



NEW DRILL RESULTS EXTEND & CONFIRM HIGH-GRADE GOLD ZONES AT RED MOUNTAIN

New assay results from two diamond drill (DD) holes (ZRMDD041 & 043), part of an ongoing drilling program at the Red Mountain gold project in Queensland, have now been received. Results include:

- 7.7m @ 4.4 g/t Au incl 1.0m @ 19.3 g/t Au & 0.7m @ 18.6 g/t Au (ZRMDD041)
- 5m @ 5.5 g/t Au incl 1.5m @ 17.7 g/t Au and 5.4m @ 1.8 g/t Au, incl 0.7m @ 12.4 g/t Au (ZRMDD043)

The DD program has successfully demonstrated that high-grade gold mineralisation extends to at least 200 metres vertical depth, expanding gold mineralisation 20 metres beyond the previous deepest hole (refer to figures 2 & 6). Gold intersections were shallower than anticipated due to the mineralisation rolling from steep east dip to a steep west dip.

The program currently includes 4 DD holes:

- 3 DD holes completed (ZRMDD041, 043 & 044) totalling 863m
- Hole 044 drilled beneath hole 043 shows similar alteration and trace indicator sulphides (sphalerite & galena) consistent with gold mineralised intervals, (refer to figures 3 & 4), core has been cut and dispatched to the laboratory – assays are pending.
- 1 additional DD hole in progress (ZRMDD042) design depth 350m.

Diamond drilling at Red Mountain will continue with the objective of potential resource definition. In addition, associated exploration activities aimed at finessing more drill targets is also taking place, including: a detailed drone based aeromagnetic survey, 3D IP electrical geophysical survey and expansion of the soil geochemical coverage.

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 deposits such as Mt Wright which is located 65km east of Charters Towers and the nearby Mount Rawdon Gold Mine (see Figure 1).

Commenting on the results announced Chairman Peter Bird said: "The results show that the mineralisation is persistent down to at least the 200 vertical meter level and is certainly not closed off. There would appear to be a higher grade 5 – 8 plus meter wide "core zone" which we will continue to chase down the plunge of the mineralised zone. We are very keen to see what the next hole assays (ZRMDD044) will deliver. Although the pace of work has been affected due to the recent very high-rainfall events in eastern

Australian and COVID-19 lockdown in Brisbane, the Company's field crew have done an excellent job in keeping field activities progressing. Given the very positive results to date it is now time to consider dedicating a drill rig to the project on a more full-time basis."

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 sub-vertical high-grade gold zone (Western Zone) to a vertical depth of 200m, with the zone remaining open at depth and the subject of ongoing drill testing (see Figures 2 - 6).

New assay results from 2 diamond core holes have now been received extending high-grade gold mineralisation to a depth of 200m below surface. High-grade gold was intersected in both holes (ZRMRD041 and 043) with individual assays peaking at 29.3 g/t Au and 43.8 g/t Au respectively. Mineralisation is associated with a stockwork of base metal (sphalerite-galena) stringer veins in altered diorite, granodiorite and granite on the margin of a rhyolite breccia (Figure 4). Hole ZRMDD043 intersected gold mineralisation including 5m @ 5.5 g/t Au associated with a rhyolite dyke at a position close to the end of drill hole ZRMRCD040 where visible gold was observed. The overall dip of gold mineralisation has rolled from dipping steep east to steep west resulting in the gold zone being intersected in hole ZRMDD043 at a position that is shallower than anticipated.

Results for hole ZRMDD044 are awaited, the hole intersected similar geology with alteration and base metal sulphides consistent with gold mineralised intervals in earlier drill holes. Gold mineralisation (7.7m @ 4.4 g/t Au) in the new hole ZRMDD041 lies 50m directly below ZRMRC016 that returned 10m @ 2.7 g/t Au, confirming continuity of high-grade gold mineralisation. Refer to Table 1 for a complete listing of both new and previous Zenith gold results.

These new results are in addition to previously announced near surface high-grade drilling intersections (ASX Releases 3-Aug-20 & 13-Oct-20, 9-Nov-20, 21-Jan-21), 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

Strong silver (Ag) grades associated with gold mineralisation, include: 15m @ 0.4 g/t Au with 20.4 g/t Ag and 4m @ 0.5 g/t Au with 82.0 g/t Ag, 5m @ 3.5 g/t Au with 54.3 g/t Ag and a new result of 5m @ 0.3 g/t Au with 30.6 g/t Ag.



Figure 1: Red Mountain Gold Project Location Map

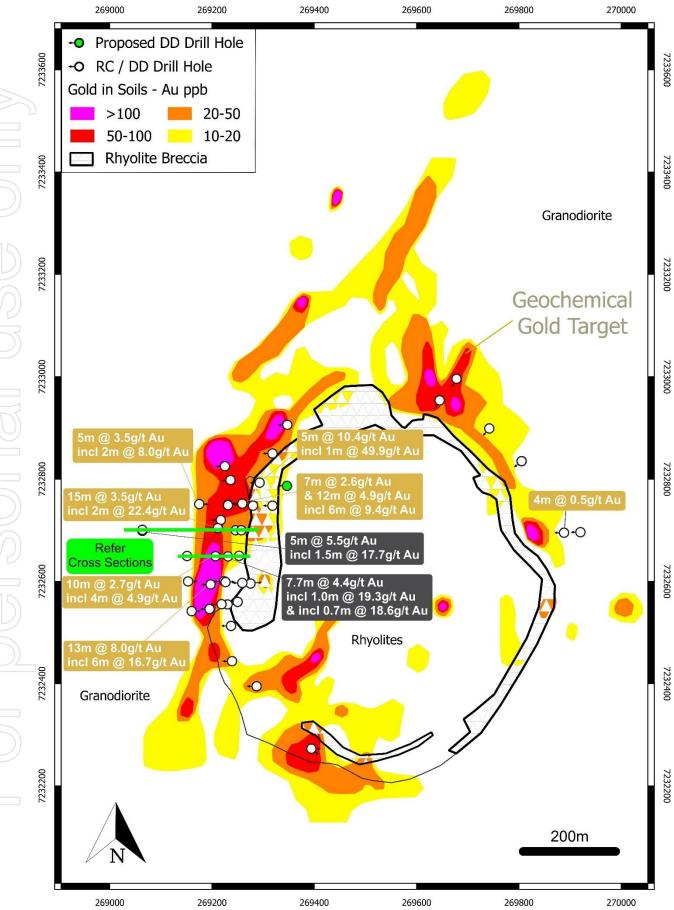


Figure 2: Red Mountain Breccia Pipe Target Showing Gold Soil Anomalies and Drill Collar Locations with Planned DD Holes (new results in black text box, previous results in gold text box)

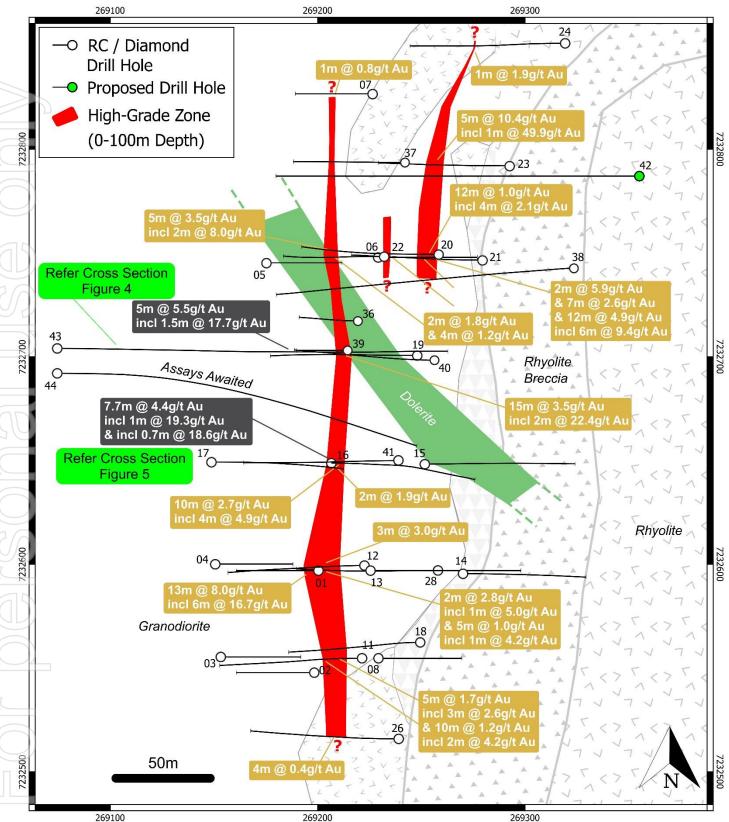


Figure 3: Red Mountain Plan Showing High-Grade Gold Zone (new results in black text box, previous results in gold text box)

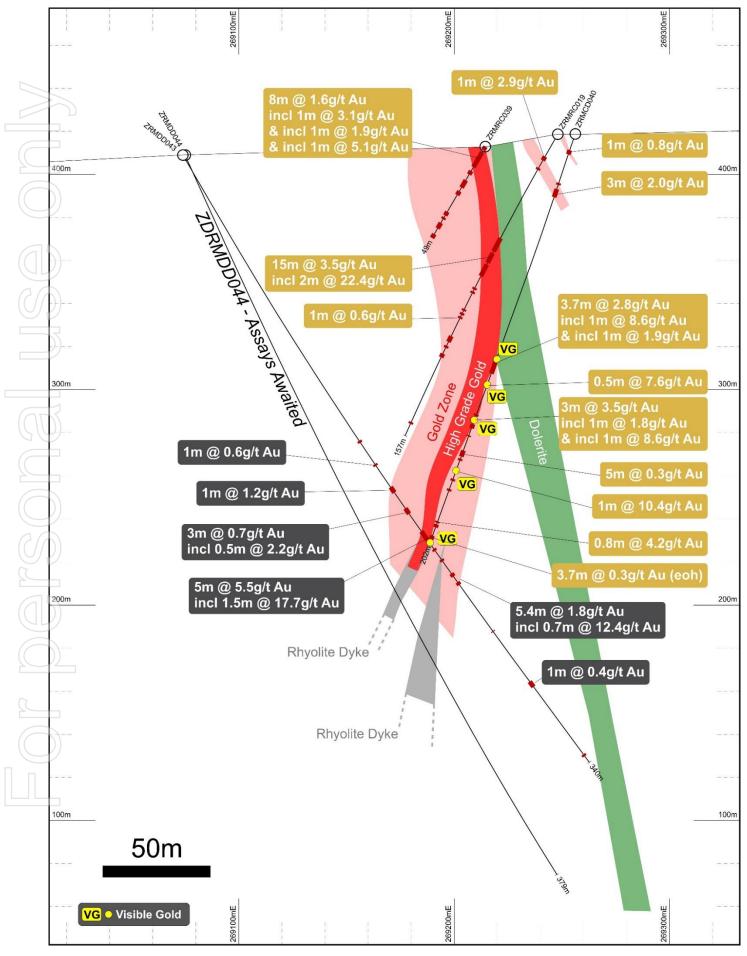


Figure 4: Cross Section - Red Mountain Western Zone High-Grade Gold Zone with Diamond Holes ZRMDD043 & 44

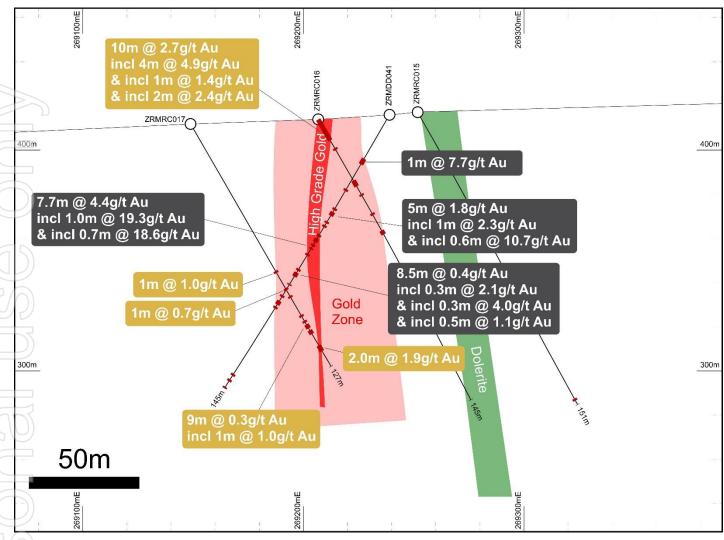


Figure 5: Cross Section - Red Mountain Western Zone High-Grade Gold Zone with Diamond Hole ZRMDD041

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 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 focused on the western part of the prospect area (Figures 2 - 5). This area is part of a larger total target zone extending some 2.2 km around the rim of the breccia pipe (Figure 3).

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).

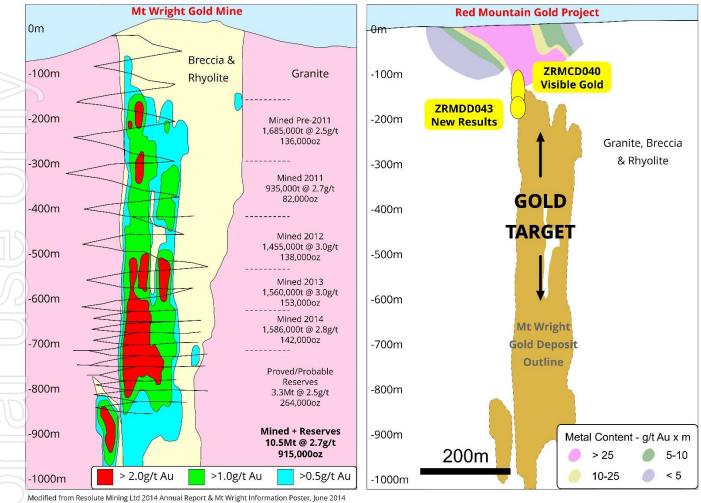


Figure 6: Comparative Cross Sections – Mt Wright Gold Mine (not an asset of the Company) and Red Mountain Gold Project with Location of New Diamond Drill Results

		Original 1-4m Samples						1m Sample	es		Comments
	Hole	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	
7	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	
\square	incl					1	2	1	1.2	0.5	
	and	26	30	4	0.7				NSR		
	ZRMRC003					67	68	1	0.8	10.2	
1	ZRMRC004				NSR						
<u>J</u>	ZRMRC005					64	69	5	3.5	54.3	
21	incl					64	66	2	8.0	109.4	
IJ,	ZRMRC006					8	14	6	1.0	4.6	
	7					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	
70	and incl					47	48	1	0.6	13.5	
20	and incl					50	54	4	2.1	14.2	
7	incl					50	51	1	6.0	20.2	
	and incl					53	54	1	2.0	26.5	
\square	ZRMRC007					36	37	1	0.8	45.0	Previous results
	ZRMRC008					64	65	1	0.4	65.1	results
21	ZRMRC009				NSR				NSR		
\mathcal{O}	ZRMRC010				NSR	43	44	1	0.0	51.6	
	ZRMRC011					25	30	5	1.7	3.5	
1	incl					25	28	3	2.6	5.5	
J.	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	
	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	

Table 1: Significant Gold Intersections from Red Mountain

	0	riginal	1-4m Samp	les			1m Sample	es		Comments	
Hole	From (m)	To (m)	Interval (m)	Au Grade (g/t)	From (m)	To (m)	Interval (m)	Au Grade (g/t)	Ag Grade (g/t)		
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		
and					60	61	1	0.7	0.9		
and					76	77	1	0.5	33.8		
and					85	86	1	0.8	0.5		
ZRMRC019	12	16	4	0.6	12	13	1	2.9	3.9		
J					18	19	1	0.5	7.1		
0	56	60	4	1.6	57	72	15	3.5	8.8		
Ŋ	68	80	12	8.9							
incl	68	72	4	25.9	70	72	2	22.4	14.2		
2					96	97	1	0.6	0.8		
	104	108	4	0.6					9.2		
ZRMRC020					2	3	1	0.5	3.3		
T	36	40	4	0.7	39	40	1	1.3	1.5		
J					46	47	1	3.2	1.7		
	60	64	4	1.0	56	71	15	0.4	20.4		
incl					62	63	1	2.7	3.4		
	84	88	4	0.7	86	89	3	0.8			
incl					86	87	1	1.2	2.4		
0					99	100	1	2.0	1.0		
IJ.	114	120	6	2.6	114	122	8	0.6		Previou	
incl					114	115	1	1.0	6.3	results	
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		
	48	52	4	4.6	49	51	2	5.9	16.5		
	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		
incl					78	79	1	1.2	1.1		
					87	89	2	0.9	3.4		
incl					88	89	1	1.2	8.7		
	100	108	8	3.9	102	114	12	4.9			
incl					103	109	6	9.4	4.4		
					140	141	1	1.6	3.5		
	144	148	4	0.5	146	148	2	0.8	2.4		
incl					147	148	1	1.2	2.4		
ZRMRC022	0	12	12	0.4	1	2	1	0.6	5.0		
					7	9	2	0.8	3.4		
incl					8	9	1	1.1	3.4		
-					20	26	6	0.9	7.3		

	0	riginal	1-4m Samp	les	1m Samples					Comment	
Hole	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					20	22	2	1.8	7.2		
					31	32	1	1.6	1.4		
					42	52	10	0.7	9.4		
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		
)					69	70	1	0.5	1.8		
ZRMRC023					23	24	1	0.7	2.5		
J					32	33	1	0.6	2.4		
3					67	72	5	10.4	3.5		
<u>ا</u>					67	68	1	49.9	3.5		
					71	72	1	1.4	0.5		
					78	86	8	0.7	1.2		
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		
ZRMRC024					14	15	1	0.6	1.7	Previou	
0					84	85	1	1.9	13.2	result	
ZRMRC025				NSR							
ZRMRC026					2	3	1	0.5			
J					23	28	5	0.2			
	52	56	4	0.4	53	54	1	0.9	0.4		
ZRMRC027				NSR							
ZRMRC028					84	86	2	2.9	1.8		
incl					84	85	1	5.0	3.1		
)					99	100	1	0.5	0.7]	
					105	110	5	1.0	3.0]	
incl					109	110	1	4.2	12.1	1	
					122	123	1	0.8	1.4	1	
ZRMRC029					5	7	2	0.6	0.4	1	
ZRMRC030					24	25	1	0.7	5.0	1	
ZRMRC031					8	9	1	0.9	0.6	1	
ZRMRC032				NSR						1	
ZRMRC033				NSR						1	
ZRMRC034	92	96	4	0.5					82.0	1	
ZRMRC035			-	NSR	96	100	4		10.6	1	
ZRMRC036	52	56	4	0.5	57	58	1	0.9	6.7		
	91	55		0.0	86	87	1	0.8	9.7		
ZRMRC037	28	32	4	1.5	31	32	1	2.9	53.7		
2	88	92	4	0.4	86	87	1	0.9	1.0		
	00	JZ	-+	0.4	95.7	96	0.3	0.9	0.6		

	о	riginal	1-4m Samp	les			1m Sample	es		Comments
Hole	From (m)	To (m)	Interval (m)	Au Grade (g/t)	From (m)	To (m)	Interval (m)	Au Grade (g/t)	Ag Grade (g/t)	
and					139.4	139.7	0.3	1.9	3.2	
					158	159	1	0.7	4.4	
					172.5	173	0.5	34.2	28.4	
					222	223	1	0.9	26.1	
					239	240	1	0.5	5.1	Previous
ZRMRC039	0	8	8	1.9	3	11	8	1.6	9.6	Gold Results –
incl	4	8	4	3.1	3	4	1	3.1	8.4	New Silver
and incl					5	6	1	1.9	8.6	Results
and incl					7	8	1	5.1	19.1	
ZRMCD040					8	9	1	0.8	1.4	
and	28	32	4	2.4	27	30	3	2.0	6.8	
and					111.3	115	3.7	2.8	7.1	
incl					111.3	112.3	1	8.6*	11.8	
and incl					114	115	1	1.9	7.1	
and					123.2	123.7	0.5	7.6*	13.3	
and					138	141	3	3.5	7.1	
incl					138	139	1	1.8	13.2	
and incl					140	141	1	8.6*	7.8	
and					156	161	5	0.3	30.6	
and					165.9	166.9	1	10.4*	13.7	
and					191	191.8 201.7	0.8	4.2	9.4	
and					198	(eoh)	3.7	0.3*	3.7	
ZRMDD041					23	24	1	7.7		
and					52	57	5	1.8		
incl					52	53	1	2.3		
and incl					56	56.6	0.6	10.7		
and					63	70.7	7.7	4.4		
incl					63	64	1	19.3		
and incl					70	70.7	0.7	18.6		
and					81	89.5	8.5	0.4		
incl					81	81.3	0.3	2.1		
and incl					84.7	85	0.3	4.0		New Gold
and incl					89	89.5	0.5	1.1		Results
ZRMDD042		•		Dri	illing in p	rogress				
ZRMDD043					169	170	1	0.6		
and					183	184	1	1.2		
and					194	197	3	0.7		
incl					194.5	195	0.5	2.2		
and					209	214	5	5.5		
incl					209	210.5	1.5	17.7		
and					232	237.4	5.4	1.8		
incl					232	232.7	0.7	12.4		

	Original 1-4m Samples			1m Samples					Comments	
Hole	From (m)	To (m)	Interval (m)	Au Grade (g/t)	From (m)	To (m)	Interval (m)	Au Grade (g/t)	Ag Grade (g/t)	
and					294	295	1	0.4		
*Visible gold r	oted in dia	amond	drill core		254	295	Ĩ	0.4		

High-grade intersections are length weighted average grades with minimum cut -off grade of 1.0g/t Au and no internal dilution, while 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
ZRMRC00	/	269200	7232597	412	79	270	-60
ZRMRC00		269198	7232548	412	75	270	-60
ZRMRC00		269153	7232548	407	75	90	-60
ZRMRC00		269155	7232555	408	75	90	
							-60
ZRMRC00		269175 269229	7232745	407	73	90	-60
ZRMRC00			7232748	413	97	90	-60
ZRMRC00		269227	7232827	406	73	270	-60
ZRMRC008		269229	7232555	408	79	90	-60
ZRMRC00		269395	7232270	408	64	130	-60
ZRMRC010		269394	7232267	408	90	90	-60
ZRMRC01		269221	7232555	407	151	270	-60
ZRMRC012		269223	7232599	411	145	270	-60
ZRMRC01		269226	7232597	411	151	90	-60
ZRMRC014		269270	7232595	415	127	90	-60
ZRMRC01	5 RC	269252	7232648	417	151	90	-60
ZRMRC010		269207	7232649	414	145	90	-60
ZRMRC01	7 RC	269149	7232649	412	127	90	-60
ZRMRC018	8 RC	269249	7232562	411	140	270	-60
ZRMRC019	9 RC	269248	7232701	419	157	270	-60
ZRMRC020	D RC	269258	7232749	417	151	270	-60
ZRMRC02	1 RC	269279	7232747	420	151	270	-60
ZRMRC022	2 RC	269232	7232748	413	103	270	-58
ZRMRC02	3 RC	269293	7232792	418	151	270	-58
ZRMRC024	4 RC	269319	7232851	409	157	270	-58
ZRMRC02	5 RC	269349	7232906	400	151	270	-58
ZRMRC020	6 RC	269239	7232516	404	157	270	-58
ZRMRC02	7 RC	269238	7232447	402	157	270	-58
ZRMRC028	8 RC	269258	7232597	415	151	270	-58
ZRMRC029	9 RC	269286	7232402	403	109	270	-58
ZRMRC030	D RC	269644	7232953	410	151	210	-63
ZRMRC03	1 RC	269679	7232996	405	157	210	-63
ZRMRC032	2 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
ZRMRC041	DD	269239	7232650	416	144.7	270	-60
ZRMCD042	DD		Drilling in pro	ogress		270	-60
ZRMRC043	DD	269074	7232704	409	339.6	90	-65
ZRMCD044	DD	269075	7232692	409	378.7	90	-66

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 - 14 April 2021

For further information contact Zenith Minerals Limited:

Directors Michael Clifford or Peter Bird

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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 & subsequent drill programs (ASX Releases 3-Aug-20 & 13-Oct-20, 9-Nov-20, 21-Jan-21), including:

- Dulcie Far North: 5m @ 5.6 g/t Au incl. 4m @ 6.8 g/t Au 0
- Water Bore: 4m @ 10.4 g/t Au 0

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 (ASX Release 17-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
	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.	
Sampling techniques	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	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.

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	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.	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	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,	Reverse circulation and HQ diamond tails on holes ZRMCD038 and ZRMCD040. ZRMCD038 pre-collar to 90m and DD tail to 272.2m ZRMCD040 pre-collar to 70m and DD tail to 201.7m
(D)	etc.). Method of recording and assessing core and chip sample recoveries and results assessed.	Dimond drilling from surface for holes ZRMDD041-044 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
Drill sample recovery	Measures taken to maximise sample recovery and ensure representative nature of the samples.	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.
	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.	No indications of sample bias based on results to date. Screen fire assays of intervals with visible gold are pending.
	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.	Drill core and drill chips were sieved and logged by a qualified geologist on site. No reporting of resources.
Logging	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	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 bene photographed.
	The total length and percentage of the relevant intersections logged.	All intervals logged and sampled
Sub-sampling techniques and	If core, whether cut or sawn and whether quarter, half or all core taken.	Core is ½ core, core is cut by diamond saw
sample preparation	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	Samples riffle split

	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	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.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	~2 to 3kg of drill sample was crushed and pulverised and a sub-sample was taken in the laboratory and analysed.
	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.	RC drilling results incorporates 1m resamples of 4m composite intervals. No field duplicates yet taken for diamond core
Sub-sampling techniques and		Each sample was 2kg to 5kg in weight which is appropriate to test for the grain size of material.
sample preparation - continued	Whether sample sizes are appropriate to the grain size of the material being sampled.	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.
	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	The samples were crushed and assayed for gold using fire assay, which is considered a near total technique
Quality of assay data and laboratory tests	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.	No geophysical tools used this sampling program
	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.	Certified reference material and blanks was included in each sample batch and appropriate levels of precision and accuracy.
	The verification of significant intersections by either independent or alternative company personnel.	Company personnel have observed the assayed samples
Verification of	The use of twinned holes.	No twinning
sampling and assaying	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Field data were all recorded in field laptops and sample record books and then entered into a database
	Discuss any adjustment to assay data.	No adjustments were made.
Location of data points	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.	Collar locations up to hole 040 are based on Trimble R10-2 GNSS Rover DGPS coordinates +/-25mm accuracy. Holes 040 onwards GPS +/-5m accuracy. DGSP surveying planned.

	Specification of the grid system used.	The grid system used to compile data was MGA94 Zone 56
Location of data points - continued	Quality and adequacy of topographic control.	Topography control is +/- 25mm.
	Data spacing for reporting of Exploration Results.	Drill holes shown in Figures 2 to 6 and Tables 1 & 2.
Data spacing and distribution	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.	The data alone will not be used to estimate mineral resource or ore reserve
5)	Whether sample compositing has been applied.	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	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	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. Drill hole ZRMDD043 indicates gold mineralisation dip is rolling from step east to steep west.
	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.	As above
Sample security	The measures taken to ensure sample security.	Samples were kept in numbered and secured bags until delivered to the laboratory
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Sampling techniques are consistent with industry standards

Section 2 Reporting of Exploration Results

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

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	Criteria	JORC Code explanation	Commentary				
	Mineral tenement and land tenure status	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 Red Mountain Project is located within the 100% Zenith owned exploration permit for minerals EPM 26384. The project is located within private grazing properties.				
	\mathcal{D}	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.	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	Acknowledgment and appraisal of exploration by other parties.	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	Deposit type, geological setting and style of mineralisation.	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.				
	\mathcal{O}	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:					
	75	o easting and northing of the drill hole collar					
S		o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar					
0	Drill hole Information	o dip and azimuth of the hole	Refer to Tables 1 & 2				
		o down hole length and interception depth					
7		o hole length.					
		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.					
	Data	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.	No high-grade cutting				
	aggregation methods	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.	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.				

Data aggregation methods - continued	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalents used.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.	Refer below
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Orientation of mineralisation based on 4 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 envelops are interpreted as north-south with steep east dips near surface rolling to steep west with depth.
	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').	As above
Diagrams	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.	Refer to descriptions and diagrams in body of text of this report.
Balanced reporting	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.	Refer to descriptions and diagrams in body of text
Other substantive exploration data	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.	No other meaningful or material exploration data to be reported at this stage
	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	Follow-up drill planning in progress. Detailed drone mag (40m line spacing) survey results awaited. 3DIP electrical geophysical survey planned to commence this month. Soil geochemical coverage currently being extended.
Further work	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Refer to figures in body of report.