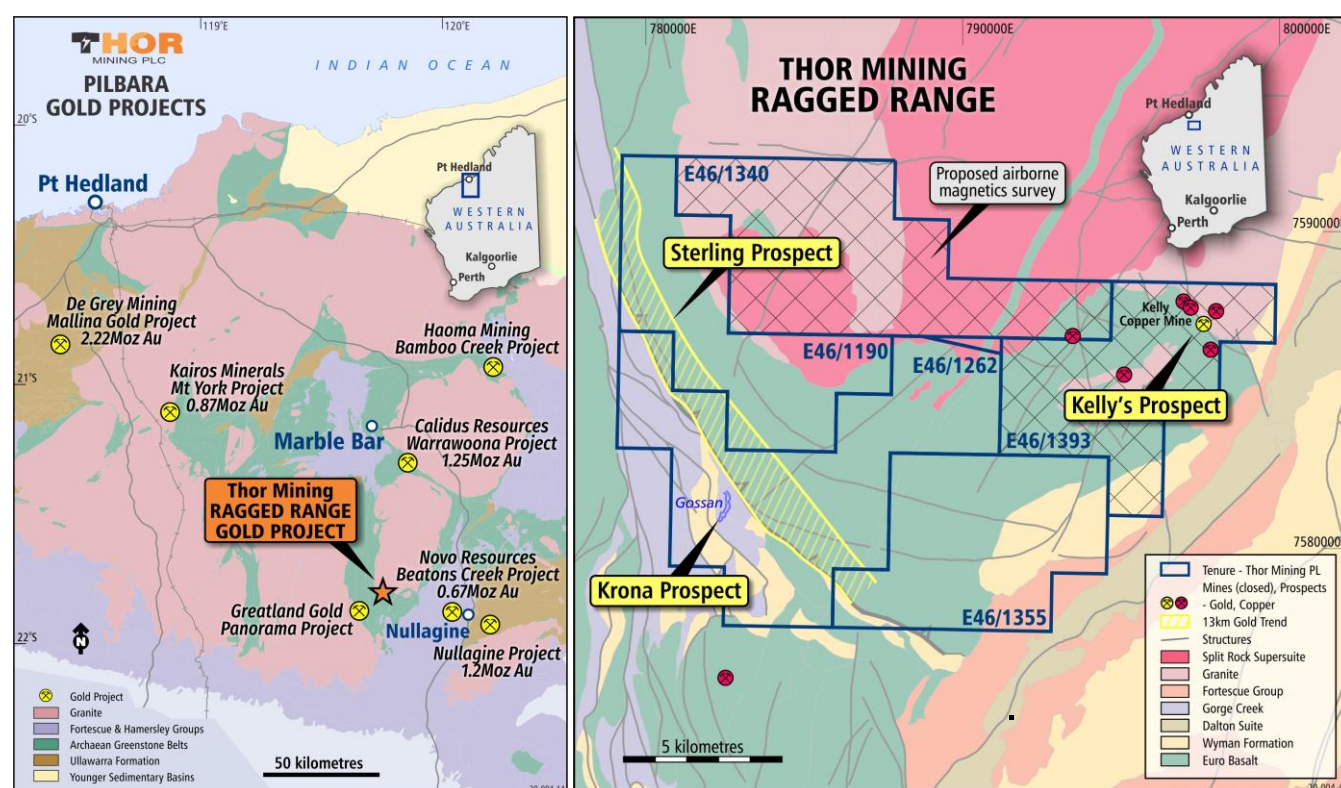


### RAGGED RANGE PROJECT

The Ragged Range Project, located in the prospective Eastern Pilbara Craton, Western Australia (Figure 1) is 100% owned by Thor Mining and comprises 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. Thor drilled 48 RC holes totalling 3,120m at the Sterling and Krona prospects, with drilling completed in July 2022.

Further details of the projects may be found on the Thor website: [www.thormining.com/projects/ragged-range-pilbara-project](http://www.thormining.com/projects/ragged-range-pilbara-project).



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

### Fixed Loop Electromagnetics (FLEM) Survey - Krona Prospect - Nickel Gossan

A high-powered Fixed Loop Electromagnetics (FLEM) ground geophysics survey was completed over the Krona Prospect in June, covering the full extent of the nickel gossan, located in the western portion of the tenure (Figures 1 and Figure 2) (ASX: THR 17 June 2022). This is the first ground geophysics survey on the Ragged Range Project. The survey over the gossan was designed to detect conductive anomalies at depth that may indicate the presence of massive nickel-copper sulphide mineralisation to constrain initial drill testing.

A single loop FLEM survey over the Krona prospect identified a conductor at the southern end of the gossan (Figure 2 and Figure 3). The conductor was modelled as a shallow flat lying feature approximately 100m deep (Figure 3) and is consistent with sulphides. The shallow (100m) conductor gives Thor a clear drill target, that was drill tested as part of RC program at the adjacent Sterling Prospect (Figure 3).

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The gossan was initially identified by the Western Australian Geological Survey on the Split Rock 1:100K mapping explanatory notes (Bagas et al., 2004). The gossan extends over 1km x 100m and lies on the basal contact of the Dalton Suite ultramafics, with the older Wyman Formation, felsic volcanics.

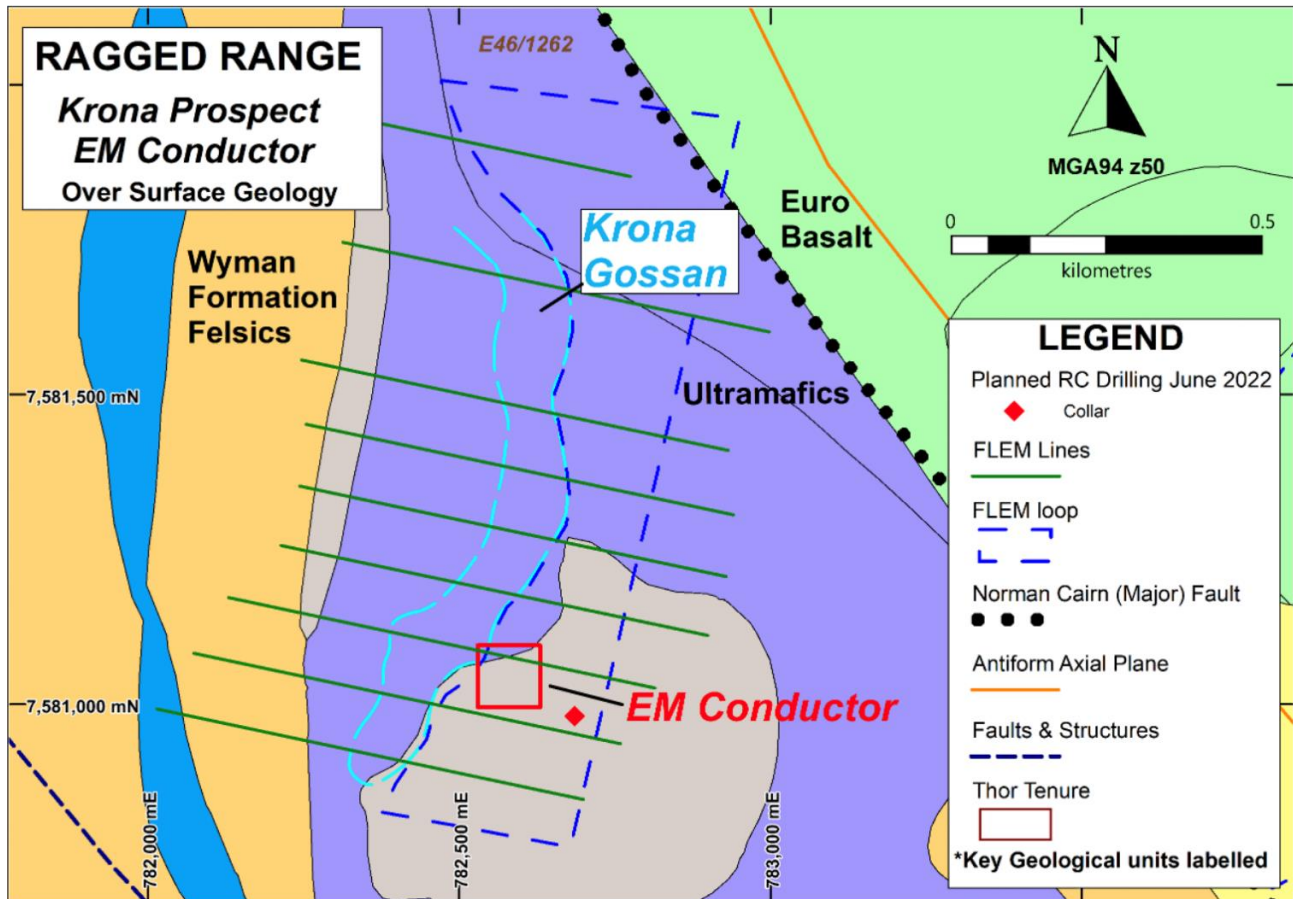


Figure 2: FLEM survey showing EM conductor overlain on the 100K GSWA Geology.

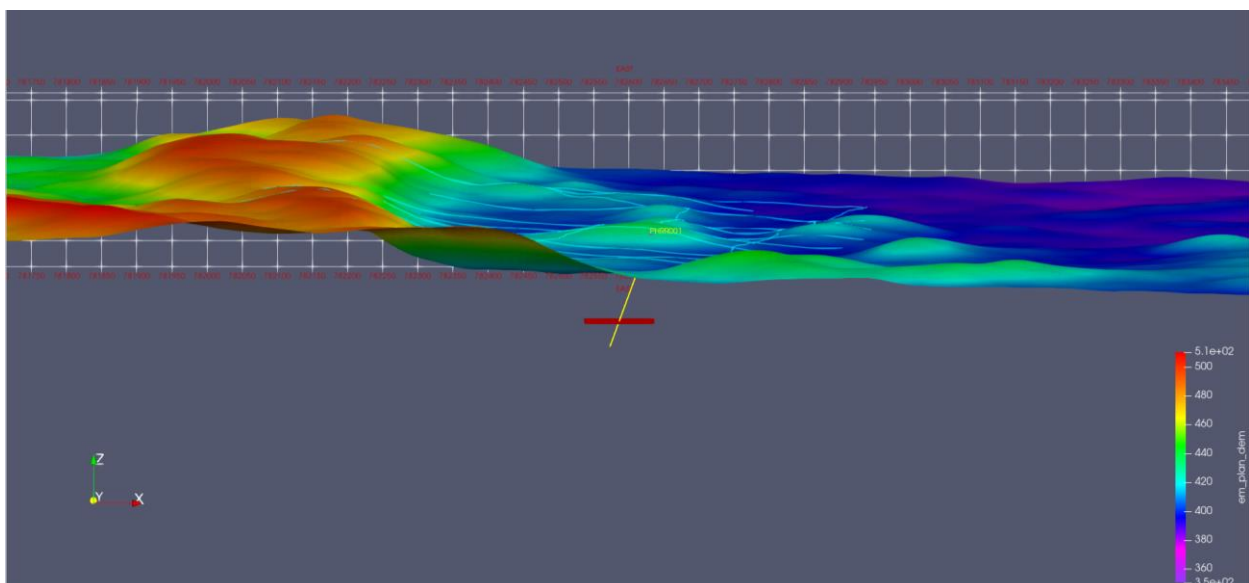


Figure 3: 3D modelled EM conductor

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### Drilling

Thor drilled 48 reverse circulation "RC" holes totalling 3,120m at the Sterling and Krona prospects, Ragged Range Project (Figure 4), with drilling completed in July (ASX: THR 11 July 2022).

#### STERLING PROSPECT

11 drill traverses were completed along the Sterling Prospect 13km structural gold corridor, with drill holes generally angled -60 degrees toward the west, near perpendicular to the structural controls of the dominant faulted contact between the Euro Basalt and the Dalton Suite ultramafics (Figure 4). Drill depths range from approximately 60-170m.

This second phase of drilling tested interpreted dilational zones (potential trap sites for mineralisation and the potential source of the gold anomalies found in stream and soil samples). Surface anomalism is associated with a series of faults and folds, subparallel or at a low angle to the regional thrust faulted contact (Norman Cairns Fault) between the Euro Basalt and the Dalton Suite ultramafics (Figure 1 and 4). In a number of the drillholes, fuchsite and/or sericite alteration, with pyrite and arsenopyrite were observed, important indicators for gold mineralisation.

#### KRONA PROSPECT

As part of the drilling program, one drill hole was drilled into the FLEM conductor recently identified below the nickel gossan at Krona Prospect, (Figure 1 and Figure 4) (ASX: THR 17 June 2022). This hole has been cased in preparation for a future Downhole Electromagnetic Survey ("DHEM") survey.

DJC Drilling Pty Ltd completed the drilling program. Drill samples have been received by the Bureau Veritas laboratory in Adelaide, with assay results anticipated in August/September.

### Sampling Update- High-grade Copper and Gold found at the Sterling and Kelly's Prospects

In parallel with the recently completed RC drilling at the Sterling and Krona Prospects (ASX: THR 11 July 2022), three rock chip and stream sediment sampling programs across the Ragged Range Project area have been undertaken.

The geological mapping and sampling programs were designed to:

- Further develop and validate Thor's geological model by identifying key mineralising structures and gold distribution at the Sterling prospect.
- Sample historic copper working at Kelly's Prospect to gain a greater understanding of the controlling structures, the tenor of gold mineralisation associated with the visible copper and /or geochemical.
- Lithological boundaries.
- Review lithological boundaries and potential alteration signatures using newly-acquired ASTER data.
- Identify potential outcropping lithium-caesium-tantalum (LCT) enriched pegmatites.

97 rock chip samples and 24 stream samples were collected in total (of which 57 rock chips and 12 stream sample results have been received back from the laboratory to date), highlighting significant gold and copper mineralisation and assisting with the structural interpretation of key controlling structures at Sterling and Kelly's Prospects (Figure 5) (ASX: THR 25 July 2022).

No outcropping LCT-enriched pegmatites have been identified to date; however, lithium exploration will continue with stream and soil sampling within the 10km goldilocks zone around the prospective Mondana Monzogranite, part of the Split Rock Supersuite. Encouraging anomalous pathfinders in some stream sediment samples warrant further investigation.

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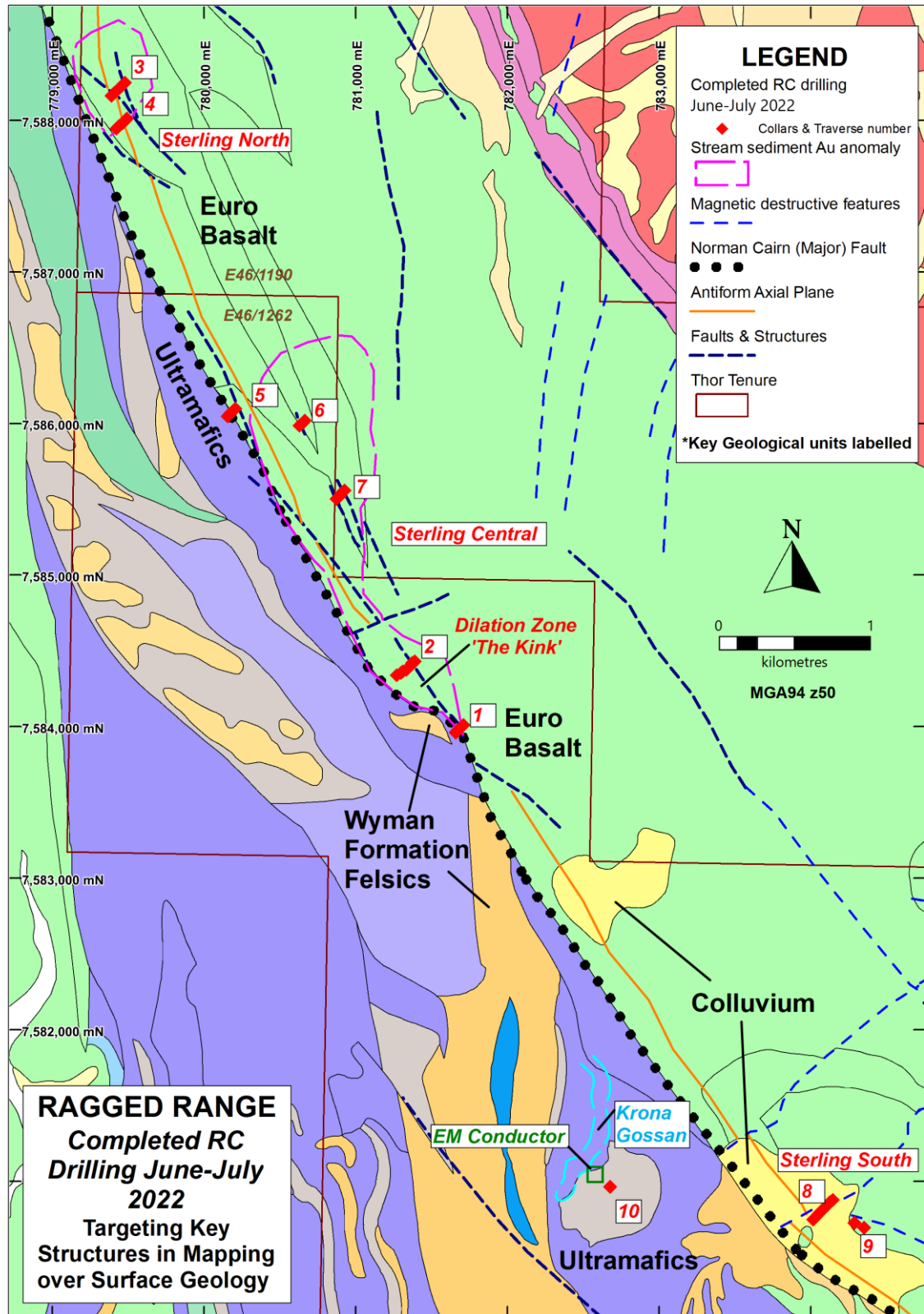
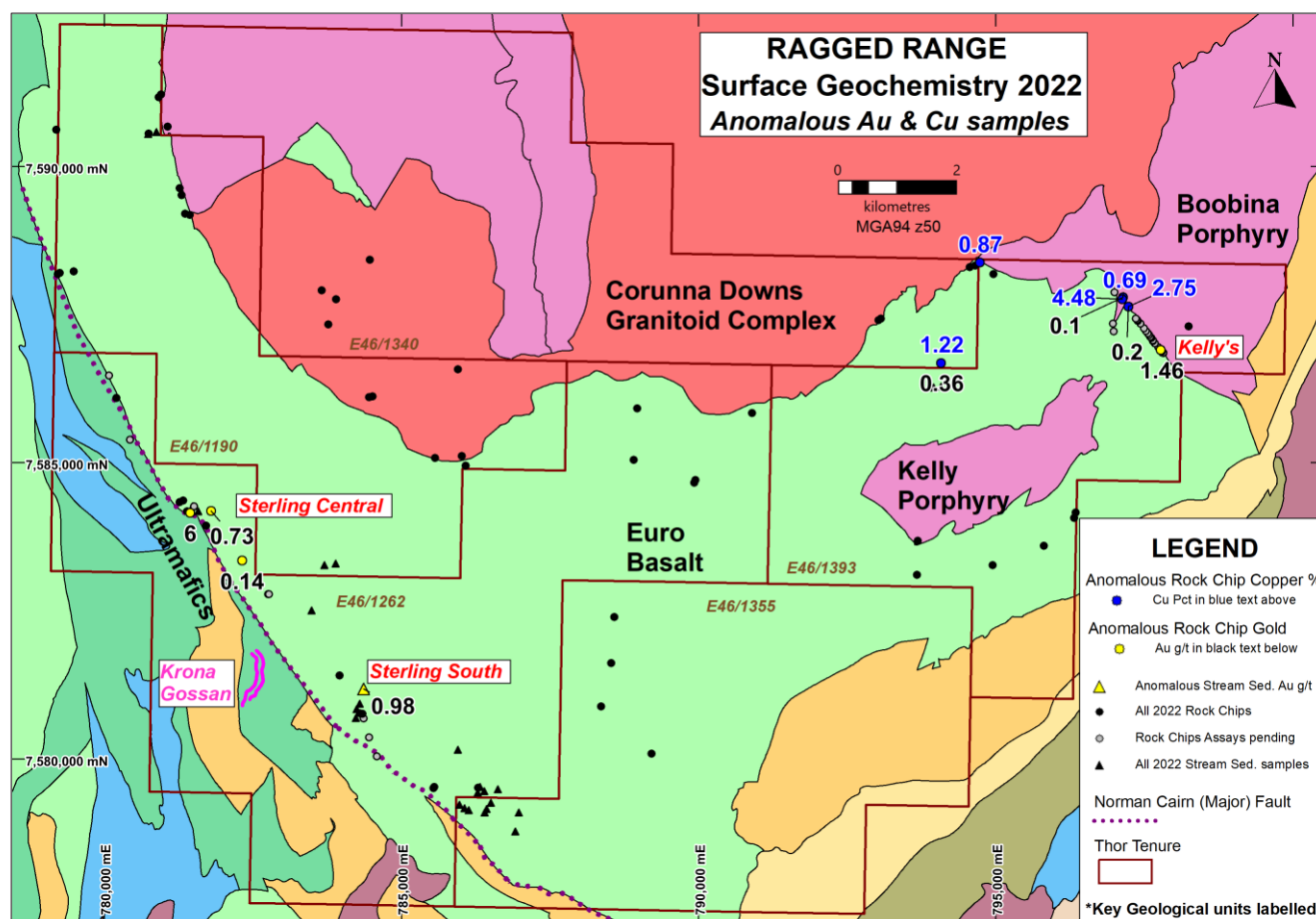


Figure 4: Sterling and Krona prospects highlighting completed RC drilling traverses

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**Figure 5:** Sampling Location Map showing the high-grade copper and gold results at Sterling and Kelly's prospects

### STERLING PROSPECT

The focus to date at the Sterling Prospect has been on the 13km gold corridor defined by stream and soil samples along the north-northwest thrust faulted contact between the Dalton Suite ultramafics and the Euro Basalt (Norman Cairn Fault). After a detailed geological and structural review of the complex folding and faulting within the ultramafics and basalts by consultant geologist Jennifer Gunter, Virga Consulting Pty Ltd, several priority areas and potential dilutional zones were highlighted, warranting ground-truthing, rock chip sampling, and follow up drill testing. Close to one of these new structural target areas (R27), a coarse stream sediment sample (ST0002) reported 0.98g/t Au with one grain of gold noted in the pan. This target was tested with five drillholes on two sections, while other targets were tested as part of the recently completed RC drilling program (ASX: THR 11 July 2022).

The 6g/t Au rock chip sample (R00053) lies within the "Kink zone": in Central Sterling, an area of complex faulting and significant dilation. This gold sample was collected within an outcropping quartz breccia vein associated with an oblique fault system to the regional Norman Cairn Fault (Figure 5).

### KELLY'S PROSPECT

The Kelly's Prospect consists of a few small, high-grade historic copper workings; these appear to be associated

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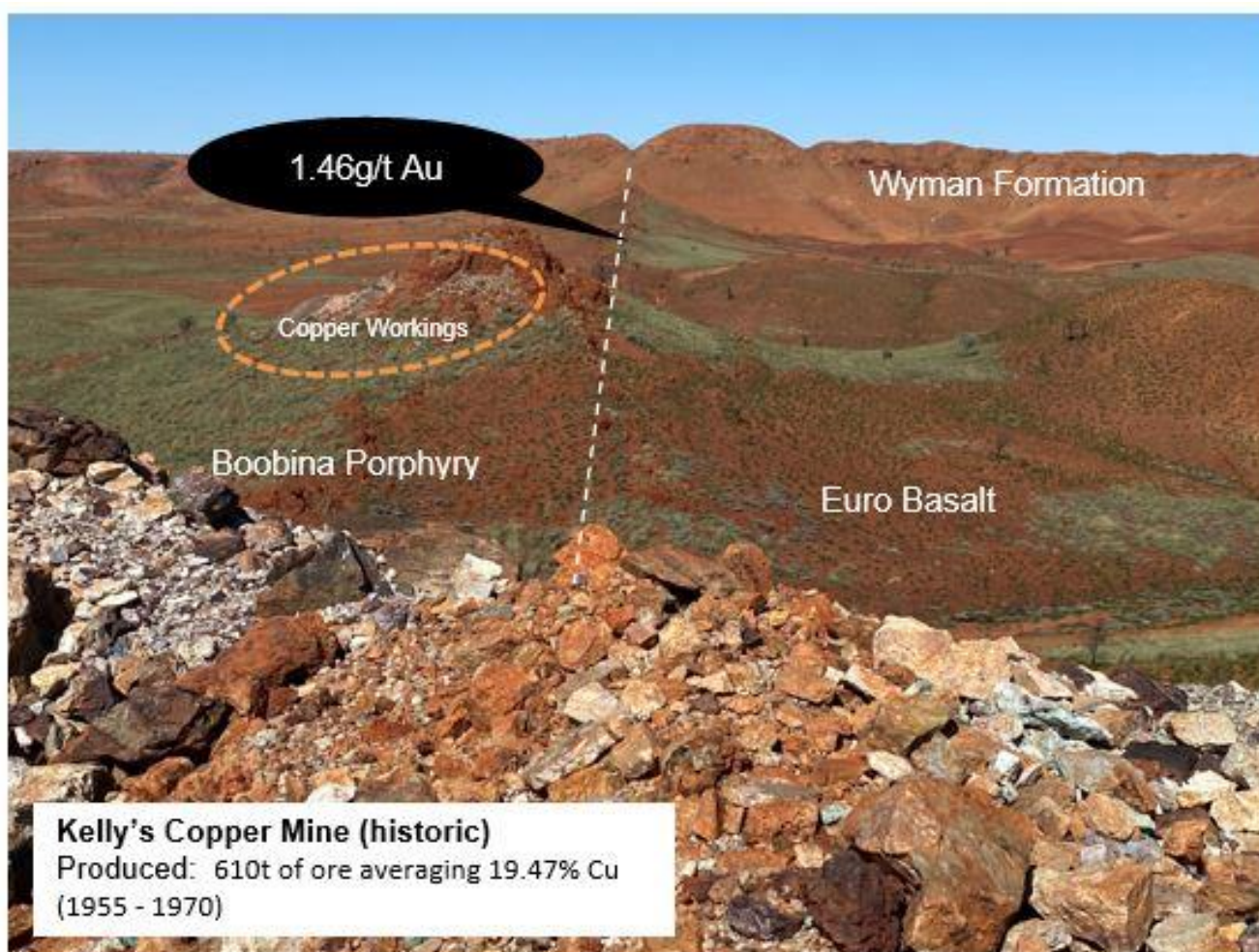


with shear zones cross-cutting the northwest trending Boobina Porphyry/Euro Basalt boundary (Figure 1 and 5).

At Kelly's Mine, historic production<sup>1</sup> between 1955-1970, although small, was of very high grade – 610t of ore averaging 19.47% Cu (Figure 5 and Photo plate 2).

Exploration to date has been sporadic, with no systematic approach over the area. Thor's sampling program to date has targeted areas along strike of known mineralisation, zones of alteration, shears/faults and zones of brecciation, including sampling along the northwest trending, 1.2km long x 25m wide ridge between Euro Basalt and Boobina Porphyry (Photo 2). Both anomalous gold (up to **1.46g/t**) and copper (up to **4.28% Cu**) have been identified.

A Heritage Survey with the Nyamal Native Title Claimant Group was completed over the Kelly's Prospect in early July in preparation for drill testing.



**Photo 2:** Kelly's Prospect looking southeast showing ridge between Boobina Porphyry and Euro Basalt

<sup>1</sup> <https://www.mindat.org/loc-122951.html>

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### Next Steps

- An airborne magnetic survey over the eastern portion of tenure to commence early August.
- Await RC drill assays, with results anticipated August/September.
- Preparation for follow up drilling of any anomalous results.
- Downhole Electromagnetic Survey (DHEM) on Krona drillhole.
- Continue regional exploration, focusing on both lithium priority areas and the copper-gold historic workings in the northeastern portion of tenure.
- Continue to review and model historic data over the Kelly's area in preparation for drill testing.
- Await the full set of rock chip sample data, especially covering the Kelly's South ridge where 1.46g/t Au was reported.

### 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 6).

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: [www.thormining.com/projects/us-uranium-and-vanadium](http://www.thormining.com/projects/us-uranium-and-vanadium).

Following on from the San Miguel County approvals on 30 March 2022, Thor has now received the Federal Bureau of Land Management (BLM) and Colorado Division of Reclamation, Mining and Safety (DRMS) approvals, completing the approval process to undertake the proposed shallow drilling program at Rim Rock, Groundhog and Section 23, shown on Figure 7 (ASX: THR 22 June 2022).

### DRILLING PROGRAM

High-grade assay results from due diligence work completed by Thor returned up to 1.25%  $U_3O_8$  and 3.47%  $V_2O_5$ , confirming uranium and vanadium mineralisation within the Salt Wash member of the Morrison Formation. This is consistent with and typical of the historical production in the Wedding Bell, Radium Mountain area of the Uravan mineral belt (Figure 7).

Following this work, three priority areas within the Colorado claims were highlighted for drill testing – Section 23, Rim Rock, and Ground Hog (Figure 7). The initial drill program comprises 15 holes drilled to an average depth of 80-100m to fully test the prospective horizon. Final drilling preparations are now underway.

**Section 23** (Figure 7) in the southeast corner of the Wedding Bell claims has been identified by Thor Mining and World Industrial Minerals LLC (US Consulting team) as the highest priority drill target in the Colorado Uranium-Vanadium Project. This area represents the only large area in the claim block with the "Salt Wash" Member precluded from historic prospecting, drilling and mine production. Proposed drillholes for this area are designed to target potential mineralisation in the third sandstone unit estimated to be within 30-40m of surface, stratigraphically, the mapped contact with the overlying upper Brushy Basin Member of the Morrison Formation.

The **Rim Rock Mine area** (Figure 7) represents a second priority drill target. The proposed drill holes are designed to straddle the ESE projection of the sampled Rim Rock Mine, whose adit opening is located immediately to the west (Photo 3). The Rim Rock Mine was the largest uranium-vanadium producer in the project area. When the adit

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area was rock chip sampled by Thor, a laterally continuous layer of vanadium mineralisation with assays was sampled:

- 0.89%  $U_3O_8$  and 1.68%  $V_2O_5$  - WR-003
- 0.14 %  $U_3O_8$  and 1.9%  $V_2O_5$  - WR-017
- 0.05%  $U_3O_8$  and 2.14%  $V_2O_5$  - WR0018

(ASX:THR Announcement 21 July 2020)

<https://www.thormining.com/sites/thormining/media/pdf/asx-announcements/20200721-high-grade-uranium-assays.colorado-field-sampling.pdf>

It is anticipated that this same layer or a stratigraphically equivalent layer of mineralisation will be intercepted by the proposed drill holes. Vanadium layers, such as this one, with relatively low uranium content (by the standards of historical uranium mining in the Uravan District), were usually ignored by the miners.

Drilling proposed at the **Groundhog Mine area** (Figure 7) is designed to test for any lateral continuation of mineralisation parallel to the east-west mineralisation mined to the south.

### Next Steps:

- Complete drilling preparations, including engaging drilling contractors.
- Drilling is anticipated to September quarter



**Photo 3:** *Uranium and Vanadium mineralisation underground at Rim Rock Prospect*

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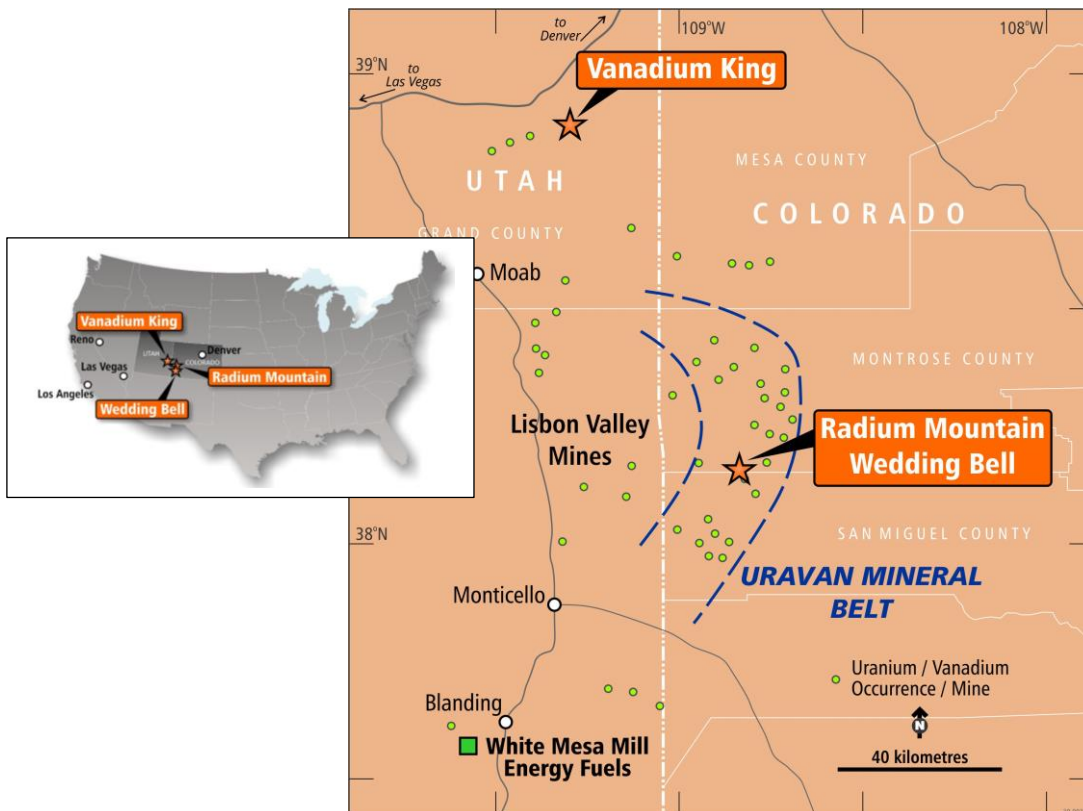


Figure 6: Location map showing projects, infrastructure and nearby White Mesa processing plant.

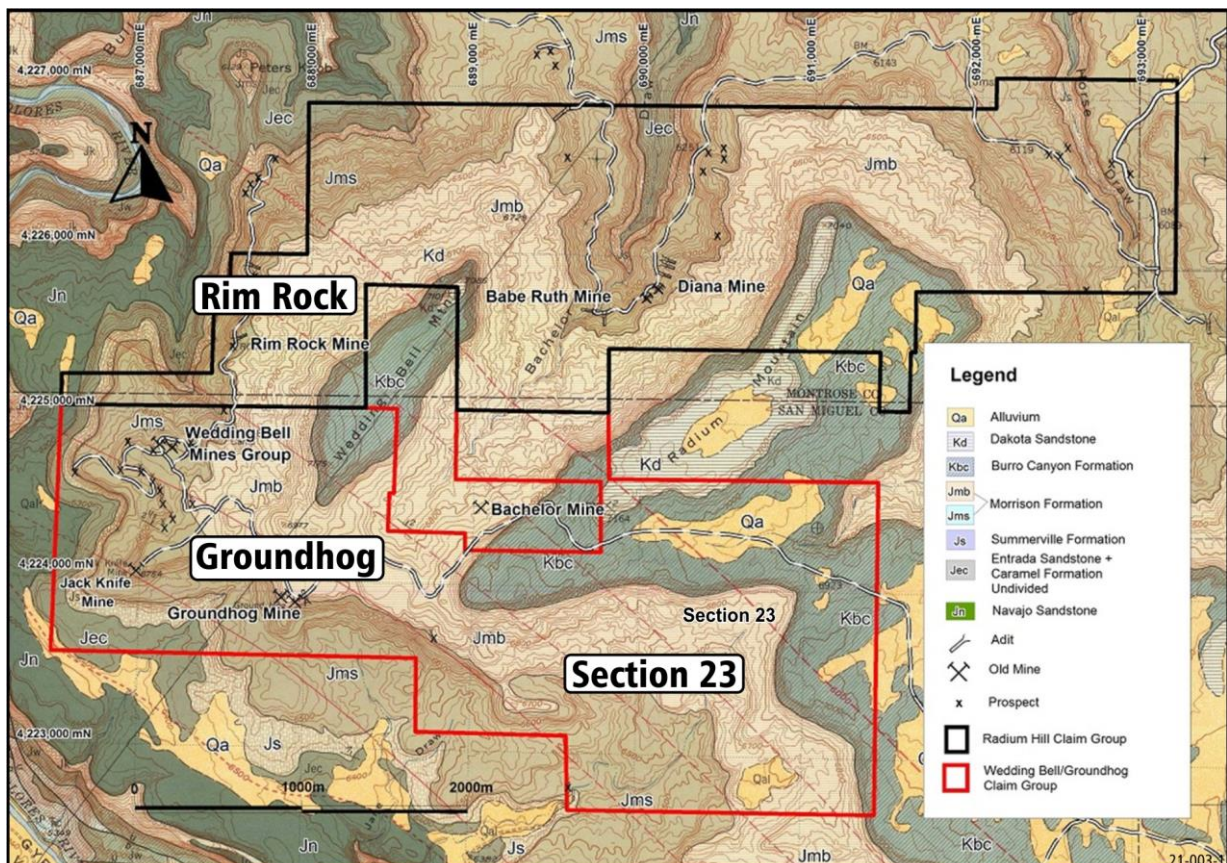
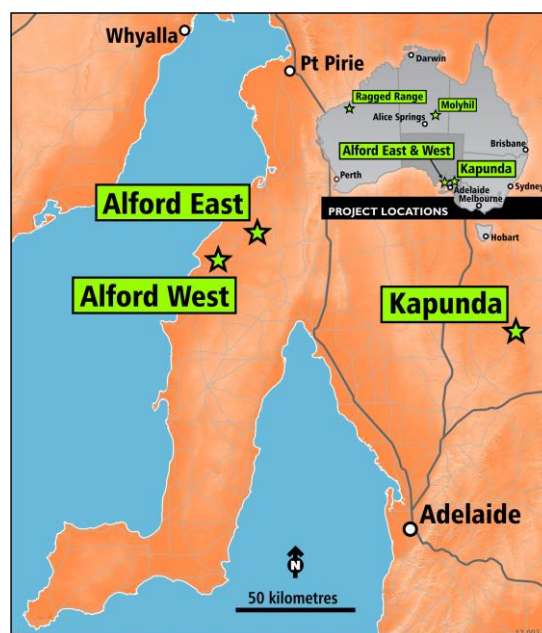


Figure 7: Map of Colorado Wedding Bell Project showing priority areas – Section 23, Groundhog and Rim Rock.

## 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 8: 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 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 (Figure 9).

Utilising historic drill hole information, Thor completed an inferred Mineral Resource Estimate (MRE), (THR: ASX 26 January 2021), consisting of:

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

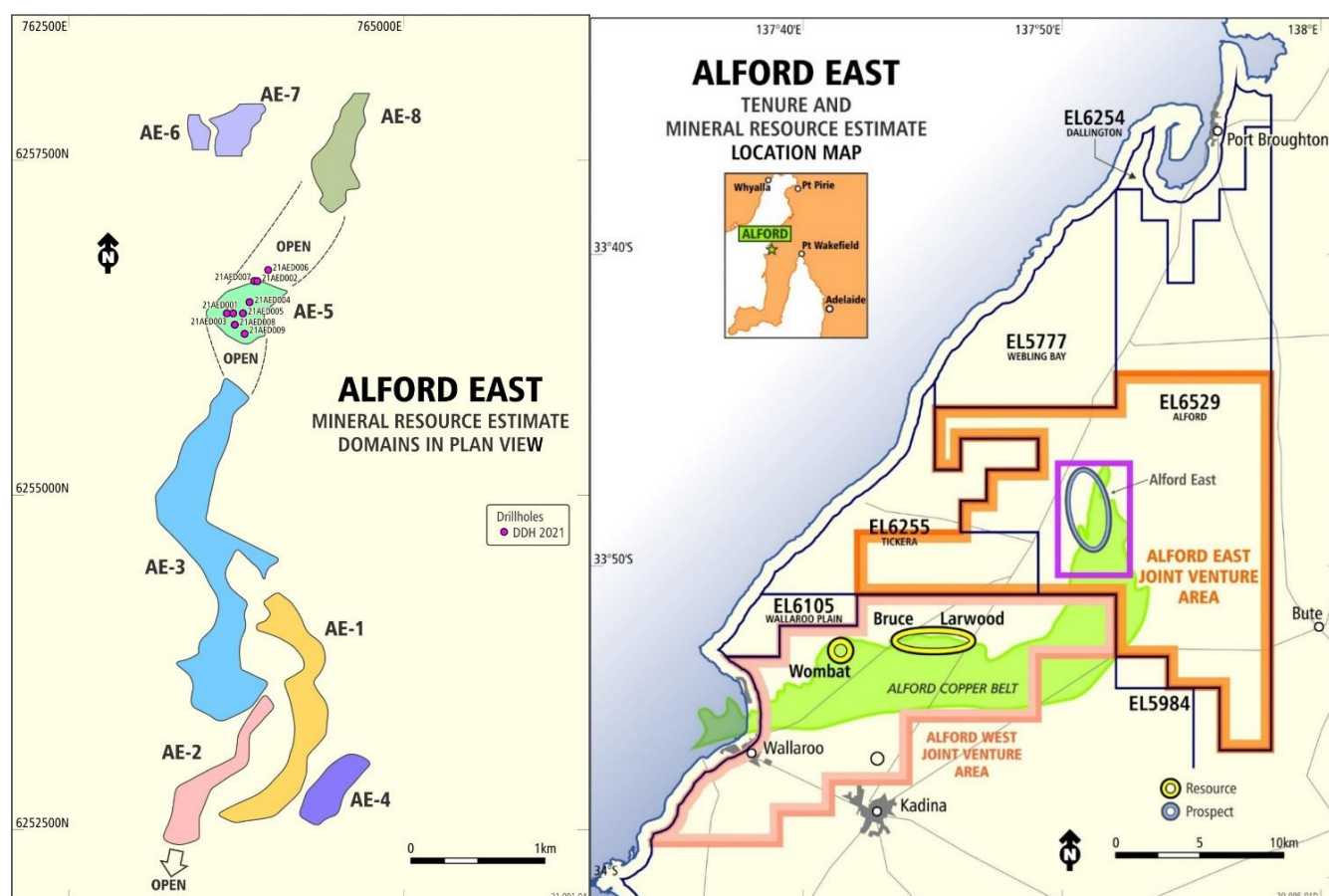
(ASX:THR Announcement 26 January 2021)

[www.thormining.com/sites/thormining/media/pdf/asx-announcements/20210127-maiden-copper.gold-estimate-alford-east-sa.pdf](http://www.thormining.com/sites/thormining/media/pdf/asx-announcements/20210127-maiden-copper.gold-estimate-alford-east-sa.pdf)

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**Figure 9:** Alford East Project showing the eight mineralised domains (Plan View) (left) and Tenement & Prospect Location Plan (right).

### Phase 2 Diamond Drilling Program

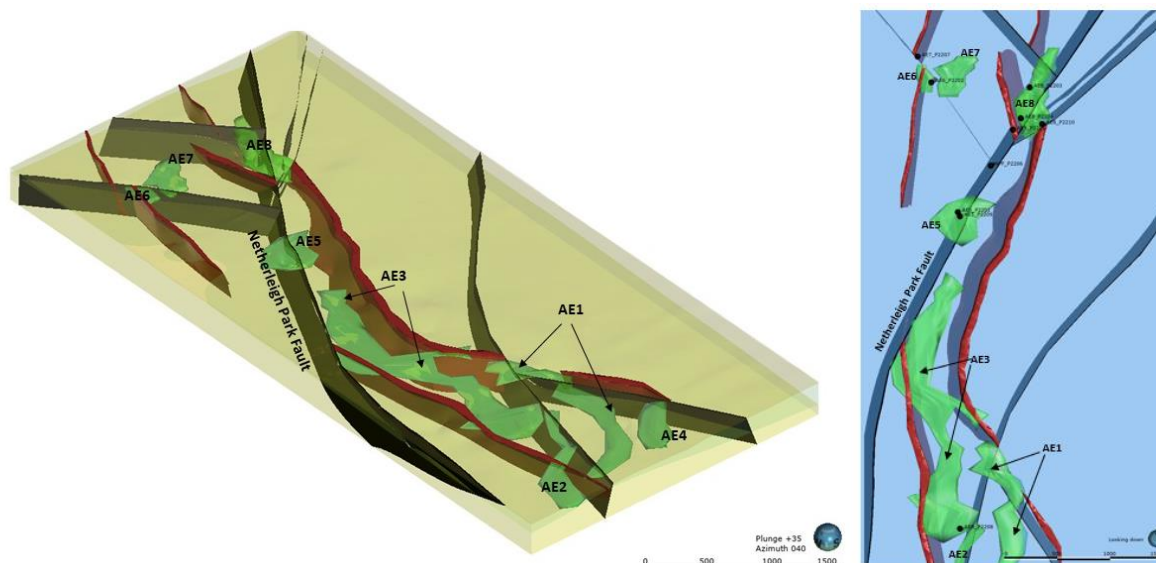
Based on the new geological model, approximately 10 diamond drill holes have been designed to test potential high-grade zones (Figure 10):

- 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 is in planning to determine aquifer connectivity between holes, with initial focus in the northern area of the mineralisation.

These drill holes including pump testing have now been approved by the South Australian Government regulators.

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



**Figure 10:** Phase two proposed drillholes, targeting potential higher-grade zones open at depth and along strike

In conjunction with the technical assessment, Thor will continue ongoing stakeholder and community engagement, as well as 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: [www.youtube.com/watch?v=eG\\_1ZGD0Wlw](http://www.youtube.com/watch?v=eG_1ZGD0Wlw)

#### 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](http://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).

## 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 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 ( $\text{CaWO}_4$ ) and molybdenite ( $\text{MoS}_2$ ) 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](http://www.thormining.com/projects).

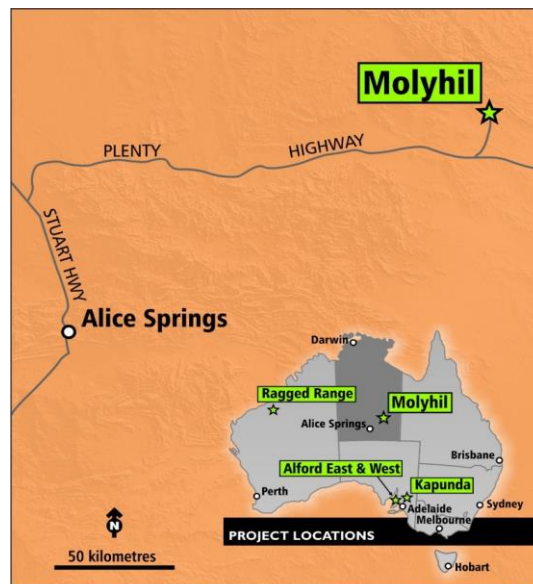


Figure 11: Molyhil project location map

### Diamond Drilling Program

Three diamond drillholes (21MHDD001 - 21MHDD003) totalling 995.4m completed in late 2021, have successfully tested and confirmed the newly identified 3D magnetic target located along strike to the south of the Molyhil Critical Minerals Project. This magnetic target represents a massive magnetite skarn hosting disseminated tungsten-molybdenum-copper mineralisation (Figure 12) (ASX:THR Announcement 28 July 2022).

Both 21MHDD002 and 21MHDD003 intercepted disseminated mineralisation, consisting of scheelite-molybdenite and chalcopyrite within massive magnetite skarn. Drillhole 21MHDD002 intercepted 46m of disseminated mineralisation, whilst 21MHDD003 intercepted two zones of disseminated mineralisation over 29m of magnetite skarn. It appears 21MHDD001 intersected the edges of the magnetite skarn drilling over the top into a granite, with negligible mineralisation (Table A, B and C).

#### 21MHDD002:

- 46m @ 0.06%  $\text{WO}_3$ , 0.05% Mo & 0.04% Cu from 249m,
- Including 11m @ 0.05%  $\text{WO}_3$ , 0.13% Mo & 0.06 % Cu from 272m

#### 21MHDD003:

- 4m @ 0.13%  $\text{WO}_3$ , 0.08% Mo & 0.06% Cu from 255m

Visible grade estimations were significantly higher than compared with assays, thus resulting in the samples being resubmitted for analysis using two different analytical techniques (Lithium Borate Fusion with ICP-MS finish and XRF Fusion), with further follow up using the coarse reject material (Photos 4 and 5). Analytical analysis of the tungsten and molybdenum is significantly impacted by the coarse nature of the scheelite crystals in half core, combined with the malleable nature of the molybdenite when pulverised; hence sample size is critical to the representivity of assay grades (bulk sampling is optimal for scheelite).

Further work on the tungsten - molybdenum - copper relationship and grade distribution is warranted.

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: [www.resourcingtheterritory.nt.gov.au/about/gdc](http://www.resourcingtheterritory.nt.gov.au/about/gdc).

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



**Photo 4:** 21MHDD02- 282-283m (282.4m) - 1m @ 0.02% WO<sub>3</sub>, 0.23% Mo & 0.07% Cu - coarse grained visible molybdenite in magnetite skarn

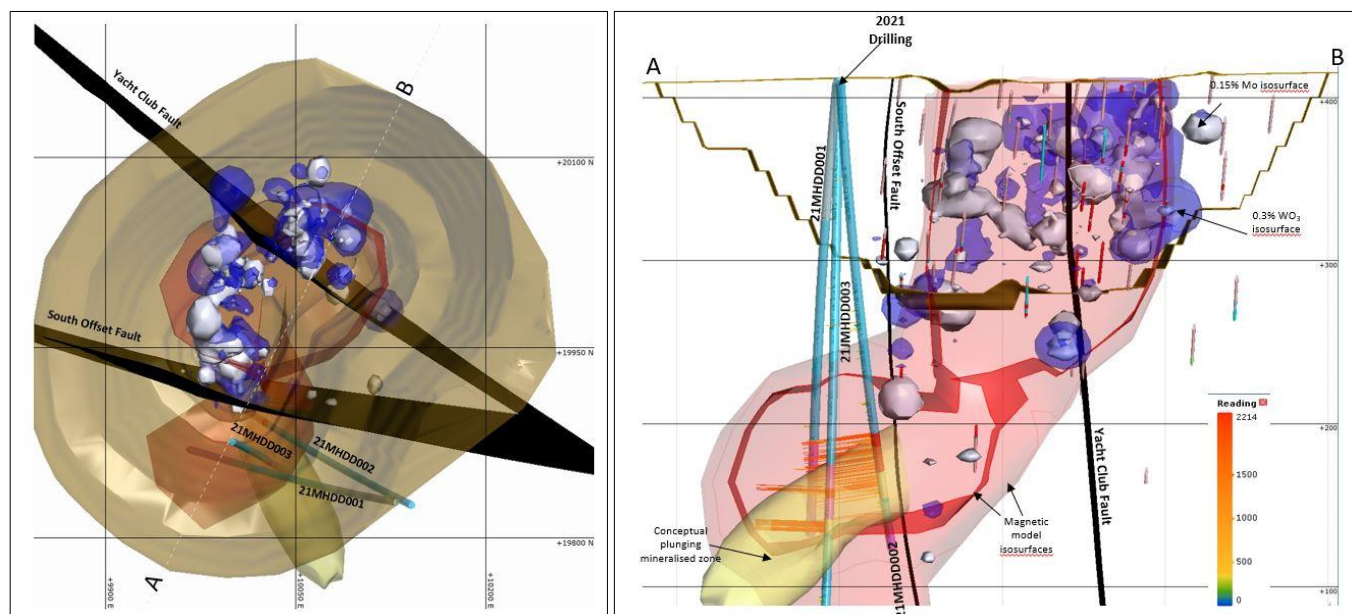


**Photo 5:** 21MHDD002: 293-294m (293.8m) - 1m @ 0.03% WO<sub>3</sub>, 0.04% Mo and 0.06% Cu – significant visible molybdenite and chalcopyrite visible throughout intercept, contrasting to assays

# QUARTERLY ACTIVITIES REPORT

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**Figure 12 (left):** 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 12 (right):** 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.

**Table A:** Drill Hole Collar Summary

DRILLHOLE	EASTING	NORTHING	ELEVATION	AZIMUTH	DIP	End of Hole
21MHDD001	577207	7482773	409	262	60	324.5
21MHDD002	577220	7482774	409	278	60	334.2
21MHDD003	577069	7482780	412	082	87	336.7

Coordinates in GDA 94 Zone 53

**Table B:** Geology

DRILLHOLE	GEOLOGY	FROM (M)	TO (M)	DOWNHOLE INTERCEPT (M)
21MHDD001	Calc-Silicate	159.1	255.8	96.7
21MHDD002	Magnetite Skarn	249	297	48
21MHDD003	Magnetite Skarn	255	259	4
21MHDD003	Magnetite Skarn	274.5	283.5	9

# QUARTERLY ACTIVITIES REPORT

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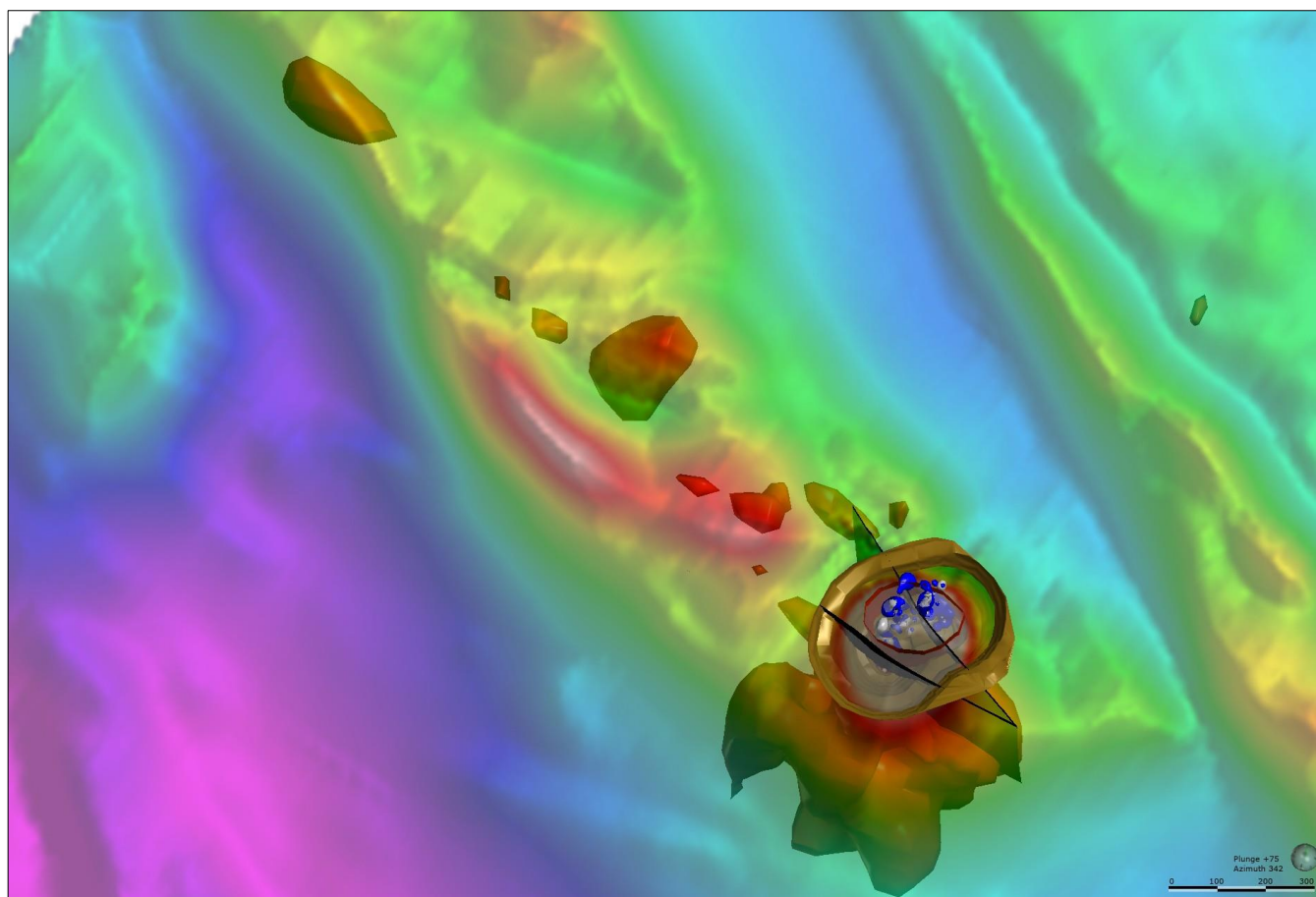
**Table C: Drill Intercepts – 21MHDD002 and MHDD03**

DRILLHOLE	FROM (M)	TO (M)	Intercept (M)	Lithium Borate Fusion with ICP-AES/MS			XRF Fusion		
				(LB102/ MA101/102)			(XF300)		
				WO <sub>3</sub> %	Mo %	Cu %	WO <sub>3</sub> %	Mo %	Cu %
21MHDD002	249	295	46	0.06	0.05	0.04	0.06	0.04	0.04
<i>Including</i>	272	283	11	0.05	0.13	0.06	0.05	0.12	0.05
21MHDD003	255	259	4	0.13	0.08	0.06	0.13	0.10	0.05

## NEXT STEP:

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.

This 3D modelling has identified further high priority targets for drill testing along strike (Figure 13).



**Figure 13:** 3D modelling of magnetics (transparent red) highlights Molyhil deposit and the recently drilled southeast plunging extension, plus drill targets along strike.

## QUARTERLY ACTIVITIES REPORT

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### 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 14). 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](http://www.thormining.com/projects).

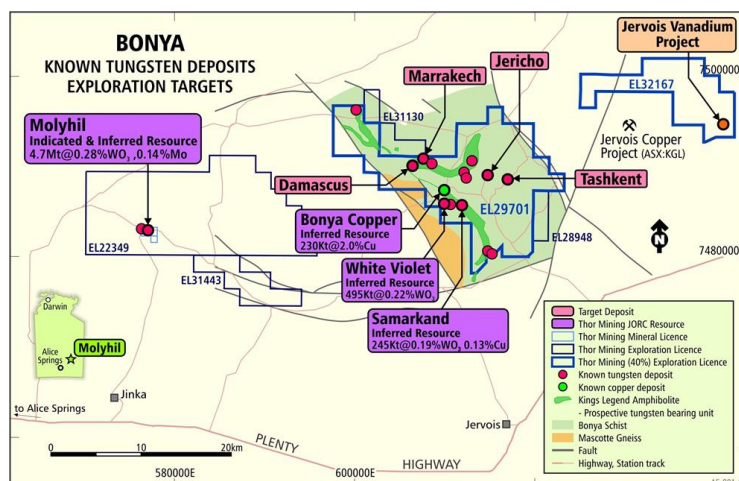


Figure 14: Molyhil Project location showing adjacent Bonya tenement

### CORPORATE, FINANCE, AND CASH MOVEMENTS

Mark Potter, Non-Executive Chair, resigned from the Board on 30 June 2022, with Alastair Clayton taking on the position of interim Non-Executive Chair.

Net cash outflows from Operating and Investing activities for the quarter were \$718,000 which included expenditure of \$556,000 directly related to exploration activities.

Providing an ending cash balance of \$2,069,000.

In addition, Thor continues to hold 48,118,920 Power Metal Resources plc (AIM: POW) Shares which are released from a trading restriction at the rate of 25% each quarter, with the second release on 31 July 2022. The market value of the POW shares currently held is £445,000 (approximately \$774,000) based on the closing price of the POW Shares as traded on the London Stock Exchange on 27 July 2022.

Cashflows for the quarter include related party payments of \$111,000 to Directors, comprising the Managing Director's salary, and Non-Executive Directors' fees.

Yours faithfully,

THOR MINING PLC  
Nicole Galloway Warland  
Managing Director

## QUARTERLY ACTIVITIES REPORT

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### 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 [www.thormining.com](http://www.thormining.com), which includes a facility to register to receive these updates by email, and on the Company's twitter page [@ThorMining](https://twitter.com/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.

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.

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>

### Notes

<sup>1</sup> [www.thormining.com/sites/thormining/media/pdf/asx-announcements/20210127-maiden-copper.gold-estimate-alford-east-sa.pdf](http://www.thormining.com/sites/thormining/media/pdf/asx-announcements/20210127-maiden-copper.gold-estimate-alford-east-sa.pdf)

<sup>2</sup> [www.thormining.com/sites/thormining/media/pdf/asx-announcements/20172018/20180222-clarification-kapunda-copper-resource-estimate.pdf](http://www.thormining.com/sites/thormining/media/pdf/asx-announcements/20172018/20180222-clarification-kapunda-copper-resource-estimate.pdf)

<sup>3</sup> [www.thormining.com/sites/thormining/media/aim-report/20190815-initial-copper-resource-estimate---moonta-project---rns---london-stock-exchange.pdf](http://www.thormining.com/sites/thormining/media/aim-report/20190815-initial-copper-resource-estimate---moonta-project---rns---london-stock-exchange.pdf)

<sup>4</sup> [www.thormining.com/sites/thormining/media/pdf/asx-announcements/20210408-molyhil-mineral-resource-estimate-updated.pdf](http://www.thormining.com/sites/thormining/media/pdf/asx-announcements/20210408-molyhil-mineral-resource-estimate-updated.pdf)

<sup>5</sup> [www.thormining.com/sites/thormining/media/pdf/asx-announcements/20200129-mineral-resource-estimates---bonya-tungsten--copper.pdf](http://www.thormining.com/sites/thormining/media/pdf/asx-announcements/20200129-mineral-resource-estimates---bonya-tungsten--copper.pdf)

## QUARTERLY ACTIVITIES REPORT

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### TENEMENT SCHEDULE

At 30 June 2022, the consolidated entity holds an interest in the following Australian tenements:

Project	Tenement	Area kms <sup>2</sup>	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%

## QUARTERLY ACTIVITIES REPORT

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At 30 June 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
Platoro	Desert Scheelite	NT #55 - 64	45 blocks (611ha or 1,510 acres)	Pilot Metals Inc	100%
	Garnet	NT #9 - 18			
	Gunmetal	NT #19 - 22, 6, 7			
	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 30 June 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")

30 JUNE 2022

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
<b>1.</b>	<b>Cash flows from operating activities</b>		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation	-	(48)
	(b) development		
	(c) production		
	(d) staff costs	(43)	(152)
	(e) administration and corporate costs	(117)	(1,017)
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	51	110
<b>1.9</b>	<b>Net cash from / (used in) operating activities</b>	<b>(109)</b>	<b>(1,109)</b>

<b>2.</b>	<b>Cash flows from investing activities</b>		
2.1	Payments to acquire or for:		
	(a) entities		
	(b) tenements		
	(c) property, plant and equipment	(88)	(104)
	(d) exploration & evaluation	(556)	(3,164)
	(e) equity accounted investments		
	(f) other non-current assets (bonds)	(43)	(43)

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (12 months) \$A'000</b>
2.2	Proceeds from the disposal of:		
	(a) entities	-	246
	(b) tenements		
	(c) property, plant and equipment		
	(d) investments	-	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)	78	406
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>(609)</b>	<b>(2,557)</b>

<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	4,261
3.2	Proceeds from issue of convertible debt securities		
3.3	Proceeds from exercise of options	-	223
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)		
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>-</b>	<b>4,345</b>

<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	2,780	1,442
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(109)	(1,109)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(609)	(2,557)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	4,345

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (12 months) \$A'000</b>
4.5	Effect of movement in exchange rates on cash held	7	(52)
4.6	<b>Cash and cash equivalents at end of period</b>	<b>2,069</b>	<b>2,069</b>

<b>5. Reconciliation of cash and cash equivalents</b> at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	<b>Current quarter \$A'000</b>	<b>Previous quarter \$A'000</b>
5.1 Bank balances	2,069	2,780
5.2 Call deposits		
5.3 Bank overdrafts		
5.4 Other (provide details)		
5.5 <b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>2,069</b>	<b>2,780</b>

<b>6. Payments to related parties of the entity and their associates</b>	<b>Current quarter \$A'000</b>
6.1 Aggregate amount of payments to related parties and their associates included in item 1	111
6.2 Aggregate amount of payments to related parties and their associates included in item 2	
<p><i>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.</i></p> <p>The amount at item 6.1 above represents fees paid to Non-Executive Directors, and remuneration paid to the Managing Director.</p>	

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

<b>7.</b>	<b>Financing facilities</b> <i>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.</i>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
7.1	Loan facilities		
7.2	Credit standby arrangements		
7.3	Other (please specify)		
7.4	<b>Total financing facilities</b>		
7.5	<b>Unused financing facilities available at quarter end</b>		
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.		

<b>8.</b>	<b>Estimated cash available for future operating activities</b>	<b>\$A'000</b>
8.1	Net cash from / (used in) operating activities (item 1.9)	(109)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(556)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(665)
8.4	Cash and cash equivalents at quarter end (item 4.6)	2,069
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	2,069
8.7	<b>Estimated quarters of funding available (item 8.6 divided by item 8.3)</b>	3.1
<i>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.</i>		
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:		
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:		

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:

*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: ..29 July 2022.....

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.