



# Australian-based Mining Exploration Company

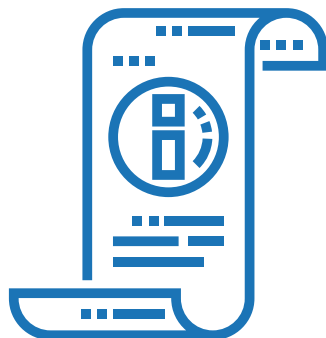
Leveraged to the developing clean  
energy world

Zenith Minerals Limited (ASX:ZNC)





# DISCLAIMER & JORC STATEMENTS



## Forward looking statements

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. Forward-looking statements include estimates of future production, reserve and mineralised material estimates, capital costs, and other estimates or prediction of future activities. They include statements preceded by words such as “believe”, “estimate”, “expect”, “intend”, “will” and similar expressions. Actual results could differ materially depending on such things as political events, labour relations, currency fluctuations and other general economic conditions, market prices for Zenith Minerals Limited products, timing of permits and other government approvals and requirements, change in operating conditions, lower than expected ore grades, unexpected ground and mining conditions, availability and cost of materials and equipment, and risks generally inherent in the ownership and operation of mining properties and investment in foreign countries.

## Information presented is a summary

This presentation aims to provide a high-level summary of various technical aspects of the Company’s projects. For more details on the underlying technical parameters the reader is referred to the ASX Reports on the Zenith Minerals Limited’s website: [www.zenithminerals.com.au](http://www.zenithminerals.com.au)

## JORC competent persons statements

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Mr Michael Clifford, who is a Member of the Australian Institute of Geoscientists and an employee of Zenith Minerals Limited. Mr Clifford 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’. Mr Clifford consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Mr John Horton, who is a Fellow and Chartered Professional of the Australasian Institute of Mining and Metallurgy and a full time employee of ResEval Pty Ltd. Mr Horton 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’. Mr Horton consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## Material ASX releases previously released

The Company has released all material information that relates to Exploration Results, Mineral Resources and Reserves, Economic Studies and Production for the Company’s Projects on a continuous basis to the ASX and in compliance with JORC 2012. The Company confirms that it is not aware of any new information that materially affects the content of this ASX release and that the material assumptions and technical parameters remain unchanged. Material ASX releases related to the results reported in this report are listed on the respective project pages.

# Corporate Snapshot

ASX:ZNC



Share Price  
**\$0.15**



Shares on Issue  
**351.7m**



Market Cap  
**\$53m**



Cash<sup>1</sup>  
**\$4.0m**



Listed Equities  
**\$6.8m**



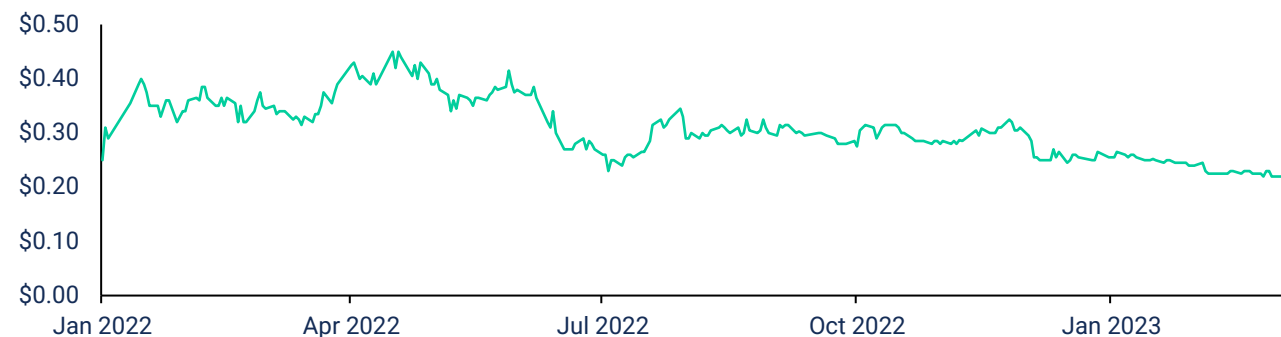
Enterprise Value  
**\$43m**

April 1<sup>st</sup> 2023

# Corporate Snapshot

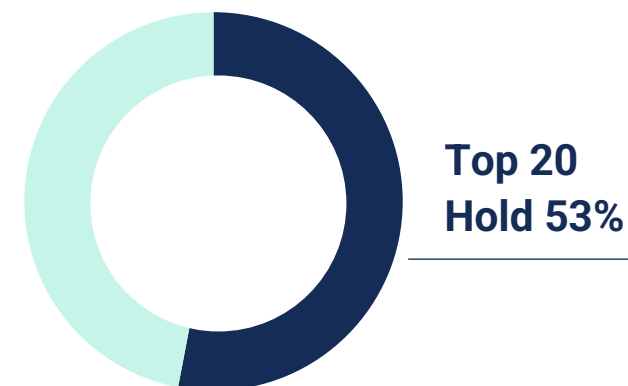
ASX:ZNC

## ASX:ZNC Share Price Performance

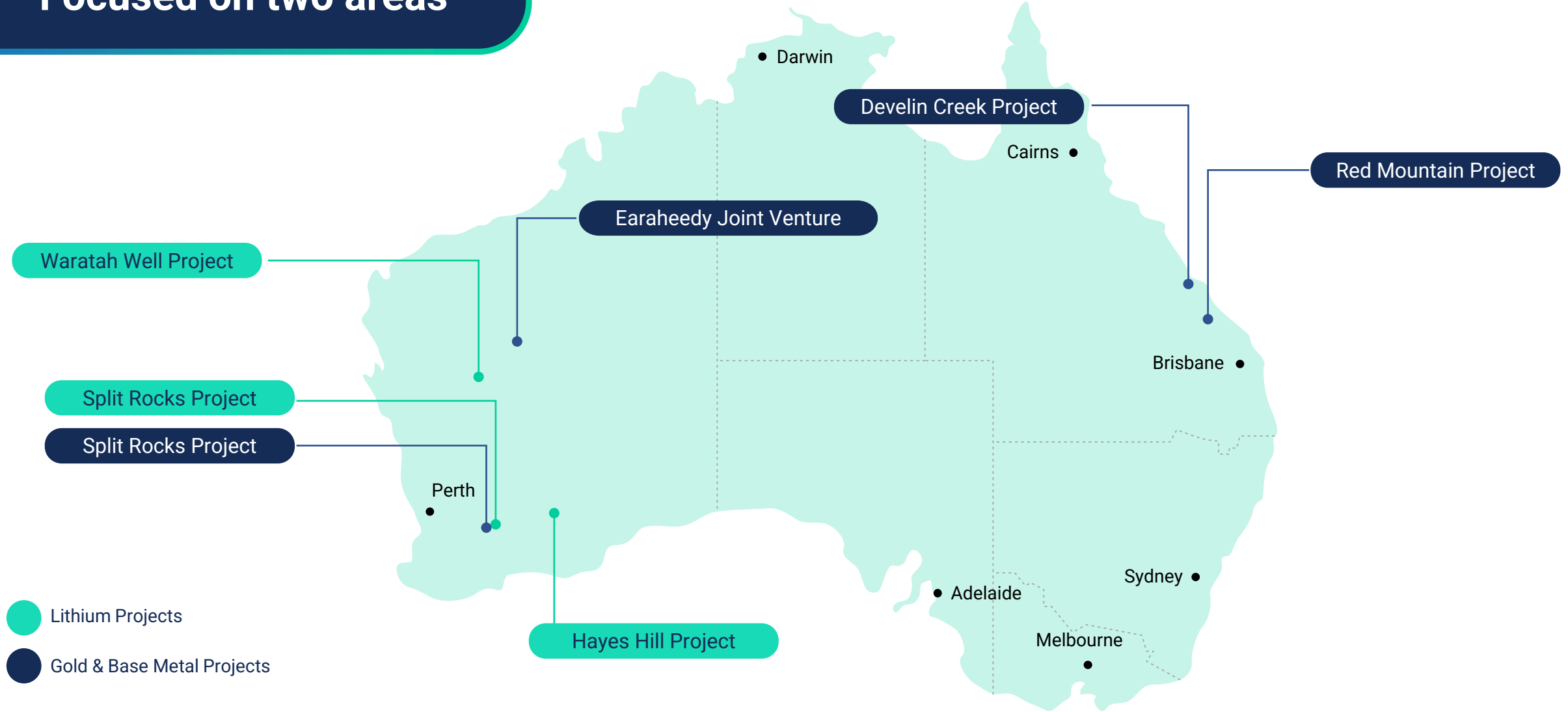


## Major Shareholders

Directors	3.4%
HSBC Custody Nom.	9.4%
BNP Paribas Noms	7.9%
Citicorp Noms	7.7%
Granich	2.5%



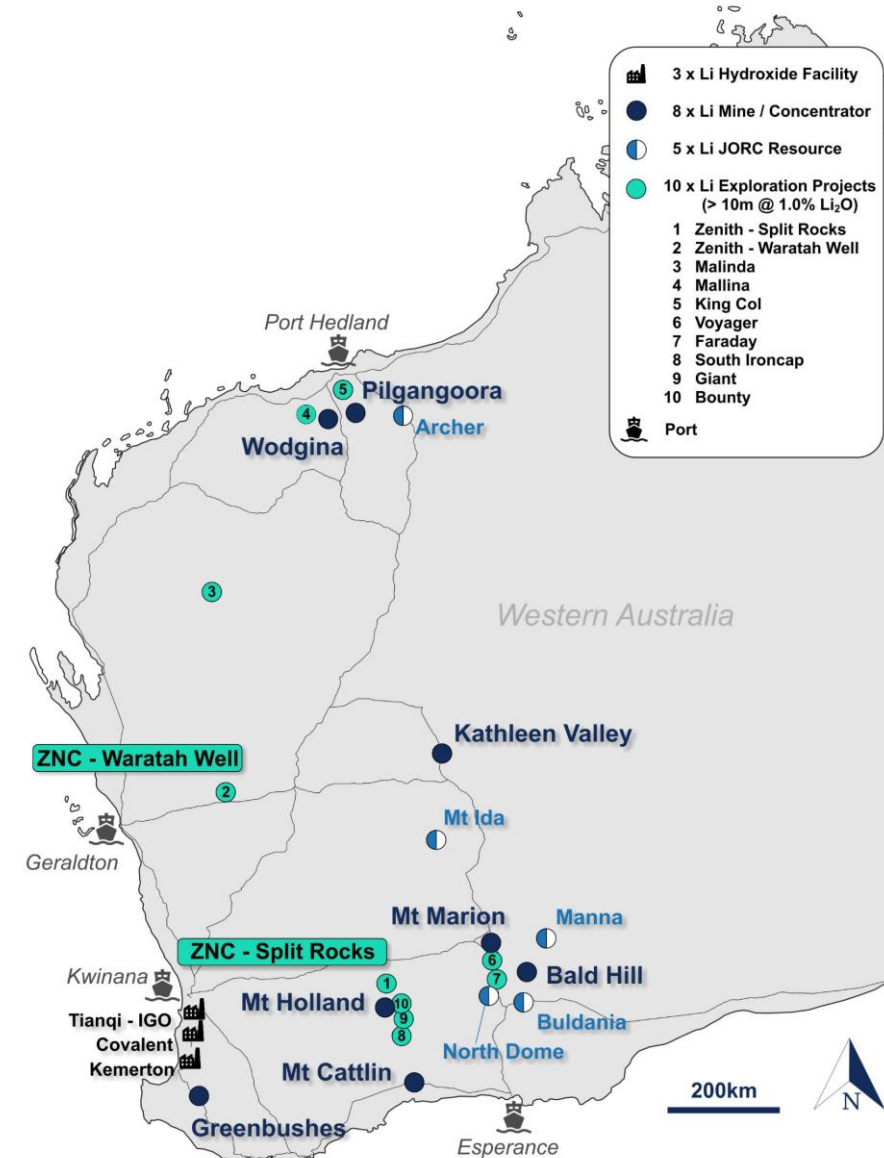
## Focused on two areas



# Lithium Projects

Zenith owns 2 of the 10 best exploration prospects in WA (Split Rocks & Waratah Well)

- ✓ There are 3 Lithium Hydroxide Facilities in WA, Tianji, Covalent and Kemerton
- ✓ 8 Lithium Mines – highlights the need for exploration
- ✓ There are 5 JORC resources
- ✓ There are 10 advanced exploration plays of which we have two of the top projects.



Exploration Project details – refer slide 19 for references

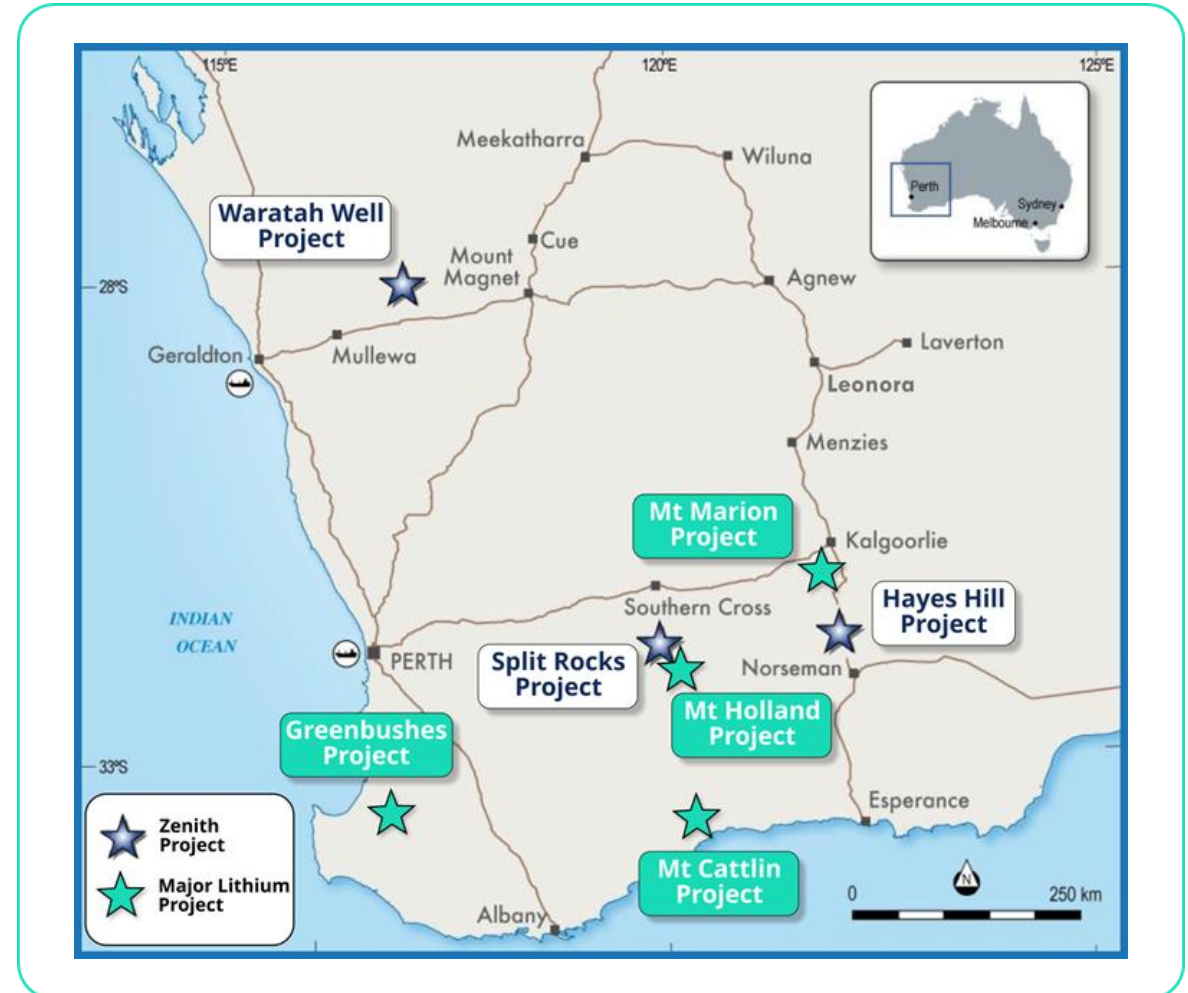
# Lithium Projects

- 

At Split Rocks we have drilled significantly in the northern extent of the resource only. In the 660 sq km we have been working further on taking soil samples which have opened up a number of targets to add to the work done at Rio. We are closing in on a resource which makes the project material.
- 

At Waratah Well we have identified significant mineralisation that may be amenable for Direct Shipping Ore (DSO) through Geraldton. This will offer the group an exciting development.
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The recent acquisition of Hayes Hill has been taken on 100% and is highly prospective for not just Lithium but also Nickel.

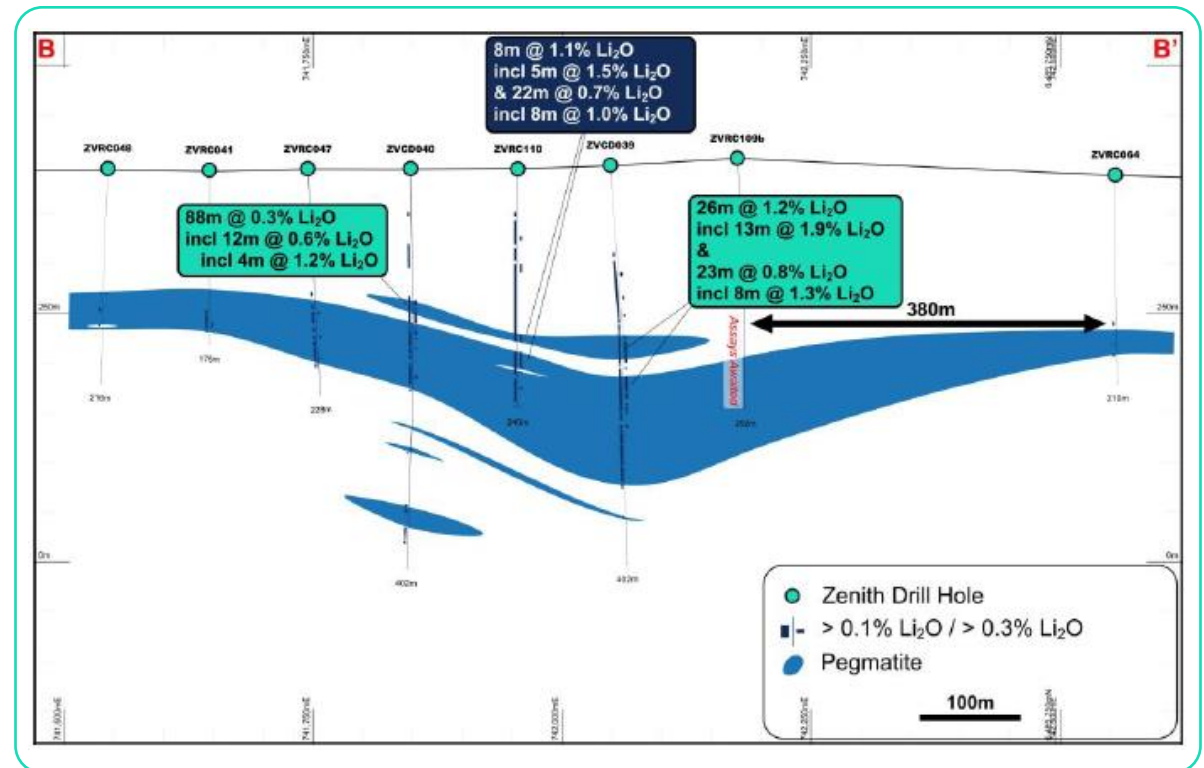
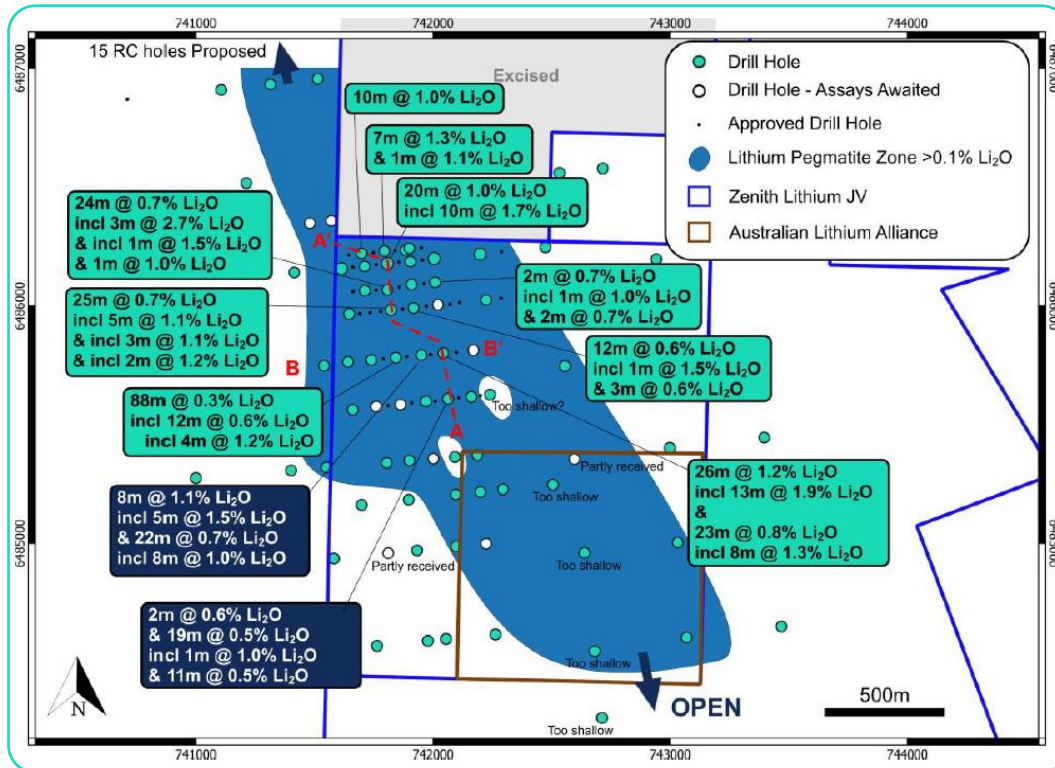




# Split Rocks – Lithium Rio Prospect

- ✓ 2022 Program – 100 holes for 22,369m  
 Best intersections included - 26m @ 1.2% Li<sub>2</sub>O  
 - 10m @ 1.7% Li<sub>2</sub>O  
 - 13m @ 1.9% Li<sub>2</sub>O

- ✓ 2023 Program – Define parameters for additional drilling, follow up targets



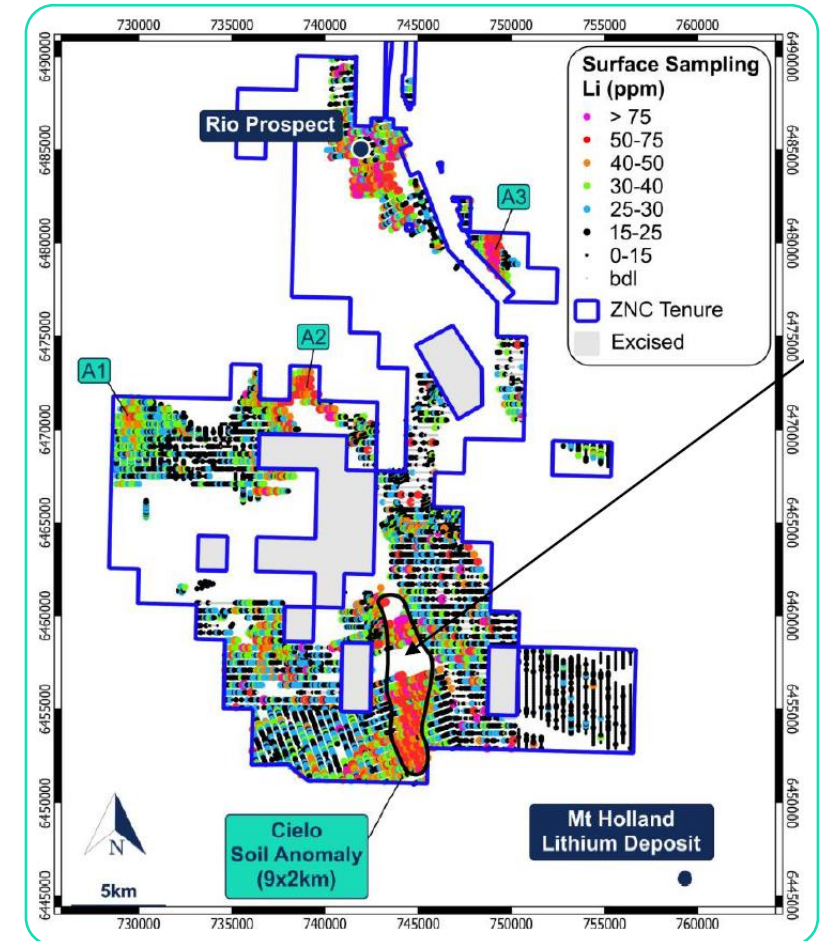
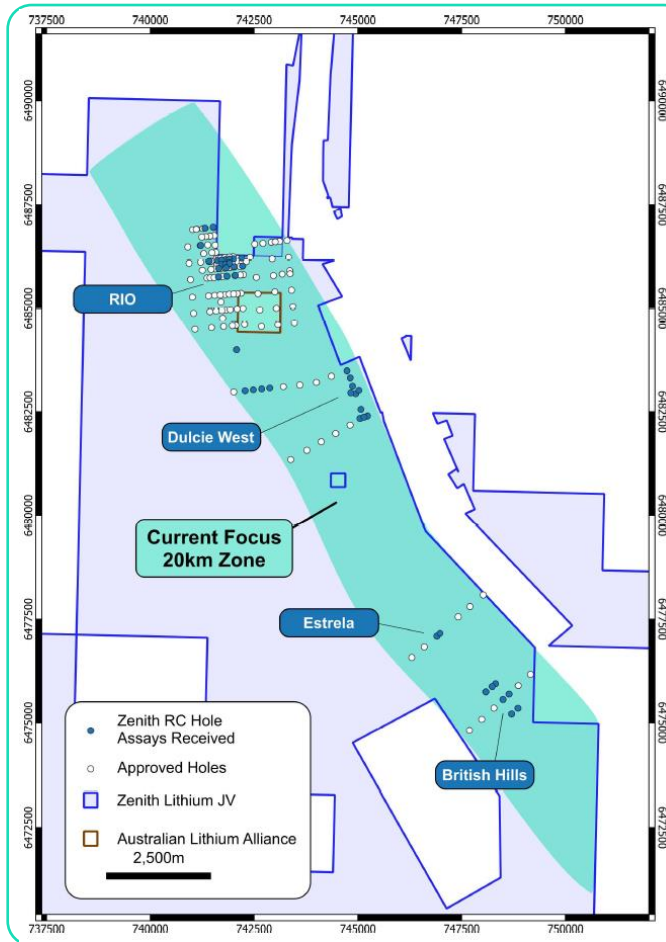
\* For full results and intersections refer ASX announcement 20-Sep-22 and 14-Feb-23



# Split Rocks – Regional – Strong Blue-Sky Potential

## New Lithium Target – “Cielo”

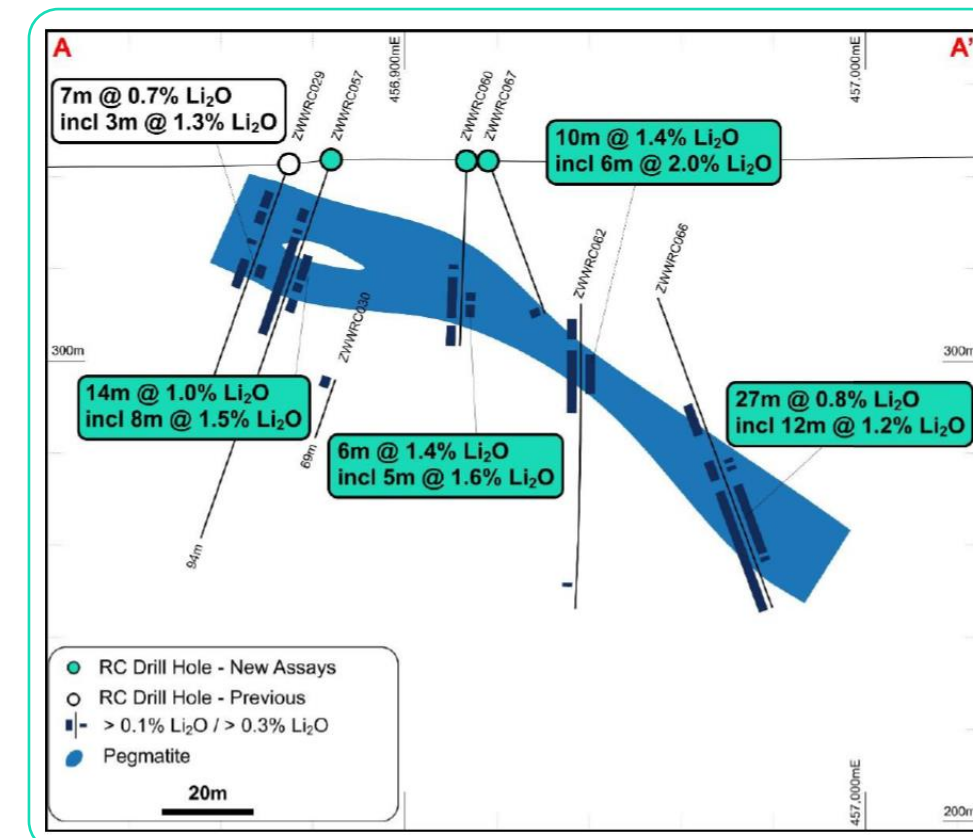
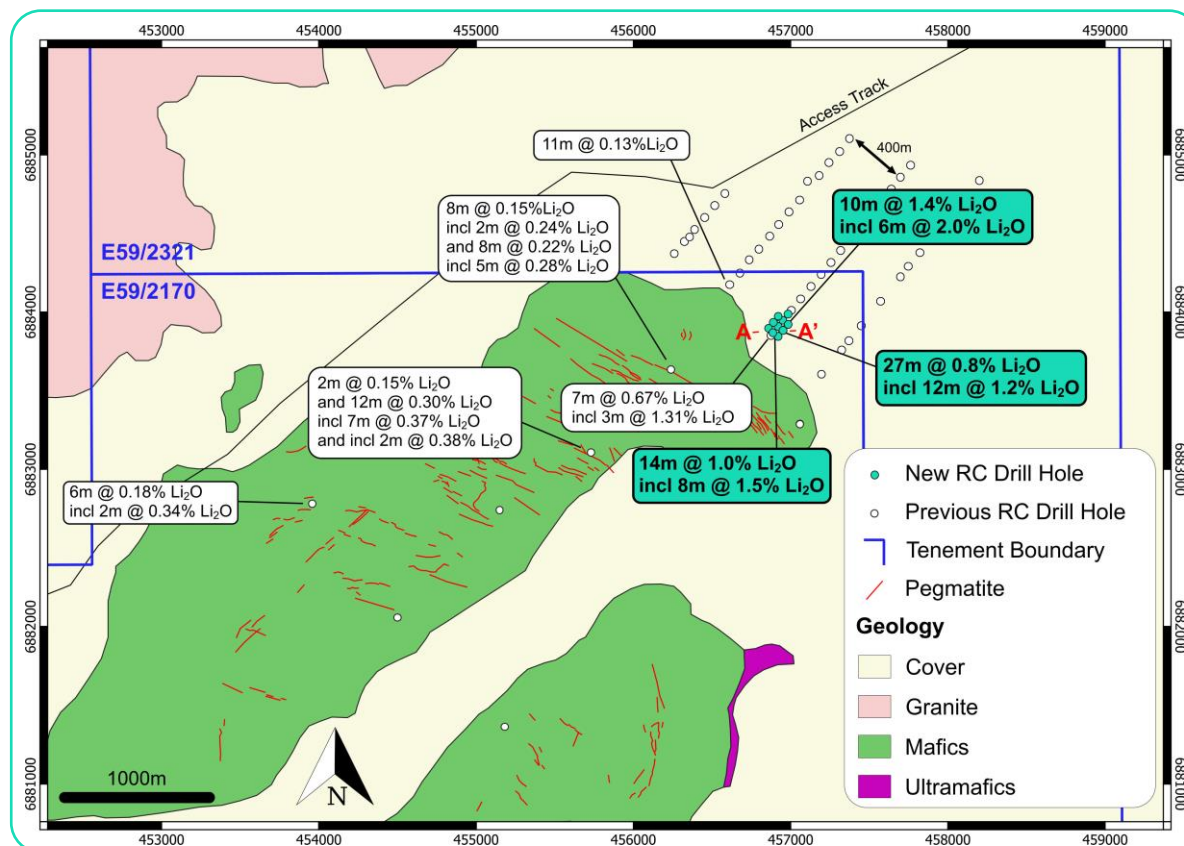
- ✓ Large Geochem anomaly 9km in length by 2km wide
- ✓ Drill testing early 2023



ZNC ASX Release 9-Feb-2023

# Waratah Well – High Grade Lithium Drill Results

- ✓ High-grade lithium open to north, south and east under shallow soil cover
- ✓ Follow-up drilling planned – early 2023
- ✓ 10m @ 1.4%  $\text{Li}_2\text{O}$  including 6m @ 2%  $\text{Li}_2\text{O}$



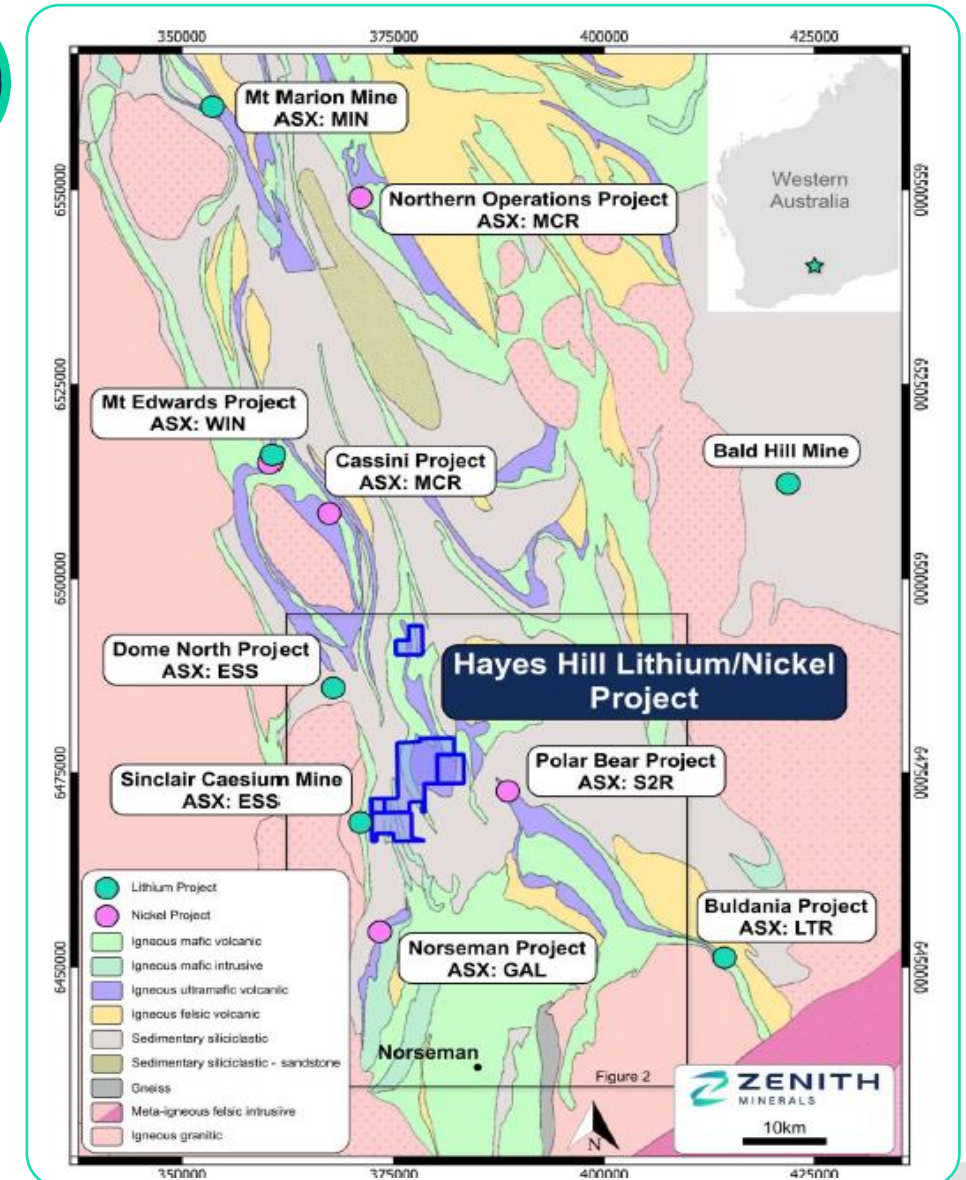
\* For full results drill refer ASX Release 24-Jan-23

# Hayes Hill

## New Lithium – Nickel Project

- ✓ Option to acquire 100% of the project\*
- ✓ 2 EIs and 3 ELA's
- ✓ SE of the Dome North Li deposits (ESS), immediately east of the Sinclair Cs deposit (ESS), NW of the Buldania Li deposits (LTR)
- ✓ Target 2 high-tenor Ni-Cu-Pt-Pd surface geochemical anomalies north of the Calisto Ni-PGE discovery and S2R's Polar Bear Ni prospects

\*Option to acquire – refer ASX Release 19-Jan-23





# Gold and Base Metal Assets

## Advance, develop or monetise

- ✓ **Split Rocks Gold:** Adjacent to the lithium site in Western Australia – 100% interest
- ✓ **Develin Creek Copper / Zinc:** Northern Queensland – 100% interest
- ✓ **Red Mountain Gold:** Queensland – 100% interest
- ✓ **Earaheedy Zinc / Lead:** Western Australia – 25% interest. Rumble Resources 75% (ASX:RTR Mkt Cap \$130m)



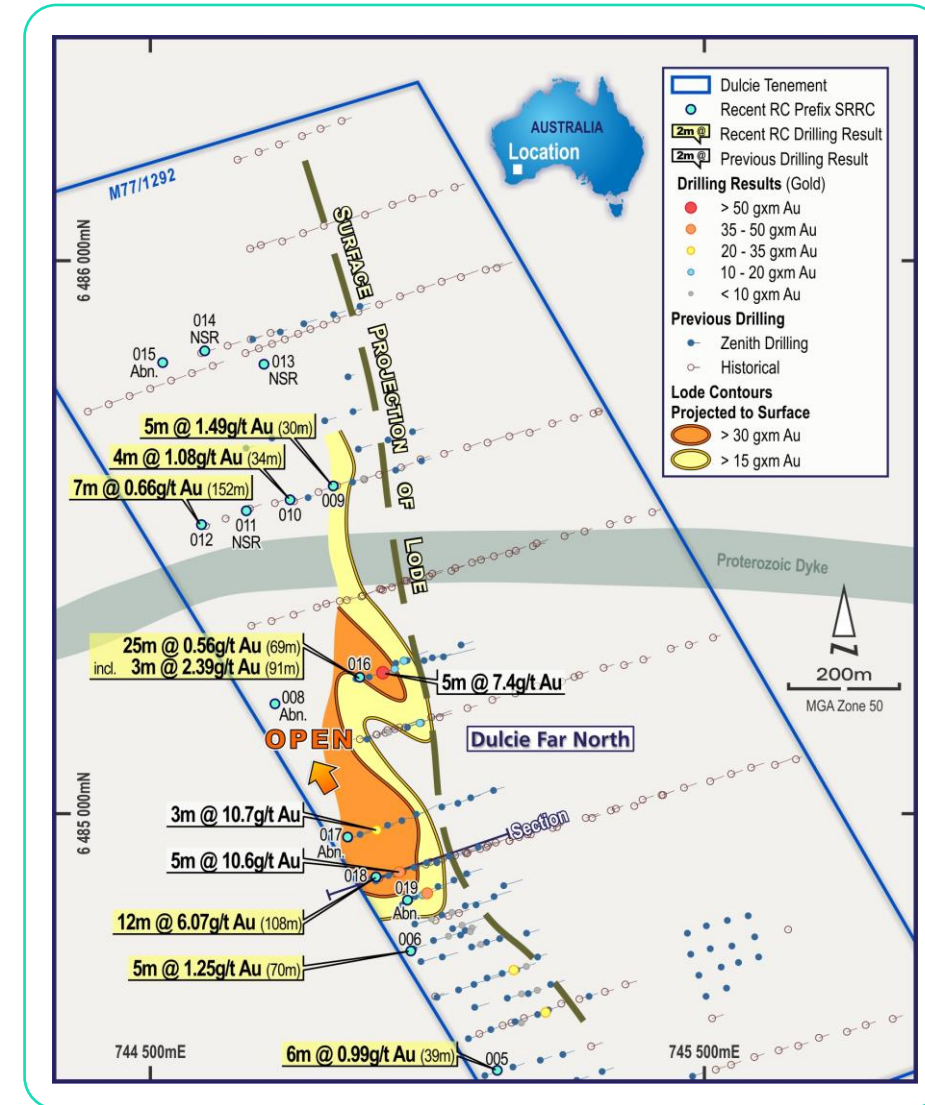
Zenith is exploring these assets with a dedicated resource led by Kevin Seymour.

# Split Rocks (Dulcie Far North) – Gold Exploration

## Fast Track Dulcie Far North Resource Definition Drilling

- ✓ High grade gold mineralisation intersected, including:
  - 12m @ 6.07 g/t Au <sup>(1)</sup>
  - 5m @ 10.6 g/t Au
  - 12m @ 2.86 g/t Au and
  - 3m @ 10.7 g/t Au
- ✓ Mineralisation targeted over 460m strike
- ✓ 40m x 40m infill drilling planned for maiden JORC resource @ June 2023
- ✓ 1,890m RC drilling from 19 holes + 800m from 15 Diamond tails planned
- ✓ Drilling scheduled to commence in March, subject to approvals

(1) ASX ZNC Release dated 25 January 2023



# Red Mountain Gold-Silver Intrusion Related Breccia Pipe

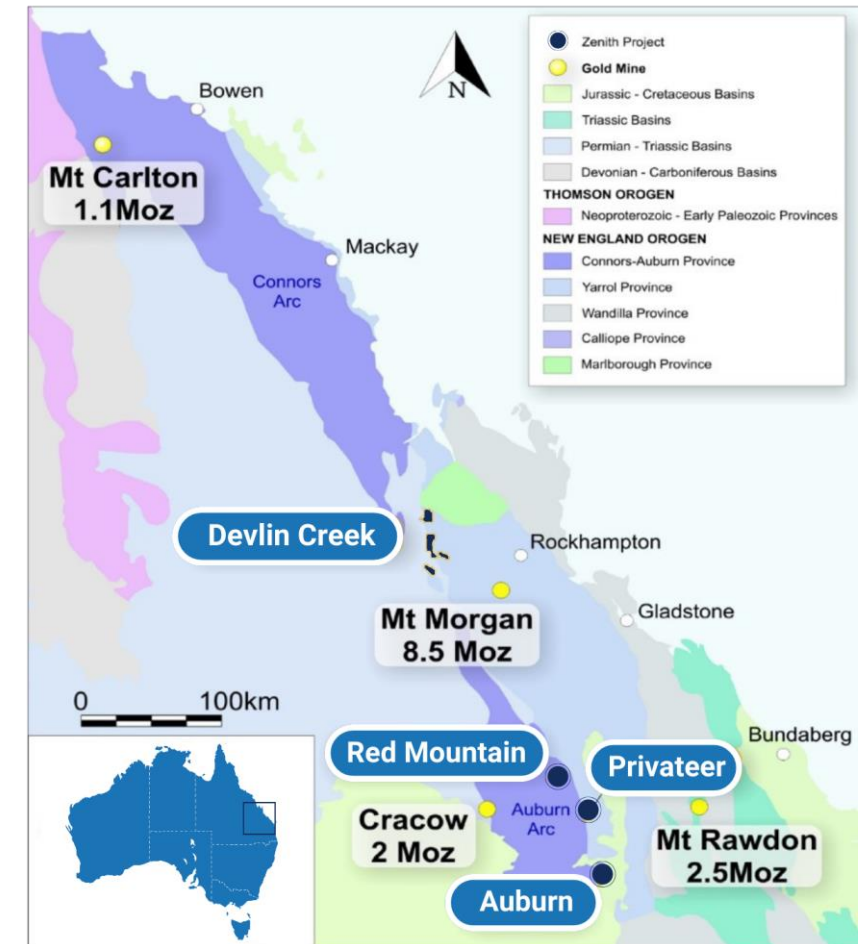
Located 400km NW of Brisbane in central Queensland

Nestled between Cracow (Aeris Resources) and Mt Rawdon (Evolution Mining)

✓ Zenith's drilling has returned compelling high-grade gold and silver intersections including:

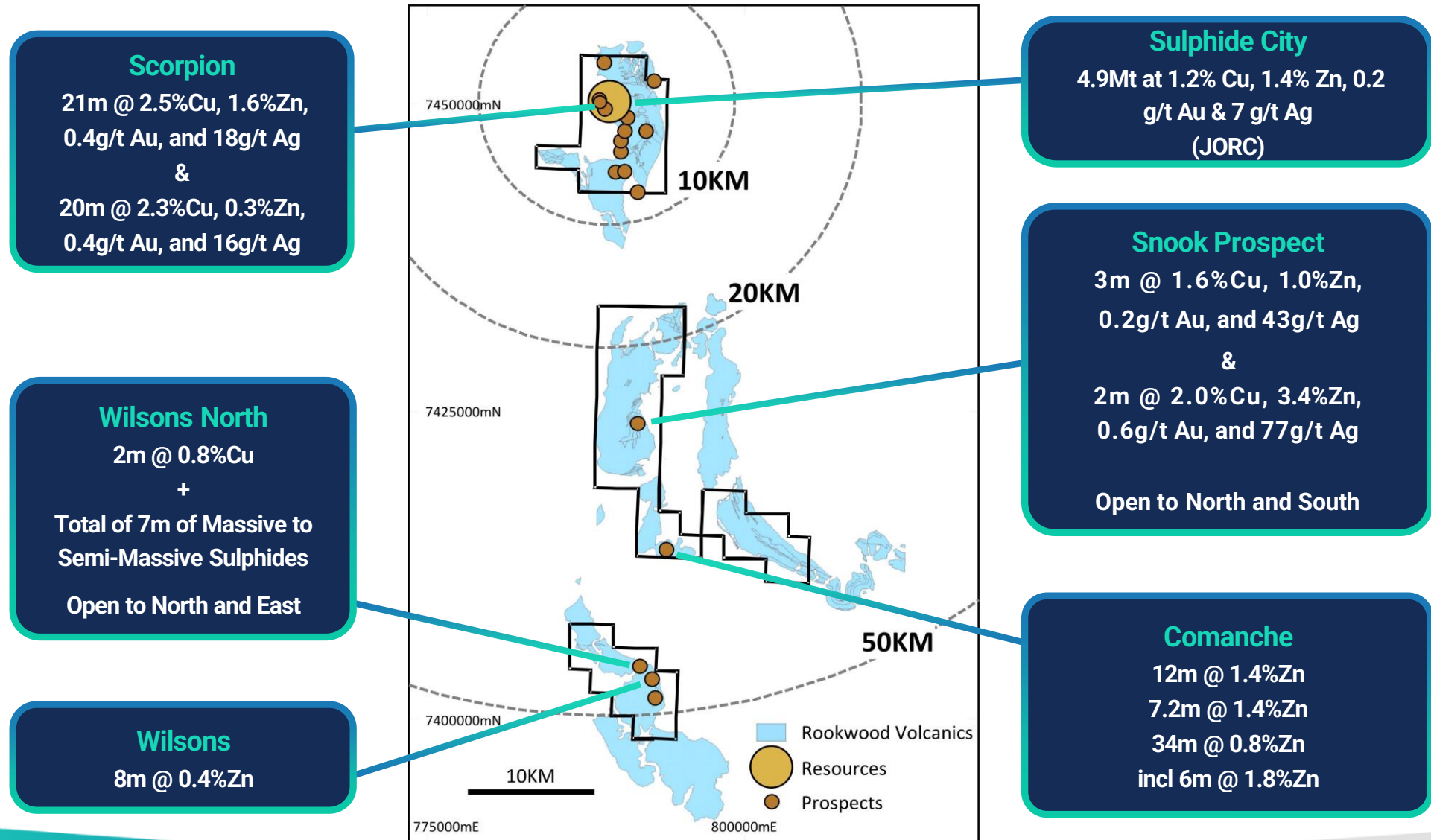
- 13m @ 8.0g/t Au from surface incl. 6m @ 16.7 g/t Au
- 15m @ 3.5 g/t Au incl. 2m @ 22.4 g/t Au
- 12m @ 4.9 g/t Au incl. 6m @ 9.4 g/t
- 5m @ 10.4 g/t Au incl. 1m @ 49.9 g/t Au
- 5m @ 3.5 g/t Au and 54.3 g/t Ag
- 10m @ 2.7 g/t from surface incl. 4m @ 4.9 g/t Au

✓ Deeper RC/Diamond drilling in 2023 will target the depth extensions of the breccia pipe @ 400mts.



\* For full results drill refer ASX Release 19-May-21

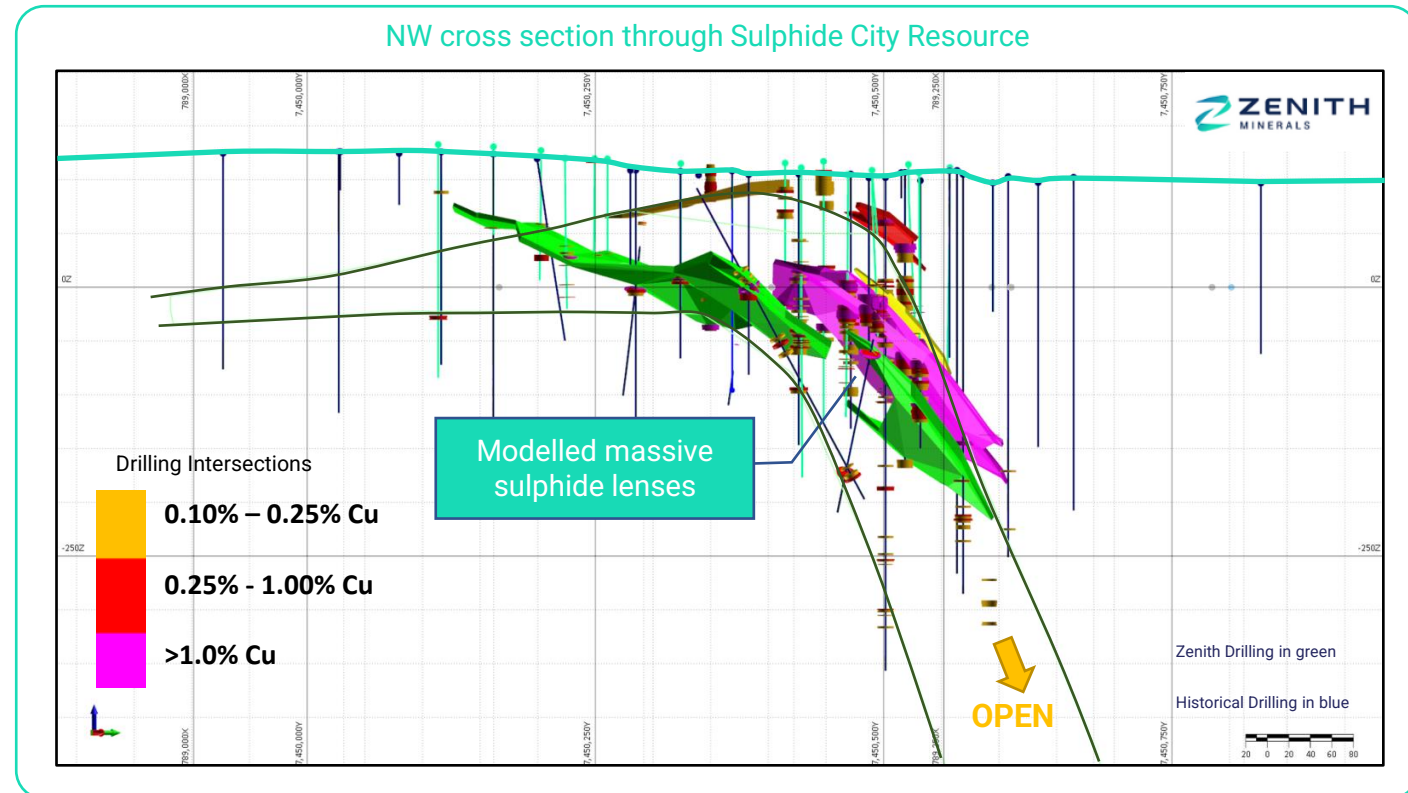




# Develin Creek - Copper – Zinc; Emerging VHMS Field

Located 80km NW of Rockhampton, QLD  
within the Rookwood Volcanics

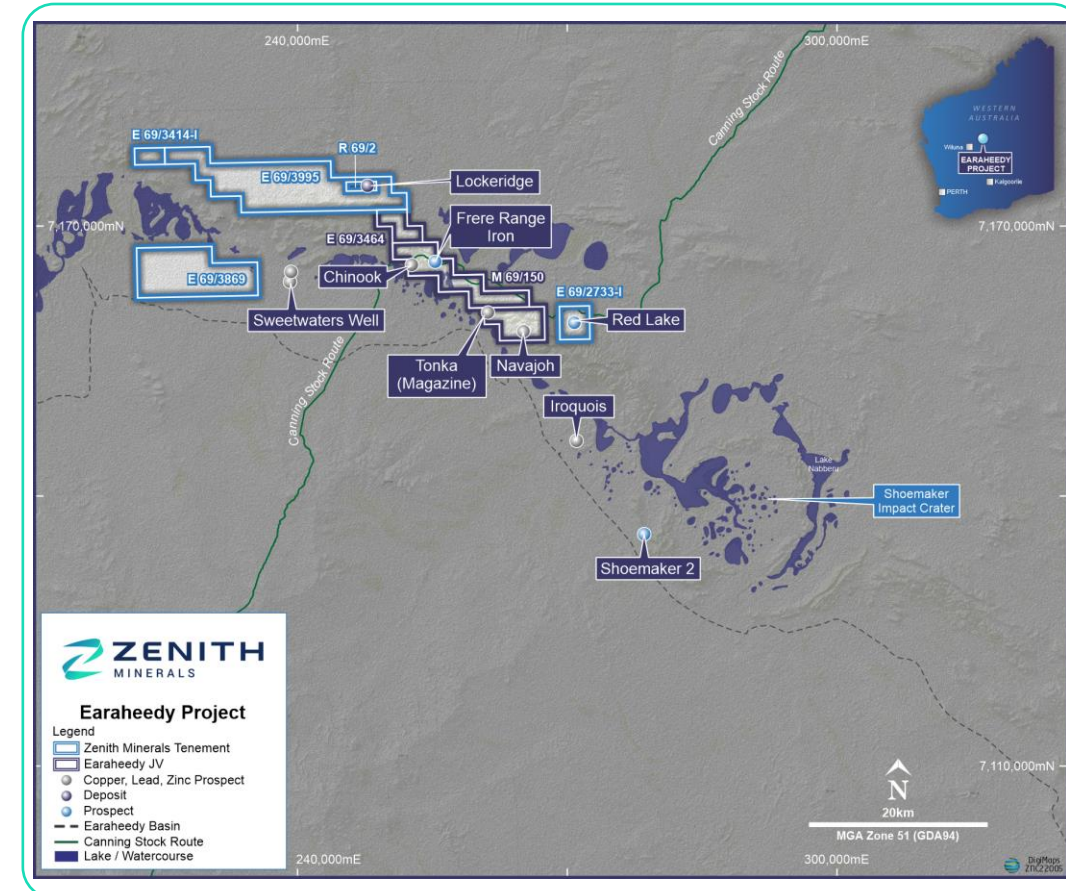
- ✓ Sulphide City JORC (2012) Inferred Mineral Resource of:
  - **4.9Mt @ 1.2% Cu, 1.4% Zn, 0.2 g/t Au & 7 g/t Ag <sup>(1)</sup>**
- ✓ New folded stratigraphy model will target high grade copper extensions along NW trending transfer faults
- ✓ **2023 planned exploration:**
  - Deeper resource extension RC/DDH drilling over Sulphide City
  - Ground EM to refine VTEM plates around Sulphide City
  - RC drilling of ground EM plates + drilling the depth extensions to Snook (30km south of Sulphide City)



(1) ASX ZNC Release dated 8 August 2022

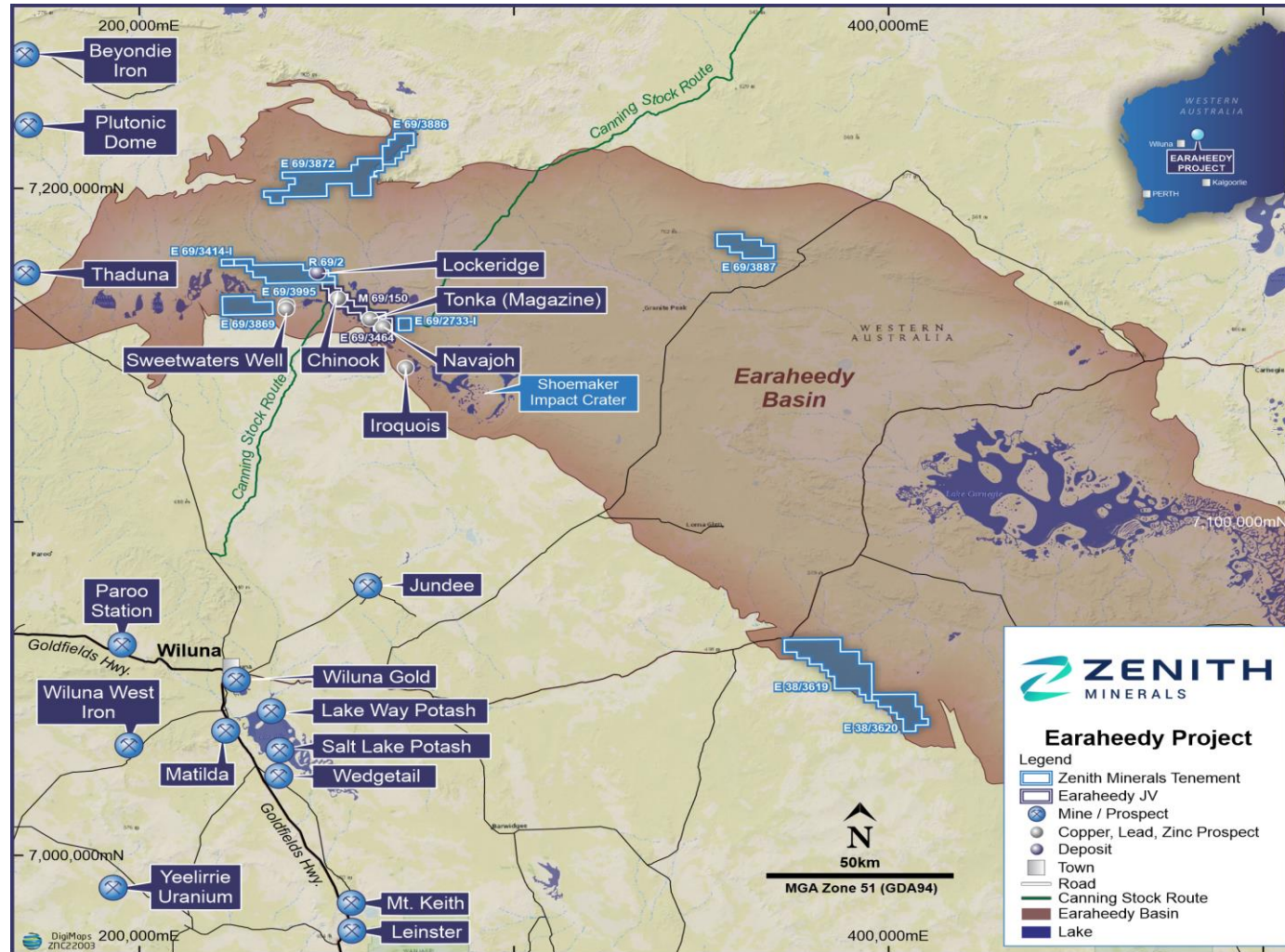
# Earaheedy – Zinc/Lead/Silver (25% free carry to Completion of BFS)

- ✓ Zenith Minerals Ltd (ASX: ZNC) holds a 25% free carried interest in the Earaheedy Joint Venture (EJV) – an emerging Tier-1 base metal province
- ✓ Maiden EJV Zn Pb Ag resource scheduled for the first half 2023
- ✓ High grade polymetallic copper silver tungsten mineralisation announced by funding partner Rumble Resources (ASX RTR) (ASX: RTR Release 3 Nov 2022) including:
  - 40cm @ 4450 g/t Ag, 3.37% Cu, 0.52% W from 115.3m in EHD010
  - 60cm @ 861 g/t Ag, 3.20% Zn from 81m in EHD009 and
  - 20cm @ 1100 g/t Ag, 0.27% Cu, 0.34% W from 83.8m in EHD018
- ✓ Outstanding initial flotation testwork results from zinc sulphide dominant ores (ASX: RTR Release 17 Nov 2022) including:
  - High zinc recoveries to 90% Zn in cleaner concentrates
  - Course primary grind size of 150 microns
  - Zinc concentrate grades to 59% Zn with no significant deleterious elements
- ✓ Outside the EJV, Zenith is looking to sell/JV its 100% owned Earaheedy Zinc Project encompassing 9 EL's with 100km strike around the basin margin





# Earaheedy – Zinc/Lead/Silver (25% free carry to Completion of BFS)



## David Ledger

### Executive Chairman

- Over 35 years in investment banking, with experience working in the United Kingdom and Australia.
- Former Executive Director of a major European Bank and has been advising institutional and corporate clients throughout his career.
- Currently works in Sydney as a Corporate Advisor with MST Financial, a specialist investment firm that provides research, sales trading and corporate finance solutions for domestic institutional clients and corporates.

## Michael Clifford

### Chief Executive Officer

- Geologist (BSc (Hons) MSc) – 30+ years' exploration.
- Senior technical and business development roles whilst at BHP Billiton Australia, Acacia Resources and AngloGold Ashanti rising to Regional Exploration Manager Australia.
- Former MD of ASX listed PacMag Metals from 2005, until its takeover in 2010, when he co-founded private explorer S2M2 Coal Pty Ltd.
- International exploration experience in the USA, Indonesia, Brazil, PNG, Angola, DRC, Mexico and Mongolia.

## Stan Macdonald

### Non-Executive Director

- Associated with the mining and exploration industry for many years, having been instrumental in the formation of numerous ASX listed companies, including Giralia Resources NL, where he was Director for over 23 years.

## Kevin Seymour

### General Manager Discovery

- Highly experienced and credentialled exploration geologist with broad experience across different commodities and geological terrains.
- Former MD of Woomera Mining and General Manager of Exploration at Ramelius Resources.
- Held senior exploration roles with Glengarry Resources, Sons of Gwalia and Delta Gold. Kevin has a track record of bringing projects into development and monetizing them.

## Geoff Rogers

### Independent Non-Executive Director

- Over 30 years experience in the resources sector
- As a former partner at King & Wood Mallesons (an international law firm), he gathered a wealth of legal experience particularly in mergers and acquisitions and the resources area.
- Involved with significant project acquisitions and project financing for many Australian and international mining and mineral development companies.
- Previously served as in-house legal counsel for an ASX listed mining company and presently manages his own sole practice advising exploration and mining companies.

## Andrew Bruton

### Non-Executive Director

- Experienced director, listed company CEO and corporate advisor.
- Over 20 years of direct experience in advancing complex mining, oil & gas and energy projects and transaction within Australia and overseas.
- Former CEO of MacArthur Minerals delivering the feasibility study on their iron ore assets.
- Previously a specialist lawyer for 20 years for one of the leading national firms and was awarded "Most Trusted Mining and Resource CEO 2022" by CEO Monthly Magazine.
- Bachelor of Business and a Bachelor of Laws from Queensland University and is a Member of the AICD.

# Investment Highlights



**Focus on building the lithium endowment**, substantial lithium drilling campaigns funded by JV partner until BFS



**Extensive and growing lithium portfolio** – increasing chances of exploration success



**Monetise gold and base metal assets** – recent key hires to accelerate exploration. Develop or Monetise



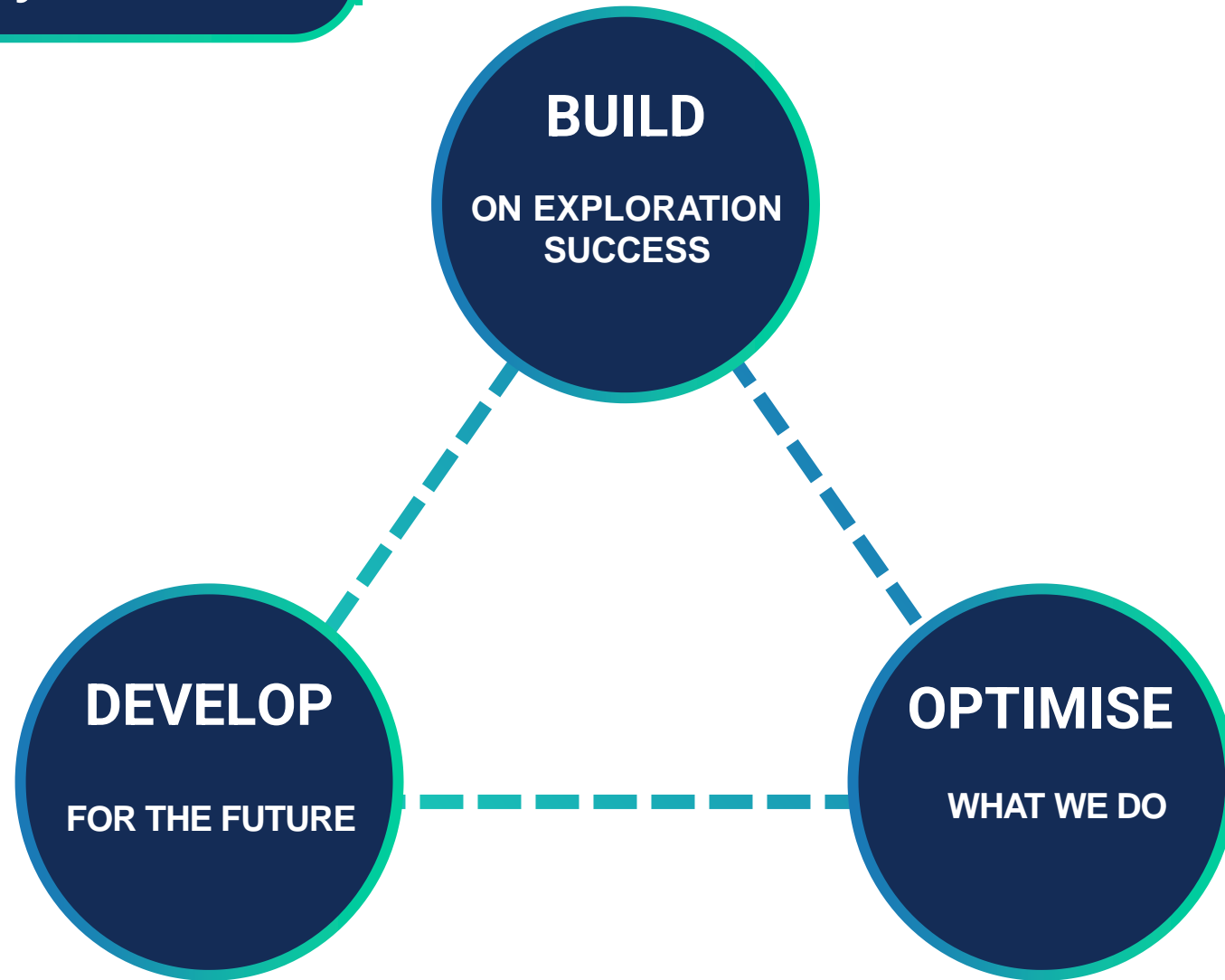
Earaheedy JV (ZNC 25%) expect **maiden mineral resource** in early 2023 and substantial drilling campaigns funded by JV partner until BFS



**Strong balance sheet** – cash & equities, \$10m



## Our Philosophy



# References

Western Australian Lithium Exploration Projects with drill intersections >10m @ 1%Li <sub>2</sub> O		
Name	Reference	Owner
Bounty	ASX: KDR 19 December 2017	Westfarmers & SQM JV -Covalent Lithium
South Ironcap	ASX: WSA 22 April 2016	IGO -Western Areas
Giant	ASX: MZN 20 December 2016	Forrestonia
Faraday	ASX: WIN 9 January 2023	Widgie Nickel
Voyager	ASX: WIN 17 January 2023	Widgie Nickel
Kangaroo Hills	ASX: AOU 24 November 2022	Auroch
Rio	ASX: ZNC 4 April 2022	ZNC
Waratah Well	ASX: ZNC 24 January 2023	ZNC
King Col	ASX: DEG 15 November 2018	DeGrey
Mallina	ASX: 1MC 7 December 2022	Morella Corporation
Malinda	ASX: RDT 20 January 2023	Red Dirt



# AUSTRALIAN-BASED MINERALS EXPLORER FOR THE PRODUCTS OF TOMORROW

**Zenith Minerals Limited (ASX:ZNC)**  
Investor Presentation  
April 2023

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