

## Red Mountain Gold System Footprint Increases with Significant Gold Grades Intercepted in RC Drilling

Zenith Minerals Limited (“Zenith” or “the Company”) is pleased to announce the first batch of assay results from reverse circulation (RC) drilling at its 100%-owned Red Mountain Gold Project in Queensland. Assays have now been received for the first three RC holes of the programme, which was designed to test the lateral extent and geometry of the mineralised Intrusion-Related Gold (IRG) system. Results show gold grades increasing to the north, highlighted by a standout intersection of **122 m @ 1.28 g/t Au** from 209 m, including **55 m @ 2.18 g/t Au** from 274 m in ZRMRC068. This first batch of results provides important new information regarding the geometry and lateral extent of the system.

### Highlights:

- **Continuation of gold system** – drilling to the north has delivered standout new RC drilling intercepts, confirming increasing gold grades along strike (see Table 2 for full intercepts):
  - **122m @ 1.28 g/t Au** from 209 m, including **55 m @ 2.18 g/t Au** (including a standout individual 1 m sample at **30.9 g/t**) and **16 m @ 2.53g/t Au** from 383 m including **5m @ 6.08g/t Au** in ZRMRC068.
  - **10 m @ 1.16 g/t Au** from 228 m, including **1 m @ 7.77 g/t Au** in ZRMRC069.
- **Supported by exceptional deep-diamond results** – recent diamond drilling demonstrates both scale and grade, highlighted by the following standout intervals:
  - **139.7 m @ 1.05 g/t Au** in ZRMDD064, defining a strong higher-grade core; and
  - **349.95 m @ 0.47 g/t Au** in ZRMDD066, with **visible gold** observed in altered granite breccia.
- **Strengthened geological model** – mineralisation is hosted within a breccia pipe controlled by a northwest-trending structure, with higher grades focused within internal rhyolite sills. The direction of the mineralised corridor is now evident, enabling more effective future drilling.
- **Geophysical expression** – previously collected Induced Polarisation (IP) data appears to map the mineralised corridor, providing a valuable tool for drill targeting.
- **Drill-ready lookalike target** – IP anomaly 500m to the south shows similar signature on the same northwest trend. First-pass RC drill testing is planned for early 2026.
- **RC Drilling complete** - seven RC holes totalling ~2,399 m have been drilled. The programme was stopped early due to inclement weather. Planning is underway for the next phase of integrated RC, diamond tails and geophysics to expand the Red Mountain system and assess additional targets across this emerging gold district, due to start in Q1 CY2026. See Table 1 for collar locations.

### Managing Director Andrew Smith said:

*"These results represent an important advancement in our understanding of the upper part of the Red Mountain gold system. We now have a much clearer definition of the breccia architecture, giving us the confidence to refine drill orientation and more effectively target the best-mineralised parts of the system.*

*The stronger grades seen in ZRMRC068, together with the correlation between the drilling and the historical IP dataset, point to a structurally controlled IRG system that remains open in multiple directions.*

*Armed with this refined geological model, we are well placed to advance the next phase of work, integrating RC and diamond drilling with geophysics and geochemistry to continue expanding what is an emerging, large-scale IRG system."*

### Discussion of Results

The current phase of follow-up RC drilling has now been completed, with seven holes totalling 2,399 m drilled prior to early termination caused by inclement weather. The programme has extended the footprint of the upper part of the system, confirmed broad lateral continuity, and highlighted a clear northwest trend along which gold grades are improving. The RC holes have also established diamond-ready pre-collars to support deeper extensions. Four RC holes are still to be returned. Highlights include:

- **122m @ 1.28 g/t Au** from 209 m, including **55 m @ 2.18 g/t Au** (including a standout individual 1m sample at **30.9 g/t**) and **16 m @ 2.53g/t Au** from 383 m including **5m @ 6.08 g/t Au** in ZRMRC068m, with a standout 1m individual assay of **18.0 g/t Au**.
- **10 m @ 1.16 g/t Au** from 228 m, including **1 m @ 7.77 g/t Au** in ZRMRC069.
- **4m @ 1.05 g/t Au** from 124m and **4m @ 1.47 g/t Au** from 160m in ZRMRC067.

Results from ZRMRC068 show gold grade increasing in association with thickening, more coherent rhyolite, which contrasts with the diamond holes drilled to the south (see Figure 1). This change in morphology and grade profile is potentially indicative of closer proximity to a vertical feeder rhyolitic intrusion. Such feeder zones represent a key exploration focus due to their capacity to concentrate and host higher-grade gold within IRG systems such as Mount Wright<sup>1</sup> due to their brittle nature.

Hole ZRMRC073 was the final hole in the programme and was collared on the same line 100m to the west of ZRMRC068 but was terminated early due to difficult drilling conditions combined with deteriorating weather. However, the geology of the hole shows the granite breccia and rhyolite occurring at a similar position to ZRMRC068 and, when viewed in conjunction with the logged geology in ZRMRC067 (see Figure 1 and Figure 2), indicates it has been drilled on the north side of an arcuate, northwest trending structure which is being interpreted as the southern margin to the breccia. This is strong evidence that the system is trending to the northwest where it remains open, and, together with the thickening rhyolite in ZRMRC068, supports vectoring

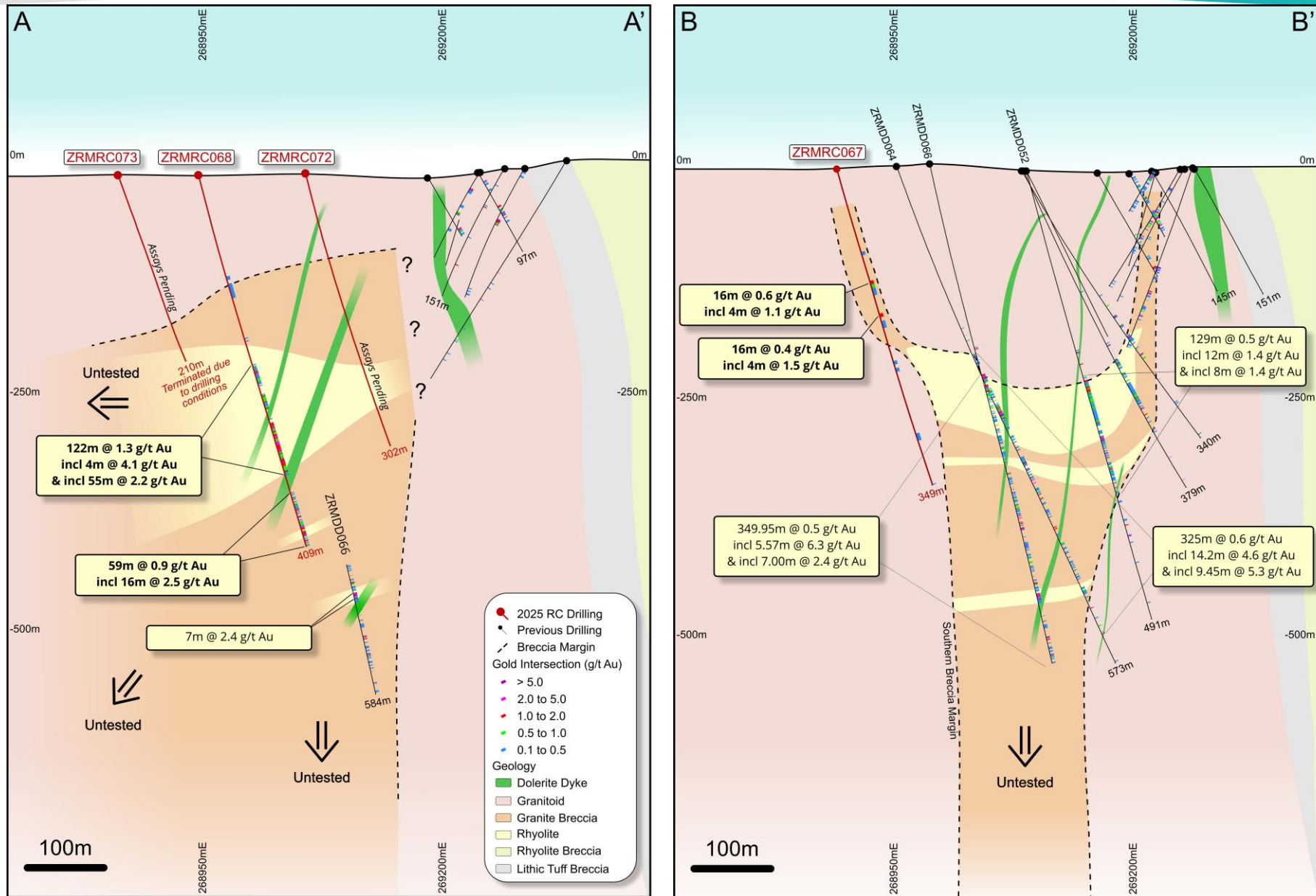
---

<sup>1</sup> The Mt Wright Gold Deposit: Ore Controls and Genesis - Morrison, Johnson and Lisowiec - Resolute Mining Limited, 2013

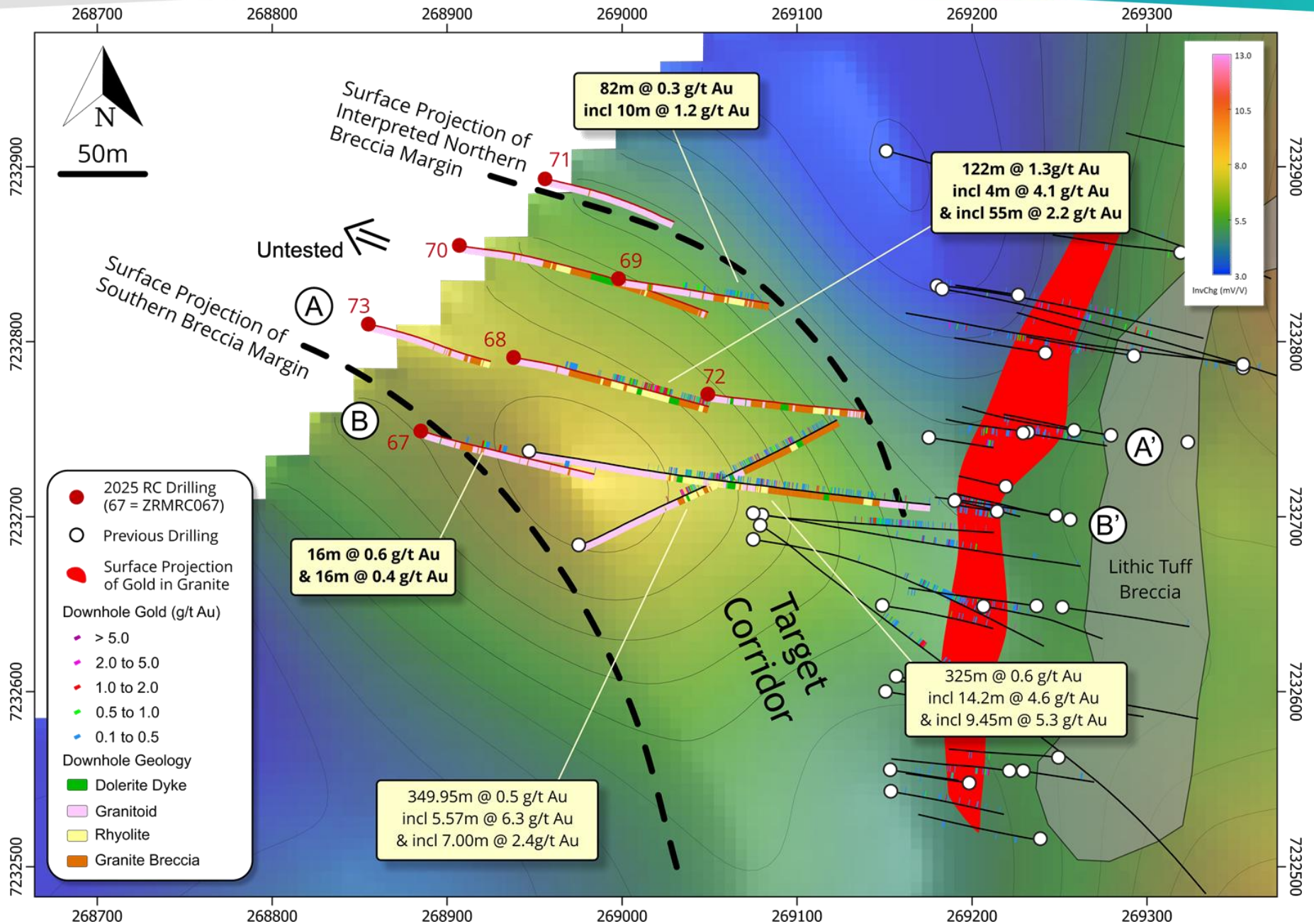
toward the potential vertical feeder position. Due to the potentially significant implications of this hole, Zenith are attempting to source a diamond rig to extend the hole before the end of the year.

Hole ZRMRC067 was designed to test the western extension of mineralisation intersected in ZRMDD064 and ZRMDD066 but did not intersect the rhyolite. However, it did return anomalous gold grades, including 16 m @ 0.6 g/t Au from 124 m, hosted within localised breccia zones. As illustrated in Figure 1, these breccia zones occur relatively high in the hole compared with adjacent drilling, suggesting that ZRMRC067 has either drilled through or passed immediately adjacent to the southern breccia margin. This supports the interpretation of an arcuate, northwest-trending target corridor, with the observed gold anomalism likely representing leakage along the southern breccia margin.

Hole ZRMRC069 was collared 75m northeast of ZRMRC068 and was abandoned at 294m due to difficult ground conditions. The northeast extension of the breccia was intersected throughout the hole, though it is apparent that the rhyolite is tapering in this direction. This has provided valuable information for interpretation of the geometry of the mineralisation and clearly shows that future targeting must focus along the southern margin of the target corridor.



**Figure 1:** Cross-sections A–A' – left and B–B' – right, showing recent RC holes and previous RC/diamond drill holes, illustrating broad, flat-lying zones of gold mineralisation hosted within rhyolite sills and granite breccia. Detailed relogging of the Red Mountain drill core and RC chips has confirmed that gold mineralisation is hosted within a distinct breccia pipe located on the western margin of the larger breccia body targeted in earlier exploration. The sections demonstrate thickening of the rhyolite host on section B–B' relative to A–A' and demonstrates the broad scale at depth - down to 530 m vertically. Late dolerite dykes locally truncate the system resulting in breaks in the grade. The location of these cross-sections is shown on Figure 2.

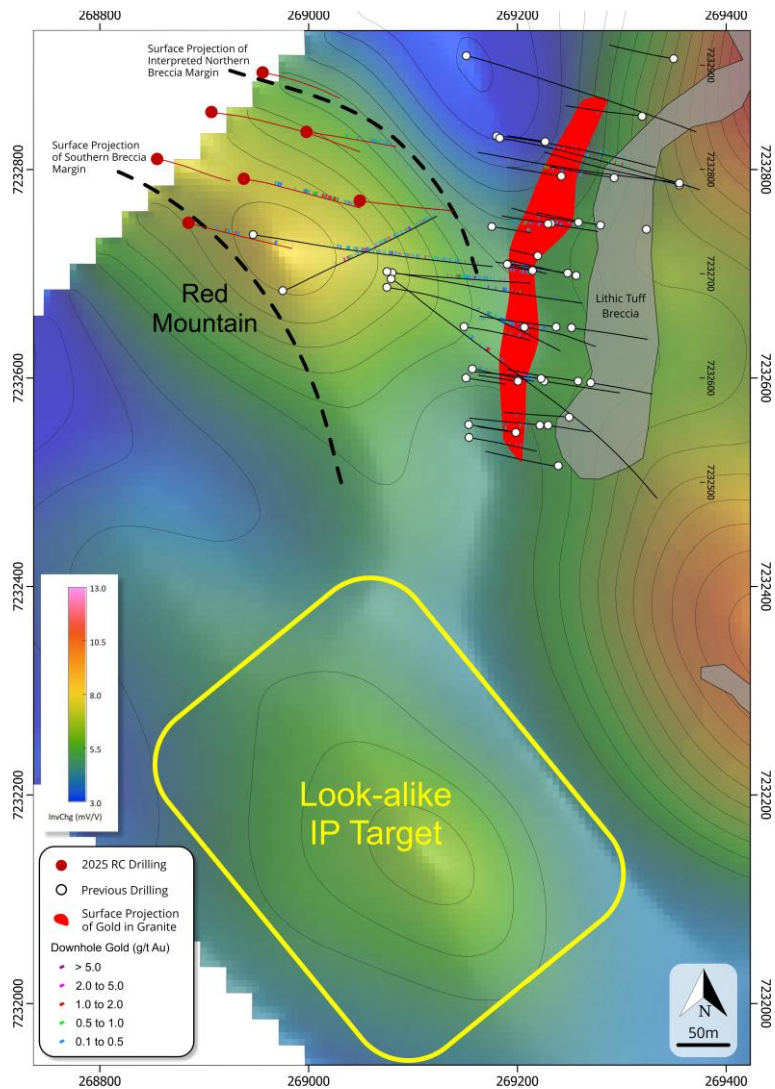


**Figure 2:** Plan view of the Red Mountain project showing down hole geology and gold grade on hole traces from recent RC and diamond drilling. The 2025 RC drilling has shown gold mineralisation to be controlled by an arcuate northwest trending structure which is evident in the IP. The background image is an IP chargeability slice at 200m below surface, which is the approximate height of the top of the upper rhyolite, and shows the close association of the interpreted bounding structures with the low order chargeability anomaly.

### Targeting with Geophysics

When considered alongside the geology from drilling to date, the target corridor appears to be mappable using previously collected IP chargeability dataset. Although the 2021 survey was designed primarily to image the main breccia pipe—and therefore provides limited coverage beyond the area shown in Figure 1 – the 200 m depth slice (approximately the average depth to the top of the upper rhyolite) displays a subtle chargeability anomaly that aligns closely with both the extent of the upper rhyolite and the interpreted target corridor. This suggests that IP may be a valuable tool for mapping the continuation of mineralisation at Red Mountain.

Furthermore, a review of the IP data on a broader scale has revealed a new target located 500 m south of Red Mountain – see Figure 3. The IP response at 200m below surface shows a similar northwest trend with structural interpretation indicating the anomaly to represent the potential continuation of the Red Mountain target corridor, albeit offset by late faulting. Surface geochemistry and further interpretation of available geophysics will now be undertaken ahead of potential first-pass drill testing.



**Figure 3:** Plan map showing IP chargeability slice at 200m below surface. The IP target south of the Red Mountain target shows similar chargeability characteristics as well as the same apparent northwest orientation. It may represent a separate breccia pipe, or the continuation of the Red Mountain trend, albeit offset by late faulting.

## Next Steps

Drilling to date at Red Mountain has demonstrated that the system is open in multiple directions and at depth. An important understanding resulting from the recent RC drilling programme is that while the drilling orientation used to date has been effective in outlining the geometry of the Red Mountain system, future drilling should be adjusted to a more suitable orientation, with a southwest-directed azimuth now considered optimal for testing along the northwest orientated target corridor.

The next phase of exploration is currently being planned which will entail the following, subject to contractor availability.

### Drilling

- Diamond tails will be used to continue holes that finished in prospective geology taking current understanding of the geometry of the system into account. A high priority is ZRMRC073, which the Company intend to re-enter before the end of the year, subject to contractor availability.
- RC drilling will test the open western extension to obtain effective coverage for diamond tails.
- Gold analytical results are still to come for ZRMRC070-73 with multi-elements for all holes to be reported. This data will be used to assist with vectoring towards the higher-grade core of the system.

### Geophysics

- IP is planned to test the western extension effectively and provide guidance with drill hole planning with chargeability highs along the trend considered to be high priority targets.
- Regional magnetics is planned to provide a broad scale dataset to discover more lookalike structural positions to host further mineralised breccia pipes.

### Surface Geochemistry

- An orientation geochemical survey over the known mineralisation will be undertaken to determine the signature of the system for use on a regional scale.
- Regional soils will follow to find more targets for priority ranking and ultimately drill testing.

## 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.

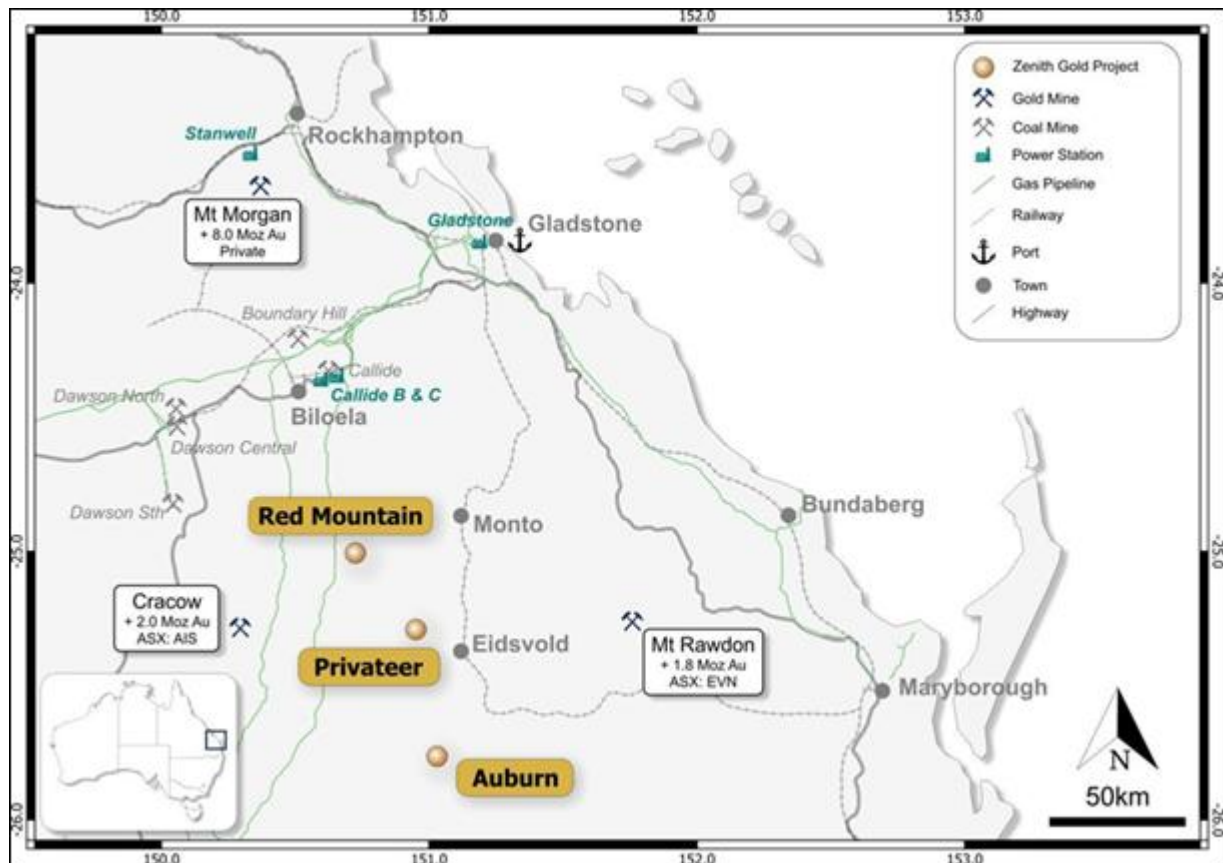


Figure 4: Red Mountain Location Map

The geological setting at Red Mountain shares notable similarities with other major Australian gold deposits such as Mt Wright (1 Moz), Mt Leyshon (3.5 Moz), Kidston (5.1 Moz) and Mt Rawdon (2 Moz). 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 testwork 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>2</sup>. These positive results indicate a straightforward processing path, which could

<sup>2</sup> ASX: ZNC – High Gold Recoveries in Metallurgical Test work – Red Mountain; 7 December 2021

contribute to the project's economic viability and align with Zenith's goal of cost-effective gold production.

### Historical Results

This Red Mountain was first recognised by Zenith in 2019 as a previously unmapped felsic volcanic breccia complex with strong gold–silver anomalism along its western margin. Early surface sampling returned rock chips up to 2.01 g/t Au and 68.3 g/t Ag, and a broad soil anomaly up to 2.2 g/t Au defined a 2 km × 1.5 km geochemical footprint<sup>3</sup>. An IP survey completed later that year highlighted a continuous chargeability trend wrapping around the breccia margin, providing the first indication of a large sulphide-bearing mineralised system<sup>4</sup>.

The maiden RC programme in mid-2020 confirmed a new gold discovery. Drilling intercepted several shallow high-grade gold–silver zones, including:

- **13 m @ 8.0 g/t Au & 3.2 g/t Ag from 0 m (incl. 6 m @ 16.7 g/t Au from 0 m)**<sup>5</sup>
- **5 m @ 3.5 g/t Au & 54.3 g/t Ag from 64 m (incl. 2 m @ 8.0 g/t Au & 109.4 g/t Ag from 64 m)**<sup>5</sup>
- **12 m @ 4.9 g/t Au from 102 m (incl. 6 m @ 9.4 g/t Au from 102 m)**<sup>6</sup>
- **5 m @ 10.4 g/t Au from 67 m (incl. 1 m @ 49.9 g/t Au from 67 m)**<sup>6</sup>

These results defined a high-grade corridor over ~300 m of strike along the western flank of the breccia pipe and established Red Mountain as a significant new discovery.

Follow-up RC step-outs later in 2020 continued to demonstrate grade and continuity. Key intercepts included:

- **15 m @ 3.5 g/t Au from 57 m (incl. 2 m @ 22.4 g/t Au from 70 m)**
- **10 m @ 2.7 g/t Au from 0 m (incl. 4 m @ 4.9 g/t Au from 0 m)**

These results helped define a steep easterly dipping zone of mineralisation, open both along strike and down-dip.

Diamond drilling commenced in late 2020 to test the depth extent of the western high-grade zone. Early diamond tails confirmed that mineralisation continued to at least **100 m vertical depth**, with intercepts such as **8 m @ 1.9 g/t Au from 0 m** and **4 m @ 2.4 g/t Au from 28 m** in pre-collars that were subsequently tailed with core<sup>5</sup>. Geological observations revealed intense sericite alteration, disseminated sulphides, and quartz–sulphide vein arrays – a signature consistent with intrusion-related gold systems such as Mt Wright<sup>7</sup>.

Between 2021 and 2023, re-logging and multi-element analysis identified a broad Au–Bi–Te–As–Sb–Pb–Zn halo consistent with vertically zoned IRGS systems. In 2023, deeper drilling delivered the critical result that confirmed vertical continuity:

---

<sup>3</sup> Surface geochemistry & soils (ZNC ASX 3 Aug 2020 & 24 Sep 2019)

<sup>4</sup> IP survey & chargeability trends (ZNC ASX 25 Oct 2019)

<sup>5</sup> ASX: ZNC – “High-Grade Gold & Silver in Resamples” (3 Aug 2020)

<sup>6</sup> ASX: ZNC – “High-Grade Gold Zone Outlined” (13 Oct 2020)

<sup>7</sup> ASX: ZNC – “Red Mountain Gold Project – Diamond Drilling Commenced” (30 Nov 2020)

- **129 m @ 0.51 g/t Au + 11.9 g/t Ag from 225 m (incl. 12 m @ 1.36 g/t Au from 257 m and 9 m @ 1.24 g/t Au from 300 m)<sup>8</sup>.**

This intercept demonstrated that Red Mountain hosts a substantial mineralised column extending well below the shallow high-grade zone.

A new RC programme in late 2024 targeted refined 3D geological positions and shallow geophysical anomalies. This work expanded the mineralised envelope laterally, returning strong new intercepts including<sup>9</sup>:

- **23 m @ 1.49 g/t Au from 48 m (incl. 2 m @ 11.3 g/t Au from 55 m)**
- **4 m @ 4.45 g/t Au from 122 m (incl. 2 m @ 8.11 g/t Au from 122 m)**
- **3 m @ 1.00 g/t Au from 90 m (incl. 1 m @ 1.69 g/t Au from 91 m)**

These results confirmed strong lateral continuity and further strengthened the IRGS interpretation.

The major breakthrough occurred in 2025 with a deep diamond programme designed to test for a Mt Wright–style system<sup>10</sup>, with several geological features sharing similarities with a Mt Rawdon IRGS model. The results exceeded expectations. Hole **ZRMDD064** returned:

- **325.05 m @ 0.56 g/t Au from 214.9 m, including:**
  - **0.95 m @ 15.50 g/t Au from 217.75 m**
  - **14.2 m @ 4.62 g/t Au from 276 m**
  - **9.45 m @ 5.29 g/t Au from 339.55 m**
  - **2.0 m @ 21.03 g/t Au from 285 m**
  - **2.1 m @ 21.15 g/t Au from 340.5 m<sup>8</sup>**

Within this broader interval was a coherent higher-grade core of: **139.7 m @ 1.05 g/t Au** from 276 m.

Hole **ZRMDD066** reinforced the scale and strength of the system:

- **349.95 m @ 0.47 g/t Au from 232.05 m, including:**
  - **5.57 m @ 6.32 g/t Au from 232.55 m**
  - **3.12 m @ 10.16 g/t Au from 235 m**
  - **7.0 m @ 2.41 g/t Au from 473 m**
  - **3.0 m @ 2.71 g/t Au from 521 m**

Visible gold was observed within altered granite breccia, confirming proximity to a hotter, more gold-fertile zone of the system, **consistent with Mt Rawdon’s feeder-proximal breccia textures.**

---

<sup>8</sup> ASX: ZNC – “Red Mountain Drilling Results Expand Gold Zone” (29 Aug 2023)

<sup>9</sup> ASX: ZNC – “Zenith Commences New RC Drilling Campaign” (11 Nov 2024)

<sup>10</sup> ASX: ZNC – “Red Mountain Drilling Complete” & “Visible Gold Observed / Deep Diamond Results” (Sep–Oct 2025)

For further information, please contact:

**Zenith Minerals Limited**

**Andrew Smith**

Managing Director

P: +61 8 9226 1110

E: [info@zenithminerals.com.au](mailto:info@zenithminerals.com.au)

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

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

**ABOUT ZENITH MINERALS LIMITED**

Zenith Minerals Limited (ASX: ZNC) is an Australian exploration company focused on advancing a portfolio of high-quality gold projects in Western Australia and Queensland. The Company is strategically positioned to capitalise on strong gold market fundamentals while maintaining exposure to future-facing battery minerals.

Zenith's core focus is its gold portfolio, which includes the Consolidated Dulcie Gold Project in Western Australia's highly prospective Southern Cross-Forrestania Greenstone Belt, and the high-grade Red Mountain Gold Project in Queensland. The Company has completed a government co-funded deep drilling programme at Red Mountain, the results of which confirm the project's significant scale and strong geological continuity.

In addition, Zenith holds a strategic 25% free-carried interest in the Earacheedy Zinc-Lead-Silver Project (joint venture with Rumble Resources Limited), which is advancing through a scoping study with Zenith fully funded through to completion of a Bankable Feasibility Study (BFS).

Zenith also retains a low-holding-cost lithium portfolio, including the Split Rocks and Waratah Well Projects, which are being incubated in the background while the Company's near-term efforts remain firmly focused on gold.

Zenith's strong financial position, diversified asset base, and disciplined exploration approach are designed to systematically grow shareholder value through sustained discovery and resource development.

## 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.

## 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** – *Zenith Commences Deep Diamond Drilling at Red Mountain*
- **11 September 2025** - *Red Mountain Drilling Demonstrates Higher-Grade Gold System*
- **22 September 2025** - *Red Mountain Drilling Complete with Priority Assays Pending*
- **8 October 2025** - *Further Red Mountain Results Confirm Substantial Scale&Depth*
- **23 October 2025** - *Visible Gold Observed as RC Drilling Starts at Red Mountain*

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 1: Red Mountain – October 2025 RC Drilling – Collar Table

Hole ID	Hole Type	EOH Depth (m)	Easting (MGA95 Z56)	Northing (MGA94 Z56)	RL (m)	Survey Method	Avg Dip	Avg Azimuth
ZRMRC067	RC	349	268889	7232749	370	GPS	-75	105
ZRMRC068	RC	409	268938	7232791	370	GPS	-75	100
ZRMRC069	RC	294	268998	7232836	366	GPS	-75	100
ZRMRC070	RC	486	268907	7232855	365	GPS	-75	100
ZRMRC071	RC	349	268956	7232893	365	GPS	-75	100
ZRMRC072	RC	302	269049	7232770	373	GPS	-75	100
ZRMRC073	RC	210	268855	7232810	366	GPS	-70	100

Table 2: Red Mountain - October 2025 RC Drilling - Significant Gold Intersections

Hole ID	From	To	Interval (m)	Gold (g/t) <sup>1</sup>
ZRMRC067	92	96	4	0.15
and	124	140	16	0.49
incl	124	132	8	0.94
incl	124	128	4	1.05
and	160	176	16	0.44
incl	160	164	4	1.47
and	212	224	12	0.14
and	292	300	8	0.10
and	348	349*	1	0.12
ZRMRC068	112	136	24	0.20
and	180	184	4	0.21
and	209	331	122	1.28
incl	212	213	1	0.57
and incl	217	219	2	1.38
and incl	225	228	3	0.86
and incl	243	251	8	0.91
incl	244	245	1	1.61
and incl	250	251	1	1.29
and incl	255	259	4	4.07
incl	257	258	1	14.25
and incl	274	329	55	2.18
incl	274	278	4	1.17
and incl	282	284	2	1.70
and incl	286	291	5	1.87
and incl	294	305	11	2.29
and incl	307	308	1	1.70
and incl	313	321	8	5.83
and incl	326	328	2	6.42
and	350	409*	59	0.94
incl	356	357	1	0.64
and incl	362	366	4	0.69
and incl	369	370	1	1.21
and incl	376	377	1	1.42

For personal use only

Hole ID	From	To	Interval (m)	Gold (g/t) <sup>1</sup>
and incl	383	399	16	2.53
incl	388	391	3	2.05
and incl	393	398	5	6.08
and incl	403	404	1	1.68
and incl	407	408	1	0.83
ZRMRC069	128	136	8	0.53
incl	128	132	4	0.77
and	156	172	16	0.21
incl	156	160	4	0.53
and	195	277	82	0.26
incl	208	209	1	0.64
and incl	224	225	1	0.71
and incl	228	238	10	1.16
incl	233	234	1	7.77
and incl	254	255	1	0.55

<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). \*Interval to end of hole. Two samples are missing from these intervals (172 to 173m and 351 to 352m both in ZRMRC068)

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.</i></p> <p><i>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>• All RC samples are collected, and cone split to 2-3kg samples on 1 metre intervals. 4m composites were taken using a sample spear through zones considered by the geologist to be lower priority. The sample despatches sent to the lab were a combination of 1m samples and 4m composites.</li> <li>• Samples are considered to be representative of the intervals sampled.</li> <li>• Standard fire assaying was employed using a 30g charge with an AAS finish (Au-AA23) at ALS. Overrange assays over 10g/t Au were assayed by fire assay with gravimetric finish (Au-GRA21).</li> <li>• Multi-element assays were obtained at ALS using a four-acid digestion and ICP-MS finish.</li> <li>•</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 is completed using best practice 5 5/8" face sampling RC drilling hammer.</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</i></p>	<ul style="list-style-type: none"> <li>• 1 metre split sample obtained from cyclone.</li> <li>• Bulk RC drill hole samples are visually inspected by the supervising geologist to ensure adequate clean sample recoveries are achieved. Any wet, contaminated or poor sample returns are flagged and recorded in the database to</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<i>loss/gain of fine/coarse material.</i>	<p>ensure no sampling bias is introduced.</p> <ul style="list-style-type: none"> <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 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. The total length and percentage of the relevant intersections logged.</i></p>	<ul style="list-style-type: none"> <li>All drill samples were 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.</li> <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.</i></p> <p><i>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. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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. 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>Duplicate samples are collected every 33rd, 66th and 99th sample using a sample spear from the bulk RC samples.</li> <li>All samples are pulverized prior to splitting in the laboratory to ensure homogenous samples with &gt;85% passing 75um. 200gm is extracted by spatula that is used for the 50g charge on standard fire assays</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> </ul>

Criteria	JORC Code Explanation	Commentary
<p><b>Quality of assay data and laboratory tests</b></p>	<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 levels of accuracy (ie lack of bias) and precision have been established.</i></p>	<ul style="list-style-type: none"> <li>• All samples submitted to the laboratory were sorted and reconciled against the submission documents.</li> <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>• Multi-elements were analysed by ICP-MS following a four-acid digestion.</li> <li>• Quantitative analysis of the gold and multi-element content was undertaken in a controlled laboratory environment.</li> <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 the programme are received.</li> </ul>

Criteria	JORC Code Explanation	Commentary
<p><b>Verification of sampling and assaying</b></p>	<p><i>The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.</i></p>	<ul style="list-style-type: none"> <li>• Alternative Zenith personnel inspected the chips 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 of any errors and/or omissions to the database and the corrections (if required) are made in the database immediately.</li> <li>• No adjustments or calibrations were made to any of the assay data recorded in the database.</li> </ul>
<p><b>Location of data points</b></p>	<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>
<p><b>Orientation of data in relation to geological structure</b></p>	<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</i></p>	<ul style="list-style-type: none"> <li>• The predominant orientation of mineralisation as currently understood is close to horizontal, as this is the orientation of the rhyolite, within which most of the high-grade gold is situated. The morphology of the rhyolite may change as further drilling is undertaken which will impact the</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<i>should be assessed and reported if material.</i>	<p>understanding of the orientation of mineralisation.</p> <ul style="list-style-type: none"> <li>Mineralisation within the granite breccia is less well understood and further drilling is required to help to determine this..</li> </ul>
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	<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 a secure transport yard in Biloela from where they are transported to the assay laboratory in Townsville. Checks are made at the lab comparing the physically received samples against Zenith's sample submission/dispatch notes.</li> </ul>
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	<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>	<p><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.</i></p> <p><i>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></p>	<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>

Criteria	JORC Code explanation	Commentary
<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><i>easting and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> <p><i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</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> <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>	<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</i>	<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</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>stated.</i>  <i>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>  <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	<p>analyses when performed by the laboratory are checked against the original to ensure repeatability of the assay results.</p> <ul style="list-style-type: none"> <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>
<p><b>Relationship between mineralisation widths and intercept lengths</b></p>	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i>  <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>  <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</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 provided.</li> </ul>
<p><b>Diagrams</b></p>	<p><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></p>	<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</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>the DBA.</p> <ul style="list-style-type: none"> <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 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>	<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 historical exploration company reports where appropriate.</li> </ul>
<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>• Follow-up work is being considered which will comprise some or all of the following – RC drilling, diamond drilling, IP geophysics and surface geochemistry.</li> </ul>

For personal use only