

Zenith Secures \$275,000 CEI Grant for Red Mountain Gold Project

Zenith Minerals Limited (ASX: ZNC) is pleased to announce that it has been awarded a grant of A\$275,000 (incl GST) from the Queensland Government under Round 9 of the Collaborative Exploration Initiative (CEI). This co-funding grant will support deep diamond drilling at the Company's 100%-owned Red Mountain Gold Project in Queensland, aimed at unlocking the project's primary gold potential, with associated copper and molybdenum mineralisation at depth.

The CEI is a competitive state government program designed to encourage discovery of critical minerals in Queensland and Zenith's successful application underscores the strategic significance of Red Mountain as an emerging critical minerals target. Zenith's award of \$275,000 represents the maximum funding, reflecting the high merit of the Red Mountain proposal.

Highlights

- **\$275,000 Grant Secured:** Zenith awarded \$275,000 (incl. GST) under Queensland Government's CEI Round 9 to support deep drilling and geophysical studies at Red Mountain.
- **Targeting Porphyry Potential:** Funding to accelerate testing of a potential large-scale intrusion-related gold system (IRGS), with a potential porphyry copper (-molybdenum) source interpreted beneath current drill depths.
- **Backed by Expert Review:** Recent independent technical assessment by RSC confirms Red Mountain exhibits the hallmarks of a vertically zoned IRGS/porphyry system with significant depth potential.
- **Next Phase Underway:** Drilling planned for the current Quarter following the wet season, building on previous intercepts of gold and copper mineralisation.

Andrew Smith, Managing Director of Zenith Minerals, commented: "We're very pleased to have received this support from the Queensland Government through the CEI program. This funding will directly support our deep drilling campaign at Red Mountain, targeting what we believe could be a significant gold system with copper and molybdenum as part of a potential broader porphyry-style, intrusion-related mineralising event. The recent independent review by RSC confirmed Red Mountain displays all the key hallmarks of a vertically zoned IRGS, with substantial potential at depth. With this co-funding in place, together with the pending proceeds from the sale of the Kavaklitepe asset in Turkey for A\$0.83m Zenith will have sourced over \$1.1m with no equity dilution, rendering us well-positioned to advance our next phase of exploration and unlock the project's broader critical minerals opportunity."

RSC's Independent Assessment

Red Mountain was recently reviewed by **RSC**, a globally recognised geological consultancy specialising in intrusion-related Tier-1 mineral systems.¹ RSC's assessment concluded that Red Mountain exhibits key characteristics of a **vertically zoned IRGS** or porphyry-style system, with strong **mineralisation**

¹ See ASX Announcement 20 February 2025

potential at depth. This reinforces Zenith's interpretation that the deeper parts of the system may host a **copper-molybdenum-gold intrusive source**, analogous to Queensland's Mt Wright and Mt Rawdon deposits.



Figure 1: Cross Section of Mt Wright (A) Compared to Red Mountain (B). Geochemical data points to presence of a fertile magmatic cupola situated beneath the rhyolites on the western margin of Red Mountain. In this regard, Red Mountain is considered a close analogue to the Mt Wright gold deposit (+0.9Moz Au produced)². Note the position of the Red Mountain intrusion is for illustration purposes only.

Key Findings from RSC's Review:

- Strong mineralisation potential below current drilling depths, with gold hosted in rhyolite units adjacent to and flanking the breccia pipe.
- **Deep-seated, fractionated intrusions** are interpreted to be driving the gold system, comparable to **Mt Wright** and other major IRGS deposits.
- Two distinct gold mineralisation styles:
 - High-grade vein-fracture mineralisation in granodiorite and granite (e.g. 5m @ 5.5g/t Au from 209m in ZRMDD043³).
 - Broad, disseminated gold mineralisation in rhyolite, including 129m @ 0.51 g/t Au⁴ from 225m in ZRMDD052, indicative of a larger magmatic cupola.

² Resolute Mining 2014 Annual Report & Information Poster, June 2014

³ ASX: ZNC - New Drill Results Extend and Confirm High-Grade Gold Zones at Red Mountain; 14-April 2021

⁴ ASX: ZNC – Red Mountain -Significant Widths of Gold and Silver; 29-August 2023

- "Pathfinder geochemistry (Bi-Mo-As-Sb-Te-Pb-Zn) aligns with intrusion-related gold models, reinforcing Red Mountain as a fertile gold system and highlighting the need for deeper diamond drilling."
- "Magnetic and geochemical anomalies suggest a deeper intrusive source, supporting the concept of a fractionated magmatic system driving mineralisation."

RSC's assessment further states that "the geochemical and structural indicators at Red Mountain are consistent with a vertically zoned IRGS, with significant mineralisation potential below current drilling depth." This aligns with previous observations that gold mineralisation is primarily hosted within mineralised rhyolite surrounding a mapped breccia pipe, reinforcing the need for deeper drilling to fully test the system.

A direct comparison of Red Mountain and Mt Wright (Figure 1) highlights similarities in geochemical and structural characteristics, particularly the presence of an Au-Bi-Sb assemblage, which suggests that drilling to date has been too shallow. The geochemical data indicate the presence of a fertile magmatic cupola beneath the rhyolites on the western margin of Red Mountain, reinforcing the IRGS model and confirming the potential for significant deeper mineralisation.

Red Mountain Project Overview

The Red Mountain Gold Project ("the Project") is located within Queensland's Auburn Arch, a region known for its rich mineral endowment. The Project presents significant gold and silver mineralisation hosted within a large breccia pipe system. Discovered by Zenith in 2017, the Project has yielded compelling results through successive exploration phases, confirming its potential as a core asset within Zenith's gold portfolio. With 100% ownership, the Project benefits from existing infrastructure and proximity to other notable gold projects in the region (Figure 2), providing logistical advantages and cost efficiencies for future operations.



Figure 2: Strategic Red Mountain Location Map - Total Gold Production shown

The geological setting at Red Mountain shares notable similarities with other major Australian gold deposits such as Mt Wright, Mt Leyshon, and Mt Rawdon. These systems, characterised by breccia complexes and intrusion-related mineralisation, have produced substantial gold resources, highlighting Red Mountain's potential to host **to host large-scale IRGS or porphyry-style copper (-molybdenum) mineralisation** within a comparable geological setting. Recent re-evaluation of the geochemical data collected to date, both surface sampling and down-hole geochemistry, continues to support the IRGS story⁵.

Metallurgical test work has shown that much of the gold at Red Mountain is free-milling and nonrefractory, with average recoveries of 83.3% via conventional cyanide leaching. Notably, samples with lower arsenic content achieved recoveries as high as 95.8%, supported by strong gravity gold recovery rates⁶. These positive results indicate a straightforward processing path, which could contribute to the project's economic viability and align with Zenith's goal of cost-effective gold production.

Previous Exploration

Since the discovery of the Red Mountain Gold Project in 2017, Zenith Minerals has completed a total of 62 drill holes, comprising 49 Reverse Circulation (RC) holes and 13 Diamond drill holes, for a cumulative total of 10,972.70 metres of drilling.



Figure 3: Red Mountain Map showing Significant Gold Intersections (2024 and previous), Main Targets and the location of the RC pre-collar for the proposed deep drilling program.

⁵ ASX: ZNC -Highly Encouraging New Drilling Results -Red Mountain Gold Project, Queensland; 20-Jan 2025

⁶ASX: ZNC – High Gold Recoveries in Metallurgical Test work – Red Mountain; 7 December 2021

The 2024 RC drilling program was designed to test four high-priority IP anomalies identified in Zenith's updated 3D geological model, as detailed in ASX Release dated 11th Nov 2024. This phase of exploration built on earlier drilling, which returned significant intercepts such as **13m @ 8.0 g/t Au and 129m @ 0.51 g/t Au**⁷ and highlighted the continuity of gold mineralisation within the breccia system.

Early Zenith shallow RC drilling produced the following high-grade **gold intercepts**, reported at a **0.3 g/t Au cut-off**⁸:

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

Deeper drilling to a maximum depth of 580m in 2023 confirmed the continuity⁹:

- 129m @ 0.51 g/t Au + 11.9 g/t Ag from 225m in (ZRMDD052; 0.1g/t Au cut-off), including:
 - 12m @ 1.36 g/t Au, and
 - 9m @ 1.24 g/t Au

New Key Gold Intercepts (2024 Drilling Campaign):

- 23m @ 1.49 g/t Au from 48m, incl 2m @ 11.3 g/t Au from 55m (ZRMRC055)
- 4m @ 4.45 g/t Au from 122m incl 2m @ 8.11 g/t Au from 122m (ZRMRC056)
- 3m @ 1.00 g/t Au from 90m incl 1m @ 1.69 g/t Au from 91m (ZRMRC053)¹⁰

These results demonstrate both the near-surface and deeper potential for gold, silver and copper mineralisation at Red Mountain, making it a prime candidate for deeper exploration.

For more details on the drilling programs, please refer to **previous announcements**¹¹.

Next Steps:

The CEI grant will support a **focused deep diamond drilling campaign**, targeting the interpreted intrusive core (magmatic cupola) beneath the breccia system. Work will include:

• Diamond drilling to deep parts of mineralisation

⁷ ASX: ZNC – Significant widths of gold and silver mineralisation intersected – Red Mountain Project – Central Queensland; 29-August 2023

⁸ See ASX Releases 30 Nov 2020 & 14 Apr 2021

⁹ ASX: ZNC -29-August 2023; 11-Nov 2024

¹⁰ See ASX Release 20 Jan 2025. Note: Significant intervals reported as values greater than 0.3 g/t Au cutoff with no more than 2m internal dilution and rounded to 2 decimal places. True widths are estimated to be ~90% of reported downhole intersections.

¹¹ See Zenith's ASX Releases dated: 03-Aug-20, 13-Oct-20, 09-Nov-20, 21-Jan-21 and 19-May-21 and 29 Aug 2023 for details on the previous drilling.

• At least one new deep hole (>400m) targeting the core molybdenum anomaly

Drilling is expected to commence **in Q2 2025**, following the wet season and completion of the Company's ongoing Dulcie Far North (DFN) drilling program in WA. Assay results from previously drilled Red Mountain core are also pending and will be integrated into target planning.

Zenith believes Red Mountain is emerging as a **significant critical minerals opportunity**, and the CEI grant allows the Company to accelerate exploration while preserving capital for its broader portfolio.

For further information, please contact:

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To learn more, please visit www.zenithminerals.com.au

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 accordance with JORC 2012.

The information contained in this report that relates to Exploration Results has been previously reported to the ASX and is extracted from the following reports available to view on Zenith's website:

Competent Person Mr Mick Clifford

- 03-Aug-20, 13-Oct-20, 09-Nov-20, 21-Jan-21 and 19-May-21

Competent Person: Mr. Kevin Seymour

- 29-Aug-2023

Competent Person Mr Chris Shanley

- 20-Feb-25

The Company confirms that it is not aware of any new information that materially affects the information included in the original market announcements referenced herein. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.