

## Red Mountain Extension Drilling Demonstrates Higher-Grade Gold System

Zenith Minerals Limited ("Zenith" or "the Company") is delighted to report the first gold assay results from the 2025 drilling campaign at the 100% owned Red Mountain Project, Queensland. A highlight result of **139.4 m @ 1.05g/t Au** has been returned from hole ZRMDD064. Importantly, geological observations in core — including a **semi-massive sulphide zone** — provide growing confidence that Red Mountain is developing as an analogue to the Mount Wright deposit (9.8 Mt @ 3.35 g/t Au for 1.1Moz Au<sup>1</sup>). as proposed by RSC (see ASX:ZNC 19<sup>th</sup> February 2025).

### Highlights:

- First hole of the 2025 drilling programme (ZRMDD064) intersected a broad gold zone of **139.7 m @ 1.05g/t Au** from 214.9 m, including high-grade intervals such as:
  - **14.2 m @ 4.62 g/t Au from 276 m**, including **2.0 m @ 21.03 g/t Au**;
  - **9.45 m @ 5.29 g/t Au from 339.55 m**, including **2.1 m @ 21.15 g/t Au (with highest individual hit of 0.8m @ 37.10g/t Au)**.
- Only a high priority section (179–355m) of ZRMDD064 has been assayed to date, with results fast-tracked to the laboratory. Assays from the remainder of the hole are expected in the coming weeks.
- The Project is emerging as a classic Intrusion-Related Gold (IRG) system, comparable to the Mt Wright deposit. At Mt Wright, lead-zinc-silver mineralisation occurs near the top of the system, transitioning into higher-grade gold zones at depth. Encouragingly, ZRMDD064 has intersected zinc-lead mineralisation across the gold zone<sup>2</sup>, supporting the interpretation that drilling to date is still only testing the upper part of the system — with higher gold grades anticipated as drilling tests deeper.
- Drilling at the eastern CEI-funded copper porphyry target has also been completed to 465.3 m, with assays expected in the coming weeks.
- On the back of these strong results, the rig has returned to the western IRG target and is now drilling a third deep diamond hole to further test the Red Mountain gold system below ZRMDD064.
- Zenith is preparing to commence a major 9,000–12,000 m RC drilling programme at its recently consolidated Dulcie Gold Project in Western Australia, with drilling expected to begin by the end of the month. The programme is fully funded following the completion of a ~\$3.5 m rights issue.

<sup>1</sup> ASX:RSG - "Resolute Mining Ltd Annual Report": 12-Jan-2006; Table 3; p10. See about Mt Wright.

<sup>2</sup> Based on observations made on the drill core and as indicated by handheld pXRF spot scans.

### Managing Director Andrew Smith said:

*"These are the results we had hoped for – the core looked exceptional, and the assays have confirmed it. The follow-up hole now underway is designed to test deeper into the system, where we anticipate even stronger gold grades. With a strengthening gold price, drilling momentum at Red Mountain, and a 12,000 m programme about to commence at our flagship Consolidated Dulcie Project, it is an incredibly exciting period for Zenith. Shareholders can look forward to a strong pipeline of exploration news in the months ahead. I would like to acknowledge the support of the Queensland Government, whose foresight in co-funding this deep diamond drilling programme has been instrumental in advancing Red Mountain and supporting the potential for a significant discovery."*

### Discussion of Results

The first drill hole of the 2025 programme was designed to test the down-dip extension of an intercept of 129 m @ 0.51 g/t Au from 225 m in ZMRDD052<sup>3</sup> encountered in a rhyolite intrusion on the western margin of the ring complex that defines the Red Mountain project. This is accompanied by extensive gold mineralisation in quartz veins within granite which overlie the intruding rhyolite (see Figure 1 and Figure 2). Results from the first batch of assays from ZRMDD064 intersected the mineralised rhyolite, with a broad intercept of **139.7 m @ 1.05 g/t Au** from 214.9 m. Internal to this, highlights include:

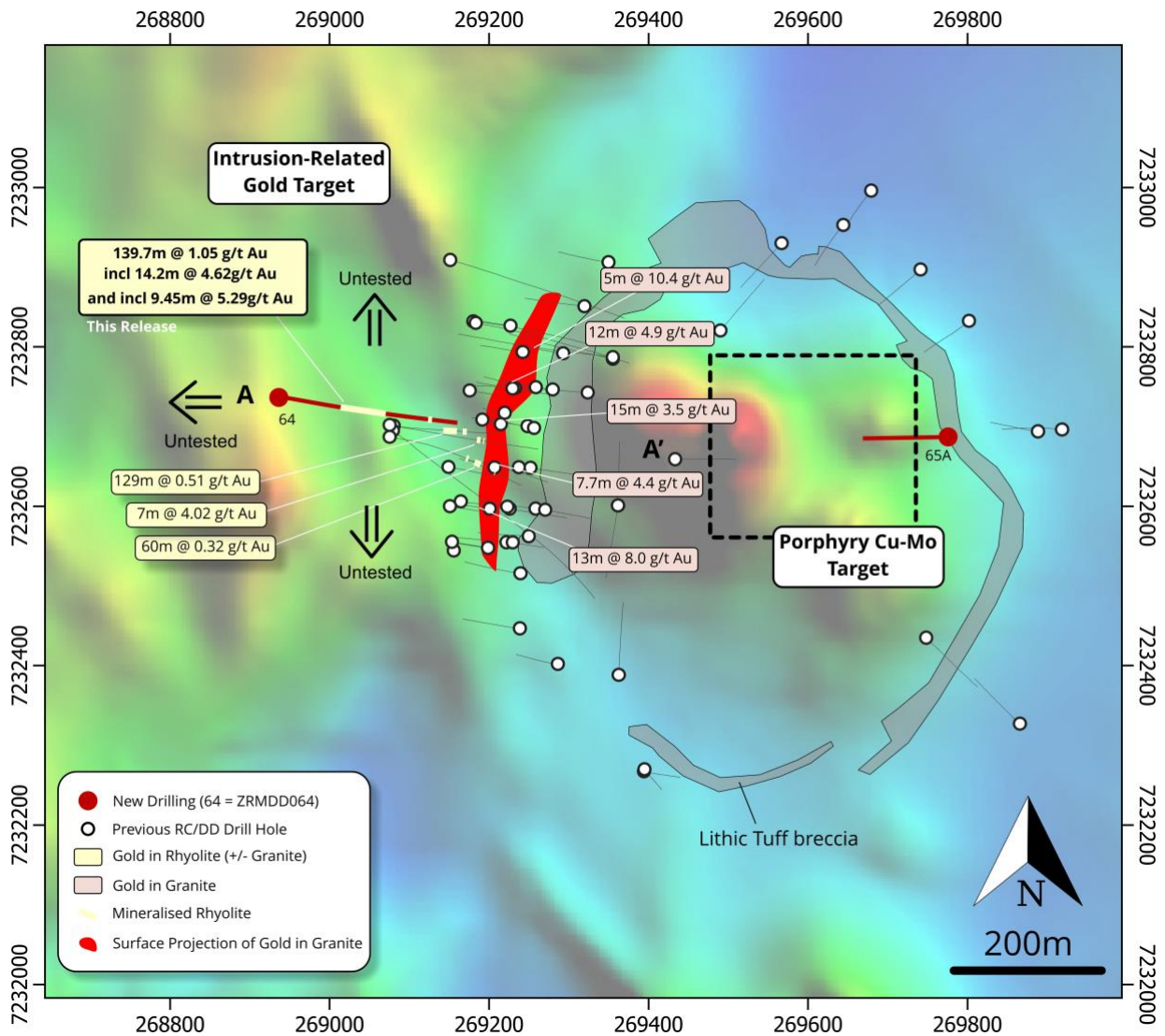
- **0.55 m @ 22.90 g/t Au** from 217.75 m;
- **14.2 m @ 4.62 g/t Au** from 276 m, including **2 m @ 21.03 g/t Au**;
- **9.45 m @ 5.29 g/t Au** from 339.55 m, including **2.1 m @ 21.15 g/t Au**.

These results show broader, higher grades than ZRMDD052 and encouragingly include a zone of semi-massive sulphide vein mineralisation near the basal contact of a rhyolite intrusion which returned the intercept of 2.1 m @ 21.1g/t Au (see Figure 3). While not necessarily considered to be indicative of economic zinc-lead mineralisation, this style of mineralisation is encouraging when considering the position of ZRMDD064 in the context of the Mt Wright mineralisation system, discussed in detail below.

Structural information from this zone is also considered potentially significant. The structure occurs at a low angle to core, suggesting that the interval does not represent true width. Although direct measurements were not possible due to the fractured nature of the rhyolite host, nearby measurable structures indicate a sub-vertical geometry, which may represent the orientation of a feeder structure at depth.

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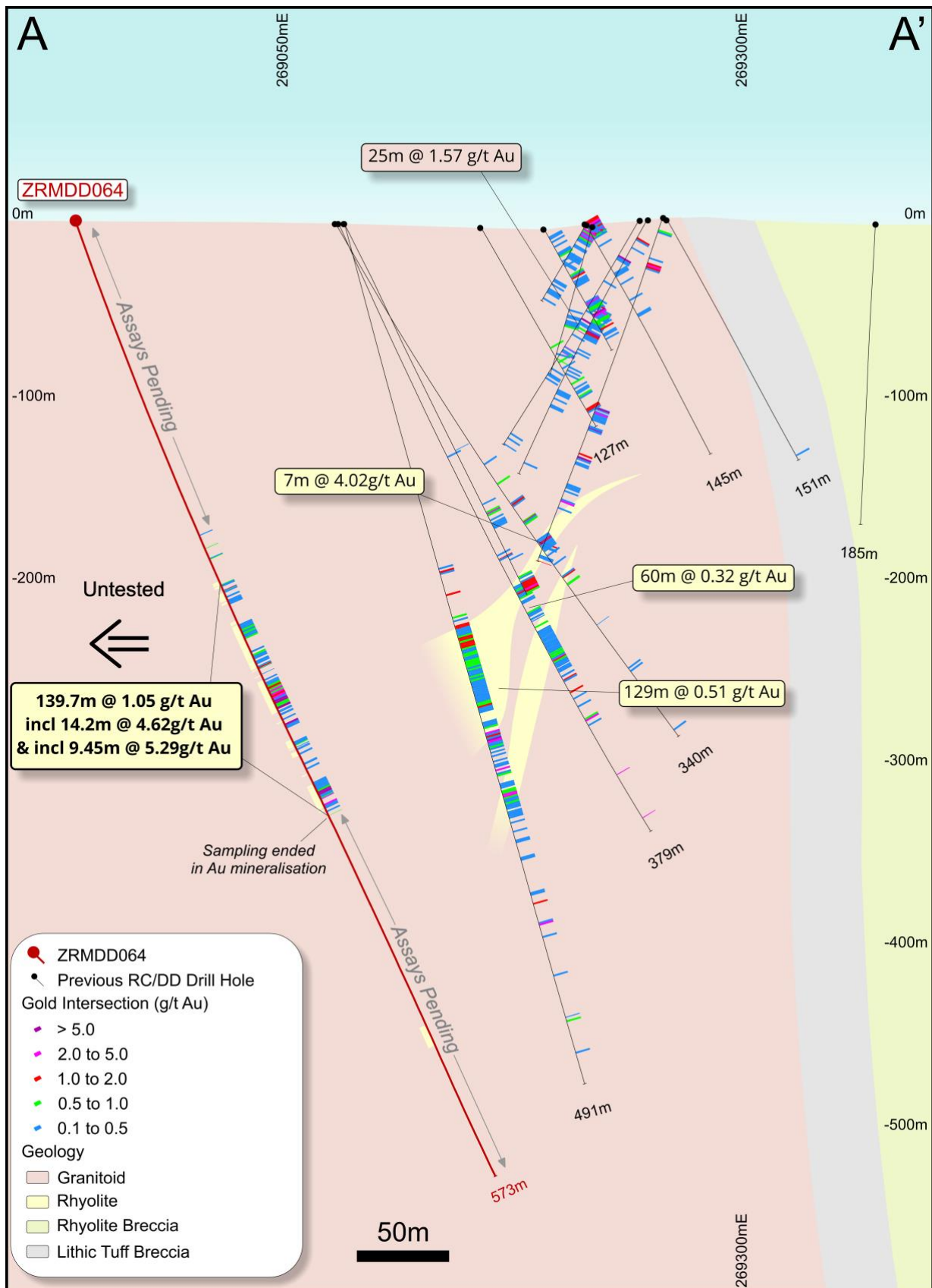
<sup>3</sup> First reported in ASX:ZNC 29<sup>th</sup> August 2023



**Figure 1: Plan view of the Red Mountain Project showing drilling results and location of western IRG target and eastern porphyry target on magnetics (RTP) background.**

The reported assay results are from a specific zone that was fast-tracked for assay. A separate rhyolite was intercepted from 481.5-493.9m (see Figure 2Figure 4) with strong alteration in granite between. Results from this zone will be reported in the coming weeks as well as base metal and silver assays for the reported zone.

The location of the rhyolite and mineralisation was higher in the hole than originally anticipated and indicates either structural dislocation via faulting or drilling at an oblique angle to the geology. The follow-up hole has therefore been designed to clarify the orientation of the host intrusion and its mineralisation, guided by structural measurements collected in ZRMDD064.



**Figure 2: Cross-section showing new results from ZRMDD064 in relation to previously reported intercepts from Zenith drilling. Interpretation of the host rhyolite has not been extended to the new drill hole as there are various possible scenarios – these will be tested in the follow-up drill hole currently underway.**





*Figure 3: Photos from semi-massive sulphide zone comprising sphalerite, galena, pyrite and chalcopyrite with associated carbonate in ZRMDD064. Left – 340.55–340.98m, Right – 340.98–341.3m.*

### **Mt Wright Comparison**

The Mt Wright gold deposit in Queensland was owned and operated by Resolute Mining Limited (ASX: RSG) between 2006 and 2017. Over its 11-year mine life, Mt Wright produced more than 1 million ounces of gold from underground mining with a Global Resource of 9.8 Mt for 1.1 Moz Au at 3.35g/t Au. The deposit is hosted within a rhyolitic breccia pipe and is characterised by distinct vertical metal zoning: lead-zinc-silver mineralisation near the top of the system, transitioning into gold-copper-bismuth zones at depth<sup>4</sup> (see Figure 4).

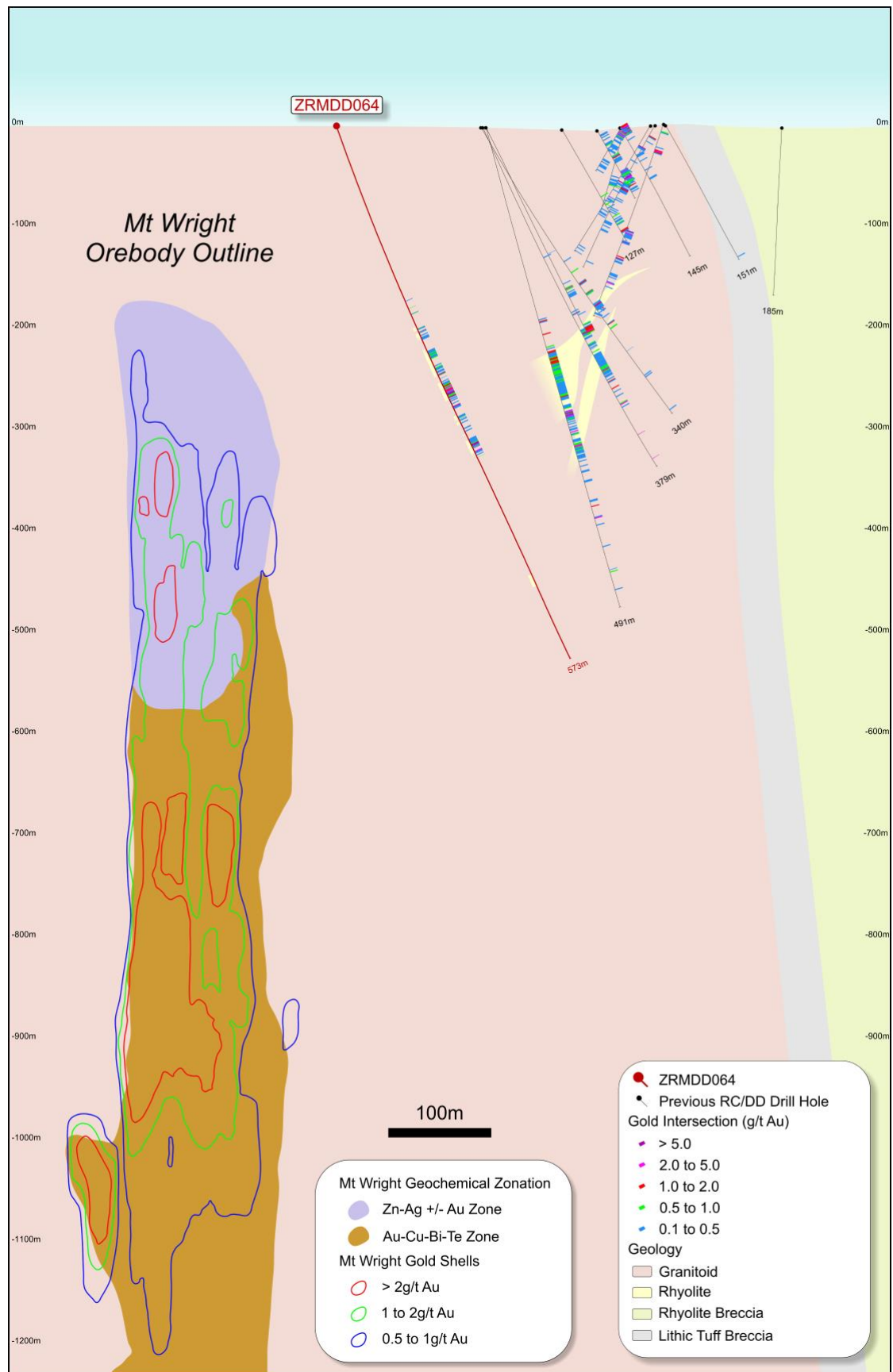
At Red Mountain, the style of mineralisation has been determined to share characteristics with Mt Wright as discussed in previous ASX announcements<sup>5</sup>. Recent analysis by consultant group RSC<sup>6</sup> determined the mineralisation styles, structural characteristics and pathfinder geochemical signature (Bi-Mo-As-Sb-Te-Pb-Zn) to be consistent with a vertically zoned IRG such as Mt Wright.

In addition to the above, the recent drilling has highlighted the significance of zinc-lead mineralisation, consistent with the upper levels of a Mt Wright system, providing encouragement that deeper drilling could reveal similar gold-rich zones.

<sup>4</sup> The Mt Wright Gold Deposit: Ore Controls and Genesis - Morrison, Johnson and Lisowiec - Resolute Mining Limited, 2013

<sup>5</sup> ZNC ASX announcements 14<sup>th</sup> April, 2021, 20<sup>th</sup> January 2025

<sup>6</sup> ZNC ASX announcement 20<sup>th</sup> February 2025



**Figure 4: Cross-section showing the scale of the Mt Wright ore body<sub>4</sub> (not an asset of the Company) compared to drilling at Red Mountain. The strong zinc-lead mineralisation in drilling to date is postulated to be the equivalent of the purple Zn-Ag +/- Au zone in the upper portion of the Mt Wright system, with increasing gold grades expected at depth. The exact comparable location of the mineralisation at Red Mountain has not been postulated as it is not possible to determine at this stage.**

## Next Steps at Red Mountain

The current drill hole has been designed to test deeper into the mineralising system, where higher gold grades are anticipated. It will also provide valuable structural information on the orientation of the rhyolite and the mineralising controls. Together, these insights will guide and refine the next phase of exploration, positioning the project for strong follow-up results.

## 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, providing logistical advantages and cost efficiencies for future operations.

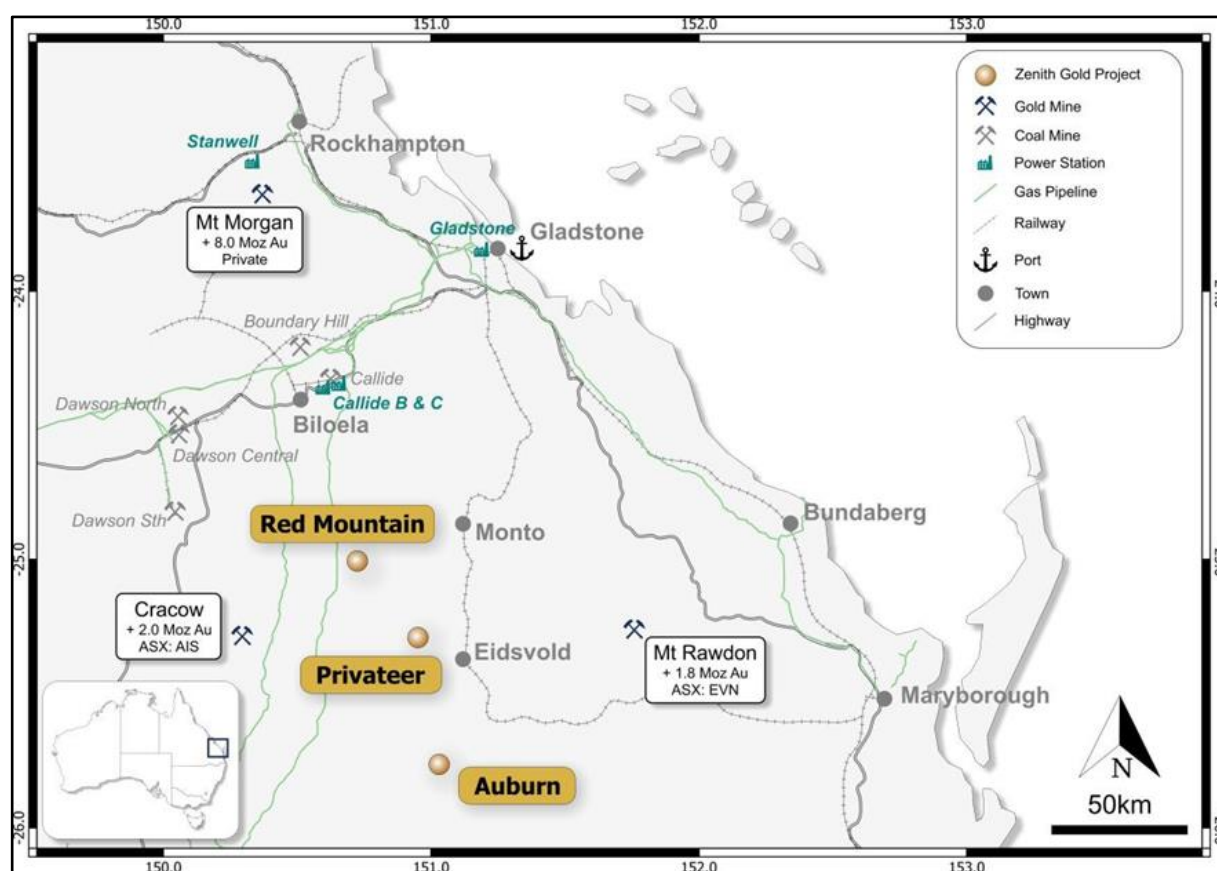


Figure 5: Red Mountain Location Map

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 large-scale IRG or porphyry-style copper (-molybdenum) mineralisation within a comparable geological setting.

Metallurgical test work has shown that much of the gold at Red Mountain is free-milling and non-refractory, 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 rates<sup>7</sup>. 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.

Red Mountain's exploration history includes a series of high-grade shallow intercepts and broad mineralised zones at depth, further supporting the Project's potential as a large-scale IRG system. Shallow RC drilling has delivered the following high-grade gold intercepts (reported at a 0.3 g/t Au cut-off)<sup>8</sup>:

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

Deeper drilling in 2023 confirmed the continuity<sup>9</sup>:

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

2024 RC drilling campaign highlights:

- 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)<sup>10</sup>

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

## **ABOUT ZENITH MINERALS LIMITED**

Zenith Minerals Limited (ASX: ZNC) is an Australian exploration company focused on advancing a diverse portfolio of gold and lithium projects located in Western Australia and Queensland. The Company is strategically positioned to capitalise on strong market fundamentals and growing demand for precious metals and battery minerals.

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<sup>7</sup> ASX: ZNC – High Gold Recoveries in Metallurgical Test work – Red Mountain; 7 December 2021

<sup>8</sup> See ASX Releases 30 Nov 2020 & 14 Apr 2021

<sup>9</sup> ASX: ZNC -29-August 2023; 11-Nov 2024

<sup>10</sup> 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.



Zenith's key gold projects include the Consolidated Dulcie Gold Project in Western Australia's highly prospective Southern Cross–Forrestania Greenstone Belt, where an Exploration Target has recently been defined, and the high-grade Red Mountain Gold Project in Queensland, where the Company has secured government co-funding to support a deep diamond drilling programme.

On the lithium front, Zenith continues to advance its Split Rocks Project, which has already established a maiden lithium resource, and the Waratah Well Project, offering further exploration potential within proven lithium-bearing terranes.

Additionally, Zenith holds a strategic 25% free-carried interest in the Earaaheedy Zinc Deposit in joint venture with Rumble Resources Limited. This advanced project has recently commenced a scoping study, underscoring its potential to become a significant new zinc-lead-silver resource, with Zenith fully funded through to the completion of a Bankable Feasibility Study.

Zenith's robust and diversified asset base, strong financial position, and active exploration programmes are aimed at systematically growing shareholder value through ongoing exploration success and resource development.

### **Next Steps at the Consolidated Dulcie Project**

Zenith is preparing to commence the Phase 2 reverse circulation (RC) drilling programme at the Consolidated Dulcie Gold Project in Western Australia, following the recent Programme of Works approval (ASX:ZNC 29 August 2025). This campaign, comprising 9,000–12,000 metres of drilling, is designed to systematically test and validate the recently defined Exploration Target of 0.3–0.8 Moz Au (10–24 Mt grading 0.9–1.1 g/t Au)<sup>11</sup> across Dulcie, Dulcie North (DN) and Dulcie Far North (DFN) – See cautionary statement on next page. Importantly, this Exploration Target is in addition to the existing DFN Inferred Mineral Resource of 8.2 Mt @ 1.2 g/t Au for 302,000 ounces (ASX:ZNC 23 June 2024), providing a strong platform for rapid resource growth.

The Exploration Target has been derived solely from extrapolation of existing drilling data, excluding undrilled zones, deeper mineralisation and speculative distal extensions (ASX:ZNC 15 July 2025). This conservative approach underscores the considerable upside potential that remains outside the defined target. The Phase 2 drilling will therefore have three core objectives: infill drilling to convert Exploration Target material into maiden JORC-compliant Mineral Resources, step-out drilling to test extensions along strike and at depth, and testing of new high-priority targets such as untested footwall lodes, fold closures and Banded Iron Formation (BIF) horizons, which have historically yielded some of the highest gold grades in the Forrestania belt.

Phase 2 will be supported by supplementary diamond drilling planned for late 2025 into 2026, aimed at collecting critical structural, metallurgical and geotechnical data to underpin future feasibility studies. With drilling mobilisation expected in late September 2025 and Zenith fully funded following its recent rights issue, the Consolidated Dulcie Project is positioned to deliver meaningful resource growth. Cautionary Statement: the potential quantity and grade of an Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

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<sup>11</sup> Exploration Target reference: ASX:ZNC 15 July 2025. See Cautionary Statement for more details

## COMPETENT PERSONS STATEMENT

The information in this announcement relating to Exploration Results is based on information compiled by Mr Daniel Greene, Exploration Manager and employee of Zenith Minerals Limited. Mr Greene is a Member of the Australasian Institute of Geoscientists and has sufficient experience relevant to the style of mineralisation and deposit type under consideration, and to the activity being undertaken, to qualify as a Competent Person as defined in the 2012 JORC Code. Mr Greene consents to the inclusion in this report of the matters based on his information, in the form and context in which they appear.

## Exploration Target Consolidate Dulcie Cautionary Statement

The Exploration Target was generated using verified drilling data from both historical operators and Zenith, covering drilling completed between 1988 and 2025 (the verified drilling data used is summarised in Table 1). Historical drilling data prior to Zenith's involvement was rigorously assessed and verified before inclusion. Any historical drill data lacking sufficient detail, accuracy, or verification required for inclusion in a future Mineral Resource Estimate (MRE) was excluded at this Exploration Target estimation stage. Consequently, only verified historical and Zenith drill results suitable for eventual resource estimation have been used for defining the current Exploration Target, and these results are presented in all associated plans and drilling summaries. Further details of sampling techniques, drilling methods, and data quality are provided in the JORC Table 1 (Appendix A).

**Table 1: Verified drilling data for all tenements greater than 10 m in depth and used for the Exploration target (ie. excluding laterite)**

Company	Period	Total	Holes				
		Meters	Total	RAB	Aircore	RC	RC/DDH
Gwalia Minerals	1988-89	716	22	22			
Aztec Mining	1992-93	1700	41	15	23	3	
FORRESTANIA	1996	159	5	5			
GASCOYNE	1996	716	8			8	
Sons of Gwalia	1997-99	18297	406	306	87	13	
Dulcie Operations	2013	274	4			4	
Zenith	2019-22	25439	362		162	196	4
Zenith	2023-24	9621	71			58	13
<b>Total</b>		<b>56921</b>	<b>919</b>	<b>348</b>	<b>272</b>	<b>282</b>	<b>17</b>

The Exploration Target has been defined by extrapolating block grades using an unconstrained block model, explicitly assuming the continuation of the DFN sheeted vein structural setting (consistent with established structural controls at DFN). It is confined to Zenith-owned tenements and excludes the uppermost 8 metres from surface and does not overlap with the existing DFN Mineral Resource extent. The model extends to the 200 m RL, approximately 250 metres below surface. For this simplified model oxide and saprolite material is assumed to occur to a depth of 30 metres and is interpreted to host predominantly flat-lying mineralisation. Fresh material is modelled with a dip of 35° toward 255°, consistent with both the DFN Mineral Resource and structural observations across the broader Dulcie area.

The model uses 2-metre composites, with estimation requiring data from at least three drillholes and two composites per hole to minimise over-smoothing with an unconstrained approach. Estimation parameters and cut-off grades were guided by the existing DFN Mineral Resource, targeting alignment with the stated 0.5 g/t Au cut-off. Historical drilling data deemed less reliable were excluded from the model but may present additional opportunities for future exploration targeting.

The range analysis based on this model consists of block grades with:

- An extrapolation of 80 m from a drill hole for the lower range case, supported by mineralisation in existing drilling that is likely with further definition.
- An extrapolation of up to 400 m from a drill hole for the upper case, speculative but considered reasonable based on Zenith's geological understanding and experience gained at DFN.

The Exploration Target is based on the same approach as used for the DFN Mineral Resource with a 0.5 g/t Au cut. The details are shown in Table 2. The Exploration Target reported here has been defined by available drilling data and continuity assumptions consistent with the known Dulcie Far North (DFN) deposit. It still excludes less reliable unvalidated historical drilling data, as well as undrilled speculative extensions, providing further exploration upside beyond the current target definition.

**Table 2: Consolidated Dulcie Exploration Target at a 0.5 g/t Au cut-off, excluding additional speculative or undrilled areas.**

Area	M tonnes		Au grade g/t		Au million ounces	
	Lower*	Upper**	lower	upper	lower	upper
Dulcie	8	17	0.9	1.1	0.2	0.6
DN	1	2	0.9	1.1	0.05	0.1
DFN	1	2	0.9	1.1	0.05	0.1
<b>Total</b>	<b>10</b>	<b>24</b>	<b>0.9</b>	<b>1.1</b>	<b>0.3</b>	<b>0.8</b>

\* Lower range based on ≤80m extrapolation from existing drill data \*\* Upper range based on ≤400m extrapolation

The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource, and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

## MATERIAL ASX ANNOUNCEMENTS PREVIOUSLY RELEASED

The Company has released all material information that relates to Exploration Results, Exploration Targets and Mineral Resources, Economic Studies and Production for the Company's Projects on a continuous basis to the ASX and in compliance with JORC 2012.

The information has been previously reported to the ASX and is extracted from the following reports available to view on Zenith's website:

All relevant Zenith ASX releases for **Red Mountain** dated:

- **3 August 2020** – Red Mountain Gold Project – Initial Drill Results
- **13 October 2020** – Red Mountain Gold Project – Further Gold Intercepts
- **9 November 2020** – Red Mountain Gold Project – Additional Assays Extend Mineralisation

- **21 January 2021** – Red Mountain Gold Project – Broad Gold Zones Confirmed
  - **19 May 2021** – Red Mountain Gold Project – Significant New Drilling Results
  - **29 August 2023** – Red Mountain Drilling Results Expand Gold Zone
  - **20 February 2025** – Independent Review Confirms Red Mountain as Mt Wright-Style IRG System
  - **10 April 2025** – Red Mountain Diamond Drilling Commenced – First Hole Underway
  - **20 August 2025** – Red Mountain Phase 1 Drilling Update
- All relevant Zenith ASX releases for **Consolidated Dulcie** dated:
- **23 June 2025** – 41% Increase in Mineral Resource at Dulcie Far North (DFN)
  - **15 July 2025** – Significant Exploration Target Defined at Consolidated Dulcie Gold Project
  - **26 August 2025** – PoW Approval Unlocks Phase 2 Drilling at Consolidated Dulcie

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 as presented have not been materially modified from the original market announcements.

*Table 3: Red Mountain September 2025 Diamond Drill Collar Location Details*

Hole ID	Hole Type	EOH Depth (m)	Easting GDA94 Z56	Northing GDA94 Z56	RL (m)	Survey Method	Avg Dip	Avg Azimuth
ZRMDD064	DD	573.1	268935	7232736	366	GPS	-70	100
ZRMDD065A	DD	465.3	269739	7232646	389	GPS	-80	270

*Table 4: Red Mountain Significant Gold Intersections*

HOLE ID	From	To	Interval (m)	Gold (g/t) <sup>1</sup>
ZRMDD064	0	179	179.00	Assays Pending
	185.2	200.0	14.80	0.06
<b>and</b>	<b>214.9</b>	<b>355</b>	<b>139.7*</b>	<b>1.05</b>
incl	217.75	218.7	0.95	15.50
and incl	264.75	265.4	0.65	1.74
<b>and incl</b>	<b>276</b>	<b>290.2</b>	<b>14.20</b>	<b>4.62</b>
incl	277	278	1.00	1.66
and incl	278.9	280	1.10	3.48
and incl	281	284	3.00	2.46
<b>and incl</b>	<b>285</b>	<b>287</b>	<b>2.00</b>	<b>21.03</b>
and incl	289.05	290.2	1.15	5.99
<b>and</b>	<b>339.55</b>	<b>349</b>	<b>9.45</b>	<b>5.29</b>
<b>incl</b>	<b>340.5</b>	<b>342.6</b>	<b>2.10</b>	<b>21.15</b>
and incl	344.75	345.2	0.45	2.36
and incl	348	349	1.00	3.00
	355	573.1	218.10	Assays Pending
ZRMDD065A	0	465.3	465.30	Assays Pending

<sup>1</sup>Three cut-off rules are applied in this table. A 0.1g/t Au cut-off with a maximum of 11.5m of consecutive internal dilution (green), a 0.5g/t Au cut-off with a maximum of 2.8m of consecutive internal dilution (yellow), and a 1.0g/t Au cut-off with no internal dilution (red).

\*This interval includes 0.40m of core loss.



## Appendix 1: Red Mountain Project - JORC Table 1 - EPM26384

Criteria	JORC Code Explanation	Commentary
<b>Sampling techniques</b>	<p><i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i></p>	<ul style="list-style-type: none"> <li>• The diamond hole was sampled along 1m intervals or sub 1m intervals following geological contacts. Samples through mineralized zones were down to 0.2m.</li> <li>• Diamond core was half cut along downhole orientation lines. Half core was sent to the ALS laboratory in Townsville for analysis and the other half was retained for future reference.</li> <li>• Standard fire assaying was employed using a 30g charge with an AAS finish (Au-AA23). Overrange assays over 10g/t Au were assayed by fire assay with gravimetric finish (Au-GRA21).</li> <li>• The Company's Bruker Titan pXRF was used for spot analysis to confirm suspected zinc-lead sulphides zones, which are considered to be important in relation to gold mineralisation, not as a viable economic zinc-lead exploration target.</li> </ul>
<b>Drilling techniques</b>	<p><i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></p>	<ul style="list-style-type: none"> <li>• Drilling was completed using best practice HQ3 + NQ2 diamond core.</li> </ul>
<b>Drill sample recovery</b>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></p>	<ul style="list-style-type: none"> <li>• All diamond core was jigsawed to ensure any core loss, if present is fully accounted for.</li> <li>• Zones of poor sample return were recorded in the database and cross checked once assay results were received from the laboratory to ensure no misrepresentation of sampling intervals has occurred.</li> </ul>
<b>Logging</b>	<p><i>Whether core and chip samples have</i></p>	<ul style="list-style-type: none"> <li>• All drill samples were</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<p><i>been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<p>geologically logged on site by professional geologists. Details on the host lithologies, deformation, dominant minerals including sulphide species and alteration minerals plus veining were recorded relationally (separately) so the logging was interactive and not biased to lithology.</p> <ul style="list-style-type: none"> <li>• Drill hole logging was qualitative on visual recordings of rock-forming minerals and quantitative on estimates of mineral abundance.</li> <li>• The entire length of each drill hole is geologically logged.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p> <p><i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></p> <p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	<ul style="list-style-type: none"> <li>• A high-grade or low-grade standard and a controlled blank were alternatively included every 20<sup>th</sup> sample</li> <li>• The laboratory uses barren flushes to clean their pulveriser and their own internal standards and duplicates to ensure industry best practice quality control is maintained.</li> <li>• The sample size is considered appropriate for the type, style, thickness and consistency of mineralisation.</li> <li>• All samples submitted to the laboratory were sorted and reconciled against the submission documents.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p> <p><i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></p> <p><i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable</i></p>	<ul style="list-style-type: none"> <li>• The fire assay method was designed to measure the total gold in the samples. The technique involves standard fire assays using a 30g sample charge with a lead flux (decomposed in the furnace). The prill is totally digested by HCl and HNO<sub>3</sub> acids before measurement of the gold determination with AAS finishes to give a lower limit of detection of 0.005 g/t Au.</li> <li>• Quantitative analysis of the gold content was undertaken in a controlled laboratory environment.</li> </ul>

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	<i>levels of accuracy (ie lack of bias) and precision have been established.</i>	<ul style="list-style-type: none"> <li>Industry best practice was employed with the inclusion of duplicates and standards as discussed above and used by Zenith as well as the laboratory. All Zenith standards and blanks are interrogated to ensure they lie within acceptable tolerances. Additionally, sample size, grind size and field duplicates are examined to ensure no bias to gold grades exists.</li> <li>Every effort has been made to ensure best-practice QA/QC procedures were followed during sampling and assaying. Initial checks indicate that the Company's QA/QC protocols – including the insertion of certified reference standards, blanks and duplicates – have returned results within acceptable limits. Only preliminary QA/QC validation has been completed to date, with a full review to be conducted once all assays from ZRMDD064 and subsequent holes are received.</li> </ul>
<b>Verification of sampling and assaying</b>	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p> <p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<ul style="list-style-type: none"> <li>Alternative Zenith personnel inspected the diamond core in the field to verify the correlation of mineralised zones between assay results and lithology, alteration and mineralisation.</li> <li>All holes were digitally logged in the field and all primary data was forwarded to Zenith's Database Administrator (DBA) where it was imported into the database. Assay data was electronically merged when received from the laboratory. The responsible project geologist reviewed the data in the database to ensure that it is correct and has merged properly and that all the drill data collected in the field has been captured and entered in the database correctly.</li> <li>In case of errors, the responsible geologist makes the DBA aware</li> </ul>

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		<p>of any errors and/or omissions to the database and the corrections (if required) are made in the database immediately.</p> <ul style="list-style-type: none"> <li>No adjustments or calibrations were made to any of the assay data recorded in the database.</li> </ul>
<b>Location of data points</b>	<p><i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control.</i></p>	<ul style="list-style-type: none"> <li>The drill hole collars were picked up using GPS survey control. Down hole surveys were collected using a multishot instrument.</li> <li>All holes were picked up in MGA94 – Zone 56 grid coordinates. Magnetic declination at 9.75° was also taken into account.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<p><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></p>	<ul style="list-style-type: none"> <li>The orientation of mineralisation is unclear at this stage and further drilling is being undertaken to help to determine this.</li> </ul>
<b>Sample security</b>	<p><i>The measures taken to ensure sample security.</i></p>	<ul style="list-style-type: none"> <li>Sample security is integral to Zenith's sampling procedures. All bagged samples are delivered directly from the field to the assay laboratory in Townsville whereupon the laboratory checks the physically received samples against Zenith's sample submission/dispatch notes.</li> </ul>
<b>Audits or reviews</b>	<p><i>The results of any audits or reviews of sampling techniques and data.</i></p>	<ul style="list-style-type: none"> <li>Sampling techniques and procedures are reviewed prior to the commencement of new work programmes to ensure adequate procedures are in place to maximize the sample collection and sample quality on new projects. No external audits have been completed to date.</li> </ul>



## Part 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i>	<ul style="list-style-type: none"> <li>The Red Mountain Tenement (EPM26384) is owned 100% by Zenith through its wholly owned subsidiary Black Dragon Energy (Aus) Pty Ltd. Heritage surveys were completed as required prior to any ground disturbing activities in accordance with Zenith's responsibilities under the Aboriginal Heritage Act in Australia.</li> <li>Currently the Tenement is in good standing. There are no known impediments to obtaining licences to operate in the area.</li> </ul>
<b>Exploration done by other parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<ul style="list-style-type: none"> <li>Exploration and mining by other parties has been reviewed and is used as a guide to Zenith's exploration activities. There was no previous exploration drilling before Zenith's.</li> </ul>
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation.</i>	<ul style="list-style-type: none"> <li>The targeted mineralisation is typical of Permo-Carboniferous Intrusion-Related Gold Systems (IRGS) found elsewhere throughout central and northern Queensland. In all instances the mineralisation is controlled by anastomosing shear zones/fault breccias passing through competent rock units. Brittle fracture and stockwork mineralisation is common within the granodiorite and rhyolite host rocks.</li> </ul>
<b>Drill hole Information</b>	<p><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i></p> <ul style="list-style-type: none"> <li>○ easting and northing of the drill hole collar</li> <li>○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>○ dip and azimuth of the hole</li> <li>○ down hole length and interception depth</li> <li>○ hole length.</li> </ul> <p><i>If the exclusion of this information is justified on the basis that the information is not Material and this</i></p>	<ul style="list-style-type: none"> <li>All drill holes completed, including holes with no significant results are reported in this announcement.</li> <li>Easting and northing are given in MGA94 coordinates.</li> <li>RL is AHD.</li> <li>Dip is the inclination of the hole from the horizontal. Azimuth is reported in magnetic degrees as the direction the hole is drilled. MGA94 and magnetic degrees vary by 9.75° in the project area. All reported azimuths are corrected for magnetic declinations.</li> </ul>

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	<i>exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i>	<ul style="list-style-type: none"> <li>Down hole length is the distance measured along the drill hole trace. Intersection length is the thickness of an anomalous gold intersection measured along the drill hole trace.</li> <li>Hole length is the distance from the surface to the end of the hole measured along the drill hole trace.</li> <li>No results currently available from the exploration drilling are excluded from this report.</li> <li>Diamond core samples are generally cut along geological contacts or up to 1m maximum.</li> </ul>
<b>Data aggregation methods</b>	<p><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></p> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	<ul style="list-style-type: none"> <li>The first gold assay result received from each sample reported by the laboratory is tabled in the list of significant assays. Subsequent repeat analyses when performed by the laboratory are checked against the original to ensure repeatability of the assay results.</li> <li>Weighted average techniques are applied to determine the grade of the anomalous interval when geological intervals less than 1m have been sampled.</li> <li>Exploration drilling results are generally reported using a 0.1 g/t Au lower cut-off and may include up to 11.5m of internal dilution. Individual high-grade intercepts are also reported at various cut-off grades noted in the tables of this report.</li> <li>All assay results are reported rounded to 2 decimals. The analytical precision of the laboratory technique is 0.005g/t Au.</li> <li>No metal equivalent reporting is used or applied.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p> <p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p> <p><i>If it is not known and only the down</i></p>	<ul style="list-style-type: none"> <li>The intersection length is measured down the length of the hole and is not usually the true width. When sufficient knowledge on the thickness of the intersection is known an estimate of the true thickness is</li> </ul>

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	<i>hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i>	provided.
<b>Diagrams</b>	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	<ul style="list-style-type: none"> <li>Detailed drill hole sections and plans for each prospect must be plotted and interpreted as part of the internal QAQC process. Field sections must be compared with Micromine/Leapfrog plots to ensure no errors or omissions creep into the database.</li> <li>The field geologist will interpret/plot their geological observations onto cross sections while logging the hole in the field before validating and transferring the digital data to the DBA.</li> <li>Errors and/or discrepancies with lithological logs must be rectified and forwarded to Perth before the assay results are received.</li> <li>Final cross sections displaying corrected geology and assays are plotted and interpreted. Depending on the target, 3D wireframes may require construction too. At the very least cross-sectional data must be translated into plan view and the relevant scaled (1:2,500 or 1:25,000) geological interpretation be updated and integrated in GIS software. The project geologist will draft any changes/modifications required as directed by the relevant project geologist / EM.</li> </ul>
<b>Balanced reporting</b>	<i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	<ul style="list-style-type: none"> <li>Significant widths are defined in the body of the report, detailing cut-off values employed, any internal dilution and "from/to" intervals.</li> <li>NSR refers to all other intersections that don't meet the criteria described.</li> </ul>
<b>Other substantive exploration data</b>	<i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical</i>	<ul style="list-style-type: none"> <li>All known exploration data has been reported in this release and/or referenced from previous announcements and/or</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	historical exploration company reports where appropriate.
<b>Further work</b>	<i>The nature and scale of planned further work ( e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas.</i>	<ul style="list-style-type: none"> <li>• Future work programmes will be dependent on the interpretation of final results from the current drilling programme.</li> </ul>