

21 January 2021



Corporate Details

Zenith Minerals Limited (ASX:ZNC)

ABN: 96 119 397 938

Issued Shares	294.4M
Unlisted options	9.6M
Mkt. Cap. (\$0.12)	\$35M
Cash (30 Sep 20)	\$5.0M
Debt	Nil

Directors

Peter Bird	Exec Chairman
Michael Clifford	CEO
Stan Macdonald	Non-Exec Director
Julian Goldsworthy	Non-Exec Director
Graham Riley	Non-Exec Director
Nic Ong	CFO & Co Sec

Major Shareholders

Directors	~8%
HSBC Custody. Nom.	9.5%
J P Morgan	5.3%
Granich	4.5%
Miquilini	3.4%
Abingdon	3.5%

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VISIBLE GOLD CONFIRMED IN RECENT DIAMOND DRILLING - RED MOUNTAIN GOLD PROJECT

- 2 Diamond core drilling results from the most recent two holes at the Red Mountain gold project in Queensland have extended the high-grade gold zone to 180 vertical metres. Gold mineralisation still remains open at depth and will be the focus of further step-out drilling planned to recommence in February 2021.
- 2 The newly intersected gold mineralisation is associated with base metal stringer veins with 5 separate occurrences of visible gold now confirmed in drill hole ZRMRD040, the last occurrence noted was at the end of the hole.
- 2 New results from these two diamond drill holes, include:
 - ZRMRD040 – 3.0m @ 2.0 g/t Au
 - 3.7m @ 2.8 g/t Au, incl 1.0m @ 8.6 g/t Au (visible gold confirmed)
 - 1.0m @ 1.9 g/t Au & 0.5m @ 7.6 g/t Au (visible gold confirmed)
 - 3.0m @ 3.5 g/t Au, incl 1.0m @ 1.8 g/t Au & 1.0m @ 8.6 g/t Au (visible gold confirmed)
 - 1.0m @ 10.4 g/t Au (visible gold confirmed) & 0.8m @ 4.2 g/t Au
 - visible gold at end of hole
 - ZRMRD038 – 0.3m @ 1.9 g/t Au & 0.5m @ 34.2 g/t Au (hole intersected dolerite dyke in predicted main gold mineralisation position).
- 2 New initial 1m resample results from previously completed RC holes, confirm previous 4m composite results, including:
 - 8m @ 1.6 g/t Au from surface, incl. 1m @ 3.1 g/t Au & 1m @ 1.9 g/t Au & 1m @ 5.1 g/t Au
- 2 These results are in addition to previously announced near surface high-grade drilling intersections, including:
 - 13m @ 8.0 g/t Au from surface, incl. 6m @ 16.7 g/t Au
 - 15m @ 3.5 g/t Au, incl. 2m @ 22.4 g/t Au
 - 12m @ 4.9 g/t Au, incl. 6m @ 9.4 g/t Au
 - 5m @ 10.4 g/t Au, incl 1m @ 49.9 g/t Au
 - 5m @ 3.5 g/t Au & 54.3 g/t Ag, incl. 2m @ 8.0 g/t Au & 109.4 g/t Ag
 - 10m @ 2.7 g/t Au from surface, incl. 4m @ 4.9 g/t Au
- 2 Strong silver (Ag) grades associated with gold mineralisation with new silver results, include:
 - 15m @ 0.4 g/t Au with 20.4 g/t Ag
 - 4m @ 0.5 g/t Au with 82.0 g/t Ag
 - supporting results previously reported including: 5m @ 3.5 g/t Au with 54.3 g/t Ag

Significance of these new assay results

Ongoing exploration activity at the 100% owned Red Mountain gold project located in Queensland (Figure 1) is continuing to provide highly encouraging high-grade gold drill assay results. Drilling to date has outlined a discrete sub-vertical high-grade gold zone (Western Zone) to a vertical depth of 180m, with the zone remaining open at depth and will be the subject of ongoing drill testing (see Figures 2 - 4).

New assay results from 2 diamond core holes completed late in CY2020 have now been received extending high-grade gold mineralisation to a depth of 180m below surface. High-grade gold was intersected in both holes (ZMRD038 and 040) with individual assays peaking at 34.2 g/t Au and 10.4 g/t Au respectively. Results were particularly strong in hole ZMRD040 with zones of high-grade gold intersected from 111m down hole to the end of hole at 201.7m. The mineralisation appears to be associated with a stockwork of base metal stringer veins in altered diorite, granodiorite and granite with the 5 separate occurrences of visible gold now confirmed by assay results (Figure 5). An occurrence of visible gold was noted in core at the end of the hole, post drilling completion. Drill hole ZMRD038 deviated south of its planned position and intersected a dolerite dyke in the predicted main gold target area. This dolerite dyke may have stopped out gold mineralisation at the intercept point (refer to Table 1 for a complete listing of both new and previous Zenith gold results).

Chairman Comments:

Commenting on the Red Mountain gold project results, Executive Charman Peter Bird said: *"We are very pleased to have now received results from this first phase of diamond drilling located on the western margin of the breccia pipe complex.*

The confirmation of extensive visible gold and strong gold grades in what we believe to be the upper levels of a breccia pipe system will now lead us to push the drilling program to explore much deeper – that is below the 180 vertical metre level. As illustrated in Figure 6 below we are potentially still only exposing the upper portion of a breccia pipe system if other similar well documented systems such as Mt Wright are a proxy.

Red Mountain is a maiden discovery by Zenith and is located within a very prospective and proven region. We anticipate that drilling at the Red Mountain Project will definitely continue in a series of phases well into CY2021. Our key objective with this project is to define something of significant value.

The upcoming 2021 year is going to be very exciting for us with follow up work including drilling planned for at least three of our key flagship opportunities. These being, the abovementioned Red Mountain asset (Queensland - 100% ZNC) for high grade gold, the Split Rocks asset (Western Australia – ZNC 100%) for large volume low grade gold mineralisation and the Devlin Creek asset (Queensland ZNC – 100%) for base metals principally copper".

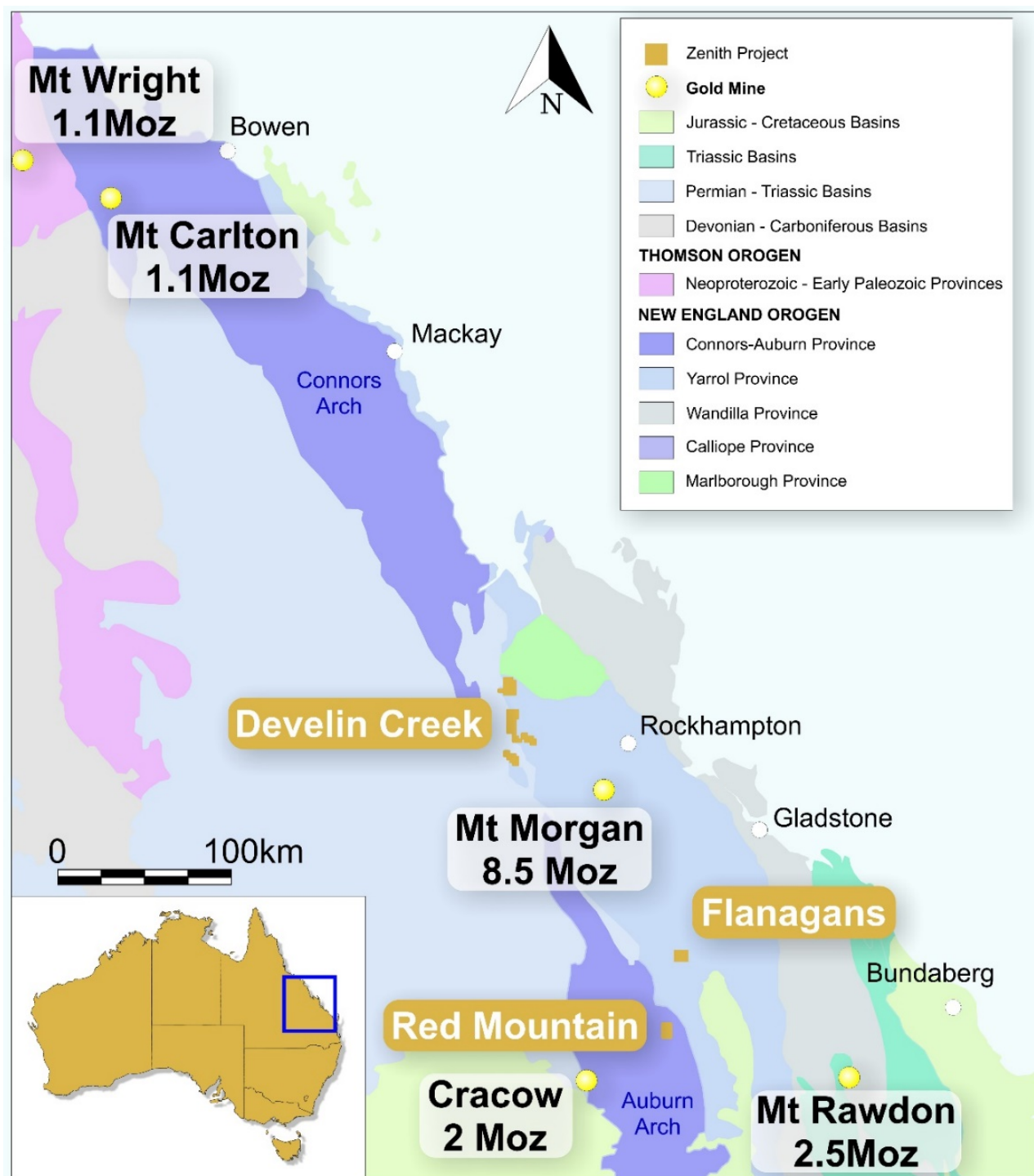


Figure 1: Red Mountain Project – Location Map

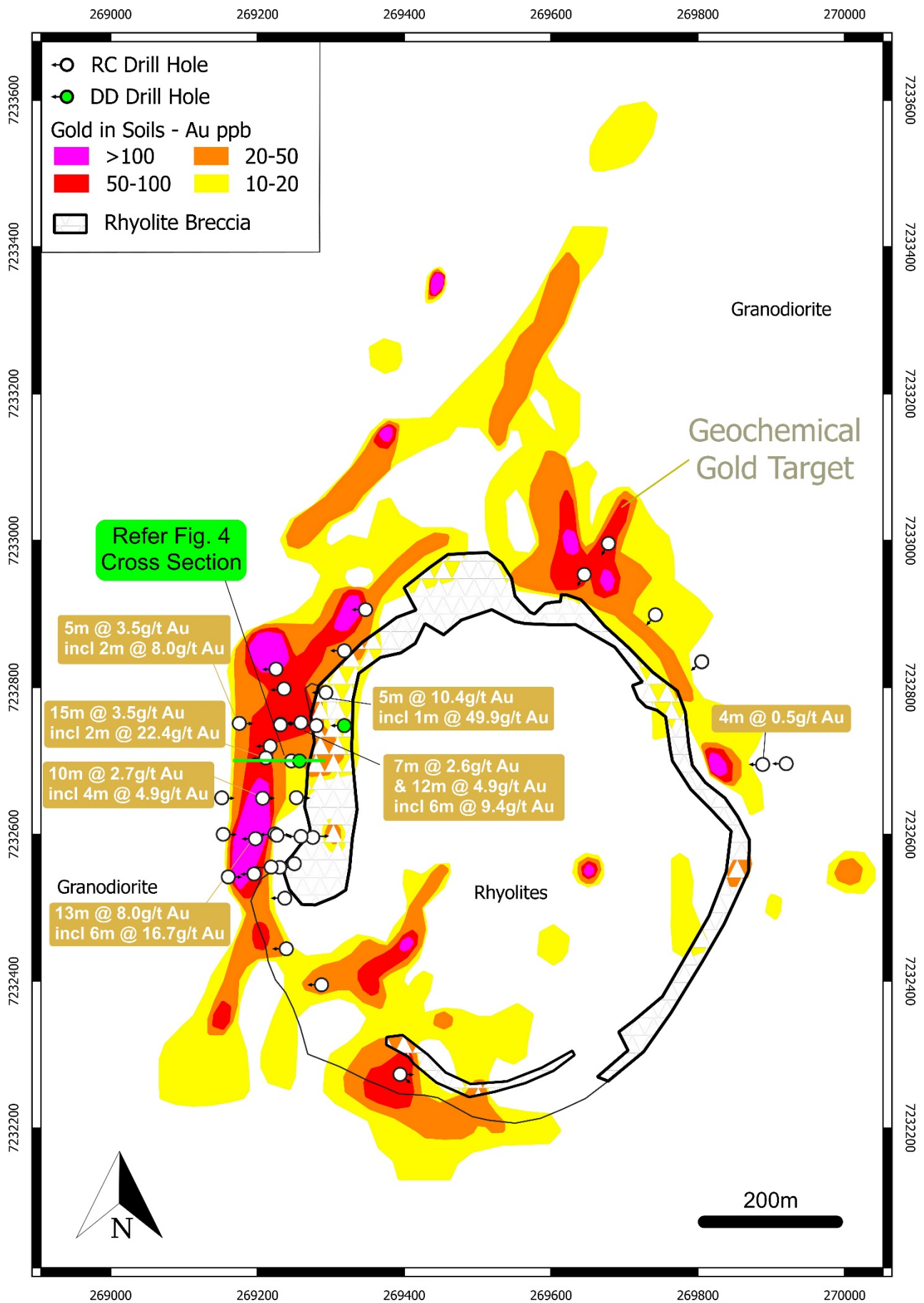


Figure 2: Red Mountain Plan Showing Gold Zones, Targets and Cross Section Location (refer to Figure 4)

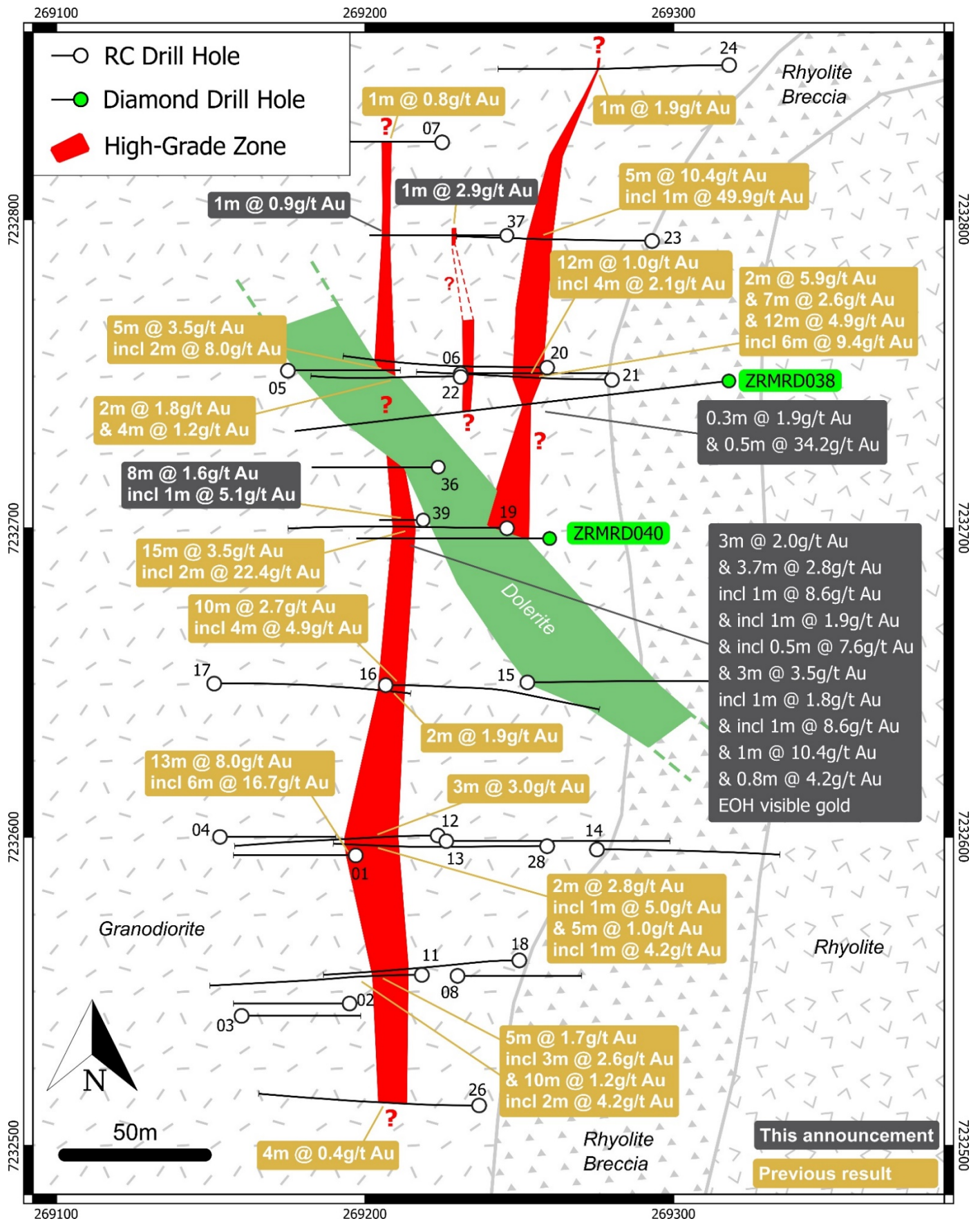


Figure 3: Plan Showing Red Mountain Project High-Grade Gold Zone, New Drill Results (dark text boxes)

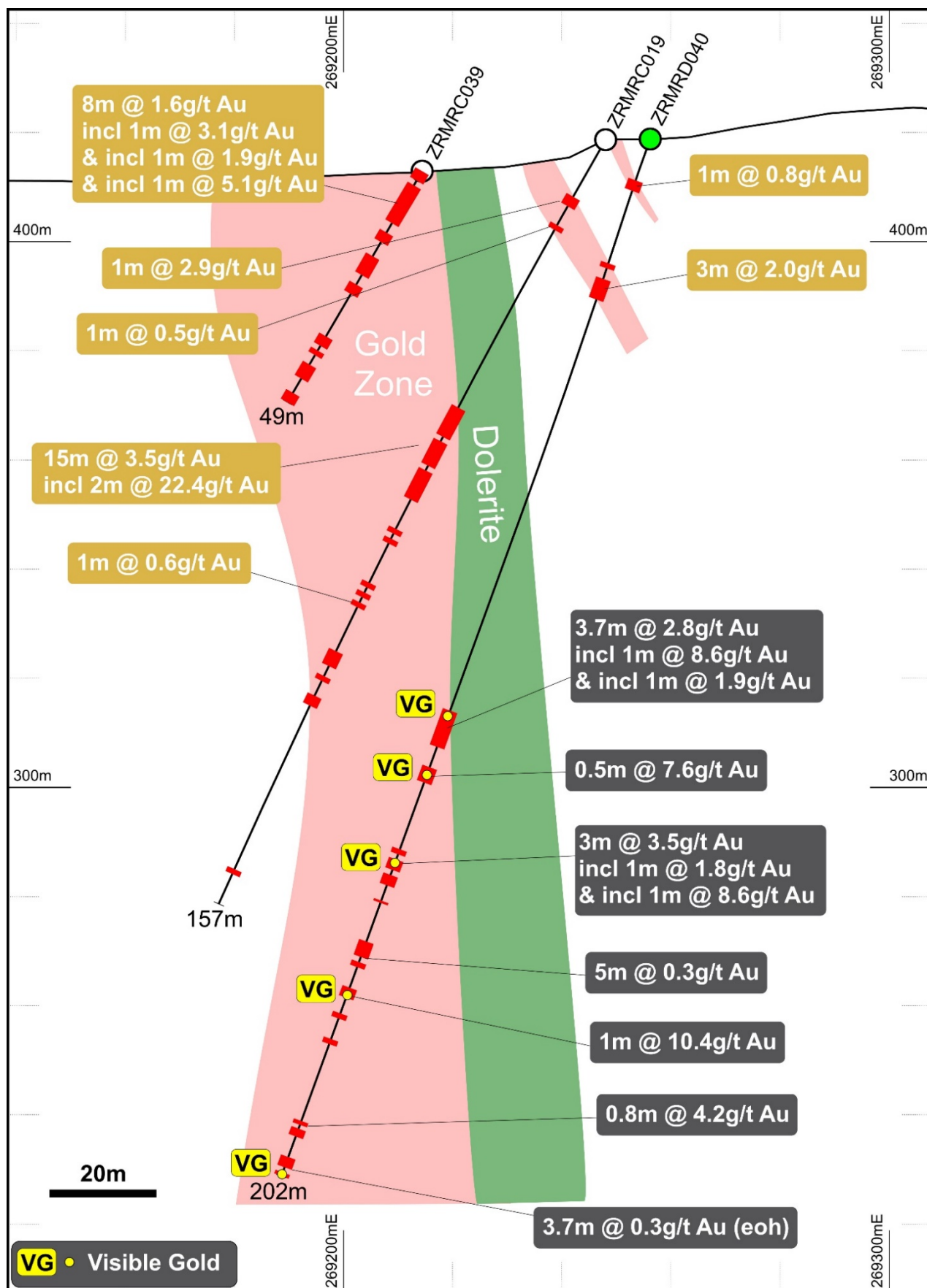


Figure 4: Cross Section - Red Mountain Western Zone High-Grade Gold Zone with New Diamond Core Results

ZRMCD040: 3.7m @ 2.8 g/t, including 1m @ 8.6 g/t

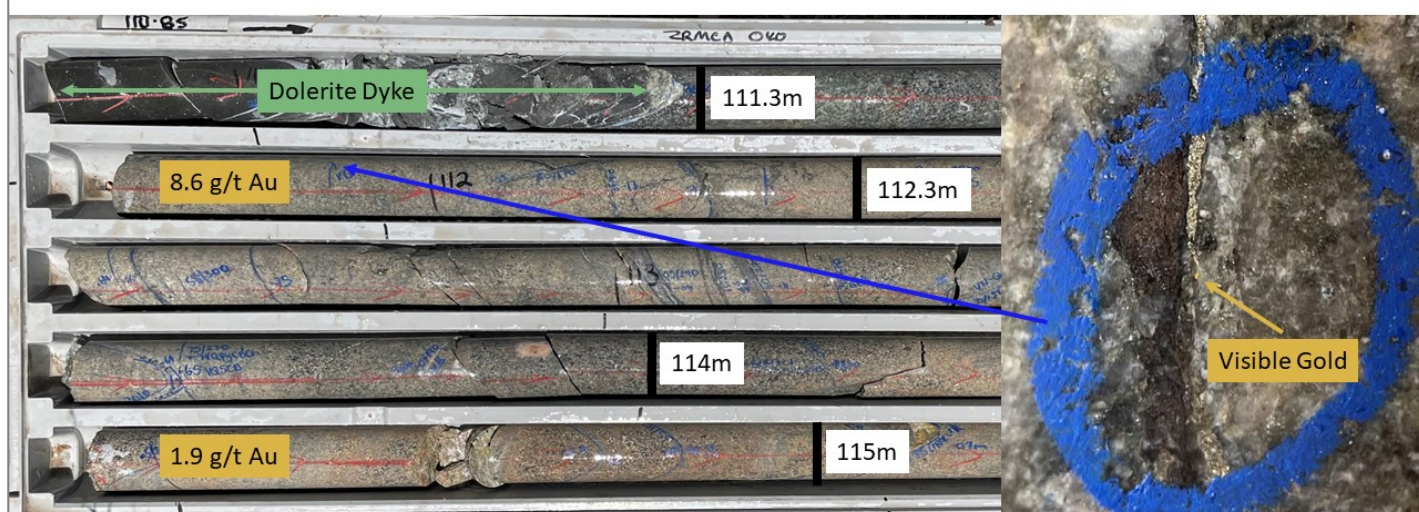


Figure 5: Red Mountain Western Zone Example of High-Grade Gold in Diamond Drill Core (ZRMCD040) 111.3m – 115m, 3.7m @ 2.8 g/t Au, including 111.3 to 112.3m, 1m @ 8.6 g/t Au with visible gold hosted in altered diorite with base metal string veins.

Red Mountain - Drill Program Rationale

Results from drilling to date at the Red Mountain Gold Project outline a zone of high-grade near surface gold mineralisation in a steep easterly dipping zone hosted by altered granitoid rocks, on the western margin of a sub-vertical felsic volcanic breccia pipe. The project is in south east Queensland, lying about halfway between two gold mines Cracow (ASX:AUR) and Mount Rawdon (ASX:EVN) (Figure 1).

The current drill program has focus on the western part of the prospect area (Figures 2 & 3). This area is part of a larger total target zone extending some 2.2 km around the rim of the breccia pipe (Figure 4).

Mineralisation at Red Mountain is considered by Zenith to be analogous to known gold deposits in Queensland. Evidence includes a zoned system with geochemistry like that documented at third party owned Queensland gold deposits such as Mt Wright which is located 65km east of Charters Towers and the nearby Mount Rawdon Gold Mine (Figure 1).

Gold mineralisation at Mount Wright occurs within both brecciated rhyolite and granite close to the margin of a rhyolite breccia pipe in a geological setting very similar to that at Zenith's Red Mountain gold project. The form and shape of the Mt Wright ore body is that of a sub-vertical pencil like body with mineralisation having a strike length of only 200m but vertical extent of over 1.2km (Figure 6). The Mt Wright gold deposit was exploited by Resolute Mining Limited as an underground operation with combined production and reserves exceeding 0.9Moz Au within total resources of ~1.1Moz Au (Resolute Mining 2014 Annual Report & Information Poster June 2014).

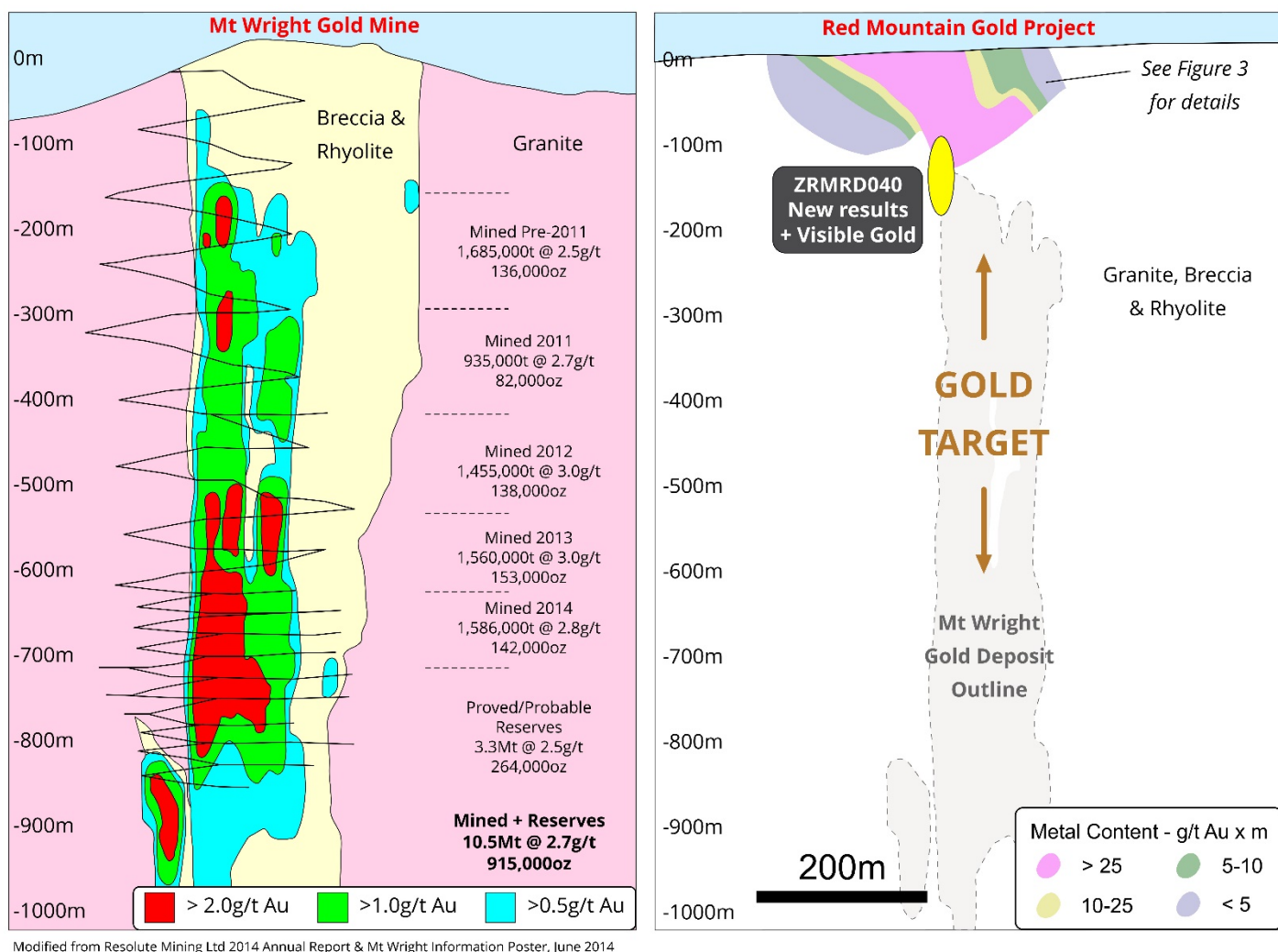


Figure 6: Comparative Cross Sections – Mt Wright Gold Mine (not an asset of the Company) and Red Mountain Gold Project with Location of New Diamond Drill Results

Background

For further background on the Red Mountain project refer to recent ASX releases by the Company on the 22nd Jul 2020, 3rd Aug 2020, 24th Aug 2020 and 9th & 21st & 28th Sep 2020, 13th Oct 2020 & 9th & 30th Nov 2020).

Table 1: Significant Gold Intersections from Red Mountain

Hole	Original 1-4m Samples				1m Samples					Comments
	From (m)	To (m)	Interval (m)	Au Grade (g/t)	From (m)	To (m)	Interval (m)	Au Grade (g/t)	Ag Grade (g/t)	
ZRMRC001	0	14	14	5.5	0	13	13	8.0	3.2	Previous results
incl	0	6	6	12.3	0	6	6	16.7	5.3	
ZRMRC002	0	6	6	0.6	0	3	3	0.7	0.2	
incl					1	2	1	1.2	0.5	
and	26	30	4	0.7				NSR		
ZRMRC003					67	68	1	0.8	10.2	
ZRMRC004				NSR						
ZRMRC005					64	69	5	3.5	54.3	
incl					64	66	2	8.0	109.4	
ZRMRC006					8	14	6	1.0	4.6	
					12	14	2	2.6	7.8	
and	25	29	4	0.9	26	27	1	3.1	13.6	
and	42	54	12	1.0	42	54	12	1.0	9.8	
incl					42	44	2	1.2	17.7	
and incl					47	48	1	0.6	13.5	
and incl					50	54	4	2.1	14.2	
incl					50	51	1	6.0	20.2	
and incl					53	54	1	2.0	26.5	
ZRMRC007					36	37	1	0.8	45.0	
ZRMRC008					64	65	1	0.4	65.1	
ZRMRC009				NSR				NSR		
ZRMRC010				NSR	43	44	1	0.0	51.6	
ZRMRC011					25	30	5	1.7	3.5	
incl					25	28	3	2.6	5.5	
and	35	43	8	1.4	37	47	10	1.2	1.7	
incl	35	39	4	2.4	37	41	4	2.4	3.4	
incl					37	39	2	4.2	5.4	
ZRMRC012					15	16	1	0.4	0.5	
and					29	33	4	0.8	4.8	
incl					32	33	1	1.5	4.3	
and	39	44	5	0.9	38	44	6	1.7	13.2	
incl					40	43	3	3.0	15.1	
and					77	80	3	0.5	1.0	
ZRMRC013				NSR						
ZRMRC014				NSR						
ZRMRC015				NSR						
ZRMRC016	0	12	12	2.2	0	10	10	2.7	3.4	

Hole	Original 1-4m Samples				1m Samples					Comments
	From (m)	To (m)	Interval (m)	Au Grade (g/t)	From (m)	To (m)	Interval (m)	Au Grade (g/t)	Ag Grade (g/t)	
incl	0	8	8	3.1	0	4	4	4.9	3.4	
incl					5	6	1	1.4	3.3	
incl					7	9	2	2.4	5.2	
ZRMRC017					77	78	1	1.0	21.8	
and					86	87	1	0.7	5.3	
and	99	101	2	0.9	100	109	9	0.3	7.9	
incl					100	101	1	1.0	0.6	
and					116	118	2	1.9	11.0	
ZRMRC018	8	12	4	0.6	9	12	3	0.5	6.1	New Ag result
and					60	61	1	0.7	0.9	
and					76	77	1	0.5	33.8	New Ag result
and					85	86	1	0.8	0.5	
ZRMRC019	12	16	4	0.6	12	13	1	2.9	3.9	New Ag result
					18	19	1	0.5	7.1	New Ag result
	56	60	4	1.6	57	72	15	3.5	8.8	New Ag result
	68	80	12	8.9						
incl	68	72	4	25.9	70	72	2	22.4	14.2	New Ag result
					96	97	1	0.6	0.8	New Ag result
	104	108	4	0.6					9.2	
ZRMRC020					2	3	1	0.5	3.3	New Ag result
	36	40	4	0.7	39	40	1	1.3	1.5	New Ag result
					46	47	1	3.2	1.7	
	60	64	4	1.0	56	71	15	0.4	20.4	New Ag result
incl					62	63	1	2.7	3.4	New Ag result
	84	88	4	0.7	86	89	3	0.8		
incl					86	87	1	1.2	2.4	New Ag result
					99	100	1	2.0	1.0	New Ag result
	114	120	6	2.6	114	122	8	0.6		
incl					114	115	1	1.0	6.3	
and incl	116	120	4	3.7	117	118	1	3.1		
and incl					121	122	1	0.5		
ZRMRC021					40	41	1	0.4	4.6	New Ag result
	48	52	4	4.6	49	51	2	5.9	16.5	New Ag result
	61	76	15	1.4	61	69	8	2.3		
incl					61	68	7	2.6	11.0	
					74	80	6	0.5	1.1	New Ag result
incl					78	79	1	1.2	1.1	New Ag result
					87	89	2	0.9	3.4	New Ag result
incl					88	89	1	1.2	8.7	New Ag result
	100	108	8	3.9	102	114	12	4.9		
incl					103	109	6	9.4	4.4	New Ag result
					140	141	1	1.6	3.5	New Ag result

Hole	Original 1-4m Samples				1m Samples					Comments
	From (m)	To (m)	Interval (m)	Au Grade (g/t)	From (m)	To (m)	Interval (m)	Au Grade (g/t)	Ag Grade (g/t)	
	144	148	4	0.5	146	148	2	0.8	2.4	New Ag result
incl					147	148	1	1.2	2.4	New Ag result
ZRMRC022	0	12	12	0.4	1	2	1	0.6	5.0	New Ag result
					7	9	2	0.8	3.4	New Ag result
incl					8	9	1	1.1	3.4	New Ag result
					20	26	6	0.9	7.3	
incl					20	22	2	1.8	7.2	
					31	32	1	1.6	1.4	New Ag result
					42	52	10	0.7	9.4	New Ag result
incl					42	43	1	1.2	3.7	
	48	52	4	1.2	48	52	4	1.2	14.6	
incl					48	49	1	1.0	26.1	
and incl					50	52	2	1.5	9.4	
	60	64	4	0.7	61	62	1	1.9	7.4	New Ag result
					69	70	1	0.5	1.8	
ZRMRC023					23	24	1	0.7	2.5	New Ag result
					32	33	1	0.6	2.4	New Ag result
					67	72	5	10.4	3.5	New Ag result
					67	68	1	49.9	3.5	New Ag result
					71	72	1	1.4	0.5	
					78	86	8	0.7	1.2	New Ag result
incl					78	81	3	1.3		
incl	68	88	20	0.5	85	86	1	1.3	0.6	
					103	104	1	0.7	1.2	New Ag result
ZRMRC024					14	15	1	0.6	1.7	New Ag result
					84	85	1	1.9	13.2	
ZRMRC025				NSR						
ZRMRC026					2	3	1	0.5		
					23	28	5	0.2		
	52	56	4	0.4	53	54	1	0.9	0.4	New Ag result
ZRMRC027				NSR						
ZRMRC028					84	86	2	2.9	1.8	New Ag result
incl					84	85	1	5.0	3.1	New Ag result
					99	100	1	0.5	0.7	New Ag result
					105	110	5	1.0	3.0	New Ag result
incl					109	110	1	4.2	12.1	New Ag result
					122	123	1	0.8	1.4	New Ag result
ZRMRC029					5	7	2	0.6	0.4	New Ag result
ZRMRC030					24	25	1	0.7	5.0	New Ag result
ZRMRC031					8	9	1	0.9	0.6	New Ag result
ZRMRC032				NSR						

Hole	Original 1-4m Samples				1m Samples					Comments
	From (m)	To (m)	Interval (m)	Au Grade (g/t)	From (m)	To (m)	Interval (m)	Au Grade (g/t)	Ag Grade (g/t)	
ZRMRC033				NSR						
ZRMRC034	92	96	4	0.5					82.0	New Ag result
ZRMRC035				NSR	96	100	4		10.6	New Ag result
ZRMRC036	52	56	4	0.5	57	58	1	0.9	awaited	New 1m gold results
					86	87	1	0.8		
ZRMRC037	28	32	4	1.5	31	32	1	2.9	awaited	
	88	92	4	0.4	86	87	1	0.9		
ZRMCD038					95.7	96	0.3	0.6	awaited	Diamond core new gold results
and					139.4	139.7	0.3	1.9		
					158	159	1	0.7		
					172.5	173	0.5	34.2		
					222	223	1	0.9		
					239	240	1	0.5		
ZRMRC039	0	8	8	1.9	3	11	8	1.6	awaited	New 1m gold results
incl	4	8	4	3.1	3	4	1	3.1		
and incl					5	6	1	1.9		
and incl					7	8	1	5.1		
ZRMCD040					8	9	1	0.8		Pre-collar
and	28	32	4	2.4	27	30	3	2.0	awaited	Diamond core new gold results
and					111.3	115	3.7	2.8	awaited	
incl					111.3	112.3	1	8.6*		
and incl					114	115	1	1.9		
and					123.2	123.7	0.5	7.6*		
and					138	141	3	3.5		
incl					138	139	1	1.8		
and incl					140	141	1	8.6*		
and					156	161	5	0.3		
and					165.9	166.9	1	10.4*		
and					191	191.8	0.8	4.2		
and					198	201.7 (eoh)	3.7	0.3*		

***Visible gold noted in diamond drill core**

High-grade intersections are length weighted average grades with minimum cut -off grade of 1.0g/t Au and no internal dilution, whilst lower grade intersections are length weighted average grades with minimum cut-off grade of 0.4g/t Au and maximum internal dilution of 4m. High-grade silver with low gold reported above 30 g/t Ag cut-off grade.

Table 2: Red Mountain Drill Collars

Hole_ID	Hole_Type	Easting	Northing	RL	Depth (m)	Azimuth	Dip
ZRMRC001	RC	269200	7232597	412	79	270	-60
ZRMRC002	RC	269198	7232548	407	75	270	-60
ZRMRC003	RC	269153	7232555	408	75	90	-60
ZRMRC004	RC	269151	7232600	411	75	90	-60
ZRMRC005	RC	269175	7232745	407	73	90	-60
ZRMRC006	RC	269229	7232748	413	97	90	-60
ZRMRC007	RC	269227	7232827	406	73	270	-60
ZRMRC008	RC	269229	7232555	408	79	90	-60
ZRMRC009	RC	269395	7232270	408	64	130	-60
ZRMRC010	RC	269394	7232267	408	90	90	-60
ZRMRC011	RC	269221	7232555	407	151	270	-60
ZRMRC012	RC	269223	7232599	411	145	270	-60
ZRMRC013	RC	269226	7232597	411	151	90	-60
ZRMRC014	RC	269270	7232595	415	127	90	-60
ZRMRC015	RC	269252	7232648	417	151	90	-60
ZRMRC016	RC	269207	7232649	414	145	90	-60
ZRMRC017	RC	269149	7232649	412	127	90	-60
ZRMRC018	RC	269249	7232562	411	140	270	-60
ZRMRC019	RC	269248	7232701	419	157	270	-60
ZRMRC020	RC	269258	7232749	417	151	270	-60
ZRMRC021	RC	269279	7232747	420	151	270	-60
ZRMRC022	RC	269232	7232748	413	103	270	-58
ZRMRC023	RC	269293	7232792	418	151	270	-58
ZRMRC024	RC	269319	7232851	409	157	270	-58
ZRMRC025	RC	269349	7232906	400	151	270	-58
ZRMRC026	RC	269239	7232516	404	157	270	-58
ZRMRC027	RC	269238	7232447	402	157	270	-58
ZRMRC028	RC	269258	7232597	415	151	270	-58
ZRMRC029	RC	269286	7232402	403	109	270	-58
ZRMRC030	RC	269644	7232953	410	151	210	-63
ZRMRC031	RC	269679	7232996	405	157	210	-63
ZRMRC032	RC	269741	7232897	413	157	220	-60
ZRMRC033	RC	269802	7232833	408	151	230	-60
ZRMRC034	RC	269888	7232694	418	151	270	-60
ZRMRC035	RC	269918	7232696	414	151	270	-60
ZRMRC036	RC	269219	7232717	412	103	270	-75
ZRMRC037	RC	269242	7232794	410	109	270	-60
ZRMCD038	RC/DD	269323	7232743	426	272.2	270	-60
ZRMRC039	RC	269214	7232703	413	49	270	-60
ZRMCD040	RC/DD	269256	7232698	419	201.7	270	-70

For further information please refer to the Company's website or contact the Company directly.

Authorised for release by the Zenith Minerals Limited Board of Directors – 21st January 2021

For further information contact:

Zenith Minerals Limited

Directors Michael Clifford or Peter Bird

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Media Enquiries

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Competent Persons Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr Michael Clifford, who is a Member of the Australian Institute of Geoscientists and an employee of Zenith Minerals Limited. Mr Clifford has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Clifford consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Material ASX Releases Previously Released

The Company has released all material information that relates to Exploration Results, Mineral Resources and Reserves, Economic Studies and Production for the Company's Projects on a continuous basis to the ASX and in compliance with JORC 2012. The Company confirms that it is not aware of any new information that materially affects the content of this ASX release and that the material assumptions and technical parameters remain unchanged.

About Zenith

Zenith has a vision to build a gold and base metals business with a team of proven project finders. Focus is on 100% owned Zenith projects, whilst partners progress multiple additional opportunities using third party funds.

Zenith is continuing to focus on its core Australian gold and copper projects including:

- **Red Mountain Gold Project** in Queensland (100% owned) where ongoing drilling is following-up the high-grade near surface gold and silver intersected in the maiden drill program (ASX Releases 3-Aug-20, 13-Oct-20, 9-Nov-20, 30-Nov-20), including:
 - 13m @ 8.0 g/t Au & 3.2 g/t Ag from surface, incl. 6m @ 16.7 g/t Au & 5.3g/t Ag
 - 15m @ 3.5 g/t Au, incl. 2m @ 22.4 g/t Au
- **Split Rocks Gold Project** in Western Australia (100% owned), where recent drilling returned, high-grade near surface gold mineralisation at multiple targets (ASX Release 5 Aug 20, 19-Oct-20, 28-Oct-20, 17-Dec-20, 14-Jan-21), including:
 - Dulcie North: 32m @ 9.4 g/t Au, incl 9m @ 31.4 g/t Au with the highest individual 1m sample returning 199.2 g/t Au.
 - Dulcie Laterite Pit:
 - 2m @ 14.5 g/t Au, incl. 1m @ 20.8 g/t Au,
 - 18m @ 2.0 g/t Au (EOH) incl. 1m @ 23.7 g/t Au &
 - 14m @ 3.5 g/t Au

- Estrela Prospect: 2m @ 9.8 g/t Au (open to north & south)
- Dulcie Far North: 5m @ 5.6 g/t Au incl. 4m @ 6.8 g/t Au
- **Develin Creek Copper-Zinc Project** in Queensland (100% owned) – maiden drill test of the new Snook copper target located 30km south of Zenith's JORC resources discovers massive copper-zinc sulphides, including 3m @ 1.6%Cu, 1.1% Zn, 0.4%Pb, 43g/t Ag and 0.2 g/t Au (ASX Release 7-Dec-20).
- **Jackadgery Gold Project** in New South Wales (option to earn initial 90%), historic trenching returned 160m @ 1.2 g/t Au. No drilling to date. Zenith planning maiden drill test (ASX Release 10-Sep-20).

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>Nature and quality of sampling (e.g. 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>	Assays received for 40 reverse circulation drill holes and 2 diamond core tails.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	1m drill samples collected via a cyclone were split through riffle splitter. Routine sampling on 4m composites via spear sampling of the 1m riffle split samples. Selected 1m intervals were assayed as 1m samples based on visual logging of alteration and sulphide content. Diamond core was routinely sampled on 1m intervals with selected intervals sampled based on geological observations at intervals no less than 0.3m.
	<i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.</i>	Reverse circulation drilling was used to obtain 1 m to 4m samples from which 2 to 3 kg was pulverised to produce a 30 g charge for fire assay. Diamond core drilling was used to obtain samples ranging from 0.3m to 1.7m. After cutting with a diamond saw, ½ core samples produced 3 to 5 kg which was pulverised to produce a 30 g charge for fire assay
Drilling techniques	<i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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>	Reverse circulation and HQ diamond tails on holes ZRMCD038 and ZRMCD040. ZRMCD038 precollar to 90m and DD tail to 272.2m ZRMCD040 precollar to 70m and DD tail to 201.7m
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Diamond core was orientated whilst RC drill chips were sieved and logged by a qualified geologist on site, data recorded in field on paper logs and transferred to digital database
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	RC drilling produced generally dry samples with excellent recoveries, all 1m samples were riffle split on site and selected interval were 4m composite sampled using a spear from the 1m riffle splits to ensure a representative sample was collected for assay.

		Diamond core was cut on site and ½ core was submitted for analysis.
	<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>	No indications of sample bias based on results to date. Screen fire assays of intervals with visible gold are pending.
Logging	<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>	Drill core and drill chips were sieved and logged by a qualified geologist on site. No reporting of resources.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i>	Drill chips logging is qualitative. Representative chip samples collected and stored in 20 compartment plastic chip trays and photographed. Drill core logging is qualitative, all core has been photographed.
	<i>The total length and percentage of the relevant intersections logged.</i>	All intervals logged and sampled
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	Core is ½ core, core is cut by diamond saw
	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	Samples riffle split
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Samples were analysed at ALS Laboratories in Brisbane, the samples were crushed, pulverised and assayed by gold using fire assay and silver by ICP-AES.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	~2 to 3kg of drill sample was crushed and pulverised and a sub-sample was taken in the laboratory and analysed.
Sub-sampling techniques and sample preparation - continued	<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>	RC drilling results incorporates 1m resamples of 4m composite intervals. No field duplicates yet taken for diamond core
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Each sample was 2kg to 5kg in weight which is appropriate to test for the grain size of material. Visible gold was logged to 1mm in size was logged in drill core. On receipt and reconciliation of assay results these observations were confirmed to be true. The presence of visible gold indicates that coarse gold is present within the Red Mountain mineralised system. Screen fire assays have been submitted for analysis of intervals that were logged as obtaining visible gold – assay results are pending.
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	The samples were crushed and assayed for gold using fire assay, which is considered a near total technique

	<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>	No geophysical tools used this sampling program
	<i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	Certified reference material and blanks was included in each sample batch and appropriate levels of precision and accuracy.
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Company personnel have observed the assayed samples
	<i>The use of twinned holes.</i>	No twinning
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Field data were all recorded in field laptops and sample record books and then entered into a database
	<i>Discuss any adjustment to assay data.</i>	No adjustments were made.
Location of data points	<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.</i>	Sample location is based on Trimble R10-2 GNSS Rover DGPS coordinates +/-25mm accuracy
	<i>Specification of the grid system used.</i>	The grid system used to compile data was MGA94 Zone 56
Location of data points - continued	<i>Quality and adequacy of topographic control.</i>	Topography control is +/- 25mm.
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	Drill holes shown in Figures 2 to 4 and Tables 1 & 2.
	<i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i>	The data alone will not be used to estimate mineral resource or ore reserve
	<i>Whether sample compositing has been applied.</i>	Results are reported as length weighted average composites at a minimum cut-off grade of 0.4 g/t Au or if silver only 30g/t Ag (refer to Table 1). Over range >100g/t Ag re-assayed using a 4 acid digest ICP-AES.
Orientation of data in relation to geological structure	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	Orientation of mineralisation based on 2 x orientated drill holes, indicates two main mineralised veins sets: moderate to steep southwest and shallow south dipping. The shallow dipping veins were less frequently measured in orientated drill core (~7 veins) versus >30 steep veins, this may be due to an orientation bias. Further drilling is required to confirm that drilling achieves unbiased sampling.
	<i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this</i>	As above

	<i>should be assessed and reported if material.</i>	
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	Samples were kept in numbered and secured bags until delivered to the laboratory
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	Sampling techniques are consistent with industry standards

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<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>	The Red Mountain Project is located within the 100% Zenith owned exploration permit for minerals EPM 26384. The project is located within private grazing properties.
	<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>	All tenements are 100% held by Zenith and are in good standing with no known impediment to future granting of a mining lease.
Exploration done by other parties	<i>Acknowledgment and appraisal of exploration by other parties.</i>	South Pine Mines Pty Ltd undertook regional scale reconnaissance rock chip sampling and a systematic stream sediment sampling program focused around the Rossmore silver occurrence from 1981 to 1982. Several companies held the ground in the following decades focusing on the porphyry copper / epithermal potential of the area with Archer Resources Limited the only company to have reported on ground exploration activity on the area of interest being reported herewith by Zenith. Anomalous silver and gold in soils was reported by Archer Resources Limited which has subsequently been confirmed by Zenith.
Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	Based on the initial site visit and preliminary evidence the geological setting and geochemical association at Red Mountain is indicative of an epizonal intrusion related gold deposit like the Mt Rawdon gold mine.
Drill hole Information	<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>	Refer to Tables 1 & 2
	<i>o easting and northing of the drill hole collar</i>	
	<i>o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i>	
	<i>o dip and azimuth of the hole</i>	
	<i>o down hole length and interception depth</i>	
	<i>o hole length.</i>	
	<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>	
Data aggregation methods	<i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i>	No high-grade cutting
	<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</i>	High-grade intersections are length weighted average grades with minimum cut -off grade of 1.0g/t Au and no internal dilution, whilst lower grade intersections are length weighted average grades with minimum cut-off grade of 0.4g/t Au and maximum internal dilution of 4m.

	<i>such aggregations should be shown in detail.</i>	
<i>Data aggregation methods - continued</i>	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No metal equivalents used.
<i>Relationship between mineralisation widths and intercept lengths</i>	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	Refer below
	<i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>	Orientation of mineralisation based on 2 x orientated drill holes, indicates two main mineralised veins sets: moderate to steep southwest and shallow south dipping. The shallow dipping veins were less frequently measured in orientated drill core (~7 veins) versus >30 steep veins, this may be due to an orientation bias. Further drilling is required to confirm that drilling achieves unbiased sampling. Overall gold mineralised envelopes are interpreted as northsouth with near subvertical dips
	<i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i>	As above
<i>Diagrams</i>	<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>	Refer to descriptions and diagrams in body of text of this report.
<i>Balanced reporting</i>	<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>	Refer to descriptions and diagrams in body of text
<i>Other substantive exploration data</i>	<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>	No other meaningful or material exploration data to be reported at this stage
<i>Further work</i>	<i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	Follow-up drill planning in progress.
	<i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Refer to figures in body of report.