



## Investigator – Silver and Tungsten

An update on the Molyhil Tungsten and Molybdenum Project.

INVESTIGATOR  
RESOURCES  
LIMITED



Mining The Territory

14 September 2023

ASX:IVR

# Disclaimer

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The information in this presentation is published to inform you about Investigator Resources Limited and its activities. Some statements in this presentation regarding estimates or future events are forward looking statements. They involve risk and uncertainties that could cause actual results to differ from estimated results. All reasonable effort has been made to provide accurate information, but we do not warrant or represent its accuracy and we reserve the right to make changes to it at any time without notice.

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## Competent Person Statements

The information in this presentation relating to exploration results is based on information compiled by Mr Jason Murray who is a full time employee of Investigator Resources Limited. Mr Murray is a member of the Australasian Institute of Mining and Metallurgy. Mr Murray has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Murray consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

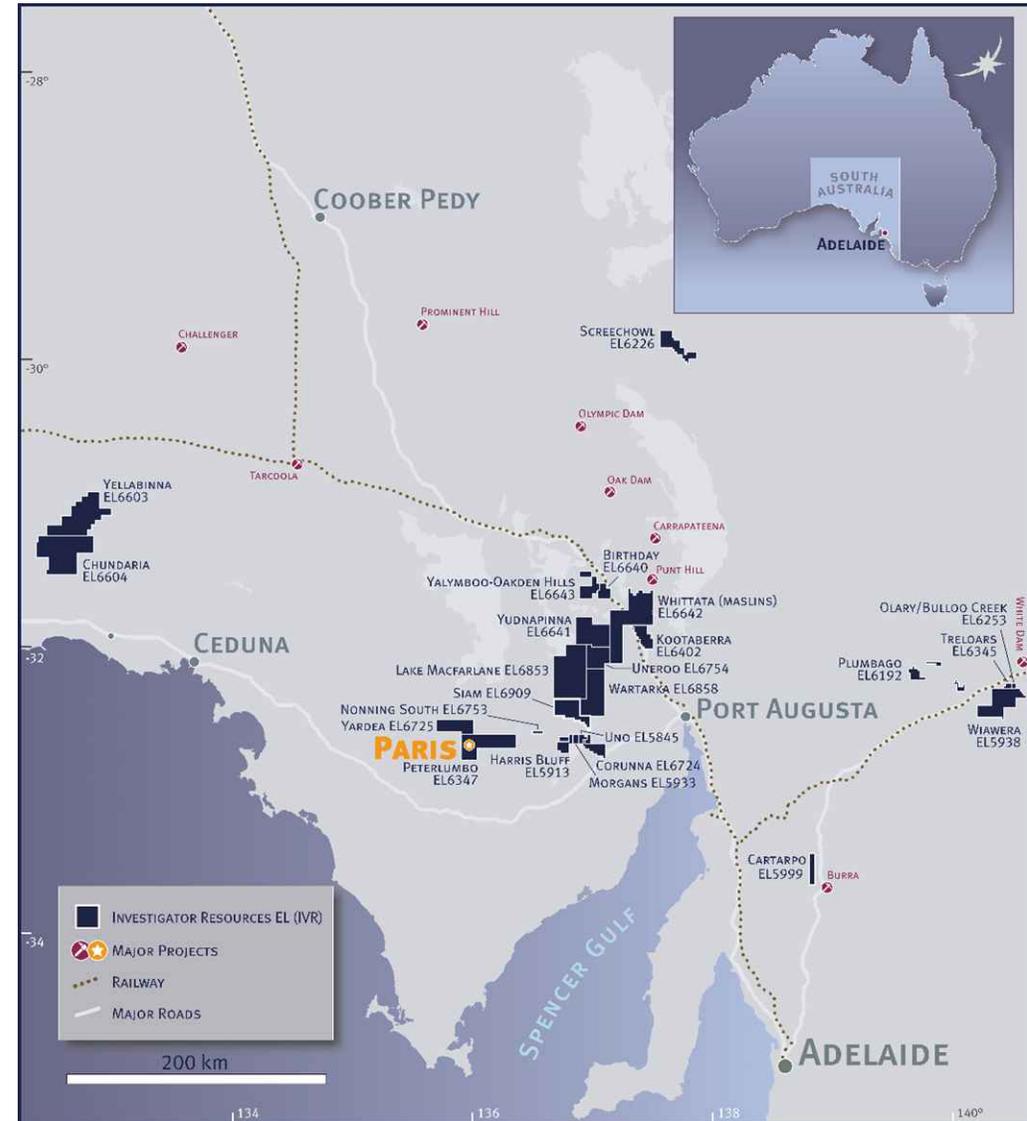
The information in this presentation that relates to Mineral Resources Estimates at the Paris Silver Project is extracted from the release titled “Paris Mineral Resource Estimate Update” dated 5 July 2023 and is available to view on the Company’s website [www.investres.com.au](http://www.investres.com.au). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcement.

The information in this presentation that relates to Pre-Feasibility Study undertaken on the Paris Silver Project is extracted from the release titled “Paris PFS Delivers Outstanding Results” dated 30 November 2021 and is available to view on the Company’s website [www.investres.com.au](http://www.investres.com.au). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the results in the relevant market announcement continue to apply and have not materially changed.

# A quick introduction to Investigator.....

- South Australia focus - 8,500km<sup>2</sup>
- Paris Silver Project
  - Australia’s highest grade primary Ag project
  - 57Moz Silver + 99kt Lead - JORC (2012) Resource #
  - Resource updated in July 2023
  - PFS completed, DFS in progress
- Uno/Morgans tenements
  - 80km east of Paris - base & precious metals
- 2 tenement areas under farm-out deals
- Curnamona Cu/Au/Ag prospectivity
- Earn-In to JV over Molyhil Tungsten Project in NT
  - Shallow, high-grade tungsten & molybdenum

# As announced to the ASX 5 July 2022



# What you need to know about Investigator?...cont



## Capital – 30 June 2023

Shares – ordinary	1,437M
Listed Options (6.3c, exp Mar 2025)	232M
Unlisted Options (7.6c, exp Dec 2025)	28.5M
Share Price	5c
Market Cap	\$72M
Cash (as at 30 June 2023)	\$4.5M

## Share Register - 30 June 2023

Jupiter Asset Management	14.6%
Top 20	32%
# Shareholders	5,500

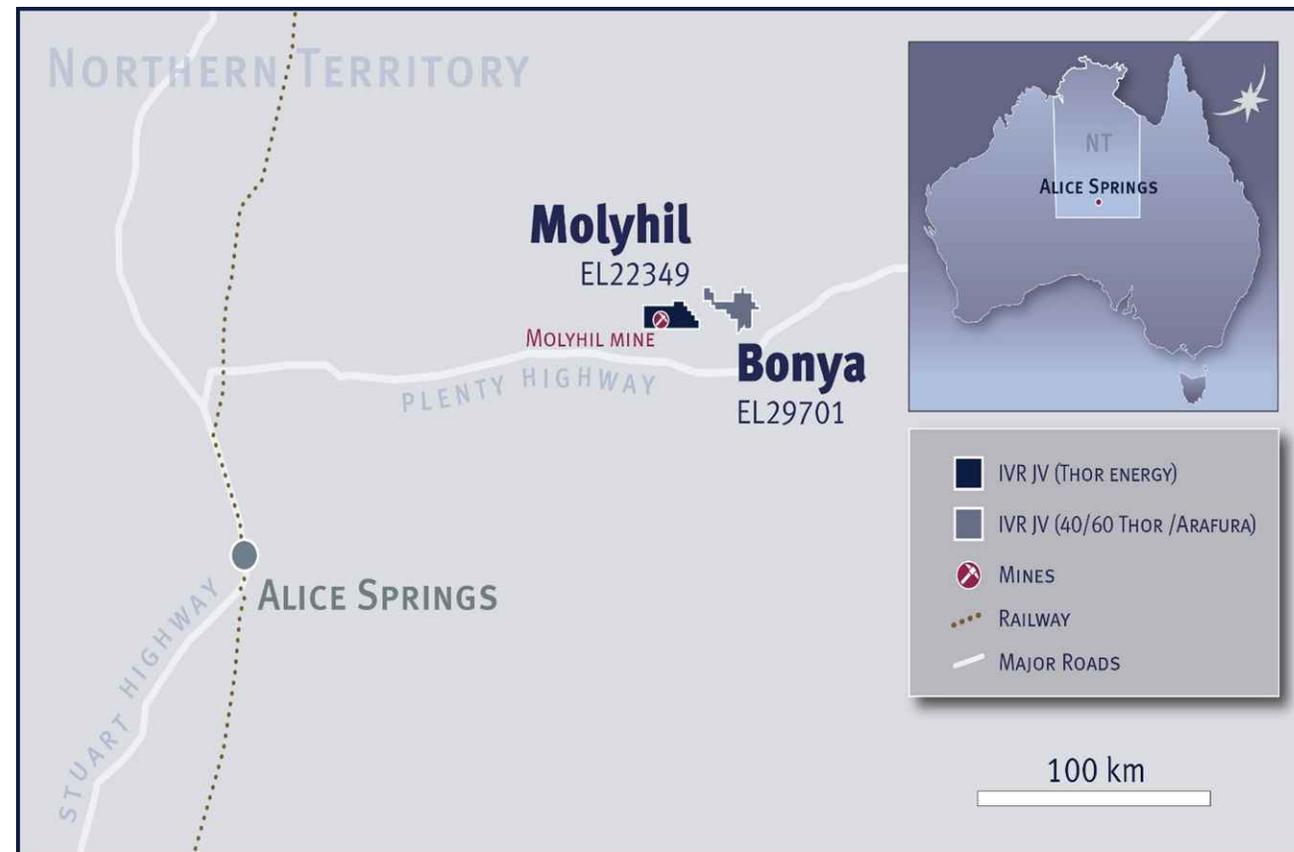
## Board and Management

Richard Hillis	Non-Executive Chair
Andrew Shearer	Non-Executive Director
Andrew McIlwain	Managing Director

# The Molyhil Project.....

- 230km NE Alice Springs, access off Plenty Hwy
- 2 tenements – Molyhil and Bonya
- Molyhil Project:
  - Skarn hosted tungsten & molybdenite
  - Subject to a number of prior mining activities
- Discovered 1973, first mined 1978, last 1982
- Various owners - Petrocarb, Hallmark and Thor
- 2018 Definitive Feasibility Study
- JORC (2012) resource estimate#
  - 4.4Mt @ 0.27% WO<sub>3</sub> and 11.8kt @ 0.1% Mo for 13.3kt WO<sub>3</sub> and 1.2kt Mo
- 2022 Earn-In to JV agreement with Investigator
- Granted NT Major Project status

# as reported by THR to the ASX 8 Apr 2021



# So what is so fascinating about tungsten?.....

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## Just about everything needs a little bit of tungsten....

- Classified as a Critical Mineral
- An essential industrial metal unique in its hardness
- Highest melting point of all metals at 3,422 deg Celsius
- Used in aero-space, steel hardening, cutting and drilling, armour plate, electronics and jewellery
- Potential application in enhancing lithium batteries
- Supply historically dominated by Chinese production
- 50% price improvement and stabilisation over last 18 months



# Investigator's Molyhil deal.....

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- 3 Stage Earn-In to JV Agreement with Thor Energy
- Stage 1:
  - \$1M before May 2024 to earn 25% JV interest in Molyhil
  - On forming JV also acquire Thor's 40% JV interest in Bonya
- Stage 2:
  - \$2M over 3 years for total 51% in Molyhil
- Stage 3:
  - \$5M over 3 years for total 80% in Molyhil
- Post earn-in Thor to contribute or dilute
- Investigator Manager and Operator



# Molyhil Definitive Feasibility Study – Thor 2018##



Post Tax NPV<sub>5</sub>:  
A\$101 Million



IRR:  
59%



Project Life  
7 years



Capex  
A\$69 Million



LOM EBITDA  
A\$239M

## Molyhil – open pit operation adopting known processing technology

- Single open pit to a depth of 120m
- Ore sorting ahead of processing
- Gravity and flotation recovery
- Dry stacked tails
- Tungsten and Molybdenum price improvements since 2018

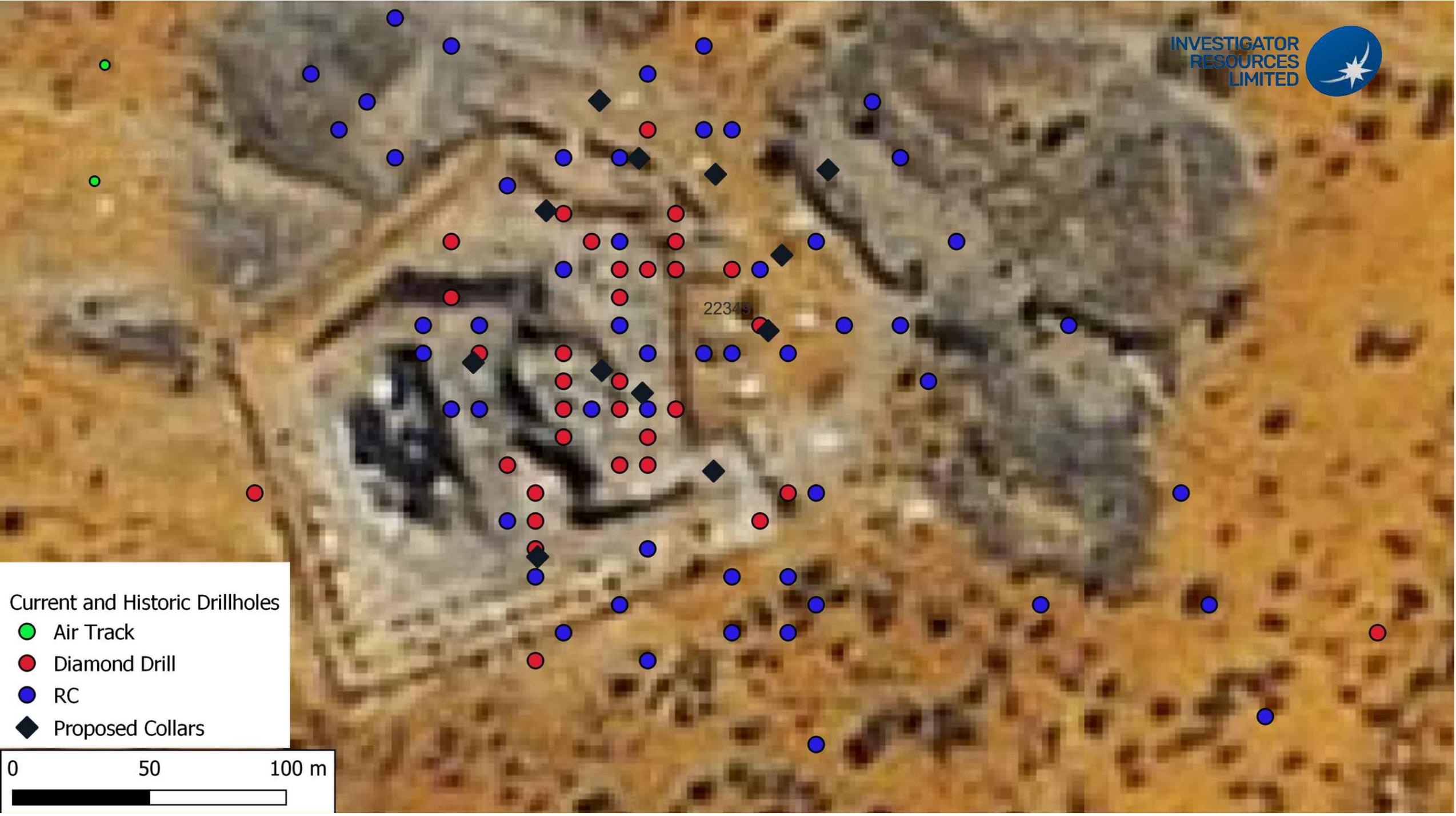
## – all financial data ass per the DFS results as released by Thor to ASX on 23 Aug 2018



# What's planned at Molyhil.....

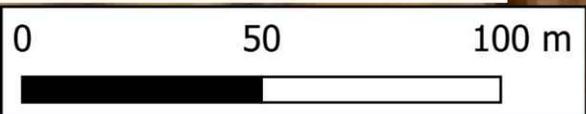
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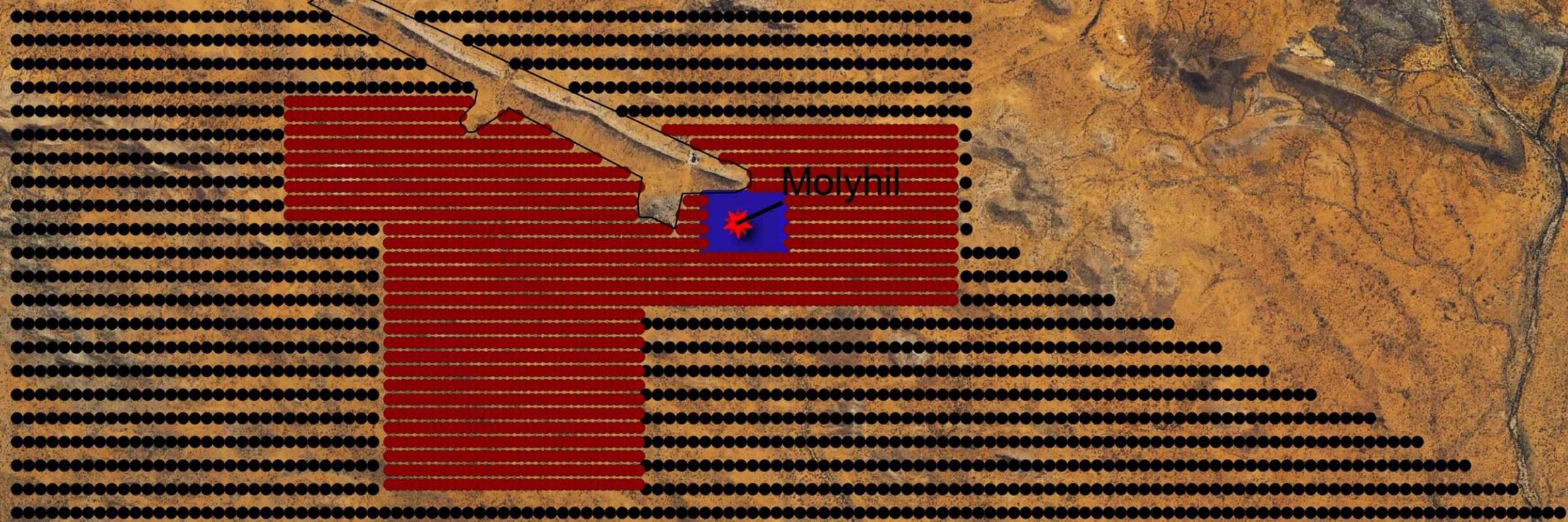
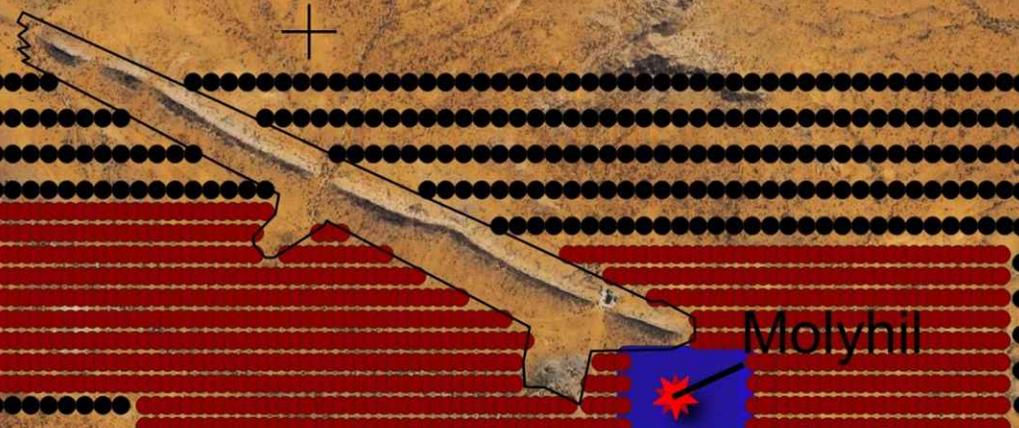
- Revised MMP in place, NT Worksafe Risk Management Plan submitted
- Program to revalidate the Mineral Resource Estimate
  - New resource model developed using MIK
  - Over 1,300 density measurements undertaken on existing drill core
  - 1,500m, 12 hole diamond drill program commencing this month
  - MRE to be finalised by end of 2023
- Comprehensive regional gravity survey – supported by NT Collaborative Funding Grant
- Met testwork program using stockpiled underground bulk sample material
- Process flowsheet review, adopting early magnetite removal
- Extension of Molyhil's "Major Project" status
- Restating project metrics early 2024



2234s

- Current and Historic Drillholes
-  Air Track
  -  Diamond Drill
  -  RC
  -  Proposed Collars





# Molyhil key objectives.....

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- Systematic and sophisticated exploration:
  - Resource drill program
  - Regional gravity survey
- Updated Mineral Resource Estimate by end 2023
- Metallurgical testwork and process flowsheet validation
- Completion of Stage 1 (25%) Earn-In – May 2024
- Scoping Study results will inform Investigator’s decision to continue Stage 2 Earn-In



**Thank you**



• **Andrew McIlwain, Managing Director**

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# Appendix 1 – Paris Mineral Resource Estimate<sup>#1</sup>

Category	Mt	Ag ppm	Pb %	Ag Mozs	Pb Kt
Indicated	17	75	0.5	41	85
Inferred	7.2	67	0.42	16	14
Total	24	73	0.41	57	99

**Table 1:** 2023 Paris Silver Project Mineral Resource estimate (25g/t silver cut-off grade).  
(Note: Total values may differ due to minor rounding errors in the estimation process)

NOTE:

The information in this presentation that relates to Mineral Resources Estimates at the Paris Silver Project is extracted from the release titled “Paris Mineral Resource Estimate Update” dated 5 July 2023 and is available to view on the Company’s website [www.investres.com.au](http://www.investres.com.au). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcement.

*#1 – As released to the ASX on 5 July 2023*

# Appendix 2 – Molyhil Earn-In to JV Agreement<sup>#2</sup>

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## General Terms

- 3 stage Earn-In to Joint Venture with Thor Mining (ASX:THR)
- Stage 1:
  - Payment to Thor of \$100,000 on execution of Heads of Agreement documentation
  - Expenditure of \$1M over 18 months (includes \$100k HoA fee above) to earn a 25% interest in the Molyhil Tungsten Project and associated tenements, and all of Molyhil's 40% interest in the adjacent Bonya tenement (EL29107 in JV with Arafura (ASX:ARU))
  - If expenditure of \$1M is not met within 18 months, balance to be paid to Thor
  - On formation of the Joint Venture (25:75 IVR:THR) IVR to issue Thor \$250,000 in IVR shares (at the higher of 15-day VWAP or \$0.05)
- Stage 2:
  - Expenditure of a further \$2M over 3 years to earn a further 26% interest in the Molyhil Project and associated tenements (51:49 IVR:THR)
- Stage 3:
  - Expenditure of a further \$5M over 3 years to earn a further 19% interest in the Molyhil Project and associated tenements (80:20 IVR:THR)
  - On formation of the 80:20 Joint Venture IVR to issue Thor \$250,000 in IVR shares (at the higher of 15-day VWAP or \$0.05)
- On formation of the 80:20 Joint Venture Thor can elect to contribute on a pro-rata basis or dilute. If diluted below 10% then Thor's interest reverts to an NSR.

*#2 – As released to the ASX on 24 November 2022*

# Appendix 3 – Molyhil Mineral Resource Estimate<sup>#3</sup>

Category	'000 Tonnes	WO <sub>3</sub> Grade %	Tonnes	Mo Grade %	Tonnes	Cu Grade %	Tonnes	Fe Grade %
Measured	464	0.28	1,300	0.13	600	0.06	280	19.12
Indicated	2,932	0.27	7,920	0.09	2,630	0.05	1,470	18.48
Inferred	990	0.26	2,580	0.12	1,170	0.03	300	14.93
<b>Total</b>	<b>4,386</b>	<b>0.27</b>	<b>11,800</b>	<b>0.1</b>	<b>4,400</b>	<b>0.05</b>	<b>2,190</b>	<b>17.75</b>

**Table 2:** Molyhil Mineral Resource Estimate JORC (2012) classification as reported by Thor Energy to the ASX on 8 April 2021. Reported at a cut-off grade of 0.07% WO<sub>3</sub> Tungsten.

(Note: Total values may differ due to minor rounding errors in the estimation process, Mineral Resource reported to a 200mRL level which was used to define material that could be potentially extracted using open pit mining methods)

NOTE:

The information in this presentation that relates to Mineral Resources Estimates at the Molyhil Tungsten/Molybdenum Project is extracted from Thor Energy's ASX release titled "Mineral Resource Estimate Update, Molyhil Project" dated 8 April 2021 and is available to view on Thor Energy's website [www.thorenergyplc.com](http://www.thorenergyplc.com). The Company understands that the Molyhil Mineral Resource Estimate was compiled in accordance with the guidelines of the Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves (JORC, 2012) and that the data for the Molyhil Mineral Resource Estimate was prepared and validated by Thor Energy under the supervision of Nicole Galloway Warland, a Member of the Australian Institute of Geoscientists. Thor Energy considered that Ms Galloway Warland had sufficient relevant experience to be considered a "Competent Person" as defined by the JORC Code (2012).

The resource estimate for WO<sub>3</sub> and Mo was undertaken by Johan van Zyl, Senior Geostatistician with Golder Associates, a Member of the Australasian Institute of Mining and Metallurgy. Mr van Zyl was considered by Thor Energy to have sufficient relevant experience to be considered a "Competent Person" as defined by the JORC Code (2012). The resource estimate for Fe and Cu was undertaken by Stephen Godfrey, Principal Resource Geologist with Resource Evaluation Services, a Fellow of the Australasian Institute of Mining and Metallurgy and a Member the Australian Institute of Geoscientists. Mr Godfrey was considered by Thor Energy to have sufficient relevant experience to be considered a "Competent Person" as defined the JORC Code (2012).

The Company confirms that it is not aware of any new information or data that materially affects the information included in Thor Energy's original market announcement, and that the form and context in which the Competent Person's findings are presented have not been modified from Thor Energy's original market announcement.

#3– As released to the ASX by Thor Energy on 8 April 2021