ASX Announcement/Press Release
Zenith Minerals Limited (ASX:ZNC)
31 October 2024

Quarterly Activity Report
For the Period Ending 30 September 2024

STRATEGY

Zenith Minerals' immediate focus remains on advancing its gold projects, with particular attention to the Dulcie Far North (DFN) and Red Mountain gold projects. These assets provide substantial near-term potential, as they offer significant leverage to the high gold price environment. Gold exploration continues to be a priority for the Company, with both projects located in regions known for their large gold endowments.

Figure 1: Zenith's Australian Based Projects

The 100% owned DFN project, situated within the Southern Cross-Forrestania Greenstone Belt, offers strong potential for resource expansion following the commencement of a major RC drilling program. Similarly, at Red Mountain in Queensland, recent drilling and geological reviews have highlighted the potential for a large gold system, with high-grade zones providing the foundation for future resource definition. Both projects have the potential to rapidly contribute to Zenith's growth, with further drilling planned to expand and define mineralised zones.

In parallel with these gold exploration efforts, Zenith is continuing to develop its longer-term battery metals strategy through its 100% owned Split Rocks and Waratah Well lithium projects in Western Australia. These assets position Zenith as a dual commodity company, balancing gold's short-term profitability with lithium's growing market demand.

A strategic review of the Company's lithium portfolio, completed in early 2024, reaffirmed the potential of these projects. While unsolicited interest was received from various strategic investors, several expressed a preference for more advanced assets. As Zenith advances its lithium exploration, including key targets at the Split Rocks and Waratah Well projects, the Company believes there will be future opportunities to re-engage with strategic partners.

Zenith's commitment to both gold and lithium projects ensures the Company remains well-positioned to benefit from short-term gold market dynamics, while also capitalising on the rising demand for battery metals in the longer term. By continuing to drive aggressive exploration across its portfolio, Zenith is focused on unlocking significant value for shareholders.

Corporate

In the previous quarter, **Andrew Smith** was appointed as the Company's new Managing Director, officially commencing on **31 July 2024**. Andrew brings a wealth of experience and a proven track record in the mining sector. His most recent success was as CEO of **British Lithium**, a company he founded in 2017. Under his leadership, British Lithium made a world-class lithium discovery in the UK. In 2023, Andrew led a successful due diligence process, culminating in the acquisition of an **80% interest** in the project by **IMERYS**, a global leader in speciality minerals. IMERYS has committed to completing the feasibility study and developing the full-scale project, which incorporates Andrew's innovative technical solutions.

With **15 years of experience** in the mining industry, Andrew has been involved in projects ranging from early-stage discovery through to feasibility studies and project development in various regions, including **Australia, Africa, the Czech Republic**, and the **UK**. His extensive background includes working for well-known mining companies such as British Lithium, **Cominco Resources Limited**, **European Metals**, **Equatorial Resources Limited**, and **Rio Tinto Limited**.

Post-Quarter Fundraising and Financial Position

Zenith Minerals Limited (ASX: ZNC) completed a successful A$1.44 million placement on 9 October 2024 at A$0.045 per share from sophisticated investors, including A$125,000 committed by Directors, pending approval at the upcoming AGM on 29 November 2024. To further bolster our exploration efforts, Zenith has launched a Share Purchase Plan (SPP) to raise up to A$500,000 on similar terms, offering eligible shareholders the opportunity to participate.

The combined proceeds from the Develin Creek sale, recent capital raise, and SPP have significantly strengthened Zenith's balance sheet, positioning us to advance our strategic objectives. Our key focus areas include intensified drilling and resource expansion at both the Dulcie Far North and Red Mountain projects. This work aims to unlock considerable value across Zenith's portfolio, reinforcing our commitment to maximising shareholder returns.

Gold Projects

During the quarter, Zenith Minerals focused on advancing its two 100% owned gold projects, Dulcie Far North and Red Mountain. Field-based activities, including drilling preparations and surveys, were conducted across both projects, aimed at expanding existing resources and unlocking additional value from these highly prospective gold zones.

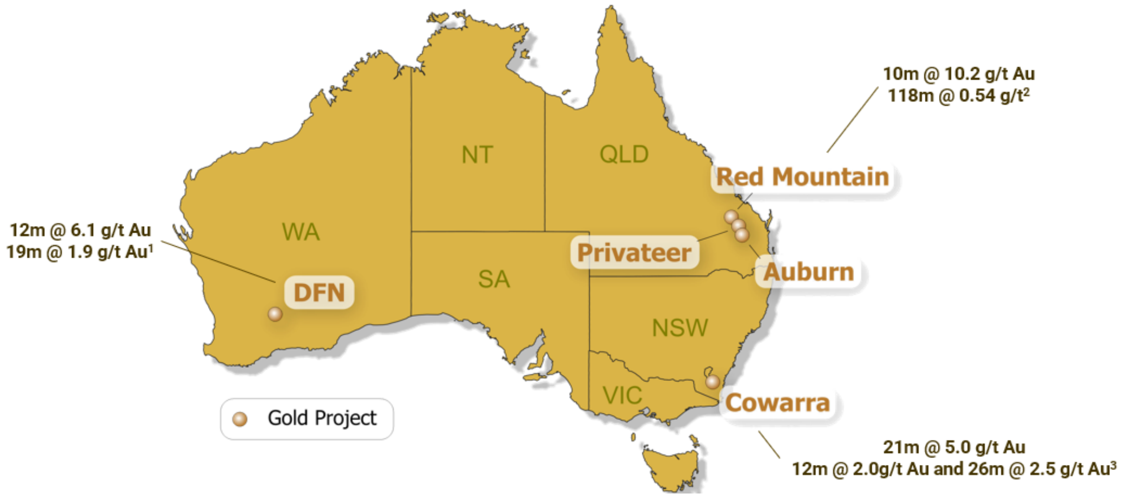

Figure 2: Zenith's Gold Projects

1. ASX Releases: 13-Jun-23, 25-Jan-23 & 14-Jun-22
2. ASX Release: 29-Aug-23
3. ASX Release: 5-Oct-22

RED MOUNTAIN (QUEENSLAND) (Zenith 100%)

The **Red Mountain Gold Project**, 100% owned by Zenith Minerals, is located in Queensland within the historically significant **Auburn Arc** (Figure 3). The project benefits from **favourable terrain** and excellent **access to infrastructure**, providing logistical advantages for exploration and future development. An **intrusion-related gold system (IRGS)** breccia pipe has been identified at the project (Figure 4), positioning Red Mountain as a key focus within Zenith's gold portfolio. IRGS deposits, like those at **Mt Wright**, **Mt Rawdon**, and **Kidston**, are renowned for their large-scale mineralisation potential, offering significant exploration upside.

The geological setting at Red Mountain is defined by a large **intrusive-related breccia pipe system**, a hallmark feature of highly productive gold deposits. Mineralisation occurs along the contact between the breccia pipe and a **flow-banded rhyolite unit** within the **Rawbelle Granodiorite**, offering excellent potential for depth extensions of gold mineralisation. Drilling and geophysical studies have confirmed high-grade **gold and silver** mineralisation, with significant widths in multiple zones, see Figure 5.

Previous Drilling Results

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.

These intercepts confirm that the system has excellent potential for a large-scale gold deposit at depth. Previous shallow drilling also returned high-grade intersections[(1)], such as:

- **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**

[(1)] ZNC ASX Release 3-Aug-20, 13-Oct-20, 9-Nov-20, 21-Jan-21, and 14-Apr-21

These results, combined with updated 3D geological modelling and geophysical data re-interpretation, have identified several **high-priority targets** for future drilling. The project remains open at depth and along strike, providing a strong case for further exploration.

Recent Developments:

During the current quarter, Zenith focused on refining the **3D geological model** and reinterpretation of **Induced Polarisation (IP) data**, which has helped identify new high-priority drill targets. Additionally, **454 metres of core samples** not previously analysed are now being prepared for assay, which could provide further insights into the mineralisation and assist with ongoing exploration efforts.

Metallurgical tests from 2021 confirmed that the gold mineralisation is **free-milling and non-refractory**, with average gold recovery rates of **83.3%**, including **95.8%** for low-arsenic samples. This highlights the processing potential of the deposit through conventional cyanide leaching techniques.

Next Steps:

Zenith is preparing for the next phase of drilling, scheduled for **late 2024**, targeting newly identified high-priority areas within the system. The upcoming drill campaign will test the strongest IP anomalies encountered to date, as well as assist in determining the lithological controls on gold mineralisation defined to this point. Red Mountain remains a key asset in Zenith's portfolio as the company continues to advance towards developing a multi-asset gold portfolio.

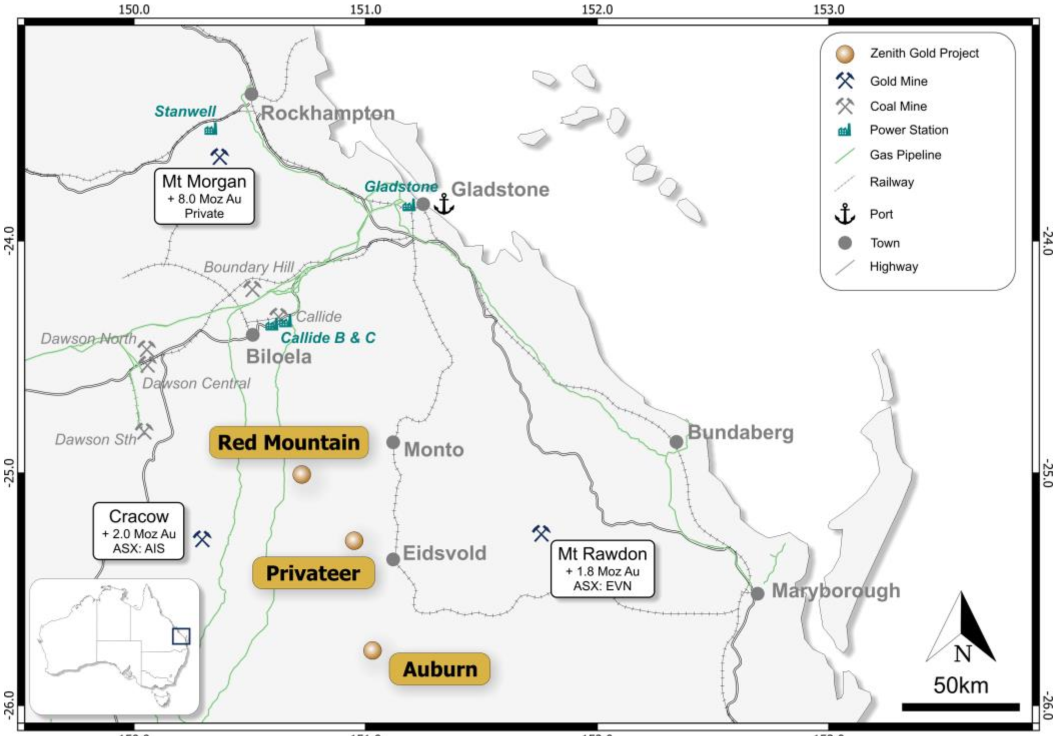

Figure 3: Red Mountain Project Location

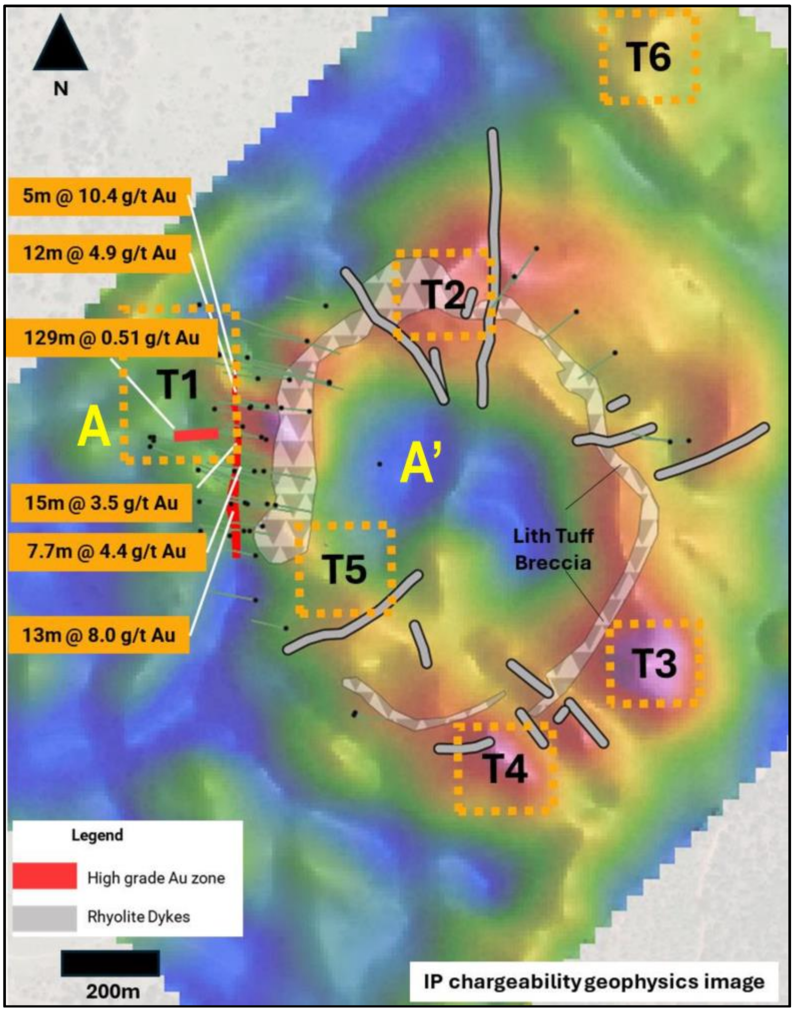

Figure 4: Red Mountain Project circular breccia pipe highlighting significant drilling results within the northwestern quadrant

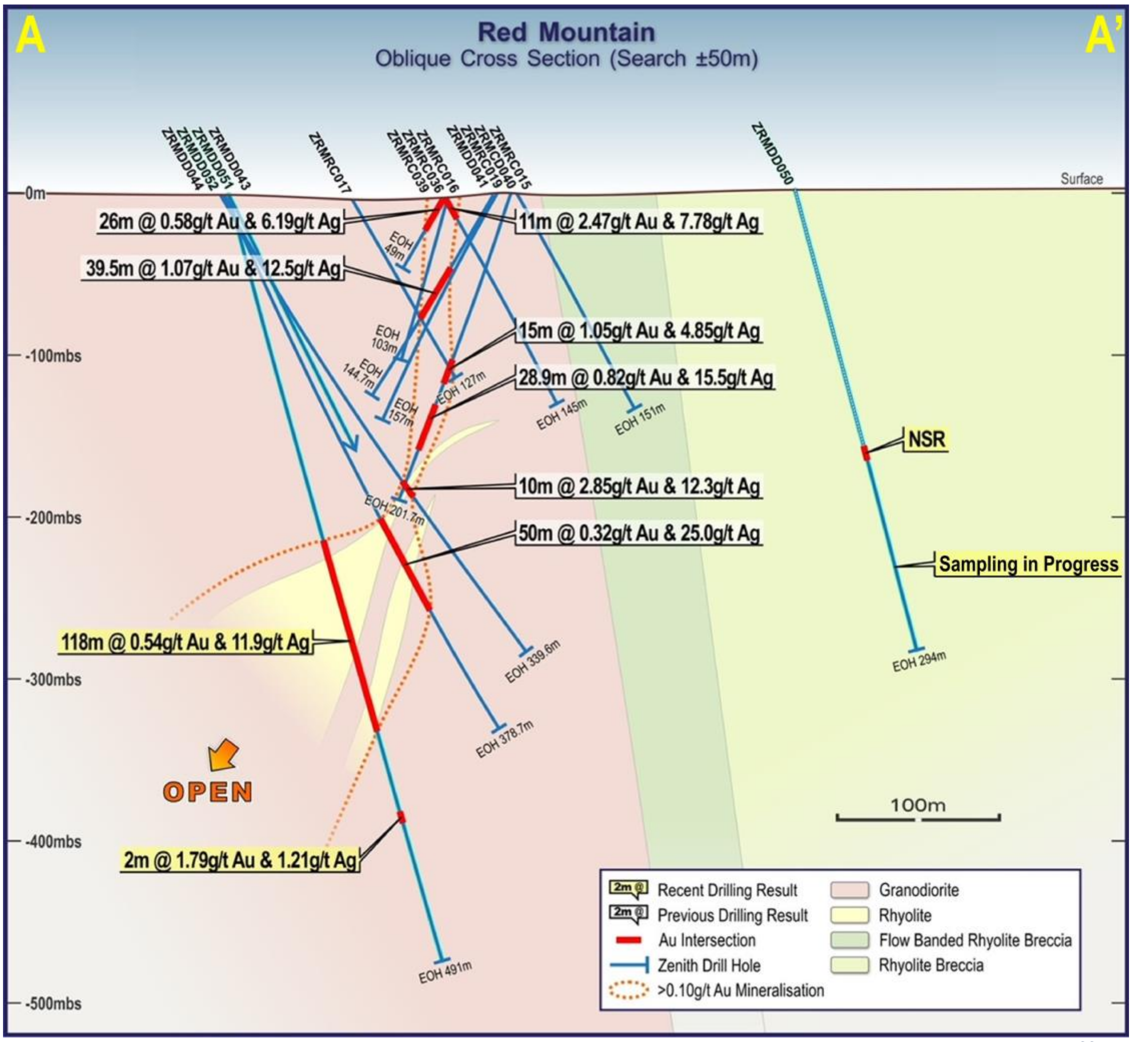

Figure 5: Cross Section through ZRMDD050 – ZRMDD052, using a 0.10 g/t Au lower cut-off

DULCIE FAR NORTH (DFN)– WESTERN AUSTRALIA (ZENITH 100%)

The Dulcie Far North (DFN) Gold Project, 100% owned by Zenith Minerals, is situated within the Southern Cross-Forrestania Greenstone Belt, approximately 400 km east of Perth, Western Australia, see Figure 7. This region is well-known for its multi-million-ounce gold endowment. The project hosts a **Maiden Inferred Mineral Resource of 3.3 million tonnes @ 1.4 g/t Au, equating to 150,000 ounces of gold** (ASX Release 11 July 2023). The DFN project is located on a granted mining lease (M77/1292) and benefits from excellent infrastructure, including proximity to underutilised gold processing facilities just 35 km to the north, offering strategic opportunities for toll treatment.

Heritage Survey and POW Approval: During the quarter, Zenith completed a **heritage survey** and secured **Program of Works (POW) approval** for a planned Reverse Circulation (RC) drilling program. These steps ensure that all regulatory and land-use conditions are met before the commencement of drilling (ASX Release 10 September 2024).

Post-Quarter Commencement of Drilling: After the quarter ended, Zenith launched a **2,400-metre RC drilling program** at DFN, targeting unclassified mineralised zones. The 17 planned RC holes, with an average depth of **150m**, aim to expand the existing resource and assess high-grade gold zones, such as **T1a, T1b, T2, T3, and T4**, which remain open along strike and at depth (ASX Release 8 October 2024).

Significant intersections[2] 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**

(2) ZNC ASX Release 14-Jun-22, 25-Jan-23, and 13-Jun-23

Exploration Strategy:
The DFN project is a cornerstone of Zenith's multi-project gold strategy, with a focus on resource expansion through infill and step-out drilling. The current drilling program is designed to assess the potential for a **standalone gold operation** or the integration of nearby gold resources. Zenith aims to capitalise on the strong gold price environment while also exploring opportunities for strategic partnerships and toll treatment.

Next Steps:
Zenith anticipates receiving **assay results** from the ongoing drilling campaign in the coming quarter and will continue to inform the market as significant progress is made. The Company remains committed to advancing DFN towards development, maximising long-term value through aggressive exploration and resource growth.

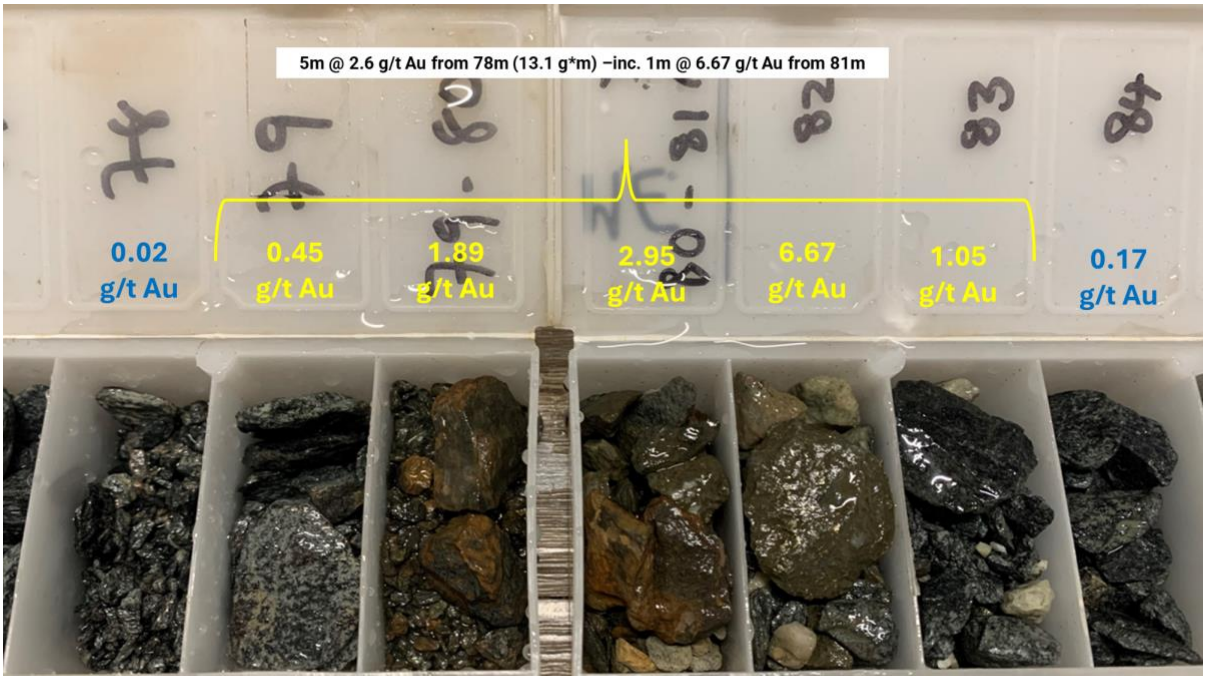

Figure 6: SRRC026 -Gold mineralisation in BIF with pyrrhotite alteration; mineralisation extends into the ultramafic wall rock on either side of the interval.

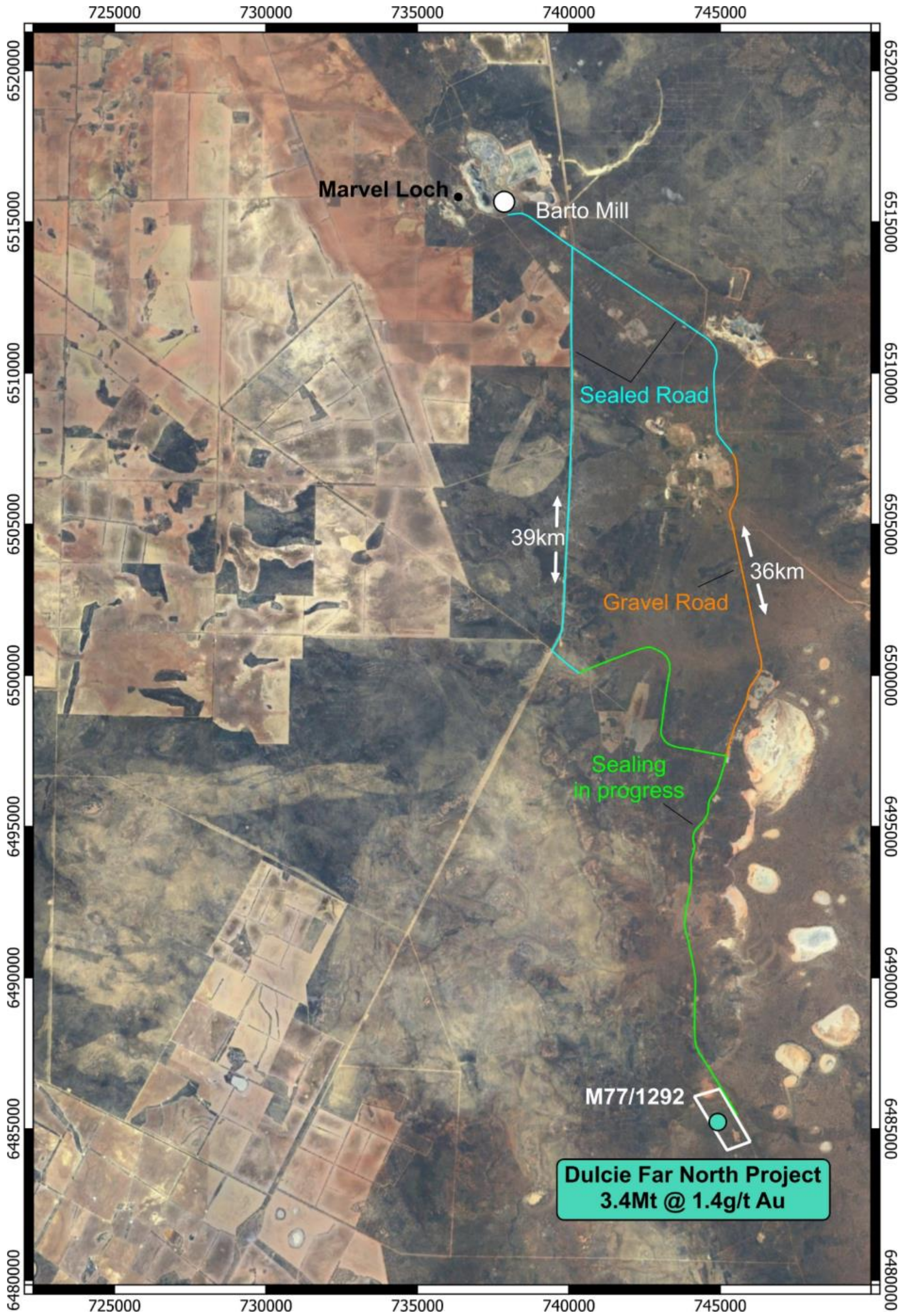

Figure 7: Split Rocks Project Location Map showing the Dulcie Far North Gold Deposit.

Cowarra Gold Project (NSW) (Zenith 26%)

Zenith Minerals holds an **indirect interest** in the **Cowarra Gold Project** through our ~26% stake in **Oxley Resources**. The project is located within the highly prospective **Lachlan Orogen** in New South Wales, a region renowned for hosting significant gold deposits. Cowarra comprises multiple gold zones associated with extensive shear zones, providing excellent potential for both near-surface and deeper gold mineralisation.

Historical production from Cowarra includes approximately **14,000 oz of gold** mined by BHP in the 1930s and **19,300 oz** produced by Horizon Pacific in the 1980s, with average grades of **6-8 g/t Au**.

Recent exploration has focused on defining high-grade gold shoots within a mineralised corridor that has seen only limited drilling. Surface analyses and **Induced Polarisation (IP) surveys** have identified numerous drill targets that remain open at depth and along strike, offering significant resource expansion potential.

The Cowarra project aims to define a **JORC-compliant resource**, with further drilling required to unlock the project's value.

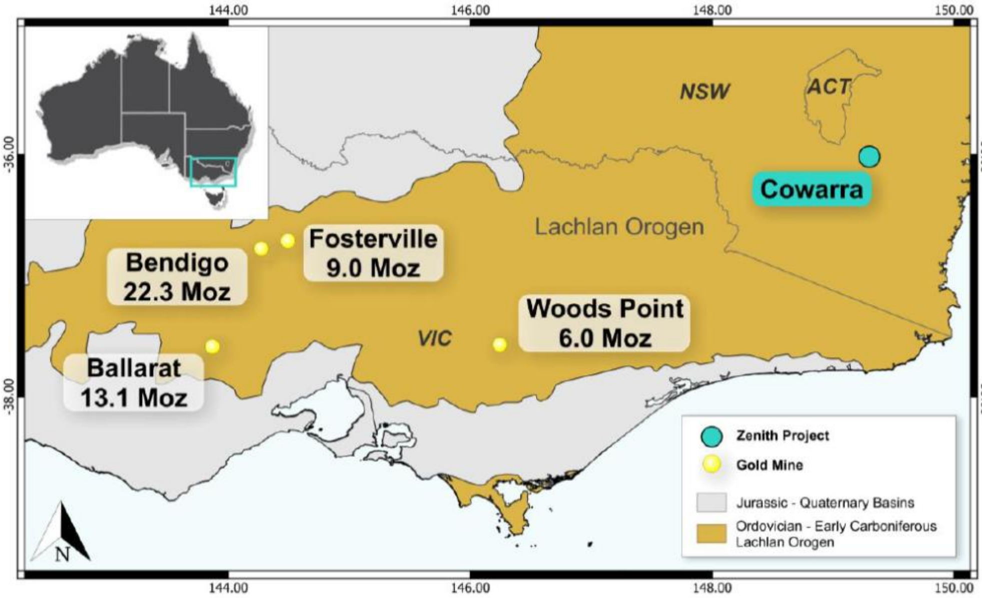

Figure 8: ***Map showing the location of the Cowarra Gold Project,*** *where the host rocks and structural setting are similar to those of major Victorian gold deposits, highlighting its potential for significant gold mineralisation.*

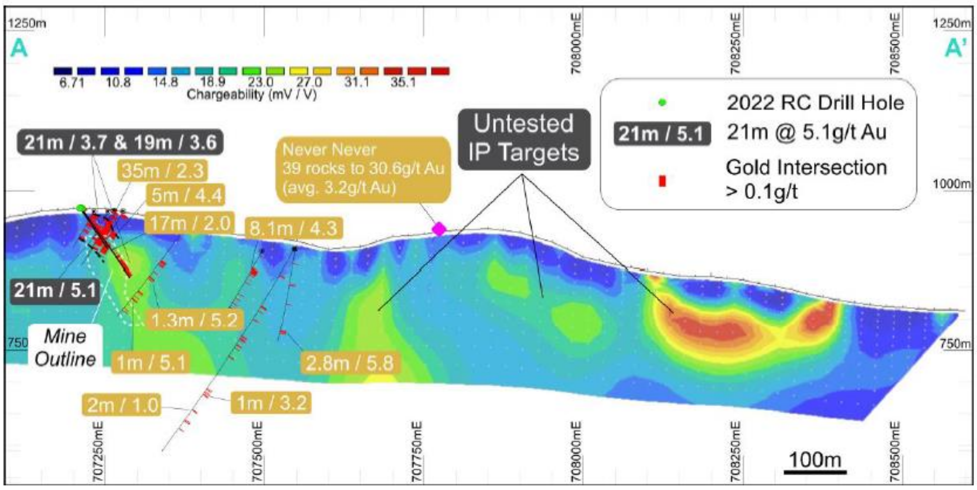

Figure 9: IP geophysics technique indicates multiple untested targets

Lithium Projects

Zenith's primary long-term focus is on minerals containing lithium and related metals required for rechargeable lithium-ion batteries for electric vehicles and renewable energy storage ("Battery Minerals"). In addition, the Company has several Australian gold projects that provide investor exposure to the gold price.

Figure 10: Location of Spilt Rocks in relation to other Western Australia Major Lithium Projects.

SPLIT ROCKS LITHIUM PROJECT – Western Australia (Zenith 100%)

The **Split Rocks Lithium Project** covers approximately **367km²** in the **Forrestania Greenstone Belt**, located **40 km south of Marvel Loch** and 30 km north of the **Mt Holland Lithium Mine** (a joint venture between **Sociedad Química y Minera and Wesfarmers**) in the **Goldfields Region** of Western Australia, see Figure 10). The tenement is large and strategically bordered by the **Forrestania Road** to the east, offering excellent infrastructure and logistical advantages for future development.

The **Rio Lithium Prospect** within Split Rocks hosts a **Maiden Inferred Mineral Resource (JORC 2012)** of **11.9Mt @ 0.72% Li_2O**, as reported on **28 September 2023**. The **Rio Lithium Resource** is based on wide-spaced drilling (generally 200m x 100m) and remains **open at depth and along strike**, with significant potential for further expansion.

Rio Lithium Deposit Inferred Mineral Resource Estimate

Zone	Million Tonnes	Li_2O %	Cs ppm	Nb ppm	Sn ppm	Ta ppm	Domain
Upper	8.45	0.76	426	77	157	62	31
Middle	3.48	0.62	387	71	364	49	32
Total	**11.9**	**0.72**	**415**	**75**	**217**	**59**	**-**

Notes to Rio Lithium Resource Table:

1. The Mineral Resource is estimated with all drilling data available at 3-Aug-23, and reported at a 0.5% Li_2O 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

To date, lithium mineralisation has been identified as a mixture of **eucryptite, spodumene, petalite**, and **lepidolite**, confirmed through multiple methods including optical microscopy, SEM, Raman spectroscopy, and XRD analyses. Early-stage metallurgical work, including flotation and calcination-leach tests, has shown that eucryptite can be processed effectively, confirming the potential for commercial extraction of lithium from the deposit.

The project area hosts over **80 advanced lithium targets**, including the large **Cielo Lithium Target**, which spans **>9km long by 2km wide** with a peak auger soil value of **880ppm Li** (ASX Release 9 February 2023). Further lithium targets were detailed in the announcements and presentations released to the ASX on **3 July 2024**.

Recent Developments:

- **Heritage Survey and POW Approval**: During the quarter, Zenith conducted a **heritage survey** and completed **soil sampling** to support future drilling. The Company also reapplied for a **Program of Works (POW)** to transition from air core to **Reverse Circulation (RC) drilling**, enabling an upcoming RC drilling campaign to test high-priority targets, including the **Cielo Lithium Target**.

- **Identification of Previously Unrecognised Pegmatites in Historic Drilling**: During field operations in the current quarter, Zenith identified previously unrecognised **pegmatite occurrences** within **historic drill holes.** Where logged at all, previous workers had misidentified the intervals as quartz veins. These pegmatite intervals, located approximately **360 metres east** of the Rio Lithium Resource, add to the **Dolphin Pegmatite** and have the potential to significantly expand the lithium-bearing zones near the Rio deposit (ASX Release 10 September 2024). This finding underscores the prospectivity of the Split Rocks Project and will be a key focus for further drilling campaigns.

Zenith's exploration strategy at Split Rocks focuses on expanding the lithium resource through targeted drilling and unlocking the project's broader potential. With recent discoveries and ongoing advancements, the project is well-positioned for resource expansion, ensuring significant growth potential in a rising lithium market.

WARATAH WELL PROJECT - Western Australia (Zenith 100%)

The Waratah Well Project, located approximately 20 km northwest of the regional town of Yalgoo in Western Australia's Murchison Region, covers around 123 km. This project targets a potentially large lithium-caesium-tantalum (LCT) pegmatite system, offering promising potential for lithium and other critical minerals. Previous drilling at Waratah Well has yielded multiple intersections, including >10 m @ 1.0% Li_2O (ASX Release, 24 January 2023), confirming the presence of significant lithium-bearing pegmatites.

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 (ASX Release 10-Mar-22) –Figure 12.

Drilling to date has confirmed the presence of high-grade lithium below the depth of weathering, refer to Figures 11 and 12 (ASX Release 24-Jan-23), including:

- 14m @ 1.0% Li_2O, incl 8m @ 1.5% Li_2O.
- 10m @ 1.4% Li_2O, incl 6m @ 2.0% Li_2O.
- 27m @ 0.8% Li_2O (true width 10m), incl 12m @ 1.2% Li_2O (true width 6m).

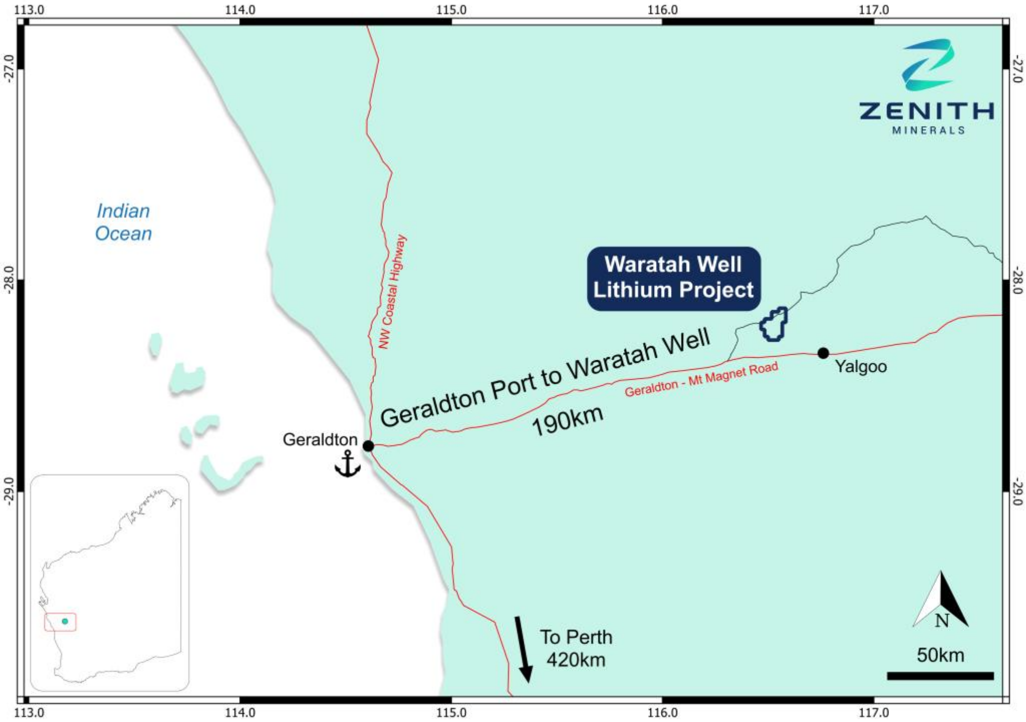

Figure 11: Location of Waratah Well

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_2O* 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).

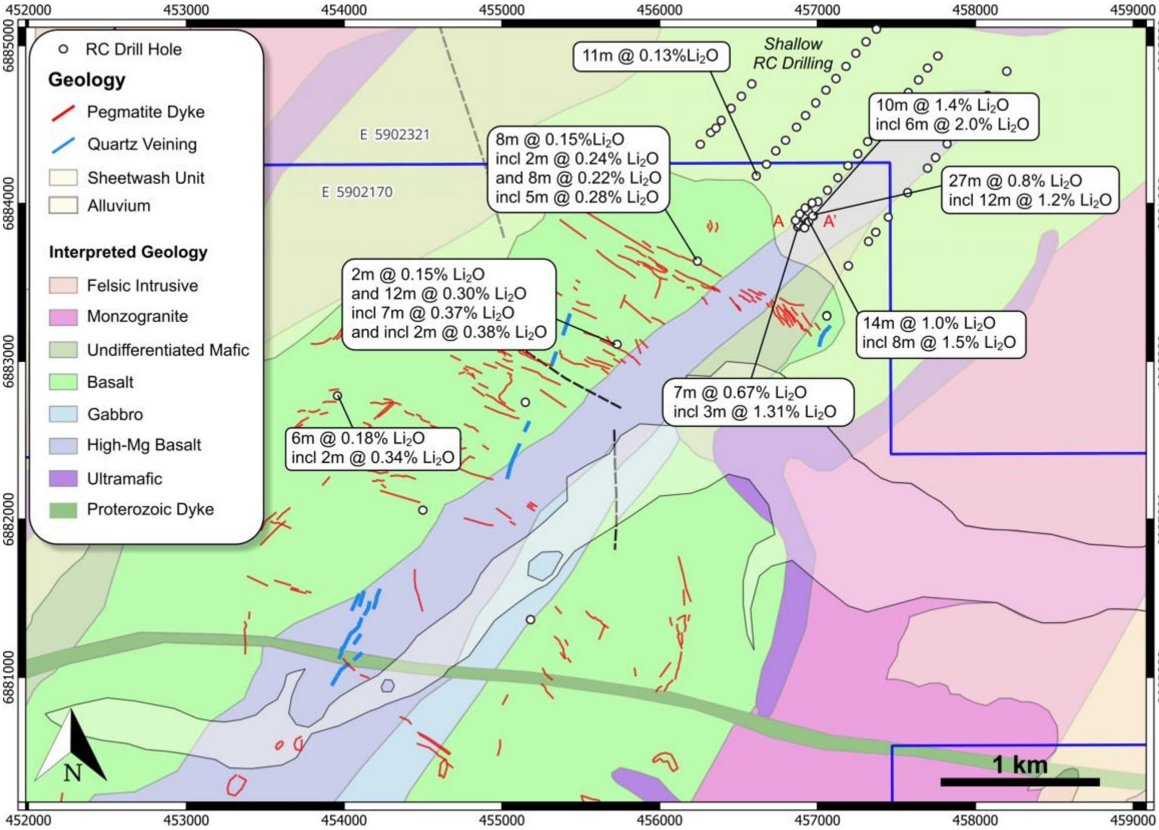

Figure 12: Waratah Well Lithium Prospect Area - Lithium Drilling Results and Location of Cross Section A-A'

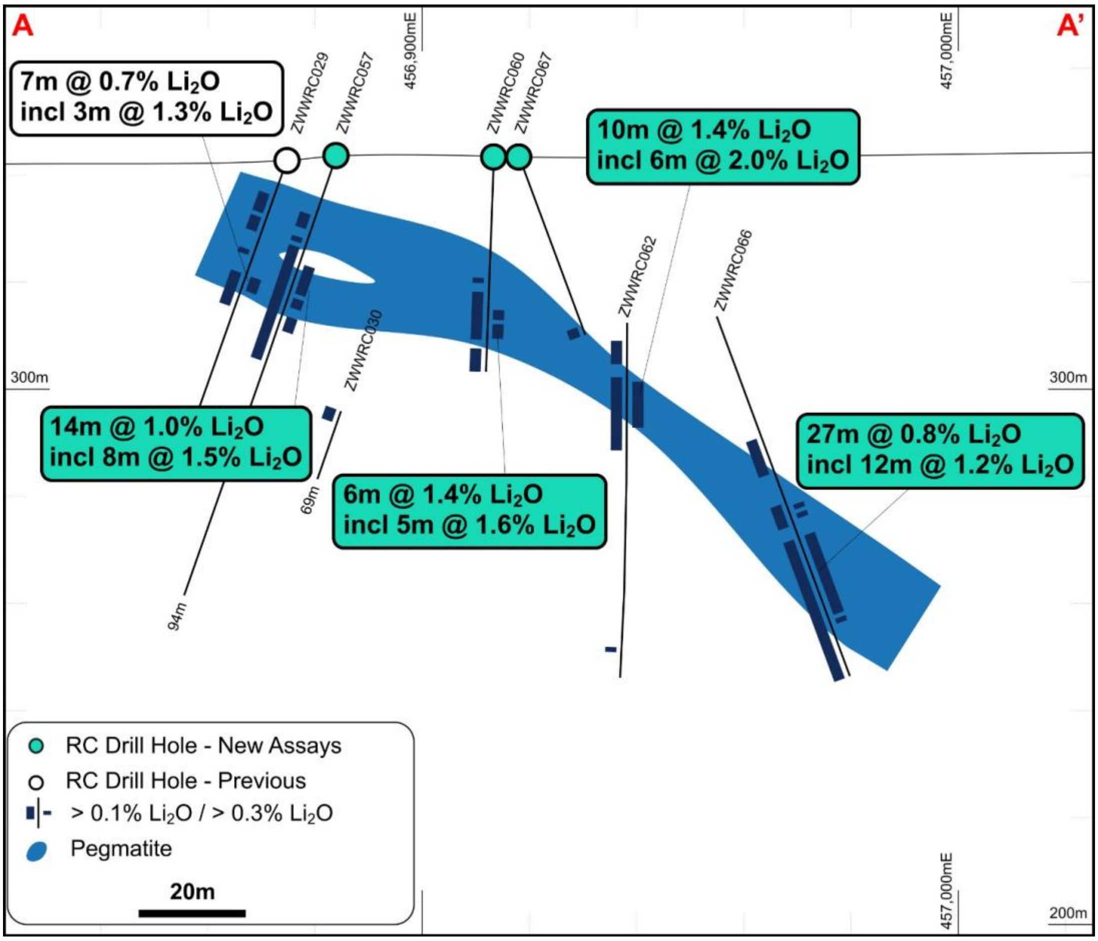

Figure 13: Waratah Well Lithium Prospect Drilling Cross Section A-A'

Recent Progress

Work during the quarter by the Zenith exploration team has shown that the lithium pegmatite mineralisation, as it is defined to date, is situated on a geological host rock contact. That contact extends under cover to the northeast and southwest and remains untested.

Heritage surveys have been completed and permits are in place to allow the next stage of 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.

During the quarter, Zenith's exploration team collected 123 **rock chip samples** to refine the stratigraphic architecture of the project area, as well as testing for favourable alteration and pathfinder signatures. All samples were submitted to Jinning Lab for four acid digest ICP-MS multi-element analysis.

Work by the Zenith team incorporating these data points has demonstrated that the lithium pegmatite mineralisation is located at the intersection of a NE-SW trending **Cr- rich geological host rock contact**. This contact extends under cover to the northeast and southwest, remaining largely untested (ASX Release 3 July 2024).

Post-quarter update: Zenith successfully applied for an **Exploration Incentive Scheme (EIS) grant** during the quarter, which was awarded post-quarter. This grant will provide funding to support further drilling and exploration activities at Waratah Well. The EIS grant represents a significant boost for the project, enabling the Company to accelerate its exploration efforts, particularly the testing of untested zones along the geological contact.

HAYES HILL PROJECT

Drilling at the **Hayes Hill** project ceased in the previous quarter. The drilling, which aimed to test large gold targets (2.5km long) and included the maiden test of the **Green Bananas** nickel sulphide target, did not return results that warranted proceeding with the **$700,000 cash option fee** due on 1 August 2024. Zenith was also unsuccessful in renegotiating the commercial terms with the project owner. As a result, the Company has now opted not to pursue an **80% joint venture interest** and retains no ongoing project involvement. Rehabilitation of the drill tracks will be completed in the upcoming quarter, in line with the terms of the option agreement.

Additionally, the Department of Mines, Industry Regulation and Safety (DMIRS) has requested an audit statement on the **Form 5 Operations Report** for E63/1773 for the year ending 7 May 2024, which is being conducted by PKF. Zenith remains liable for any outstanding remediation obligations.

Base Metal Projects

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

Zenith Minerals, through its wholly owned subsidiary, Fossil Prospecting Pty Ltd, holds a 25% non-contributing equity in the Earaheedy Joint Venture Project and is free carried by Rumble through to the completion of a Bankable Feasibility Study (BFS). The Earaheedy Project, located 110 km northeast of Wiluna in Western Australia, continues to show potential as a world-class base metal discovery.

Chinook Metallurgical Test Work

Metallurgical test work on mineralised samples from the Chinook Deposit progressed during the September quarter, focusing on material derived from a 10-hole diamond drilling program (see Figure 14) that provided a 2,300 kg representative metallurgical core sample. Key components of this test work include:

- **Pilot beneficiation trials:** These trials aim to explore options for upgrading lower-grade Zn-Pb mineralisation within the pit-constrained Mineral Resource Estimate (MRE).
- **Early comminution tests:** Initial assessments of crushing and grinding characteristics.
- **Detailed mineralogy and flotation optimisation:** Testing focused on enhancing recovery and concentrate quality for future planned scoping-level studies.

Following additional flowsheet optimisation studies, the Chinook metallurgical program is close to completion, with a final report anticipated in November. Results from this test work are expected to be released in the December quarter.

Resource Expansion and Mato Prospect Discovery During the quarter, Zenith's joint venture partner, Rumble Resources, expanded the resource base across the Chinook, Tonka, and Navajoh deposits. The current Inferred Mineral Resource across these deposits stands at **94Mt @ 3.1% Zn+Pb and 4.1 g/t Ag, representing 2.2Mt of contained zinc, 0.7Mt of contained lead, and 12.6Moz of contained silver**[1]. An additional discovery at the Mato Prospect, located 10 km west of Chinook but outside the JV area, strengthens the broader project area's potential to become a major base metal camp. Key intersections from Mato include:

- **16m @ 5.09% Zn+Pb, including 10m @ 7.05% Zn+Pb**
- **29m @ 3.12% Zn+Pb, including 14m @ 5.04% Zn+Pb**[(1)]

While Mato is outside the Zenith-Rumble JV, the discovery reinforces the Earaheedy Basin's potential for large-scale, low-cost open-pit mining. Less than 30% of the 70 km-long Navajoh Unconformity Unit has been effectively drill-tested, leaving significant upside for future resource expansion.

Next Steps

- **Metallurgical Studies**
  - Completion of the Chinook test work program, which includes the results from pilot beneficiation and optimisation trials.
- **Scoping Studies**
  - Commencement of internal scoping studies upon completion of the current test work program, which will support further development planning for the Chinook deposit.

This expanded metallurgical and exploratory focus positions the Earaheedy Project for substantial growth, underpinned by Zenith's ongoing support for Rumble Resources' efforts in unlocking the project's full value potential.

[1] ASX: RTR release 19th April 2023

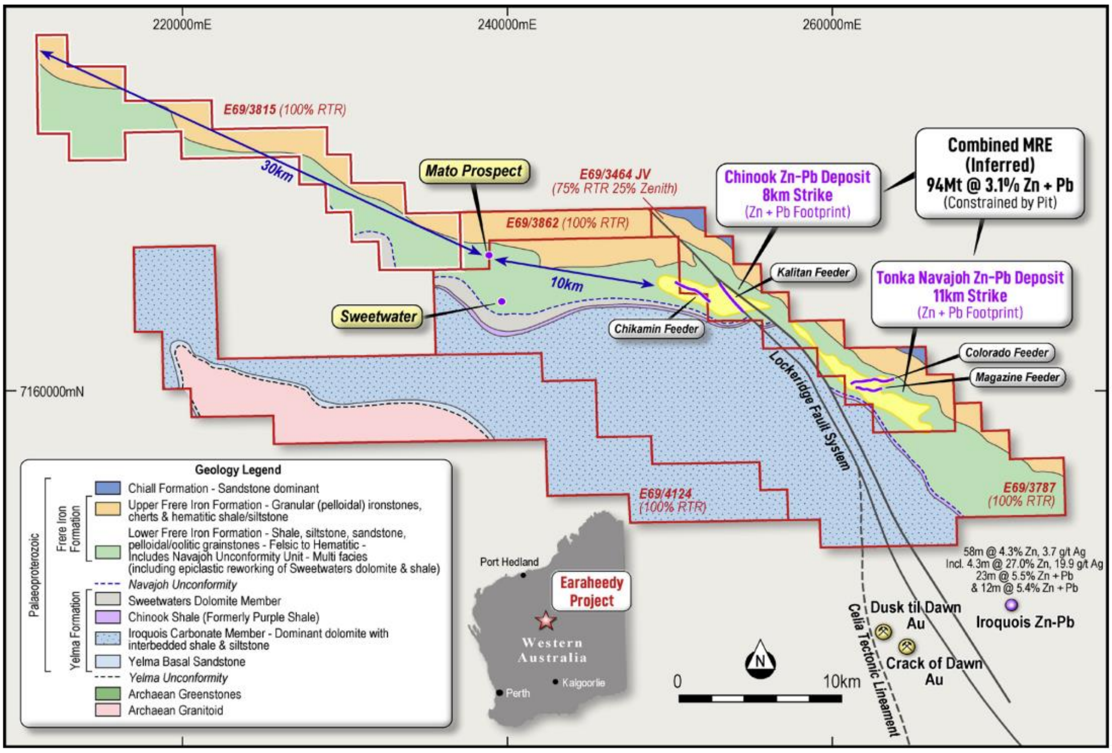

Figure 14: Earaheedy Project – Prospectivity Map - highlighting area of maiden MRE and location of Mato Prospect

EARAHEEDY ZINC PROJECT – WA (Zenith 100%)

The Earaheedy Zinc Project (EZP) covers an area to the northeast and west of the Earaheedy Joint Venture project and comprises four granted exploration licences. No exploration was completed during the quarter. This ground comprises of E69/3414, R69/2. E69/2733, E69/3869, E69/3995.

Delivin Creek – QLD (Disposed)

During the quarter, Zenith Minerals Limited finalised the sale of its remaining 49% interest in the Develin Creek Copper-Zinc Project, held through its 100% subsidiary Mackerel Copper Pty Ltd, to QMines Limited (ASX: QML), marking a strategic divestment that reinforces our focus on priority assets (ASX: ZNC 30 Sept 2024). The transaction included tenements EPM17604 and EPM16749 and was completed with a cash payment of $975,000 and the issuance of 10,261,194 QMines shares, valued at $687,500 based on a 30-day VWAP of $0.067. These shares are under a 5-month voluntary escrow, reflecting an ongoing commitment between both parties.

This transaction enables Zenith to prioritise and fund its core gold and lithium projects, including the upcoming drilling at Dulcie Far North. The successful completion underscores our commitment to focusing on high-impact assets while optimising returns for shareholders.

CORPORATE

Capital

Cash balance of $1.39M at the end of the quarter. Equity investments held by Zenith are worth approximately $2.09M (valued as at 30-Sep-24) including: 43.9 million AIM:BHL shares and 10.2 million ASX:QML shares.

In accordance with Listing Rule 5.3.1, the Company reports that there was $0.39M exploration expenditure incurred during the quarter.

During the quarter Zenith completed the sale of the remaining 49% interest in the Develin Creek Copper-Zinc Project to QMines Limited (ASX:QML) for $0.975M in cash and $0.69M in QMines shares (10,261,194 shares).

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 30 Sep 24 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-Sep-24 were:

Bradda Head Holdings Ltd (LON & TSX-V:BHL)
43.9M shares

QMines Ltd (ASX:QML)
10.2M shares

Oxley Resources Pty Ltd* (9.4M shares, 26% of Oxley).

*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 a 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).

Zenith's joint venture partner for the Kavaklitepe gold project in Turkey, Gubretas Maden a Turkish mining company that owns their 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 share in a 5% Net Profit Royalty.

New Opportunities and Divestments

The Company advises that it is actively exploring various opportunities, including both potential project acquisitions and disposals. Ongoing negotiations remain incomplete at this stage, and the Company will provide appropriate disclosure should any agreements or significant developments arise. Our strategic focus is on enhancing the portfolio through selective acquisitions while considering divestments where they align with our long-term objectives.

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	Develin Creek Queensland	EPM17604 and EPM16749	49%	0
Interests in mining tenements and petroleum tenements acquired or increased	Nil			

PROJECT	LOCATION	TENEMENT NUMBER	HOLDER	ZENITH MINERALS INTEREST	STATUS
Earaheedy Zinc JV	WA	E69/3464	Rumble Resources Ltd Fossil Prospecting Pty Ltd	75% 25%	Granted
Earaheedy Zinc JV	WA	M69/150	Rumble Resources Ltd Fossil Prospecting Pty Ltd	75% 25%	Pending
Earaheedy Mn	WA	E69/2733	Zenith Minerals Limited	100%	Granted
Earaheedy Mn	WA	E69/3414	Zenith Minerals Limited	100%	Granted
Earaheedy Mn	WA	R69/2	Zenith Minerals Limited	100%	Granted
Earaheedy Zinc	WA	E69/3869	Caldera Metals Pty Ltd	100%	Granted
Earaheedy Zinc	WA	E69/3995	Caldera Metals Pty Ltd	100%	Granted
Develin Creek	QLD	EPM16749	Mackerel Metals Limited	49%	Sold
Develin Creek	QLD	EPM17604	Mackerel Metals Limited	49%	Sold
Auburn	QLD	EPM27517	Black Dragon Energy (AUS) Pty Ltd	100%	Granted
Privateer	QLD	EPM27552	Black Dragon Energy (AUS) Pty Ltd	100%	Granted
Red Mountain	QLD	EPM26384	Black Dragon Energy (AUS) Pty Ltd	100%	Granted
Waratah Well	WA	E59/2170	Black Dragon Energy (AUS) Pty Ltd	100%	Granted
Waratah Well	WA	E59/2321	Black Dragon Energy (AUS) Pty Ltd	100%	Granted
Split Rocks	WA	E77/2375	Black Dragon Energy (AUS) Pty Ltd	100%	Granted
Split Rocks	WA	E77/2386	Black Dragon Energy (AUS) Pty Ltd	100%	Granted
Split Rocks	WA	E77/2388	Black Dragon Energy (AUS) Pty Ltd	100%	Granted
Split Rocks	WA	E77/2395	Black Dragon Energy (AUS) Pty Ltd	100%	Granted
Split Rocks	WA	E77/2513	Black Dragon Energy (AUS) Pty Ltd	100%	Granted
Split Rocks	WA	E77/2514	Black Dragon Energy (AUS) Pty Ltd	100%	Granted
Split Rocks	WA	E77/2515	Black Dragon Energy (AUS) Pty Ltd	100%	Granted
Split Rocks	WA	E77/2555	Black Dragon Energy (AUS) Pty Ltd	100%	Granted
Split Rocks	WA	E77/2598	Black Dragon Energy (AUS) Pty Ltd	100%	Granted
Split Rocks	WA	E77/2616	Black Dragon Energy (AUS) Pty Ltd	100%	Granted

Split Rocks	WA	P77/4490	Black Dragon Energy (AUS) Pty Ltd	100%	Granted
Split Rocks	WA	P77/4507	Black Dragon Energy (AUS) Pty Ltd	100%	Granted
Split Rocks-Dulcie	WA	M77/1292	Black Dragon Energy (AUS) Pty Ltd	ZNC owns mineral rights below 6m	Granted

Competent Persons Statement

The information in this report that relates to exploration results, mineral resources, and exploration activities is based on information compiled by Mr **Christopher Shanley**, who is a Member of the Australian Institute of Geoscientists and an employee of Zenith Minerals Limited. Mr Shanley 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 Shanley 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 relating to **Exploration Results** and **Mineral Resources** compiled by Mr **Michael Clifford**, who is a Member of the Australian Institute of Geoscientists and was an employee of Zenith Minerals Limited at the time of preparation, is also included. Mr Clifford has sufficient experience relevant to the style of mineralisation and type of deposit under consideration 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 relevant to the style of mineralisation and type of deposit under consideration 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 relevant to the style of mineralisation and type of deposit under consideration 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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This 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	Quarter ended ("current quarter")
96 119 397 938	30 September 2024

Consolidated statement of cash flows			Current quarter $A'000	Year to date (3 months) $A'000
1.	**Cash flows from operating activities**			
1.1	Receipts from customers		6	6
1.2	Payments for			
	(a)	exploration & evaluation (see Note to 1.2(a))	(392)	(392)
	(b)	development	-	-
	(c)	production	-	-
	(d)	staff costs	(220)	(220)
	(e)	administration and corporate costs	(287)	(287)
1.3	Dividends received (see note 3)		-	-
1.4	Interest received		7	7
1.5	Interest and other costs of finance paid		-	-
1.6	Income taxes paid (refund)		-	-
1.7	Government grants and tax incentives		-	-
1.8	Other (GST)		146	146
1.9	**Net cash from / (used in) operating activities**		**(740)**	**(740)**

Note to 1.2(a) – For the quarter ended 30 September 2024, $392 (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.

2.	**Cash flows from investing activities**			
2.1	Payments to acquire or for:			
	(a)	entities	-	-
	(b)	tenements	-	-
	(c)	property, plant and equipment	(2)	(2)
	(d)	exploration & evaluation	-	-
	(e)	investments	-	-
	(f)	other non-current assets	-	-

Consolidated statement of cash flows		Current quarter $A'000	Year to date (3 months) $A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	975	975
	(c) property, plant and equipment	-	-
	(d) investments	20	20
	(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)	-	-
2.6	**Net cash from / (used in) investing activities**	**993**	**993**

3.	**Cash flows from financing activities**		
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	-	-
3.10	**Net cash from / (used in) financing activities**	**-**	**-**

4.	**Net increase / (decrease) in cash and cash equivalents for the period**		
4.1	Cash and cash equivalents at beginning of period	1,138	1,138
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(740)	(740)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	993	993
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	-

Consolidated statement of cash flows		**Current quarter $A'000**	**Year to date (3 months) $A'000**
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	**Cash and cash equivalents at end of period**	**1,391**	**1,391**

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	1,391	1,138
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	**Cash and cash equivalents at end of quarter (should equal item 4.6 above)**	**1,391**	**1,138**

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	115
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-

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.

Director fees and salaries $114,877

7.	**Financing facilities** *Note: the term "facility' includes all forms of financing arrangements available to the entity.* *Add notes as necessary for an understanding of the sources of finance available to the entity.*	**Total facility amount at quarter end $A'000**	**Amount drawn at quarter end $A'000**
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	**Total financing facilities**	-	-
7.5	**Unused financing facilities available at quarter end**		-
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.		

8.	**Estimated cash available for future operating activities**	**$A'000**
8.1	Net cash from / (used in) operating activities (item 1.9)	(740)
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)	(740)
8.4	Cash and cash equivalents at quarter end (item 4.6)	1,391
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	1,391
8.7	**Estimated quarters of funding available (item 8.6 divided by item 8.3)**	1.88

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.

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

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: The Company has raised approximately $1.3 million in October, with another $140k pending shareholder approval. The Company has also launched a share purchase plan seeking to raise $500k.

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, see comments on 8.8.2 above.	

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 October 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 [*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.