3rd August 2020

Red Mountain Project – High-Grade Gold & Silver in Resample Results

- **New gold assays from 1 metre resampling of mineralised composites confirm high-grade near surface gold intersections, and multi-element assays return high silver grades from the maiden drill program at Red Mountain, including:**
  - **13m @ 8.0 g/t Au & 3.2 g/t Ag from surface (previously reported as 14m @ 5.5g/t)**
    - **including 6m @ 16.7 g/t Au & 5.3g/t Ag (previously reported as 6m @ 12.3g/t)**
  - **5m @ 3.5 g/t Au & 54.3 g/t Ag from 64m**
    - **including 2m @ 8.0 g/t Au & 109.4 g/t Ag**
- **High grade gold assays peak at 58.3 g/t Au whilst silver results peak at 160 g/t Ag for individual 1m samples.**
- **Follow-up RC drilling recommenced on the 22nd July 2020 and is progressing well.**

Zenith Minerals Limited ("Zenith" or "the Company") is pleased to advise that assay results from 1m resamples of original mostly 4m composite samples from the maiden drill program at the Company's 100% owned Red Mountain project in Queensland (Figure 1) have now been received. These resample results confirm the presence of high-grade near surface gold as previously announced to the ASX on the 17th June 2020. In addition, the Company is pleased to report that multielement assays show high levels of silver are associated with the gold mineralisation.

CEO COMMENTS

Commenting on Red Mountain, CEO Mick Clifford said: *"Assay results from new 1m samples from the maiden drilling resample are very pleasing and confirm the high tenor of gold mineralisation at Red Mountain previously reported, whilst the new high-grade silver results add further value to this exciting project."*

About the Current Drill Program

Following the very positive results returned in the maiden drill program a drill rig has re-commenced work on site on a full-time basis and pending positive follow-up assay results the RC rig will work a continuous roster at Red Mountain over the coming months (ASX Release 22 July 2020). Initial follow-up drill lines are shown on Figure 2 and dependant on results are likely to be expanded to test the full extent of targets shown on Figure 3. Drilling is progressing well, following some initial delays caused by rain.

Maiden Drill Program - Background

The initial drill program was a significant success with highly encouraging gold results returned from only a portion of a larger target area. Drilling tested 250m

ZENITH MINERALS

Corporate Details

Zenith Minerals Limited (ASX:ZNC)
ABN: 96 119 397 938

Issued Shares	294.4M
Unlisted options	9.6M
Mkt. Cap. ($0.11)	A$32M
Cash (30th June 20)	A$0.97M
Share Issue July 20 (before costs)	$A5.1M
Debt	Nil

Directors

Mike Joyce	Non-Exec Chair
Michael Clifford	Managing Director
Stan Macdonald	Non-Exec Director
Julian Goldsworthy	Non-Exec Director
Graham Riley	Non-Exec Director
Peter Bird	Non-Exec Director

Major Shareholders

Directors	~13%
HSBC Custody. Nom.	10%
J P Morgan	5.0%
Miquilini	3.9%
Abingdon	3.5%

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of strike of a 1200m long high-order gold anomaly with surface soil values including: 2.2g/t Au, 1.6 g/t Au, 0.56g/t Au and 0.33 g/t Au and gold in rock chips to 2.0 g/t Au & 114 g/t Ag. Drill intersections included 14m @ 5.5 g/t from surface.

The maiden drill program was designed to test several different geological units and IP geophysical responses.

Key points included:

- Gold mineralisation occurs in sericite altered, pyritic and quartz veined granodiorite, and dolerite host rocks on the western margin of the newly recognised felsic volcanic breccia complex.
- Gold mineralisation locally occurs coincident with IP geophysical chargeability highs providing Zenith with a tool to guide future follow-up drilling. The IP chargeability anomaly extends for approximately 1500m around the volcanic breccia pipe margin and to date has only been tested by 2 drill holes.
- 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.

Details of New 1m Resample Results

Initial sampling from the maiden drill campaign was completed on a routine 4m composite basis with selected 1m sampling based on visual estimates of alteration, sulphides and other geological criteria. Assaying of 1m samples for gold mineralised 4m composites has now been completed and results are reported in Table 1 below.

Table 1: Significant Gold Intersections from New 1m Re-samples compared with previously reported composite assays (note composite samples were not assayed initially for silver).

Hole	Original 1-4m Samples				New 1m Re-samples				
	From (m)	To (m)	Interval (m)	Original 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**
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	67	68	1	0.8	**10.2**
ZRMRC004				NSR					
ZRMRC005	64	69	5	3.5	64	69	**5**	**3.5**	**54.3**
incl	64	66	2	8.0	64	66	**2**	**8.0**	**109.4**
ZRMRC006	12	14	2	2.6	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	42	44	**2**	**1.2**	**17.7**
and incl	47	48	1	0.6	47	48	1	0.6	**13.5**
and incl	50	54	4	2.1	50	54	**4**	**2.1**	**14.2**
incl	50	51	1	6.0	50	51	**1**	**6.0**	**20.2**
and incl	53	54	1	2.0	53	54	**1**	**2.0**	**26.5**
ZRMRC007	36	37	1	0.8	36	37	1	0.8	**45.0**

ZRMRC008	64	65	1	0.4	64	65	1	0.4	**65.1**
ZRMRC009				NSR				NSR	
ZRMRC010				NSR	43	44	**1**	**0.0**	**51.6**

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 3m. High-grade silver with low gold reported above 30 g/t Ag cut-off grade.

Recent Activity and Background on Red Mountain

A zone of surface gold and silver mineralisation was discovered by Zenith at Red Mountain in a previously unrecognised felsic volcanic breccia complex comprising flow banded rhyolite radial dykes, rhyolite ring breccia as well as granite and gabbro breccias, first identified by Zenith's field team during initial sampling which returned rock chip results up to 0.69 g/t gold and 114g/t silver.

September 2019

Further field work by Zenith to follow-up these results returned highly encouraging gold and silver rock chip sample results up to 2.01 g/t gold and 52.5 g/t silver about 800 metres north of the best results from initial sampling. In addition, systematic geochemical sampling outlined a large 2km by 1.5km zoned soil anomaly with peak soil gold result of 2.2 g/t Au, refer to ZNC ASX release 24 Sep 2019.

October 2019

A geophysical survey completed at Red Mountain defined multiple medium strength chargeability (10mv/v) anomalies, likely to be caused by the presence of sub-surface disseminated sulphides or clay alteration zones, coincident with the margins of the felsic volcanic breccia complex as announced to the ASX on 25 Oct 2019 (Figure 2).

November 2019

An infill geochemical program completed to define the limits of the high-grade western gold zone outlined a robust drill target. High-grade soil results from the follow-up sampling up to 1300ppb Au (1.3 g/t Au) supported previous results of 2210 ppb Au (2.2g/t Au) 1600ppb Au, 550ppb Au and 320ppb Au define a 450m x 50m >100ppb Au gold soil anomaly, with the southern end of the anomaly grading >500ppb (0.5 g/t Au) over 150m of strike (ZNC ASX release 25th Nov 2019).

June 2020

As outlined in the ASX Release 17th June 2020 the maiden drill program was designed to test several different geological units and IP geophysical responses. The initial drill program was a significant success with highly encouraging gold results returned from only a portion of a larger target area. Drill intersections included 14m @ 5.5 g/t from surface.

The high-grade surface gold results defined to date form a core to a much larger zone of gold anomalism (>10ppb Au) extending over an area 1200m x 150m on the western margin of the Red Mountain felsic volcanic breccia system (Figure 2).

Geological Vectors

The Red Mountain project is located between two gold mines Cracow (Evolution Mining Limited (ASX:EVN) divesting to Aeris Resources Limited (ASX:AUR)) and Mount Rawdon (ASX:EVN) (Figure 1). Cracow is a low-sulphidation epithermal gold deposit whilst Mount Rawdon is described in the literature as an epizonal intrusion-related gold deposit.

The Red Mountain host rocks, alteration and geochemical association are interpreted as having similarities to the Mt Wright gold deposit located in North Queensland and of that at the nearby operating Mt Rawdon gold mine owned by Evolution Mining. The similarities provide Zenith with a geological model to assist in targeting gold and silver mineralisation at Red Mountain.

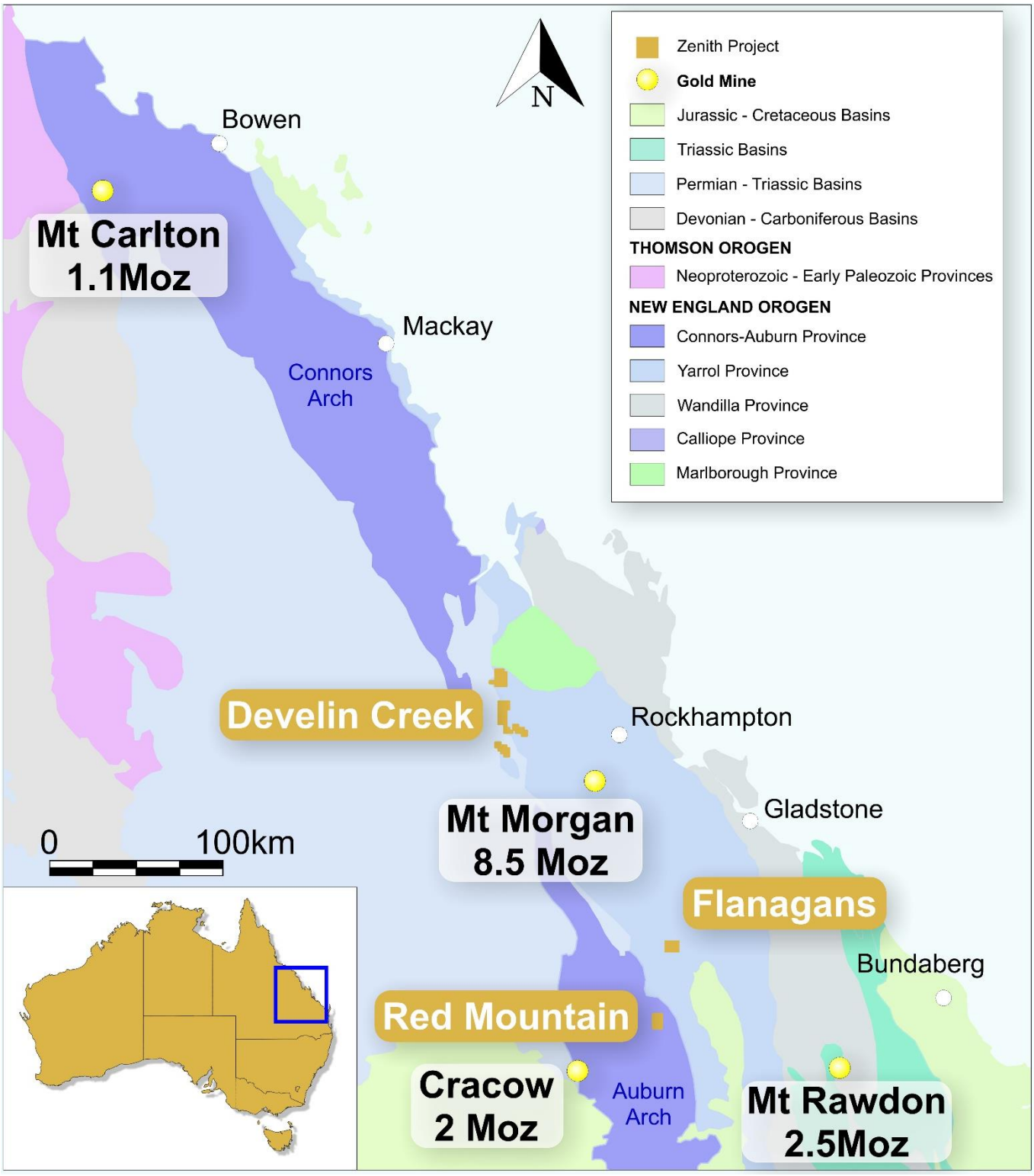

Figure 1: Red Mountain Project – Location Map

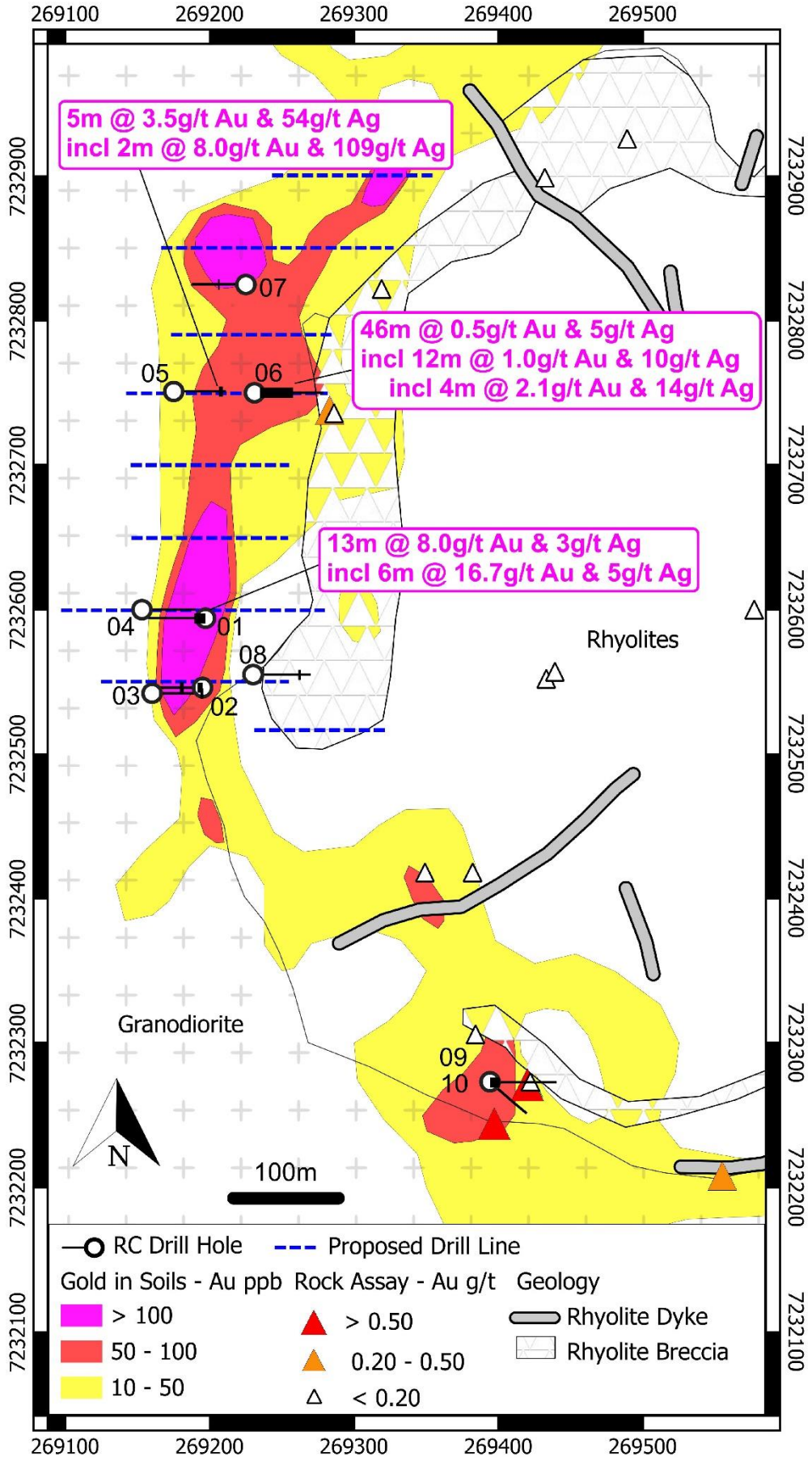

Figure 2: Red Mountain Plan Showing Initial Planned Follow up Drill Lines

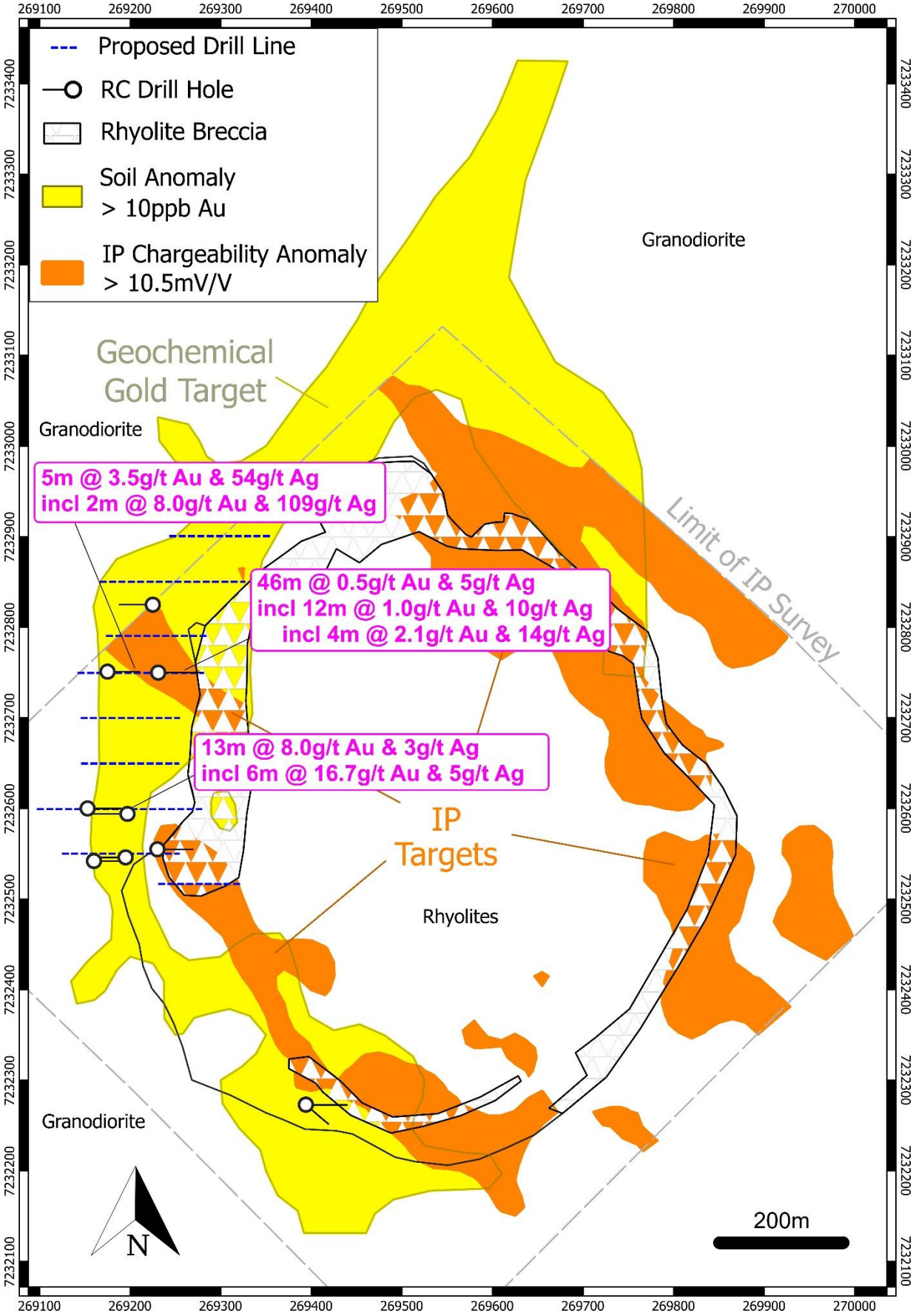

Figure 3: Red Mountain Plan Showing Drill Targets for Follow-up Testing

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.

Authorised for release by the Zenith Minerals Limited Board of Directors – 3rd August 2020

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About Zenith

Zenith has a vision to build a gold and base metals discovery 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.

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	*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.*	10 reverse circulation drill holes totalling 780m.
	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.
	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
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, etc.).*	Reverse circulation
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	Drill chips were sieved and logged by a qualified geologist on site, data recorded in field on paper logs and transferred to digital database
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	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
	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

Logging	*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 chips were sieved and logged by a qualified geologist on site. No reporting of resources.
	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.
	The total length and percentage of the relevant intersections logged.	All intervals logged and sampled
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	No core
	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.
Sub-sampling techniques and sample preparation - continued	*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.*	1m resampling of selected mineralised 2 and 4m composites to be completed
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Each sample was 2kg to 3kg in weight which is appropriate to test for the grain size of material.
Quality of assay data and laboratory tests	*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
	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. In addition, a barren feldspar flush was run before and after each 1m resample analysis.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	Company personnel have observed the assayed samples
	The use of twinned holes.	No twinning

	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Field data were all recorded in field note books 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.*	Sample location is based on GPS coordinates +/-5m accuracy
	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 +/- 10m.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	Drill holes shown in Figures 2 to 3 and in Figures and Tables included in ASX Release 22nd July 2020.
	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
	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 is unsure at this stage and therefore true widths are uncertain, however drill holes were designed and orientated to intersect geological contacts, mapped veins and structures and IP geophysical chargeability anomalies normal to strike and therefore are more likely than not to represent near true widths
	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.)

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.
	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.
Drill hole Information	*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:*	Drill holes shown in Figures 2 to 3 and in Figures and Tables included in ASX Release 22nd July 2020.
	o easting and northing of the drill hole collar	
	o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	
	o dip and azimuth of the hole	
	o down hole length and interception depth	
	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 aggregation methods	*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
	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	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

	such aggregations should be shown in detail.	with minimum cut-off grade of 0.4g/t Au and maximum internal dilution of 3m.
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.	The intersections are down hole lengths as, true widths are not known at this stage. The orientation of mineralisation is unsure at this stage and therefore true widths are uncertain, however drill holes were designed and orientated to intersect geological contacts, mapped veins and structures and IP geophysical chargeability anomalies normal to strike and therefore are more likely than not are close to true widths, although further drilling will be required to confirm this.
	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
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
Further work	*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. Multi-element assays in progress, multi-spectral analysis of drill chips planned.
	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.