

ASX Code: "THR"



23 June 2021

THOR MINING PLC

Registered Numbers:
United Kingdom 05276 414
Australia 121 117 673

Registered Office:
58 Galway Avenue
MARLESTON, SA, 5035
Australia

Ph: +61 8 7324 1935
Fx: +61 8 8351 5169

Email:
corporate@thormining.com

Website:
www.thormining.com

Twitter
[@ThorMining](https://twitter.com/ThorMining)

Enquiries:
Nicole Galloway Warland
Managing Director
Thor Mining PLC
+61 8 7324 1935

Nominated Advisor
Jessica Cave
WH Ireland Ltd
+44 (0) 20 7220 1666

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

Directors:
Michael Billing
Nicole Galloway Warland
Mark Potter
Mark McGeough

Key Projects:

- **Gold**
Ragged Range Pilbara WA
- **Copper**
Alford East SA
- **Uranium / Vanadium**
Colorado / Utah USA
- **Tungsten**
Molyhil NT
Pilot Mountain USA

Company Announcements Office

**ASX Securities Limited,
20, Bridge Street,
Sydney, N.S.W. 2000**

**Ragged Range Project, WA
Exploration Update**

The directors of Thor Mining Plc ("Thor") (AIM, ASX: THR, OTCQB: THORF) are pleased to provide an exploration update on the Company's 100% owned Ragged Range Project, located in Eastern Pilbara, Western Australia including the first soil results from two reconnaissance soil surveys, at the Sterling Prospect.

Project highlights:

- Gold in soil anomalism defined over 1.2km strike length (6 soil lines) and is open to the south and north in the central area of the Sterling Prospect, close to the Euro Basalt and Dalton Suite ultramafic contact.
- Up to 114ppb Au in soil samples in the central area of the Sterling Prospect. **This is well above background and considered highly significant.**
- **Thor Mining awarded A\$160,000** from the Western Australia Government under the Government EIS Co-funded grants program, to drill test stream and soil gold anomalies at Sterling Prospect.
- New tenement application E46/1393 covering recently surrendered mining lease, containing numerous historic copper-gold workings associated with the Boolina porphyry close to the Corunna Down Batholith. **Historic production¹ between 1955-1970 although small was of very high grade – 610t of ore averaging 19.47% copper.**
- Infill soils and geochemical data analyses continuing, with field mapping and regional soil and stream sampling program scheduled to commence shortly over priority targets within the anomalous 13km gold trend to further delineate coherent gold trends prior to and concurrent with drill testing at the Sterling Prospect.
- Further geophysics is being assessed across the Ragged Range tenement package to generate additional gold, copper and nickel exploration targets.

Nicole Galloway Warland, Managing Director of Thor Mining, commented:

"These latest results are very promising for Thor as the gold anomalism in soils supports the stream sediment results, with gold clusters and trends forming in the Sterling Prospect. This confirms the significant exploration potential for a quality gold discovery at Ragged Range.

An old track into the prospect area is currently being upgraded to allow for the exploration teams to work independently without having to rely on helicopter support. This will speed up Thor's field work and allow follow up soil sampling to be completed quickly and will also allow access for a drilling rig.

We look forward to providing further updates on our continued progress."

ASX Code: "THR"



23 June 2021

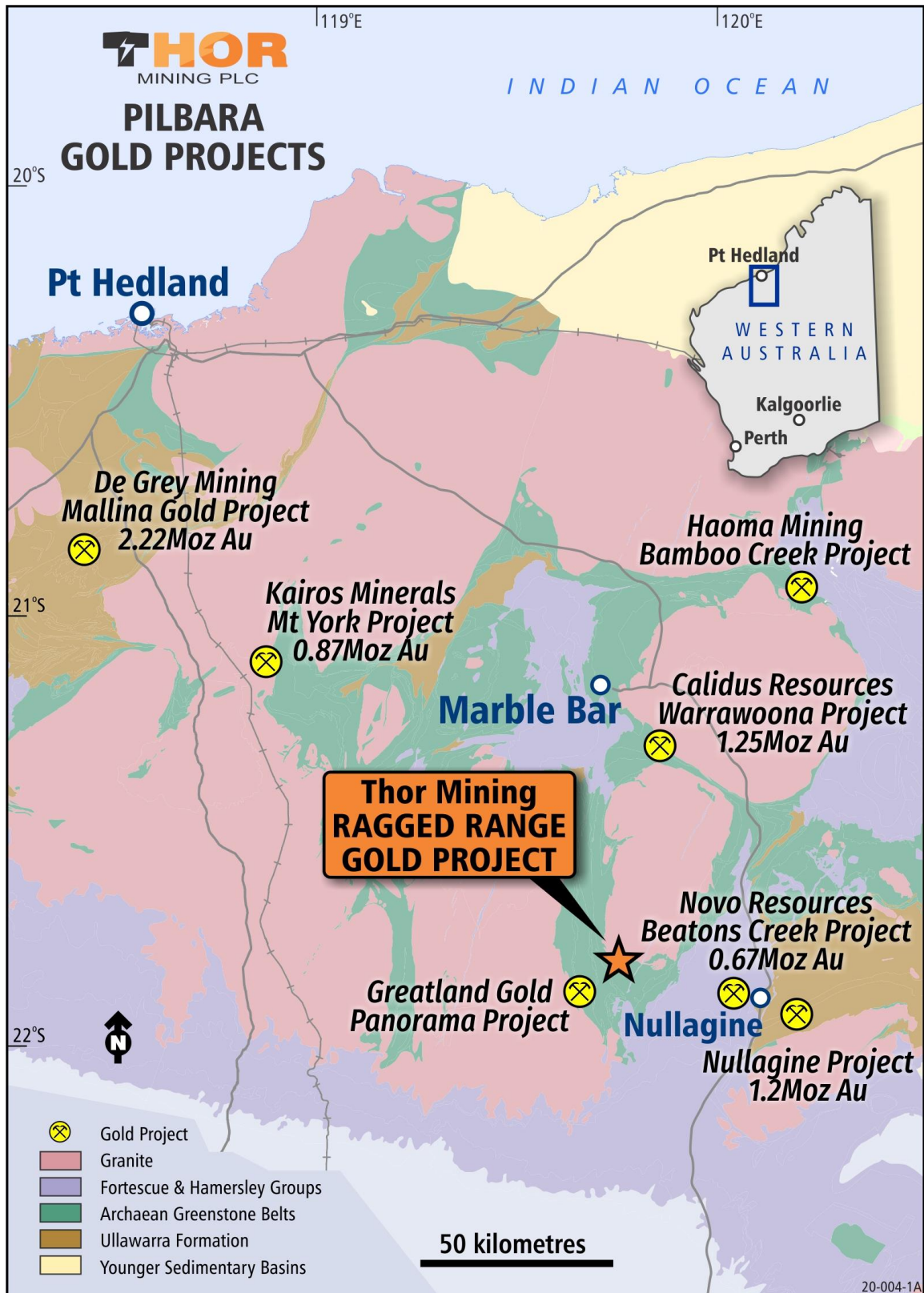


Figure 1: Tenement & Prospect Location Plan

ASX Code: “THR”



23 June 2021

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) with the recent additional tenure surrounding the gold anomalous zones, E46/1393 (application), Figure 1.

Sterling Prospect

As a follow-up to high-grade gold stream results reported from sampling in 2019 and 2020 (THR:ASX announcement 1/12/2020), Thor completed a 392-sample soil program, over two areas of the Sterling Prospect; Sterling Central and Sterling South (Figure 2 & 4).

<https://www.thormining.com/sites/thormining/media/pdf/asx-announcements/20201201-high-grade-gold-in-stream-sediment-ragged-range.pdf>

The samples were collected from a thin residual soil overlying the Euro Basalt and extending westward over the ultramafic Dalton Suite contact. Samples were spaced at 50m along traverses spaced 200m apart. This spacing was designed as a first pass, with potential infill around areas of evaluated results. The typical terrain is shown on the photograph - Figure 3.

At each sample site, two samples were collected and both sieved to -2mm. The first sample of approximately 2kg was crushed at the Intertek lab in Perth and a sub-split assayed for Au by an aqua regia method AR25 and multi-element assaying by four acid digest with MS25 finish.

The 1kg Bulk Leach Extractable Gold (BLEG) sample was assayed by method CN1000 for gold only.

One orientation line was completed with an additional -80 mesh soil sample collected, duplicating one soil line. The -80 mesh results reported are consistent with the -2mm sampling method along the same line. Blanks and other representative standards were inserted for QA/QC.

Soil Results

The Au BLEG results report a background around 2- 3ppb Au with sample values up to a maximum of 114.23ppb Au. This range is very similar to the previous stream sediment sampling in the area. The BLEG results are shown for the; Sterling Central and Sterling South, on Figures 4. In Sterling Central one zone of gold anomalism can be traced for 1.2km on six lines (see Figure 4). The strike of this anomalism is oblique to the Euro Basalt and Dalton Suite contact and suggests that gold mineralisation is controlled by minor faults and structures, in this area.

It should be noted that BLEG assaying is a partial digest method whereby gold is extracted, using cyanide over a 24-hour period. This is in contrast to a complete digest assaying method such as fire assaying where all the sample is digested and the total gold value is reported. BLEG values that report above background are considered significant and will show trends of surface gold anomalism. BLEG values that are over five times background (above 15ppb Au) are considered highly significant.

Significant results summaries in Table A.

ASX Code: "THR"



23 June 2021

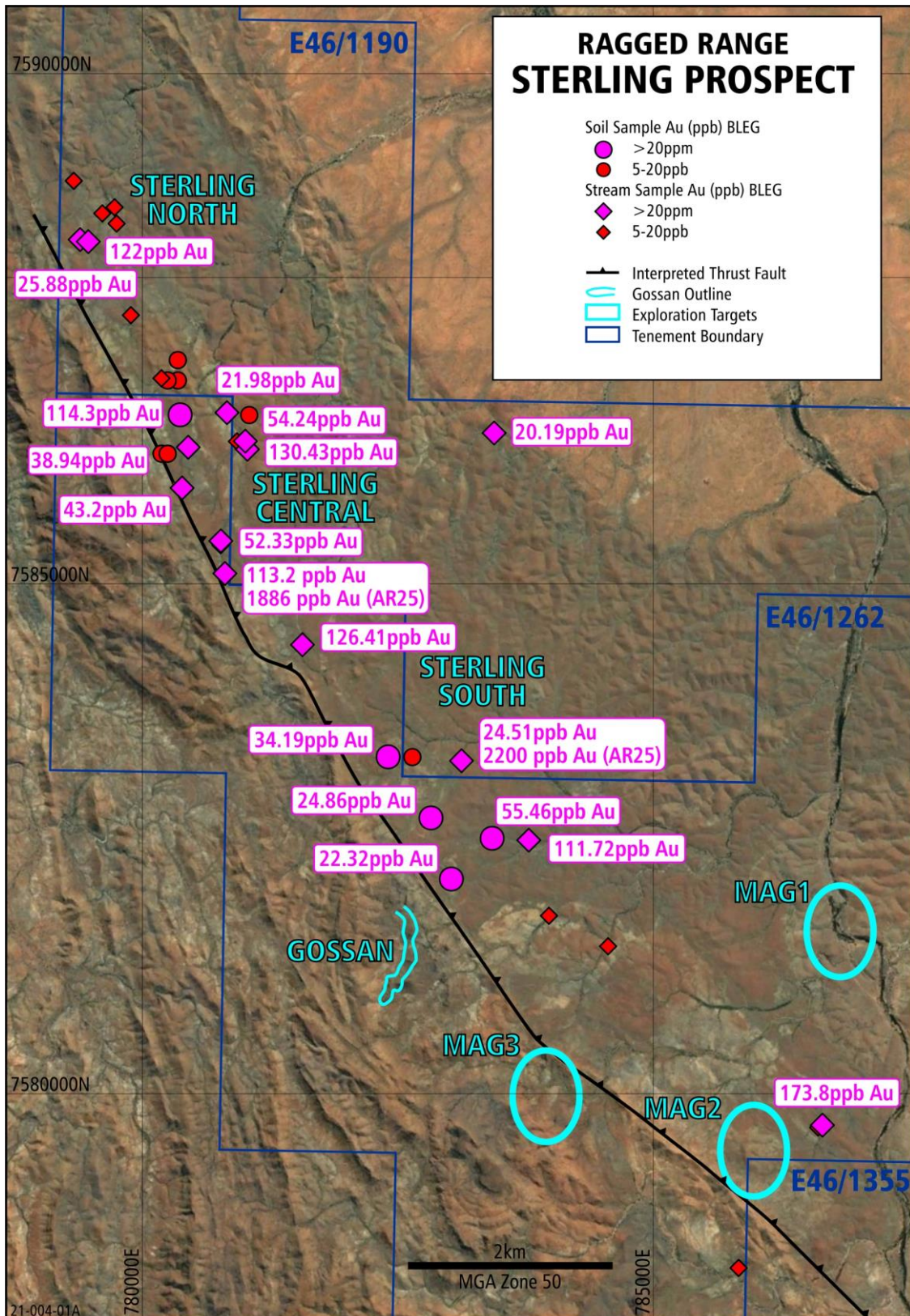


Figure 2: Sterling Prospect – showing anomalous gold clusters in streams and soils.

ASX Code: "THR"



23 June 2021



Figure 3: View of Euro Basalt topography and thin residual soil

Table A: Significant Soil Samples (Above 6ppb)

Sample ID	Easting	Northing	Tenement	Au ppb (BLEG)
21RRS 7F	783000	7582102	E46/1262	22.32
21RRS 55F	783400	7582500	E46/1262	55.46
21RRS 91F	782800	7582695	E46/1262	24.86
21RRS-181	782650	7583300	E46/1190	8.16
21RRS-186	782400	7583300	E46/1262	34.19
21RRS-205	780350	7587200	E46/1190	6.51
21RRS-226	780250	7587000	E46/1190	8.9
21RRS-228	780350	7587000	E46/1190	5.48
21RRS-266	780350	7586650	E46/1262	114.23
21RRS-280	781050	7586650	E46/1190	6.4
21RRS-314	780200	7586275	E46/1262	17.44
21RRS-315	780250	7586275	E46/1262	12.1

MGA94 Zone 50 (GDA)

ASX Code: "THR"



23 June 2021

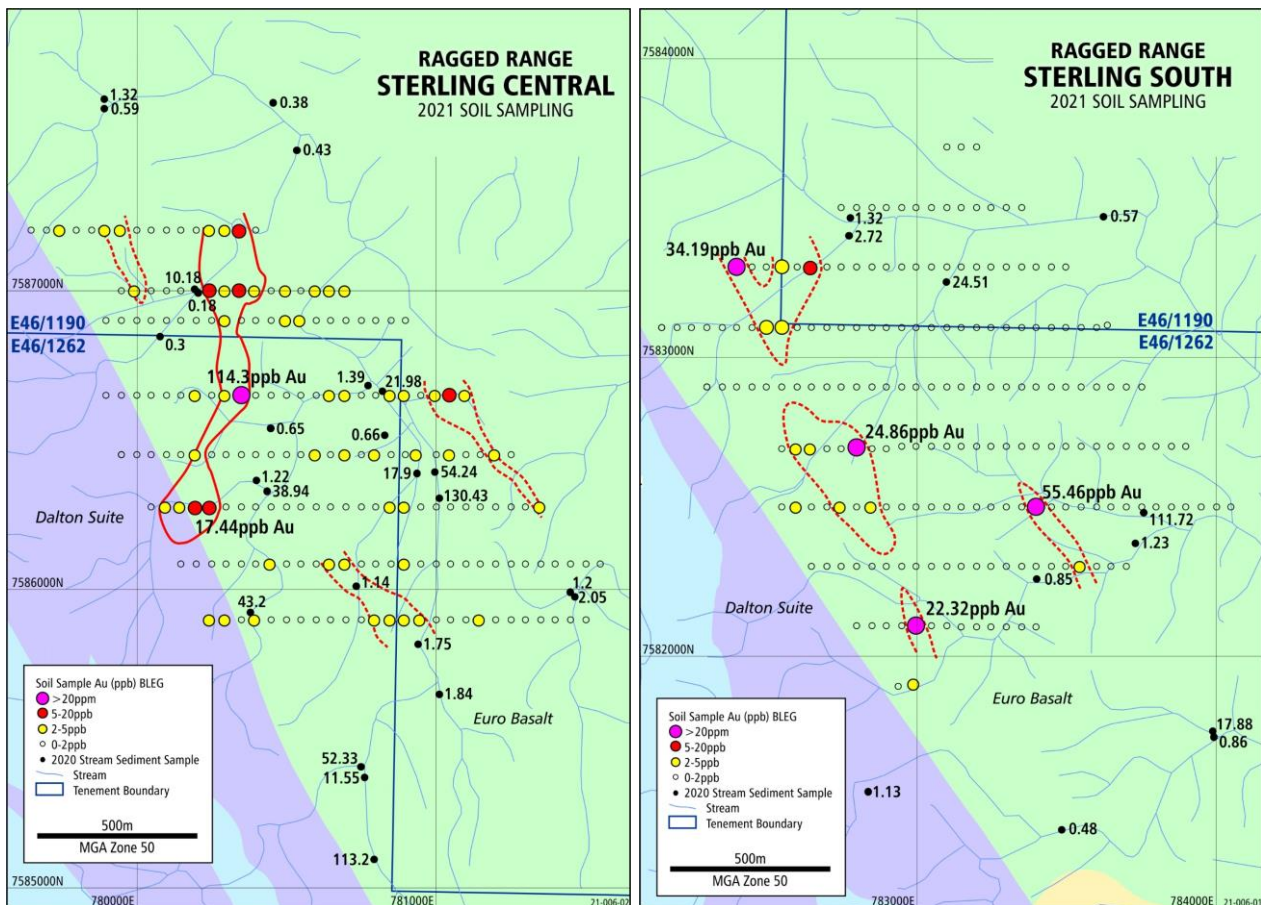


Figure 4: Central Area Soil Sampling Results (left) and Southern Area Soil Sampling Results

Nickel Gossan

Geological mapping of the nickel gossan which was previously sampled in mid-2020 (THR: ASX announcement 31/7/20) confirmed that the gossan extends over 1km and sits at the base of the Dalton Suite (ultramafic units) adjacent to the older felsic volcanics of the Wyman Formation (Figure 6). This position of the gossan at the base of the ultramafic contact is significant from a geological nickel-sulphide model perspective.

Prior to drill testing beneath the gossan, a ground electromagnetic (EM) survey will be undertaken. Thor is currently finalising this program.

<https://www.thormining.com/sites/thormining/media/pdf/asx-announcements/20200826-pilbara-goldfields-encouraging-nickel-assay-results.pdf>

ASX Code: "THR"



23 June 2021

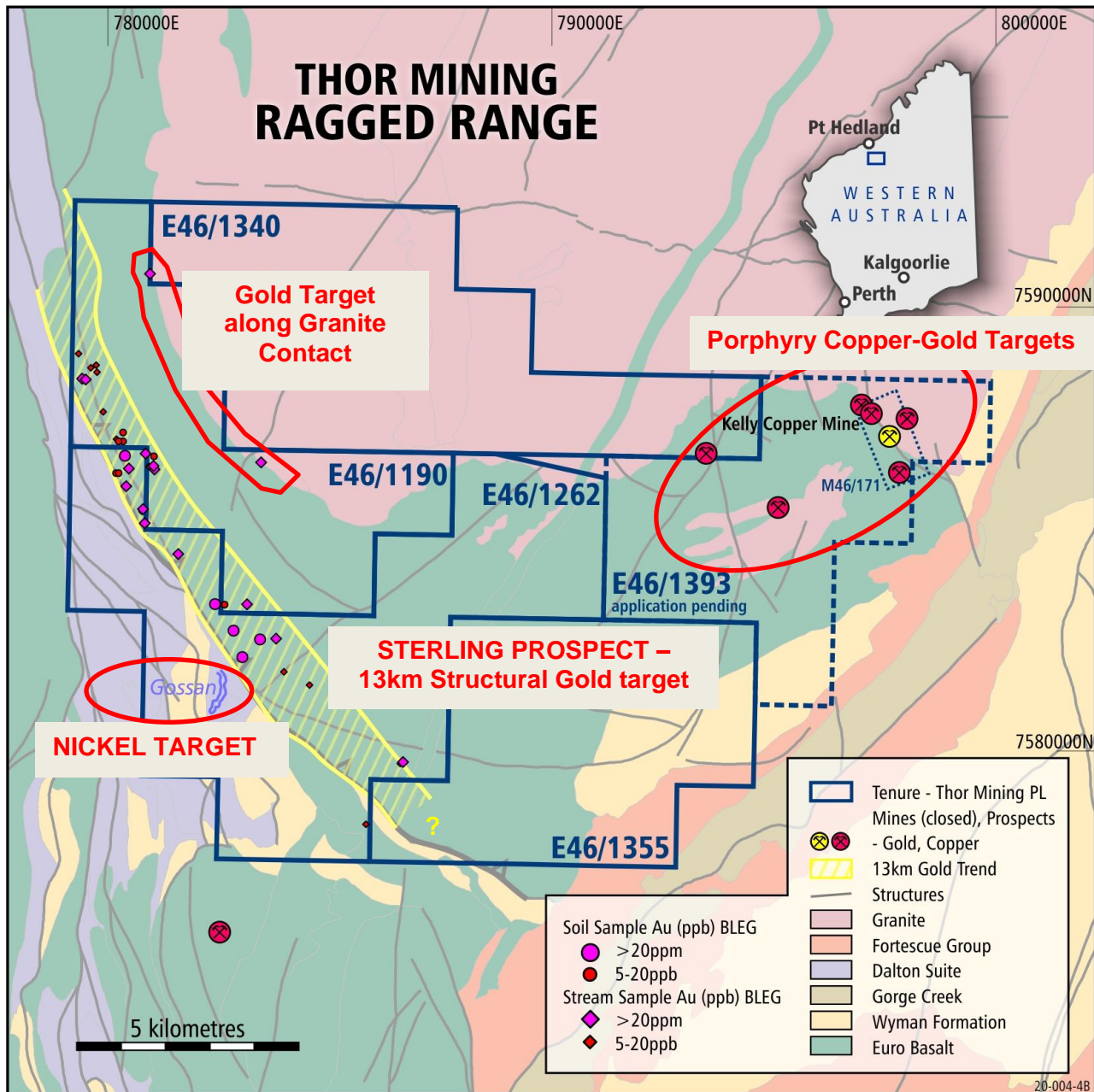


Figure 6: Ragged Range Project highlighting areas of exploration Focus

E46/1393- Kelly/Ryan Copper- Gold Prospects

A new tenement application E46/1393 in the northeast covers recently surrender mining lease M46/171 (Figure 6). This area covers several history copper-gold and copper-base metals mines and prospects. The copper mineralization is associated with the dacite Boolina porphyry, close to the margin of the Corunna batholith, and intrudes the Kelly greenstone belt.

ASX Code: “THR”



23 June 2021

At Kelly’s Mine, historic production¹ between 1955-1970 although small was of very high grade – 610t of ore averaging 19.47%Cu (Figure 7).

Exploration to date has been sporadic, with no systematic approach over the area. Thor will be targeting areas of mineralisation, zones of alteration, shears/faults and zones of brecciation.

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

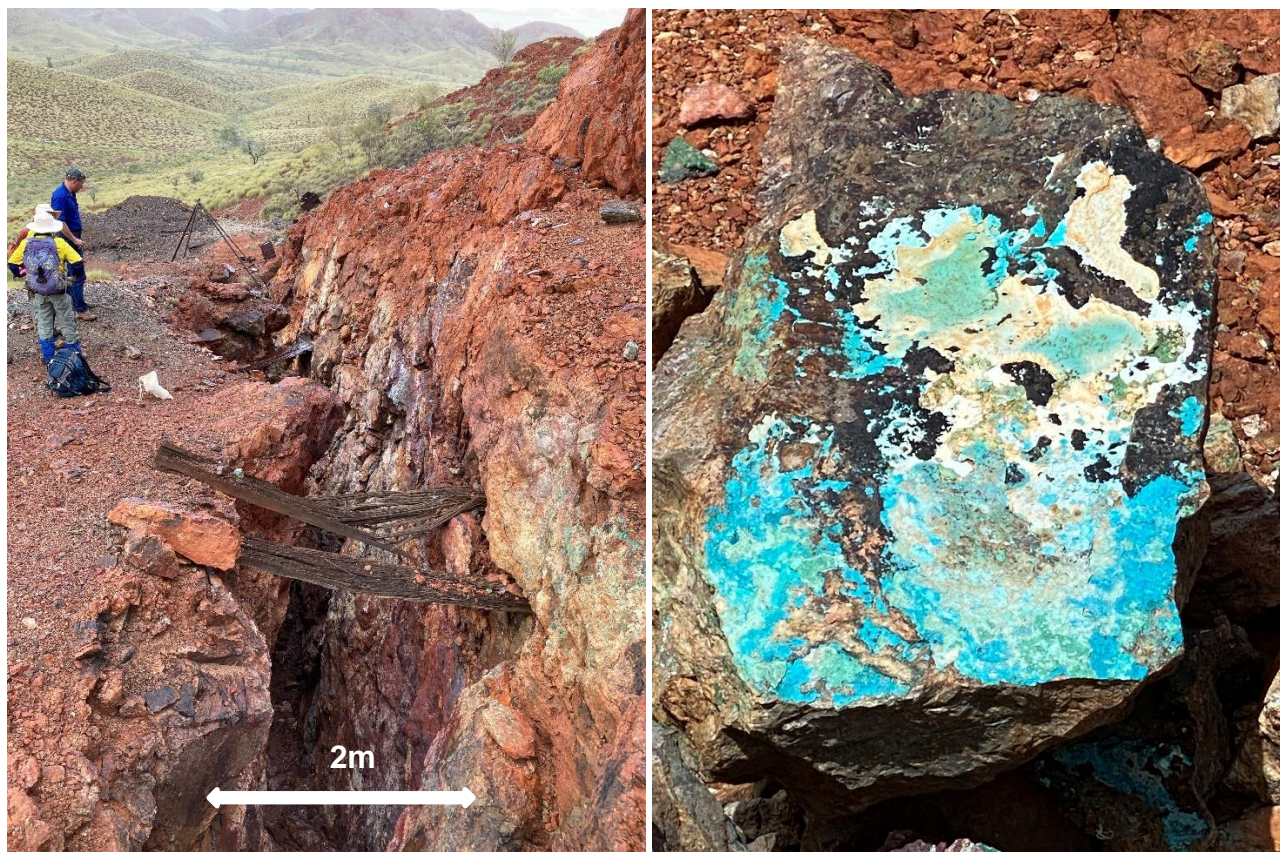


Figure 7: Kelly’s Historic Working (left). Copper oxide minerals Chrysocolla and Malachite in rock sample.

Next Steps

Infill soil sampling at a closer spacing of 100m x 25m will be used to finalise drill targets. Further reconnaissance soil sampling at 200m x 50m spacing will be continued along strike to cover the 7km strike length of the Sterling Prospect where stream sediment sampling has reported anomalous gold values. An existing station track is currently being upgraded to allow for easier access.

Concurrent with drilling program, regional gold targets including to the northwest and southeast of Sterling prospect, the granitoid contact in the north, plus the copper-gold area in the northeast (Kelly/Ryan Prospects) will be followed up with reconnaissance stream and soil geochemistry programs (Figure 6). Government and company geophysics is being used in conjunction with the geochemical data, to assist with structural and lithological targeting.

Thor Mining was awarded A\$160,000 from the Western Australia Government under the EIS Co-funded grants program to drill test gold anomalies at the Sterling Prospect.

ASX Code: “THR”



23 June 2021

This announcement is authorised for release to the market by the Board of Directors.

For further information, please contact:

THOR MINING PLC

Nicole Galloway Warland, Managing Director

+61 8 7324 1935

nicole@thormining.com

Competent Persons Report

The information in this report that relates to Exploration Results and Reporting of Soil Sampling at the Sterling Prospect is based on information compiled by Mark McGeough, who holds a BSc Dual Geology/Geography (HONS) and who is a Fellow of The Australasian Institute of Mining and Metallurgy. Mr McGeough is a director of Thor Mining PLC. He has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’. Mark McGeough consents to the inclusion in the report of the matters based on his 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, 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 km² 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 first half of 2021.

At Alford East in South Australia, Thor is earning an 80% interest in copper deposits considered amenable to extraction via Insitu Recovery techniques (ISR). In January 2021, Thor announced an Inferred Mineral Resource Estimate of 177,000 tonnes contained copper & 71,000 oz gold¹.

Thor also holds a 30% interest in Australian copper development company EnviroCopper Limited, which in turn holds rights to earn up to a 75% interest in the mineral rights and claims over the resource on the portion of the historic Kapunda copper mine and the Alford West copper project, both situated in South Australia, and both considered amenable to recovery by way of ISR.^{2,3}

Thor holds 100% 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 resources⁴, in the Northern Territory of Australia, which was awarded Major Project Status by the Northern Territory government in July 2020.

ASX Code: “THR”



23 June 2021

Adjacent to Molyhil, at Bonya, Thor holds a 40% interest in deposits of tungsten, copper, and vanadium, including Inferred resource estimates for the Bonya copper deposit, and the White Violet and Samarkand tungsten deposits.⁵

Thor holds 100% of the Pilot Mountain tungsten project in Nevada, USA which has a JORC 2012 Indicated and Inferred Resources Estimate on 2 of the 4 known deposits.⁶

Notes

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

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

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

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

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

⁶ www.thormining.com/sites/thormining/media/pdf/asx-announcements/20162017/20170522-tungsten-resource-increase.pdf

www.thormining.com/sites/thormining/media/pdf/asx-announcements/20182019/20181214-pilot-mountain-resource-update.pdf

ASX Code: “THR”



23 June 2021

1 JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where ‘industry standard’ work has been done this would be relatively simple (eg ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	<p>The programme comprised soil sampling collecting a -2mm fraction for geochemical analysis for Au by 1kg BLEG and Au by aqua regia AR25 (after crushing and pulverising) and multi-element MS25 analysis. One orientation line of -80 mesh sieved samples was also collected and assayed by AR25.</p> <p>Each rock chip sample comprised 2– 5kg of rock assayed for Au (FA 50) and multi-element 4 acid digestion. Two BLEG stream sediment samples were also collected and assayed for Au by the 1kg BLEG method</p>
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	Not applicable
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	Not applicable
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	No logging was undertaken
Sub-sampling techniques	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and 	<p>Samples were screened in the field as described in “Sampling Techniques” above.</p> <p>The sample sizes are as per industry standard for stream</p>

ASX Code: “THR”



23 June 2021

Criteria	JORC Code explanation	Commentary
and sample preparation	<p><i>appropriateness of the sample preparation technique.</i></p> <ul style="list-style-type: none"> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<p>sediment geochemistry. Field duplicates and blank samples were submitted for assay with the other samples.</p>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i> • <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i> 	<p>The proposed assay method is appropriate for preliminary exploration.</p>
Verification of sampling and assaying	<ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i> 	<p>Not undertaken</p>
Location of data points	<ul style="list-style-type: none"> • <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i> 	<p>Hand held GPS – MGA94 zone 50 (GDA)</p>
Data spacing and distribution	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i> • <i>Whether sample compositing has been applied.</i> 	<p>Not applicable – no resource is being reported</p>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> • <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i> 	<p>Orientational bias is not applicable to soil sampling at this stage but samples were collected along East -West lines that are orientated approximately perpendicular to the assumed strike of gold mineralisation.</p>
Sample security	<ul style="list-style-type: none"> • <i>The measures taken to ensure sample security.</i> 	<p>Samples were trucked back from Marble Bar to the Intertek assay laboratory in Perth.</p>

ASX Code: "THR"



23 June 2021

Criteria	JORC Code explanation	Commentary
		Sample security levels are considered appropriate for a preliminary reconnaissance assessment.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	None undertaken

II Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	Exploration results are reported on E46/1190 and E46/1262 in Western Australia held 100% by Thor Mining PLC.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	Not applicable
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	Yet to be determined
Drill hole Information	<ul style="list-style-type: none"> A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	No drilling has been undertaken or reported
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent 	Only field observations have been reported. There has been no data aggregation.

8 June 2021

Criteria	JORC Code explanation	Commentary
	<i>values should be clearly stated.</i>	
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> • <i>These relationships are particularly important in the reporting of Exploration Results.</i> • <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> • <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg ‘down hole length, true width not known’).</i> 	No drilling has been undertaken or reported
<i>Diagrams</i>	<ul style="list-style-type: none"> • <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i> 	A sample location plan including current 1:100k scale geology has been provided
<i>Balanced reporting</i>	<ul style="list-style-type: none"> • <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i> 	All results have been reported
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> • <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i> 	All data have been reported
<i>Further work</i>	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> • <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	Subject to assay results, it is anticipated that follow up stream sediment geochemistry (soil) and geological mapping will be undertaken to locate the source of gold mineralisation.