

## Quarterly Activity Report

### For the Period Ending 31 December 2023

#### HIGHLIGHTS

##### Battery Metals

**Zenith regained control of key lithium projects, the Split Rocks Lithium Project, and the Waratah Well Lithium Project in WA, post-quarter end (ASX Release 11-Jan-24) – Figure 1.**

- **Split Rocks Lithium Project**

- Split Rocks Lithium Project (covering ~367km<sup>2</sup>) located in the Forrestania greenstone belt 30km north of the Mt Holland Lithium Mine (Sociedad Química y Minera and Wesfarmers).
- Maiden Inferred Mineral Resource (JORC 2012) for the Rio Lithium Pegmatite Deposit at Split Rocks of **11.9Mt at 0.72% Li<sub>2</sub>O** (ASX Release 28-Sep-23).
- 83 advanced lithium targets identified in December 2023 (ASX Release 7-Dec-23). Targets include the very large (>9km long by 2km wide), untested Cielo Lithium Target previously announced to ASX on 9-Feb-23, with a peak auger soil value of 880ppm Li.
- A total of 318 drill holes are fully permitted and ready for drilling, with Permits of Work in place for a further 193 AC drill holes (heritage clearance required), covering the very large Cielo lithium target and 14 other targets.
- Split Rocks is 1 of only 7 lithium deposits with a JORC mineral resource in Western Australia, outside existing lithium mining operations (Figure 2).

- **Waratah Well Project**

- Waratah Well Project (covering ~123km<sup>2</sup>) located ~20km northwest of the regional town of Yalgoo in the Murchinson Region, holds a potentially large lithium-caesium-tantalum pegmatite target (Figure 2).
- Multiple drill intersections at Waratah Well have returned **>10m @ 1.0%Li<sub>2</sub>O** (ZNC ASX Release 24-Jan-23).
- Permits are in place to commence a drilling program to further test these targets, which remain open in all directions.

With strong corporate activity in the lithium sector Zenith will now conduct a review of both lithium projects including the potential to seek expressions of interest from potential strategic investors. Post-quarter end, Zenith announced (ASX Release 15-Jan-24) that it has engaged Azure Capital to assist the Company with its strategic review of its Lithium business. This will include exploring new potential strategic investor relationships and the potential sale of its Lithium business, including the 100% owned Split Rocks and Waratah Well lithium projects in Western Australia. The process is expected to be completed in 2nd quarter of calendar 2024. Azure has also been appointed as the Company's takeover response adviser.

- **Hayes Hill Lithium - Nickel Target** - Ground based electromagnetic (EM) geophysical surveys confirm nickel sulphide targets at the Hayes Hill Lithium – Nickel Project in Western Australia (ASX Release 20-Nov-23). EM surveys have defined two nickel sulphide drill targets adjacent to the well-defined surface geochemical targets at Green Bananas. One discrete, strong (up to 20,000 siemens) bedrock conductor located immediately west of the geochemical target and another conductor located immediately south. Both are robust sub-surface nickel sulphide drill targets. Drill permitting is in progress.

### Gold & Base Metal Projects

**Earaheedy Joint Venture** – 25% free carried interest in Earraheedy Zinc Project. Rumble Resources Ltd (75%) has completed diamond drilling to obtain a bulk sample for metallurgical testwork (ASX:RTR Release 9-Jan-24) .

### ZENITH BATTERY METALS

Zenith is focused on minerals containing lithium and related metals required for rechargeable lithium-ion batteries for electric vehicles and renewable energy storage ("Battery Minerals") – Figure 1.

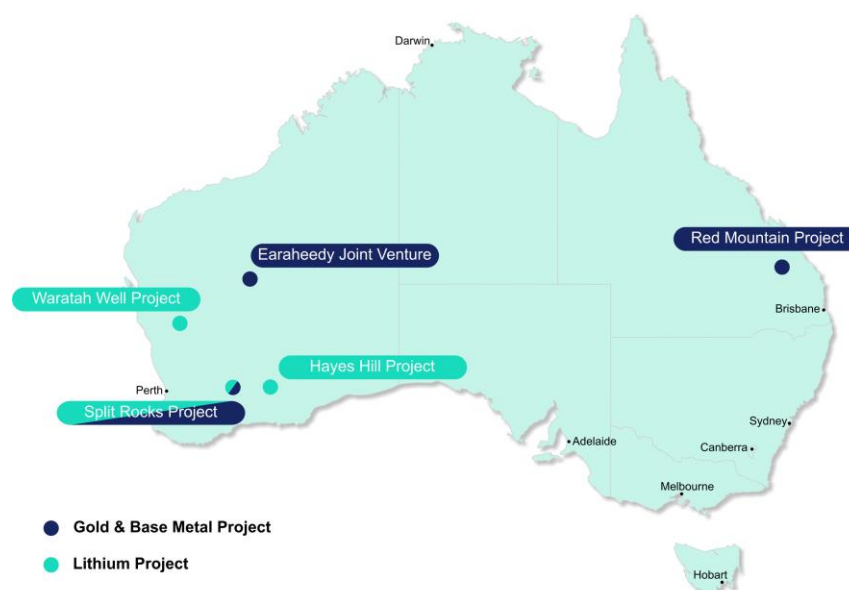


Figure 1: Zenith Lithium Project Locations

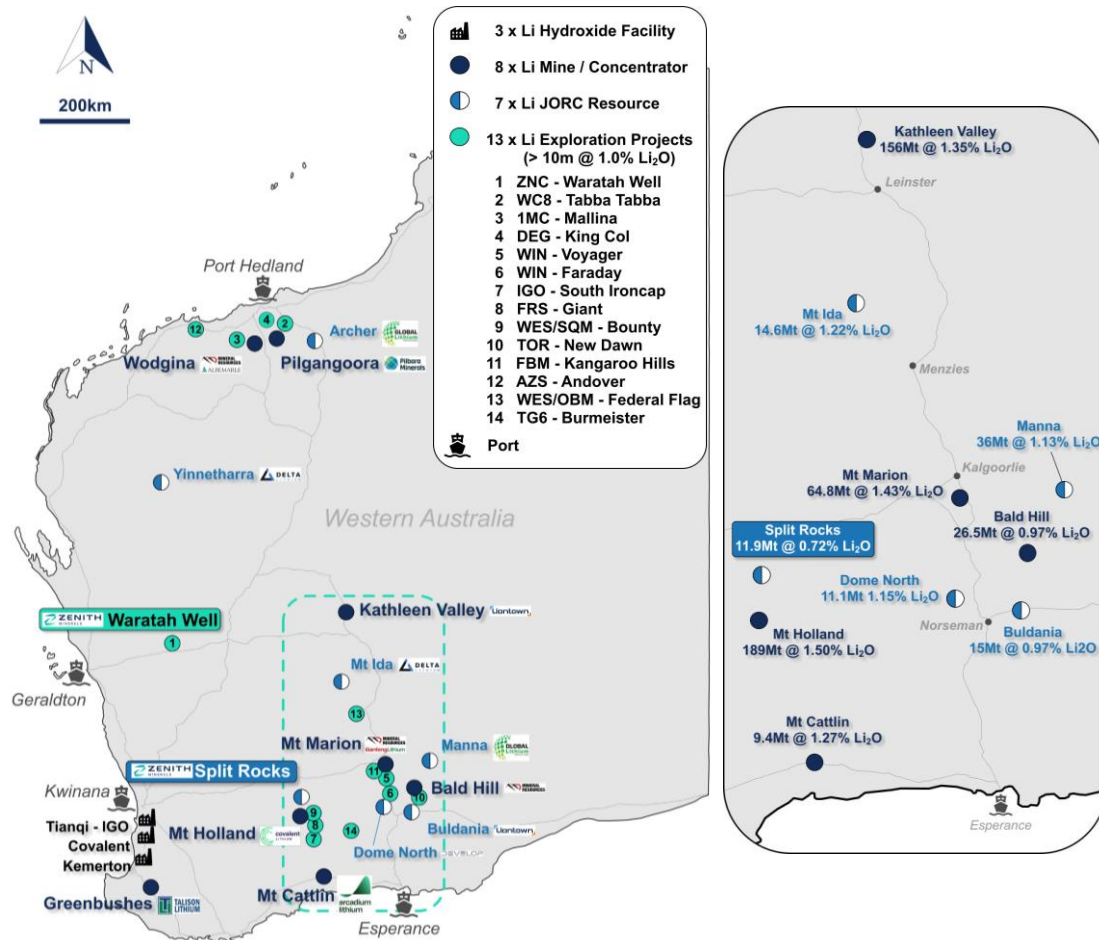


Figure 2: Split Rocks and Waratah Well Project Locations with Major Lithium Mines and Projects in Western Australia<sup>1</sup>

## PROJECT DETAILS

### SPLIT ROCKS LITHIUM-TANTALUM PROJECT – WA

The Split Rocks Project is located approximately 40km south of the regional town of Marvel Loch in the Goldfields Region of Western Australia.

The project area lies immediately north of the Mt Holland Lithium Mine owned by Covalent Lithium (SQM and Wesfarmers) - Figure 2.

Drilling at the Rio Prospect has returned significant lithium mineralisation (Figures 3- 6) - refer to ASX Release 16-Nov-22, culminating in a maiden Inferred Mineral Resource (JORC 2012) - ASX Release 28-Sep-23. The mineral resource for the Split Rocks Rio lithium pegmatite deposit has been estimated, using all data available as at 3-Aug-23. Drilling is currently relatively wide spaced (generally 200m x 100m).

Note: 1. Refer ZNC ASX Release 30-Oct-23 and ZNC ASX Release 31-Jan-24 Company Update Presentation – 2024 for cross referencing details, additional resource reported ASX:DL1 27-Dec-23. Drill intersections reported as lithium mica drill intersections not included.

To test the reasonable prospects for eventual economic extraction, a preliminary open pit optimisation was conducted. The resultant pit captured the majority of the lithium mineralisation; the remaining mineralisation is in shallow dipping sheets that would alternatively be amenable to low-cost room and pillar underground mining.

The Mineral Resource estimate for the Split Rocks Rio project reported at a 0.5% Li<sub>2</sub>O cutoff is shown below. The entire resource is classified Inferred and is open at depth and along strike.

<b>Rio Lithium Deposit Inferred Mineral Resource Estimate</b>							
<b>Zone</b>	<b>Million Tonnes</b>	<b>Li<sub>2</sub>O %</b>	<b>Cs ppm</b>	<b>Nb ppm</b>	<b>Sn ppm</b>	<b>Ta ppm</b>	<b>Domain</b>
Upper	8.45	0.76	426	77	157	62	31
Middle	3.48	0.62	387	71	364	49	32
<b>Total</b>	<b>11.9</b>	<b>0.72</b>	<b>415</b>	<b>75</b>	<b>217</b>	<b>59</b>	<b>-</b>

Notes to Resource Table:

1. The Mineral Resource is estimated with all drilling data available at 3-Aug-23, and reported at a 0.5% Li<sub>2</sub>O cutoff.
2. The Mineral Resource is reported in accordance with the JORC Code 2012 Edition.
3. The Competent Person is Phil Jankowski FAusIMM of CSA Global
4. Rounding may lead to minor apparent discrepancies

Significant smoothing of lithium grades in the resource estimation process due to the current wide drill spacing (generally 200m x 100m). Closer spaced drilling has the potential to define more discrete high-grade lithium zones that could enhance the overall lithium grade of the deposit.

Lithium mineralisation remains open to the northeast, south and at depth, with further drilling required to define the full limits of mineralisation.

Lithium pegmatite mineralisation identified to date is a mixture of eucryptite with lesser spodumene, petalite and lepidolite confirmed by multiple methods including optical microscopy, SEM, Raman spectroscopy and XRD analyses.

The amenability of eucryptite mineralisation to conventional treatment processes has been shown by positive sighter flotation testwork and bench scale calcination-leach tests, hence confirming the potential of eucryptite as a viable lithium target (ASX Release 26-Jul-22).

### Forward Program

Lithium mineralisation at Rio remains open to the north, south, east and at depth. Permits are now in place to enable infill and extensional drilling of up to a further 50 RC / diamond holes in the immediate Rio area.

Rio is the first lithium target that was tested with extensive RC and diamond drilling and is one of > 80 targets within the Split Rocks project, that the Company wishes to drill test (ASX Release 10-Aug-23). In November 2023 an in-house review by Zenith's

technical team of new surface sample assays, a review of existing soil geochemical data and assessment of historic and Zenith drill data resulted in 83 lithium targets being defined within Zenith's large tenement holding at Split Rocks (ASX Release 7-Dec-23). This was a significant increase from the 30 targets previously reported (ASX Release 10-Aug-23) – refer Figure 3. Targets include the very large (>9km long by 2km wide), untested Cielo Lithium Target previously announced to ASX on 9-Feb-23, with a peak auger soil value of 880ppm Li.

The review reassessed the surface geochemical lithium anomaly threshold at 46ppm Li (or 100ppm  $\text{Li}_2\text{O}$ ). This threshold was based on the surface geochemical signature surrounding the Company's Rio lithium deposit, the soil anomaly covering the Mt Holland Lithium Deposit and other competitor announcements that included soil anomalies that upon drill testing have successfully intersected significant lithium rich LCT pegmatites (refer ASX Release 7Dec-23 for further details).

Finally, a review of Zenith's drill database has defined 6 targets requiring drill follow-up that contain historic, near surface, weathered pegmatite drill intersections up to 50m thick. These pegmatites are considered highly significant, based on their LCT pegmatite chemistry (K/Rb ratio less than 50), with additional anomalous contents of Cs, Li, Ta, or Nb).

318 drill holes are fully permitted and ready for drilling (including the 50 holes at Rio), whilst Permits of Work are in place for a further 193 AC drill holes, covering Cielo and 14 additional targets.



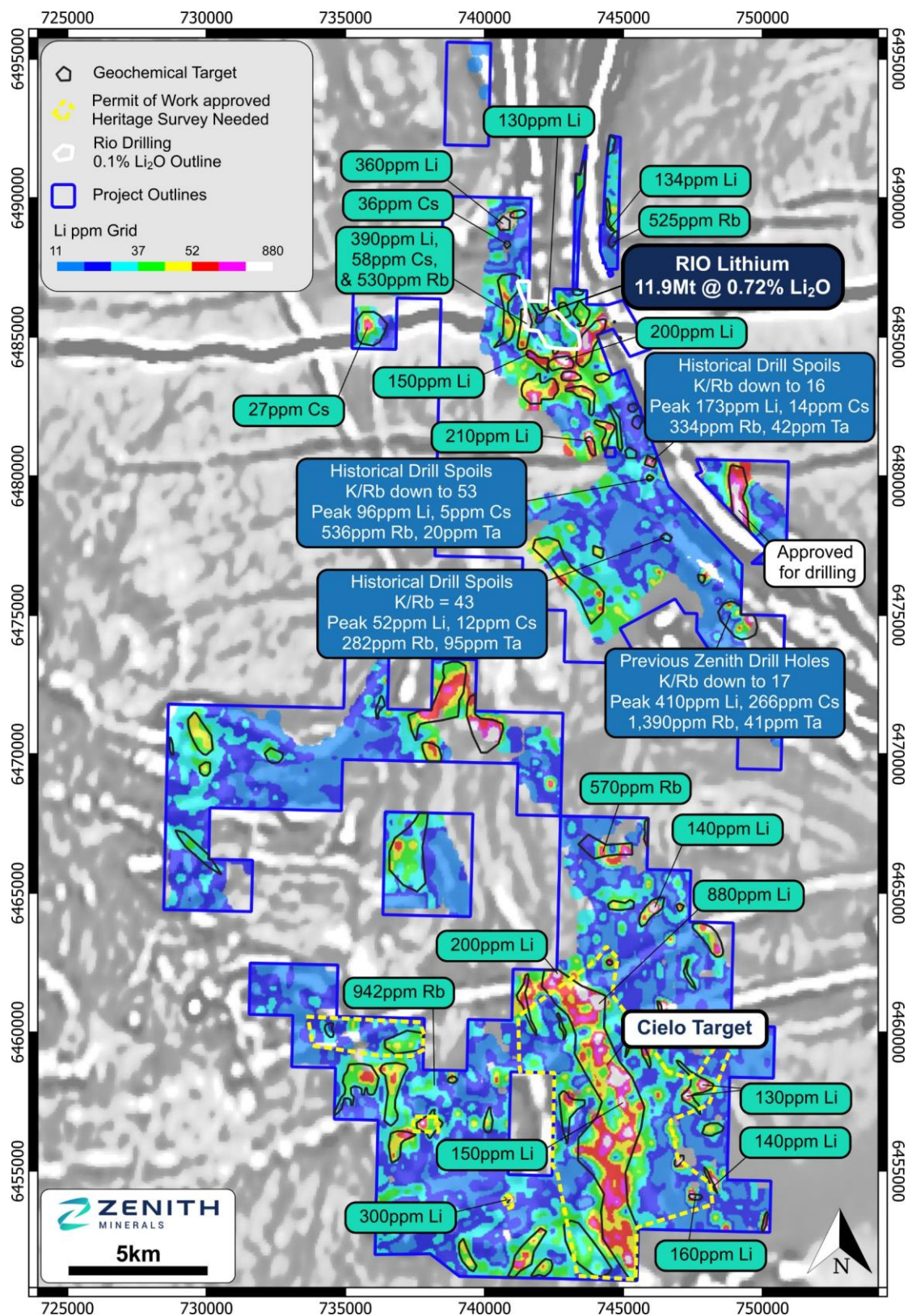


Figure 3: Split Rocks Rio Mineral Resource Location and Lithium Pegmatite Targets

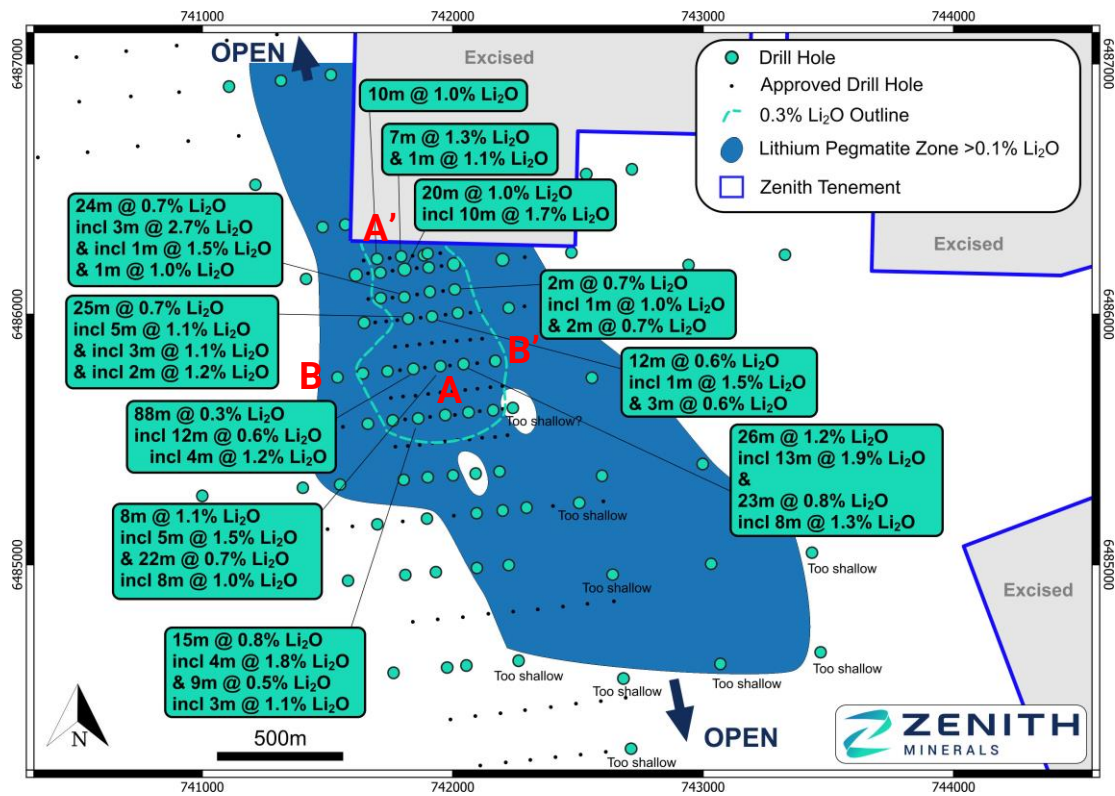


Figure 4: Rio Pegmatite – Map with Significant Lithium Drill Results

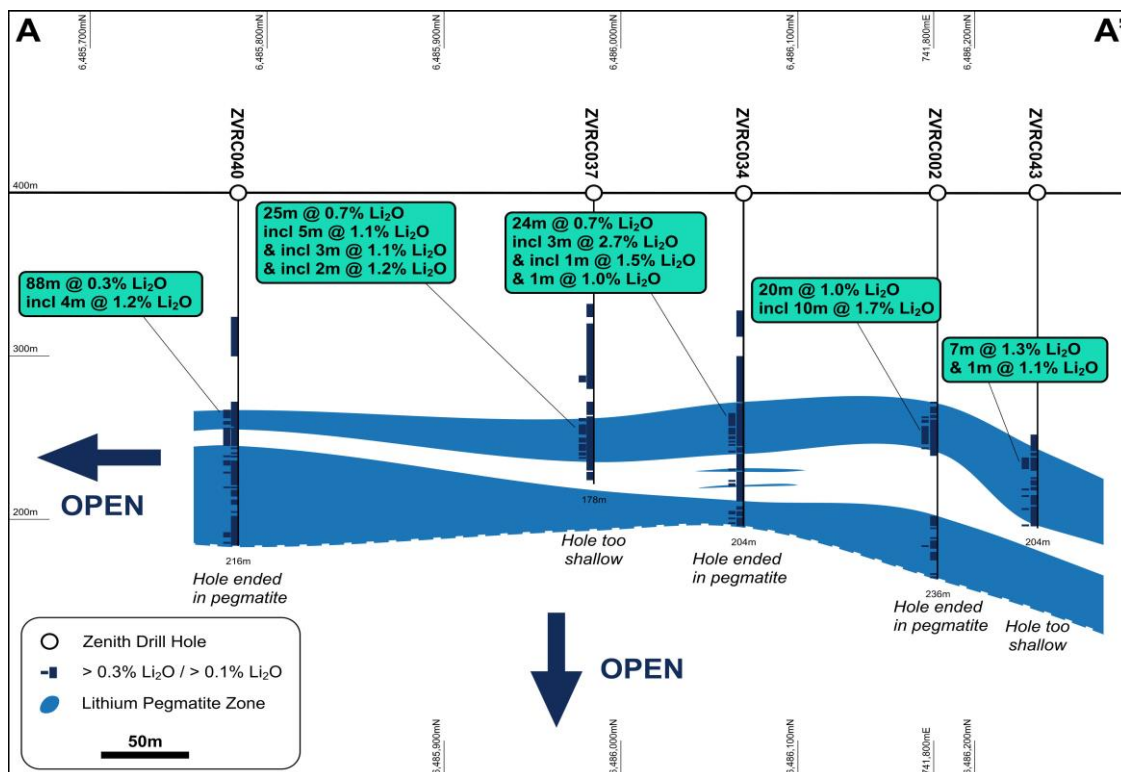


Figure 5: Rio Pegmatite – Long Section with Significant Lithium Drill Results

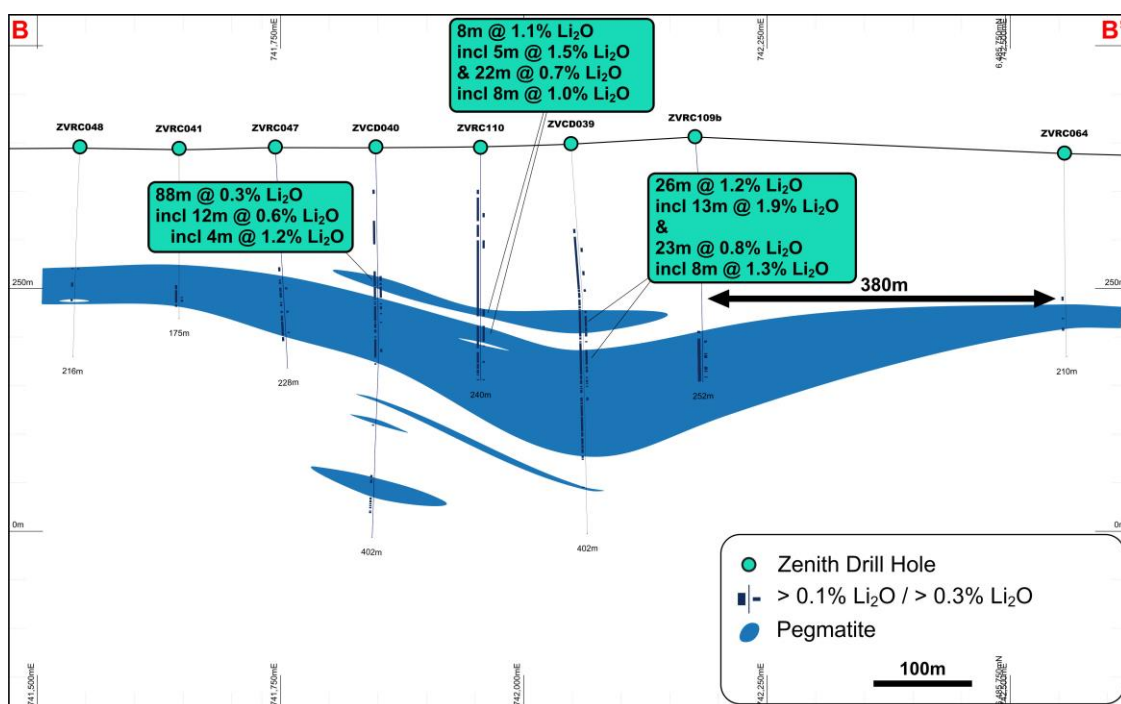


Figure 6: Rio Pegmatite – Cross Section with Significant Lithium Drill Results

### WARATAH WELL LITHIUM-TANTALUM PROJECT – WA

The Waratah Well Project is located approximately 20km northwest of the regional town of Yalgoo in the Murchison Region of Western Australia.

An initial drilling program in early 2022 confirmed the presence of widespread lithium bearing pegmatite dykes over a 4km zone, open to the north and east under soil cover at Waratah Well (ASX Release 10-Mar-22).

Drilling to date has confirmed the presence of high-grade lithium below the depth of weathering, refer Figures 7 & 8, (ASX Release 24-Jan-23), including:

- 14m @ 1.0% Li<sub>2</sub>O, incl 8m @ 1.5% Li<sub>2</sub>O.
- 10m @ 1.4% Li<sub>2</sub>O, incl 6m @ 2.0% Li<sub>2</sub>O.
- 27m @ 0.8% Li<sub>2</sub>O (true width 10m), incl 12m @ 1.2% Li<sub>2</sub>O (true width 6m).

Lithium mineralisation has been identified by laboratory XRD analysis as containing up to 84% petalite. High-grade petalite is not well documented in Western Australia but is known in several overseas deposits. An example of a lithium deposit containing significant petalite is the Arcadia lithium deposit in Zimbabwe formerly owned by Prospect Resources Ltd (ASX:PSC). Prospect reported a JORC 2012 Mineral Resource of 72Mt @ 1.06% Li<sub>2</sub>O\* and then subsequently completed a feasibility study and pilot plant before divesting its 87% project interest for \$US378M (\$US422M on a 100% basis)\*\* as announced by ASX:PSC on 23-Dec-21, highlighting petalite as a potential significant economic contributor to lithium projects. (\*full details are disclosed in ASX:PSC Release 11-Oct-21, \*\*Refer to ASX:PSC Release 23-Dec-21).



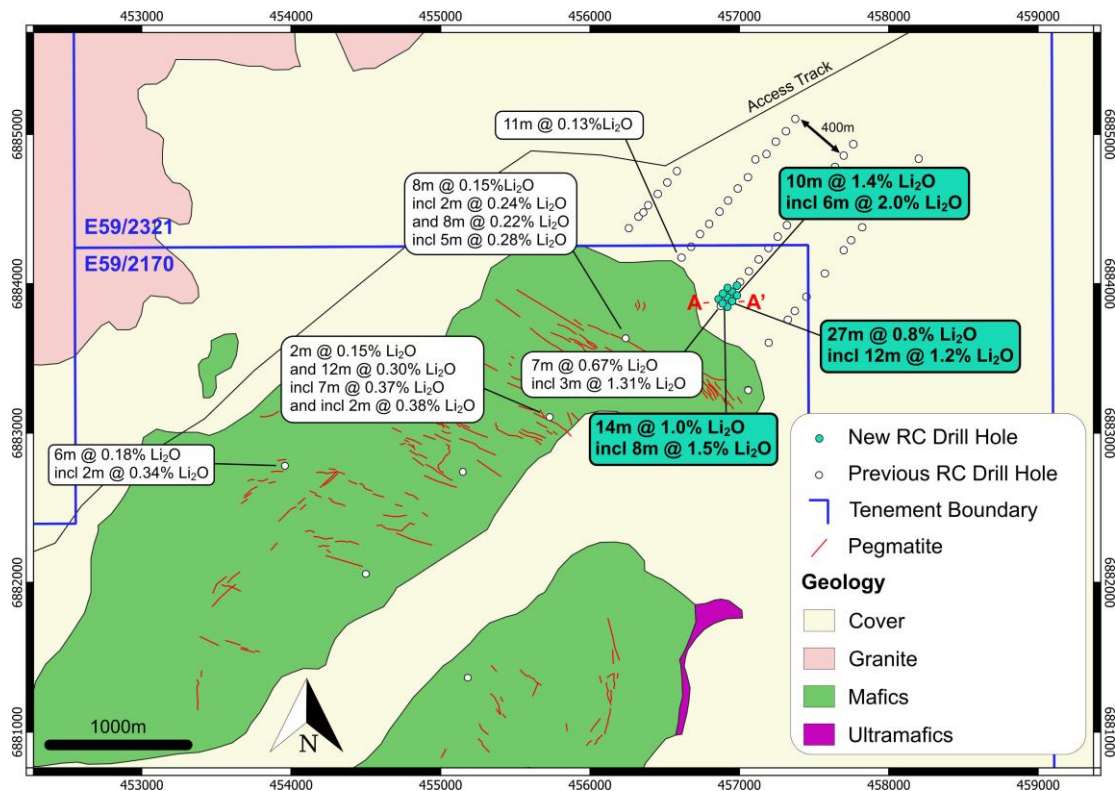


Figure 7: Waratah Well Lithium Prospect Area - Lithium Drilling Results and Location of Cross Section A-A'

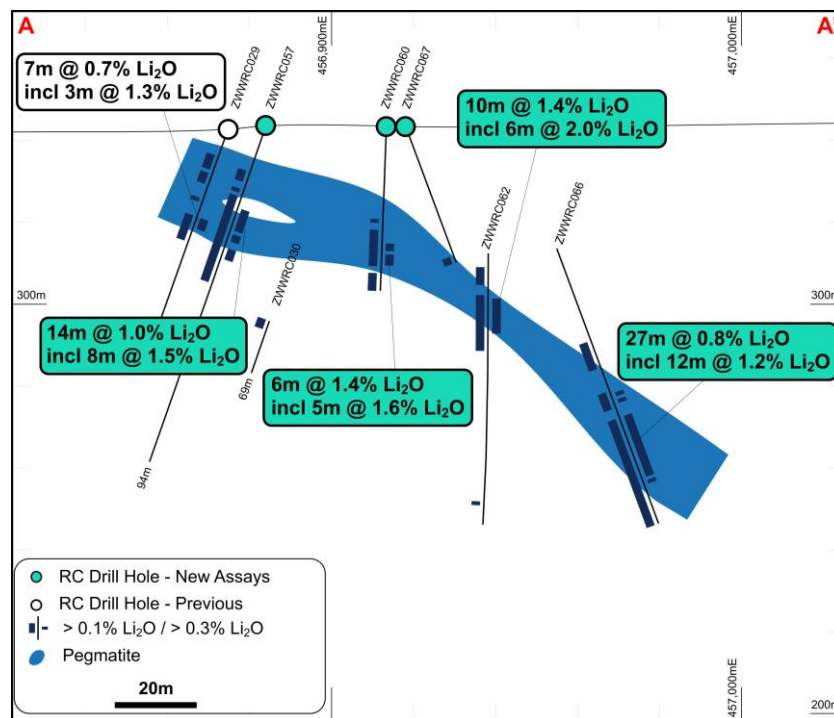


Figure 8: Waratah Well Lithium Prospect Drilling Cross Section A-A'

Heritage surveys have been completed and permits are in place to allow a substantial follow-up drill program to define the extents of lithium mineralisation that remains open to the north, south and east under shallow soil cover at Waratah Well.

## HAYES HILL LITHIUM – NICKEL PROJECT – WA (Zenith option to earn 100%)

The Hayes Hill project consists of 4 granted exploration licences in a highly mineral prospective corridor with significant untested lithium and nickel potential. The project is situated 10 – 14km to the east and southeast of the Dome North lithium pegmatite deposit and immediately east of the Sinclair caesium pegmatite mine both owned by Essential Metals Limited (ASX:ESS). Liontown's (ASX:LTR) Buldania lithium deposits are located a further 43km to the southeast of the Hayes Hill project area (Figure 9).

Nickel prospective ultramafic rocks extend 18km north along strike from Galileo's (ASX:GAL) Calisto nickel-PGE discovery and 11km northwest along strike from S2 Resources' (ASX:S2R) Polar Bear nickel prospects (Gwardar, Taipan & Halls Knoll) – Refer to Figures 9.

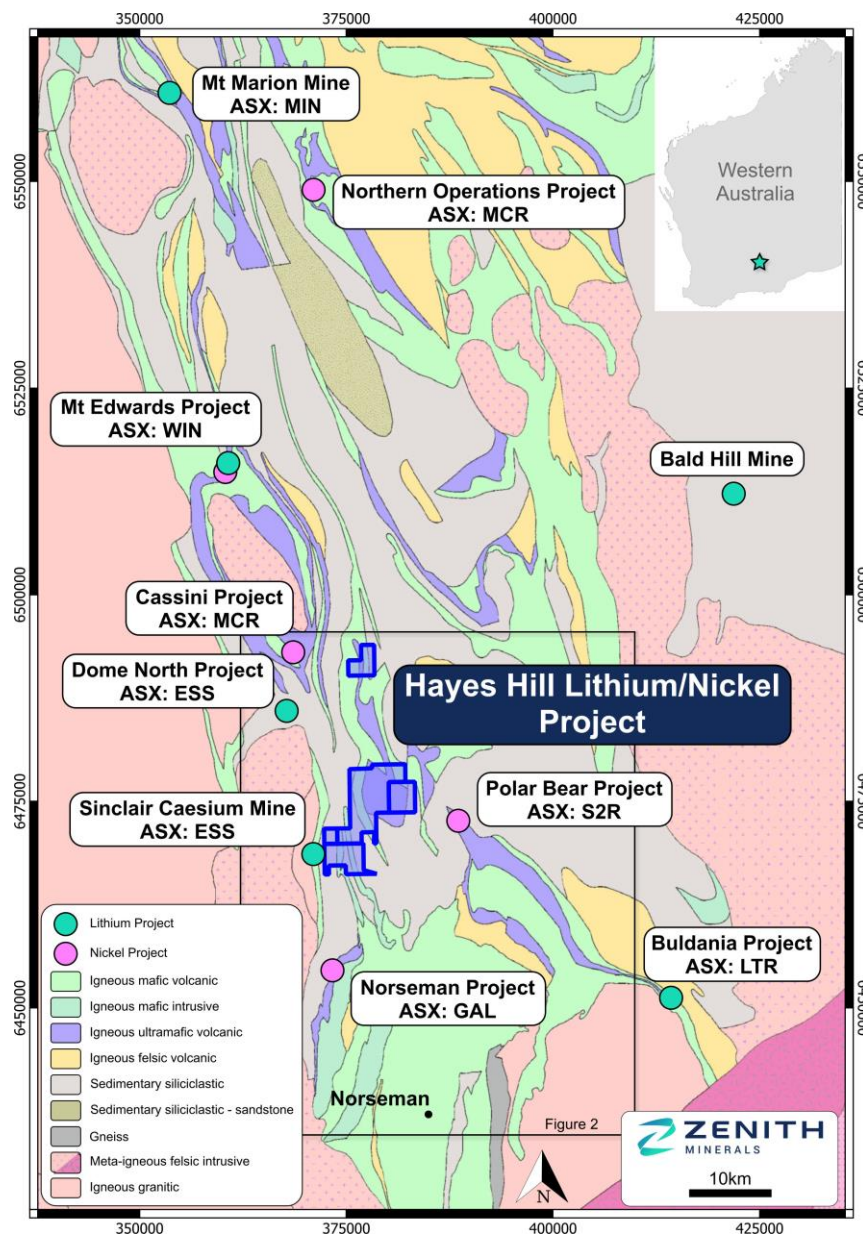


Figure 9: Hayes Hill Project Location

The project was secured as it is considered prospective for lithium. Ongoing geochemical screening is in progress to test that potential. Supplementary to the lithium work, the Company is also aware that the area is in a nickel district and is therefore conducting complementary exploration work to assess its nickel sulphide upside.

Both moving loop and fixed loop time domain electromagnetic (MLTEM /FLTEM) surveys have now defined two strong (up to 20,000 siemens) bedrock conductors, considered to be sub-surface, nickel sulphide drill targets (ASX Release 20-Nov-23).

The EM conductors lie adjacent to the well-defined surface geochemical targets at Green Bananas where recent hand auger geochemical sampling (ASX Release 4-Jul-23) returned peak assay results of 0.43% Ni, 0.44%Cu, 0.53% Co and 203ppm Pt.

Two conductors have been identified at Green Bananas HH1\_A in the south and HH1\_B in the west.

The southern target (HH1\_A) FLTEM models varied from sub-vertical to 40° N/NNW dip, conductance ~1250-6000S+, with an area size likely >200m x 200m. There appears to be an offset of the FLTEM models from those defined by MLTEM. The modelled conductor lies close to the inferred southern limb of a north plunging fold, at the contact between mafic and ultramafic rocks (Figures 10– 12).

The western drill target (HH1\_B) is best modelled as a plunging, short strike length conductor of high conductance (>20,000S) with dimensions ~75m x 250m+, occurring at an estimated depth of 50-75m to the top of the body. The conductor is modelled at the contact between mafic and ultramafic rocks (Figures 11 & 13).

The EM conductors lie adjacent to the well-defined surface geochemical targets at Green Bananas. The geochemical anomaly is consistent with nickel-sulphide geochemical fertility ratios (Ni/Cr ratio, Kambalda ratio and Ni-MgO residuals) developed by researchers based on published studies of Western Australian nickel sulphide deposits.

HH1\_B is a clear direct drill target, whilst HH1\_A will need drilling and downhole EM (DHTEM) to define potential bedrock conductors given the variability/less confidence in the MLTEM/FLTEM modelling.



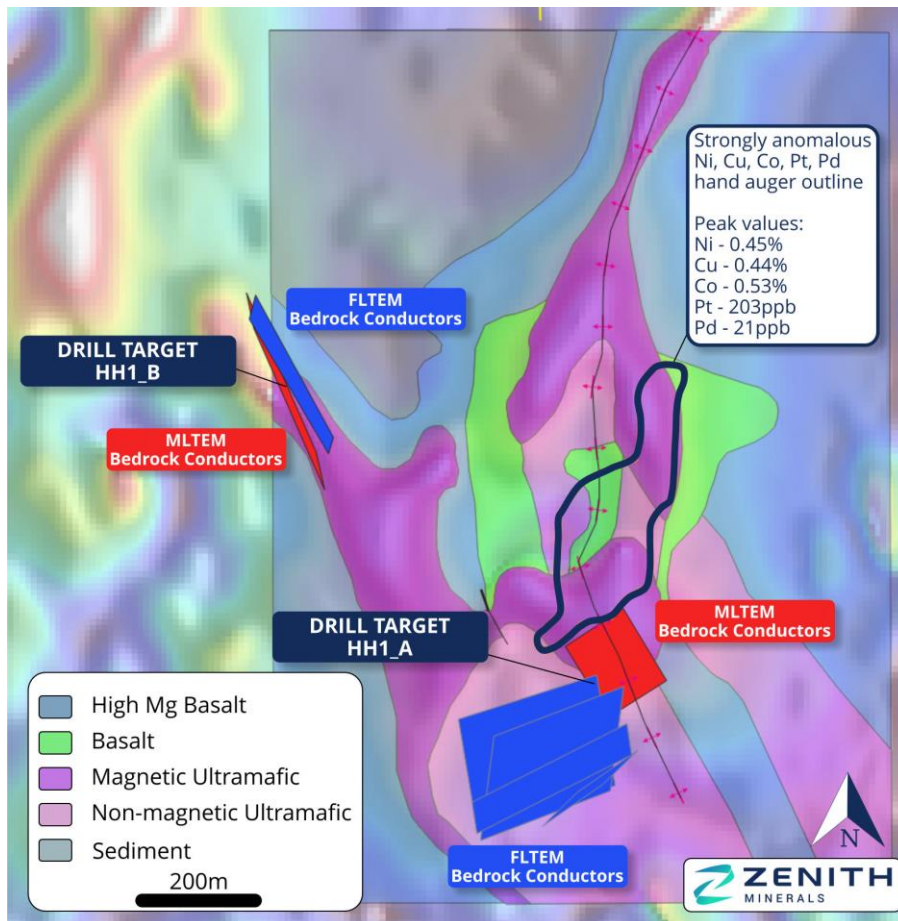


Figure 10: Plan Showing Green Bananas Nickel Sulphide Targets

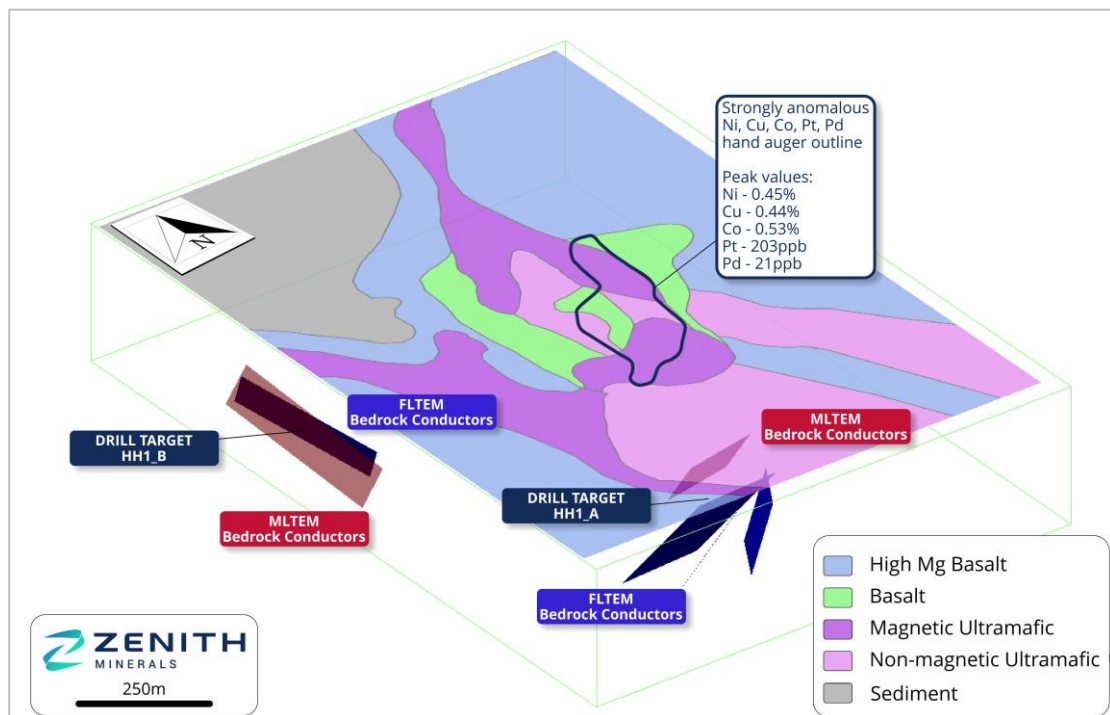


Figure 11: 3D Model of Green Bananas Nickel Sulphide Targets (view looking northeast)



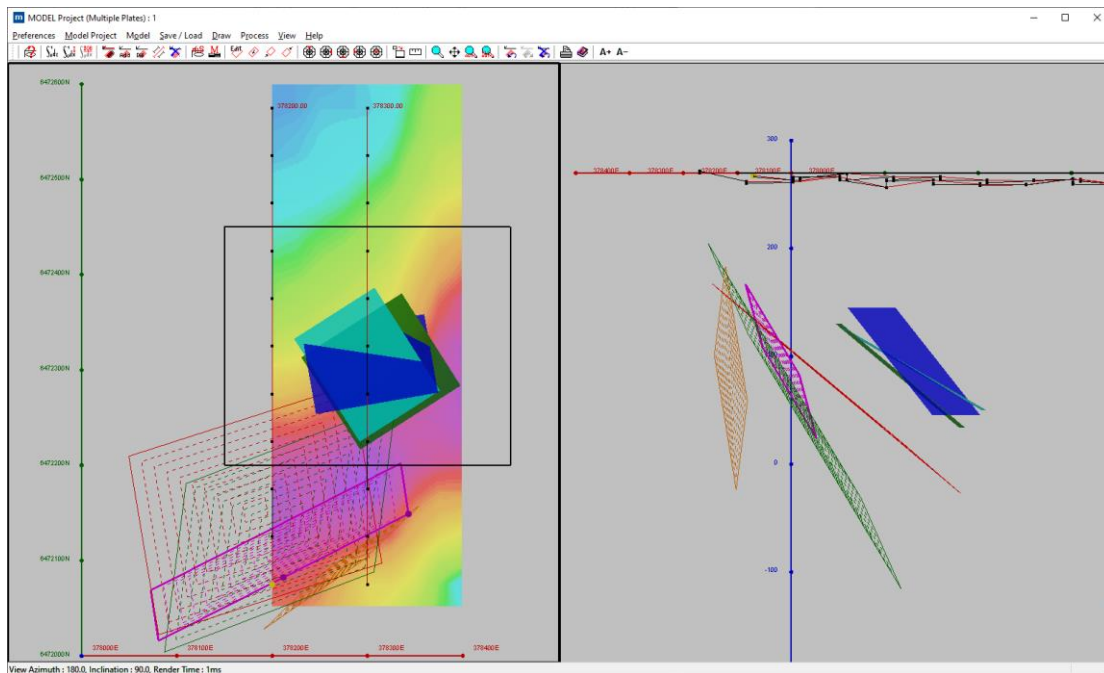


Figure 12: FLTEM & MLTEM – Green Bananas - Conductor HH1\_A Models (PLAN VIEW (CH30BZ Imagery) Cross Section ENE View (Model scenarios MLTEM plates in solid colours blue/green, FLTEM as hatched polygons)

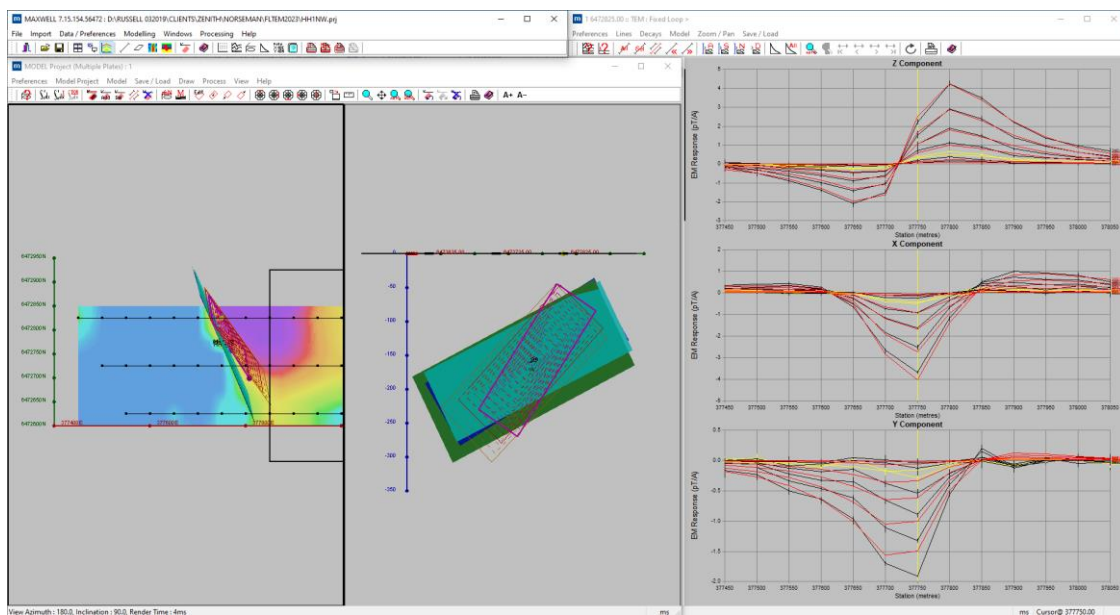


Figure 13: FLTEM & MLTEM – Green Bananas - Conductor HH1\_B Models (PLAN VIEW (CH40BZ) Cross Section – West View (Model scenarios - MLTEM plates in solid colours blue/green, FLTEM as hatched polygons)

## YIMIA LITHIUM PROJECT – WA

Zenith signed a binding option agreement to secure up to a 100% interest in the lithium rights over tenure near Coolgardie – Western Australia (ASX Release 22-May-23).

Drilling has now been completed and all assays received from the recent program at the Yilmia lithium project in Western Australia (refer to ASX Releases 19-Oct-23, 4-Oct-

23, 22-May-23 for background). The program has confirmed that the greenstone host sequence extends under soil cover throughout the project area for over 8km of strike. Most drill holes intersected pegmatites, ranging in thickness from 1m up to 20m, as per the target model, but based on analytical results the pegmatites are not considered to be of lithium - caesium – tantalum (LCT) character and do not contain any significant lithium contents. Following receipt and interpretation of multi-element drill hole geochemistry a comprehensive prospectivity assessment was completed in late-January 2024. Based on the review the Company considers the Yilmia lithium target has been adequately tested and it will not be proceeding with the option over the property. Control of the project will now be returned to the project owner.

## **GOLD-COPPER & ZINC PROJECTS**

### **EARAHEEDY ZINC PROJECT – WA (Zenith 25% free carry to end BFS, ASX: RTR 75%)**

The Earahedy Zinc Joint Venture project is located ~900km northeast of Perth and forms a key component of Zenith's gold and base metal portfolio within an emerging Tier-1 base metal province.

In April 2023 Quarter Rumble announced a maiden, open-pit constrained, Inferred Mineral Resource Estimate (MRE) for the Chinook, Tonka and Navajoh zinc deposits that make up the Earahedy Joint Venture Project.

The MRE on a 100% basis stands at **94Mt @ 3.1% Zn+Pb and 4.1 g/t Ag** (using a 2% Zn+Pb cutoff) and constrained within optimised pit shells. Refer to Rumble's ASX Release dated 19-Apr-23, for full details.

Zenith, through its wholly owned subsidiary, Fossil Prospecting Pty Ltd, holds a 25% non-contributing equity in the Earahedy Joint Venture Project and is free carried by Rumble through to the completion of a Bankable Feasibility Study (BFS).

Diamond drilling to obtain a bulk sample for metallurgical testwork was completed during the quarter (ASX Release 9-Jan-24).

### **EARAHEEDY ZINC PROJECT – WA (Zenith 100%)**

The Earahedy Zinc Project (EZP) covers an area to the northeast and west of the Earahedy Joint Venture project and comprises four granted exploration licences. No exploration was completed during the quarter.

### **SPLIT ROCKS GOLD PROJECT – Western Australia (Zenith 100%)**

Zenith's Split Rocks Gold Project including the Dulcie Far North Prospect (Figure 14) is situated within the Southern Cross-Forrestania Greenstone Belt located approximately 400km east of Perth.

Previously reported gold intersections<sup>(1,2)</sup> include:

- **19.0m @ 1.9 g/t Au from 102m in SRRC020, incl 4m @ 6.4 g/t Au from 110m**
- **12m @ 6.1 g/t Au from 108m in SRRC018, including 5m @ 10.5 g/t Au from 113m**

- 7m @ 7.8 g/t Au from 90m in ZDRC090, incl 5m @ 10.6 g/t Au from 91m,
- 8m @ 4.2 g/t Au from 99m in ZDRC098, incl 3m @ 10.7 g/t Au from 103m,
- 5m @ 7.4 g/t Au from 47m in ZDRC095, and
- 9m @ 2.0 g/t Au from 57m in ZDRC095

(1) ZNC ASX Release dated 13-Jun-23

(2) ZNC ASX Releases dated 14-Jun-22 and 25-Jan-23

A maiden JORC (2012) Compliant Inferred Mineral Resource (using a 0.5 g/t Au lower cut) has been estimated (ASX Release 11-Jul-23) containing: **3.4 Mt at 1.4 g/t Au for 150,000 ounces Au**. Gold mineralisation remains open to the north and down dip. Further infill and extensional drilling is likely to expand the mineralised zone.

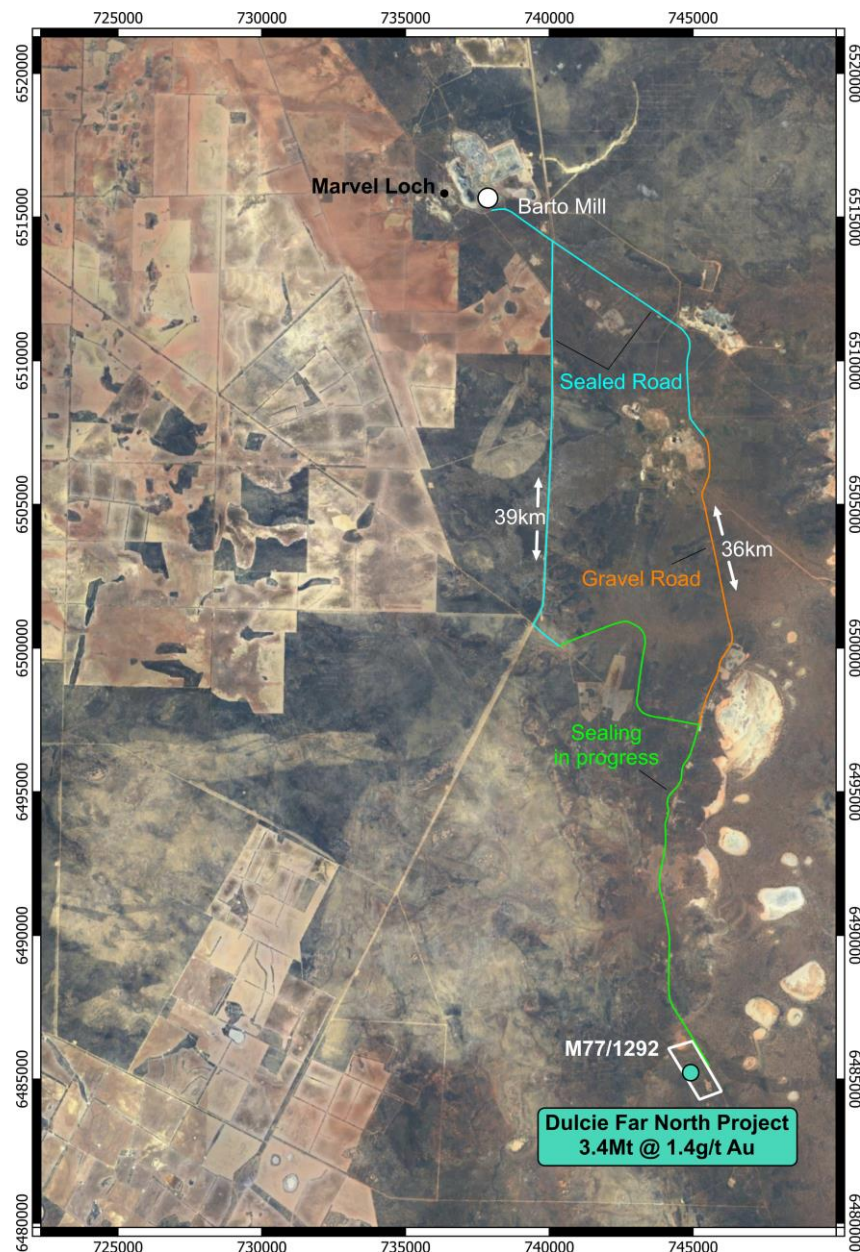


Figure 14: Split Rocks Project Location Map showing the Dulcie Far North Gold Deposit.

### **RED MOUNTAIN GOLD-SILVER PROJECT – Queensland (Zenith 100%)**

An intrusive related gold system breccia pipe has been identified at the Company's Red Mountain Project in Queensland (Figures 15 and 16). Diamond drilling in 2023 confirmed the depth continuity of gold and silver mineralisation occurring as stockwork, sheeted and extensional quartz and minor base metal veins hosted primarily within rhyolite and granodiorite. Results reported (ASX Release 29-Aug-23) include:

- **118m at 0.54 g/t Au + 11.9 g/t Ag from 225m in ZRMDD052, including 12m at 1.36 g/t Au + 4.93 g/t Ag from 288m and 9m at 1.24 g/t Au + 6.30 g/t Ag from 323m**
- **11m at 0.45 g/t Au + 4.54 g/t Ag from 183m, and 11m at 1.16 g/t Au + 1.08 g/t Ag from 224m in ZRMDD051**

While true widths remain undetermined at this stage, the scale of the mineralisation encountered confirms there is excellent potential for a large mineralised system at Red Mountain.

Drilling was following up previous shallow high-grade gold intersections at Red Mountain including:

- **13m @ 8.0 g/t Au from surface in ZRMRC001, incl 6m @ 16.7 g/t Au from surface**
- **15m @ 3.5 g/t Au from 57m in ZRMRC019, incl 2m @ 22.4 g/t Au from 70m**
- **12m @ 4.9 g/t Au from 102m in ZRMRC021, incl 6m @ 9.4 g/t Au from 103m**
- **5m @ 10.4 g/t Au from 67m in ZRMRC023, incl 1m @ 49.9 g/t Au from 67m, and**
- **7.7m @ 4.4 g/t Au from 63m in ZRMCD041, incl 1m @ 19.3 g/t Au from 63m**

An Induced Polarisation (IP) anomaly, previously untested at depth, was the focus of a drilling program in 2023, reflecting a likely westerly dip to the breccia pipe. The pipe has now been confirmed to dip east and the IP anomalism can be attributed to the expansive sulphidic, flow banded rhyolite (flow dome) intrusion extending westward, away from the mapped breccia pipe (Figure 17). Follow-up drilling is required to scope the lateral and depth extents of the rhyolite hosted mineralisation.





Figure 15: Red Mountain Project Location

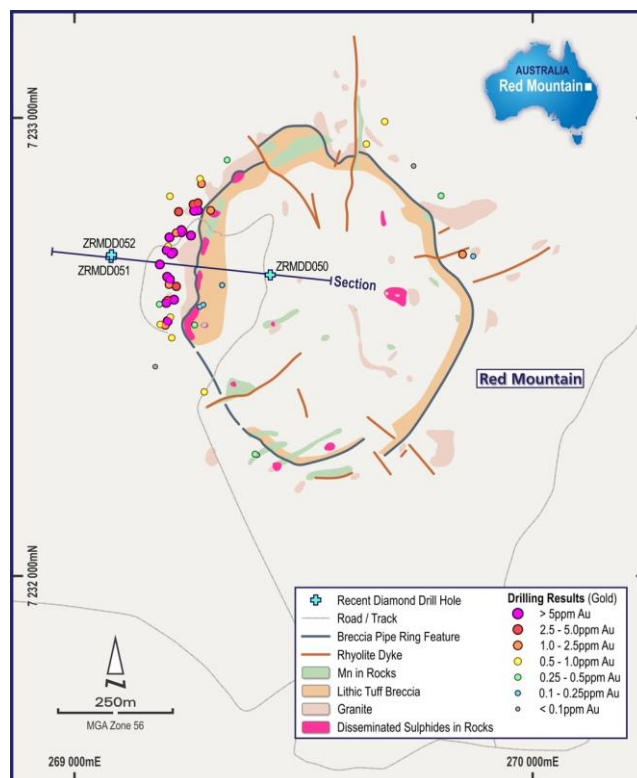


Figure 16: Red Mountain Project circular breccia pipe highlighting significant drilling results within the northwestern quadrant

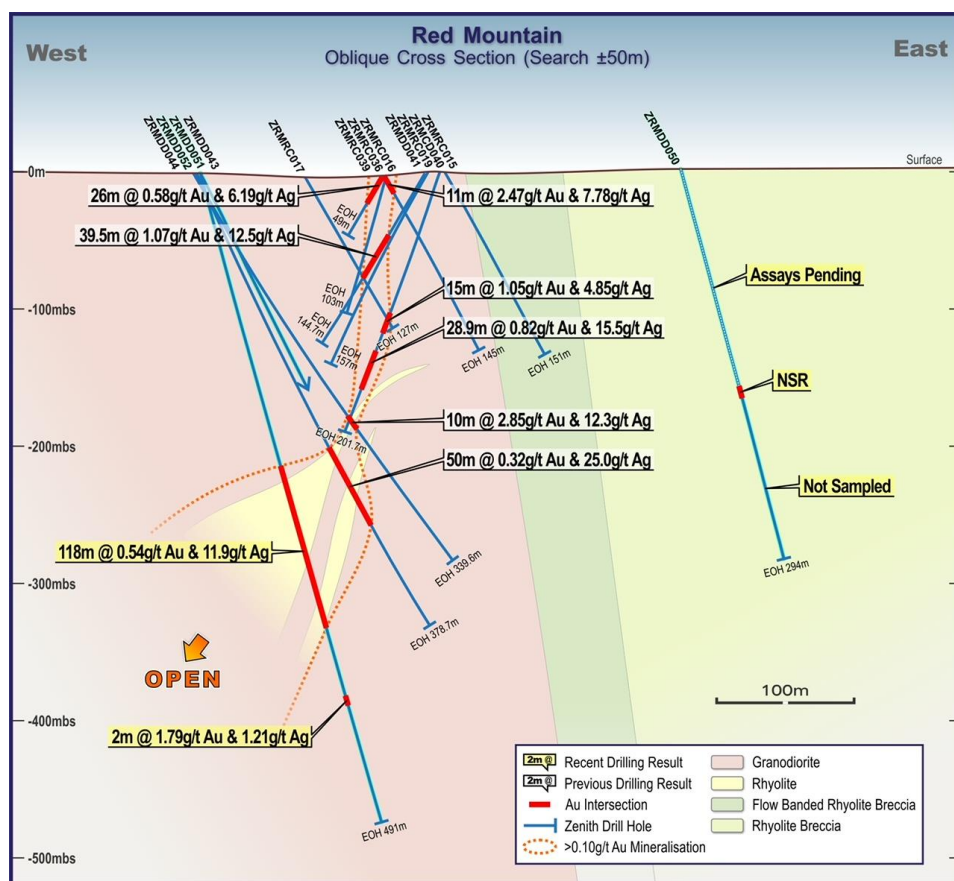


Figure 17: Cross Section through ZRMDD050 – ZRMDD052, using a 0.10 g/t Au lower cut-off

## KAVAKLITEPE GOLD PROJECT – TURKEY (Zenith ~20%)

Zenith's joint venture partner for the Kavaklitepe gold project in Turkey, Gubretas Maden a Turkish mining company that owns there nearby Sogut gold mine (under development) is planning an infill RC drilling programme over the project to enable a JORC Compliant resource to be estimated. Zenith has elected not to contribute to the programme and will dilute from its current 20% equity in the project. Should Zenith's equity fall below 10% it will revert to a 5% Net Profit Royalty.

## CORPORATE

### Capital

Cash balance of \$1.3M at the end of the quarter. Equity investments held by Zenith are worth approximately \$2.5M (valued as at 15-Jan-24) including 3.2 million ASX:RTR, 8.4M ASX:QML & 43.9 million AIM:BHL shares.

In accordance with Listing Rule 5.3.1, the Company reports that there was \$1.4M exploration expenditure incurred during the quarter.

An amount of approximately \$1M (net) in outstanding refunds is owed by EVM to Zenith. The amount relates to tenement rents and rates, Zenith staffing costs, and other

exploration costs incurred by the Company under the EVM earn-in agreement during 2022 and 2023. The Company will now restart a process to attempt to recover these amounts from EVM. The outstanding monies have been fully impaired in the Company's accounts.

The Company has sufficient funds to continue with its budgeted activities on its projects.

At section 6.1 of the Appendix 5B, the payments to Directors of the Company for the quarter ended 31-Dec-23 were for gross wages, fees and superannuation.

### **Investments**

The Company holds investments in various listed entities because of project-based transactions. Holdings as at 30-December-23 were:

Bradda Head Holdings Ltd (LON & TSX-V:BHL) 43.9M shares	Alien Metals Ltd (LSE AIM:UFO) 7.827M shares
Rumble Resources Ltd (ASX:RTR) 3.2M shares	QMiner Limited (ASX:QML) 8.4M shares

Oxley Resources Pty Ltd – (Zenith owns 27% shareholding).

Oxley owns the Cowarra Gold project in NSW, with multiple regional prospects and gold targets over 8km of strike, with limited systematic drill testing having occurred to date. Discrete IP geophysical targets from Oxley's survey work are high priority for drill follow-up. S2 Resources Limited also signed an agreement with Oxley to earn a 70% interest in the Warraweena Ni-Cu project in NSW (S2R:ASX Release 4-Dec-23).

### **New Opportunities and Divestments**

The Company advises that it is currently in ongoing and incomplete negotiations in connection with potential project acquisitions and disposals. This work has included assessment of various 3rd party lithium properties. The Company will provide appropriate disclosure should negotiations and agreements be completed.

In May 2023 Zenith signed a binding, but conditional agreement (ASX Release 8-May-23), that granted unlisted company WA Rare Earths Pty Ltd (WRE) an option to acquire 80% legal and beneficial interest in a rare earth element (REE) project portfolio (REE portfolio) held by Zenith. The REE portfolio included 7 granted exploration licences (EL's) and 1 exploration licence applications (ELA's) in Western Australia. On 6-Oct-23 WRE advised Zenith that it would not proceed with the option to acquire the REE assets and the projects were returned to Zenith. Although clay hosted rare earth mineralisation was likely to be present the Company considered that the potential for ionic rare earth style mineralisation within this tenement package to be low and hence all tenements were surrendered.

## Tenement Interests

Changes in tenements	Tenement reference and location	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced	Earaheedy Zinc, REE Tenements & Morris Bore	E70/6118 E70/6119 E70/6149 E70/6150 E70/6151 E53/2228 E29/1199 E20/1026 E77/2457 E69/3872 E69/3886 E69/3887 E52/4028	100%	Nil
Interests in mining tenements and petroleum tenements acquired or increased	Split Rocks & Waratah Well	E77/2513 E77/2388 E77/2514 E77/2555 P77/4507 E77/2375 E77/2386 E77/2616 E77/2598 E77/2394 E77/2395 E59/2170 E59/2321	Zenith Lithium JV (ZNC 100%, EVM earning 60%) other minerals 100%	100%

Interest in mining tenements	Project	Tenement	Interest
	Earaheedy Zinc JV	E69/3464	Rumble Resources Limited (75%) Fossil Prospecting Pty Ltd (25%)
	Earaheedy Mn 100%	E69/3414	100%
	Earaheedy Mn 100%	R69/2	100%
	Earaheedy Mn 100%	E69/2733	100%
	Earaheedy Zinc 100%	E69/3869	100%
	Earaheedy Zinc 100%	E69/3995	100%
	Split Rocks	E77/2513	100%
	Split Rocks	E77/2388	100%
	Split Rocks	E77/2514	100%
	Split Rocks	E77/2555	100%
	Split Rocks	P77/4507	100%
	Split Rocks	E77/2375	100%
	Split Rocks	E77/2386	100%
	Split Rocks	E77/2616	100%
	Split Rocks	E77/2598	100%
	Split Rocks	E77/2394	100%
	Split Rocks	E77/2395	100%



Split Rocks	P77/4490	100%
Dulcie Far North	M77/1292	ZNC 100% mineral rights-to sub-6m
Waratah Well	E59/2170	100%
Waratah Well	E59/2321	100%
Auburn	EPM27517	100%
Privateer	EPM27552	100%
Red Mountain	EPM26384	100%
Hayes Hill	E63/1773	Option to Acquire 100%
Hayes Hill	E15/1588	Option to Acquire 100%
Hayes Hill	E15/1919	Option to Acquire 100%
Hayes Hill	E15/1588	Option to Acquire 100%
Yilmia	E15/1760	Option to Acquire 100%
Yilmia	E15/1783	Option to Acquire 100%

### Competent Persons Statement

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 the Dulcie Far North Gold Mineral Resource 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.

The information in this report that relates to the Split Rocks - Rio Lithium Mineral Resource is based on information compiled by Mr Phil Jankowski, who is a Fellow of the Australasian Institute of Mining and Metallurgy and a full-time employee of CSA Global. Mr Jankowski 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 Jankowski 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.

**For further information, please contact:**

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To learn more, please visit [www.zenithminerals.com.au](http://www.zenithminerals.com.au)

**This ASX announcement has been authorised by the Board of Zenith Minerals Limited.**

## Appendix 5B

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

Name of entity

Zenith Minerals Limited

ABN

96 119 397 938

Quarter ended ("current quarter")

31 December 2023

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
<b>1.</b>	<b>Cash flows from operating activities</b>		
1.1	Receipts from customers	2	4
1.2	Payments for		
	(a) exploration & evaluation (see Note to 1.2(a))	(819)	(1,544)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(291)	(585)
	(e) administration and corporate costs	(299)	(758)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	50	118
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid (refund)	-	4
1.7	Government grants and tax incentives	-	-
1.8	Other (GST)	(79)	41
<b>1.9</b>	<b>Net cash from / (used in) operating activities</b>	<b>(1,436)</b>	<b>(2,720)</b>

Note to 1.2(a) – For the quarter ended 31 December 2023, \$819 (rounded \$A'000) of the exploration & evaluation expenditure at 1.2(a) has been capitalised and its inclusion at 1.2(a) is to maintain consistency with Zenith Minerals Limited reporting in its Financial Report pursuant to the Australian Accounting Standard AASB 6 and AASB 107.

<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	-	(2)
	(d) exploration & evaluation	-	-
	(e) investments	-	-
	(f) other non-current assets	-	-

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (6 months) \$A'000</b>
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	1,200
	(c) property, plant and equipment	-	-
	(d) investments	-	332
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>-</b>	<b>1,530</b>

<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other – Contributions from Joint Venture partner	-	229
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>-</b>	<b>229</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	2,748	2,272
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(1,437)	(2,720)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	1,530
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	229



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

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	<b>Cash and cash equivalents at end of period</b>	<b>1,311</b>	<b>1,311</b>

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	1,311	2,272
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>1,311</b>	<b>2,272</b>

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	192
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><i>Director fees and salaries \$192,295</i></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.</i> <i>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)	(1,436)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	-
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(1,436)
8.4	Cash and cash equivalents at quarter end (item 4.6)	1,311
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	1,311
8.7	<b>Estimated quarters of funding available (item 8.6 divided by item 8.3)</b>	0.91
<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: Yes, although exploration expenditure may be reduced whilst Zenith is conducting a strategic review of its lithium assets, as announced to ASX on 15-Jan-24.		

- 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: ZNC currently retains approximately \$2.5M in listed equities which it may elect to sell, over the following 6 – 12 months to provide additional working capital. Zenith announced on 15-Jan-24 that it had appointed Azure Capital to assist it with a strategic review of its lithium assets. That review will include assessment of potential future commercial relationships with strategic investors. An interim capital raise may be required to provide working capital ahead of any potential transaction with potential strategic investors under the Azure mandate. In addition, as part of the sale of the Develin Creek copper project, as announced to ASX 28-Aug-23, ASX:QML is required to pay ZNC a further second tranche payment of \$1.3M in cash & \$1M in QML shares. Note the second tranche payment by QML may be adjusted down to \$0.975M cash and \$0.6875M worth of QML shares, should a detailed metallurgical study show zinc concentrate grades below 50% or that a 50% zinc concentrate grade is not commercially achievable. The second tranche payment is due on 28-Aug-24.

- 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: Yes, the Company expects to be able to continue its operations and to meet its business objectives as detailed in its Quarterly Activities & Cashflow Report ending Dec 23.

*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: 31 January 2024.....

Authorised by: **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

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

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[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.