

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

Issued Shares	323.1M
Unlisted options	14.5M
Mkt. Cap. (\$0.23)	A\$74.3M
1 () /	•
Cash (30 <sup>th</sup> Sep 21)	A\$6.2M
Equities (30 <sup>th</sup> Sep 21)	A\$8.3M
Debt	Nil

#### Directors

Michael Clifford	Director-CEO
Stan Macdonald	Non-Exec Director
Julian Goldsworthy	Non-Exec Director
Nicholas Ong	Co Sec
Nick Bishop	.CFO

#### **Major Shareholders**

1	Directors	3.4%
	HSBC Custody. Nom.	9.4%
	Citicorp Nom	9.0%
	BNP Paribas. Nom.	5.8%
	Granich	3.7%

#### **Our Vision**

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 partner funds.

#### **Contact Us**

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# HIGH GOLD RECOVERIES IN METALLURGICAL TESTWORK - RED MOUNTAIN

• High gold recoveries (average 83.3% gold) in sighter level leach testwork conducted on drill core samples from the Company's 100% owned Red Mountain gold project in Queensland.

### • Leach Testwork

- Sample composite 1 (4.25 g/t Au, low As)
  - Very-high gold recovery (95.8% gold in 24hrs)
  - Very-high gravity gold component 61.2% gravity gold recovery
  - Moderate silver leach recovery 63.2% silver recovery
  - Low cyanide (CN) usage, low lime consumption, fast leach kinetics
  - Sample composite 2 (3.64 g/t Au, high As)
    - Moderate gold recovery (70.7% gold in 48 hrs)
    - No gravity recovery test completed for this composite
    - **o** Low CN usage, low lime consumption, fast leach kinetics
- Average of the two composites returned 83.3% gold recovery with both having low CN usage, low lime consumption and fast leach kinetics.

 Sighter level metallurgical testwork indicates high average gold recoveries using standard industry leaching technology on composite samples that represent the two main mineralisation styles at Red Mountain. Initial results are highly encouraging but further detailed variability testing will need to be completed as the project moves forward.

**Commenting on the metallurgical testwork, CEO Michael Clifford said:** "I am pleased to report that initial metallurgical testwork on gold mineralisation at Red Mountain has returned high average gold recoveries using industry standard leaching technology. As the Red Mountain gold mineralised zone continues to grow, we will undertake more detailed metallurgical testwork to confirm these initial sighter tests.

I am also looking forward to completing the deep diamond drill hole we have planned to test the central copper-gold core target at Red Mountain, but unfortunately, we've had to postpone commencement of this hole until the new year. Heavy rain and flooding in Queensland have restricted access to the project and to the drill rig which is located on a third-party project site."

### **Details of Metallurgical Testwork**

Metallurgical testwork was completed on two composite samples of diamond drill core from the high-grade western gold zone at Red Mountain. One composite samples represents gold with low arsenic levels (Composite-1 <500ppm As), the other contained higher levels of arsenic (Compoiste-2 >500ppm As). The low-As gold mineralisation style represents 2/3 of all drilled gold intersections at Red Mountain with the high-As type the remaining 1/3. By the amount of gold in those

intersections (calculated as metal content) it is the opposite with approximately 1/3 of the contained gold in the low-As gold mineralisation style and 2/3 in the high-As stye.

Testwork was performed at ALS Metallurgy (Composite-1) and at Auralia Metallurgy (Composite-2), with both Jaboratories located in Perth, Western Australia.

### Leach testwork Composite – 1 ALS

Direct cyanidation bottle roll leach test.

Grind Size p80 μm	Gravity Gold (%)	Recovery 2 hours (%)	Recovery 8 hours (%)	Recovery 12 hours (%)	Total Recovery 24 hours (%)	Leach Tail (Au g/t)	Calculated Head (Au g/t)	Average Head Assay (Au g/t)	NaCN usage (kg/t)	Lime Usage (kg/t)
90	61.22	90.85	94.44	95.24	95.76	0.18	4.25	4.77, 4.72, 6.28, 3.25	0.57	0.51

Above recoveries calculated on solution, gravity concentrate and leach residue assays.

Total Ag recovery 63.23% calculated as per above. Ag head assay 11.7 g/t.

## Leach testwork Composite - 2 Auralia

Direct cyanidation bottle roll leach test.

A	Grind Size p80 μm	Gravity Gold (%)	Recovery 2 hours (%)	Recovery 8 hours (%)	Recovery 24 hours (%)	Total Recovery 48 hours (%)	Leach Tail (Au g/t)	Calculated Head (Au g/t)	Average Head Assay (Au g/t)	NaCN usage (kg/t)	Lime Usage (kg/t)
	106	na	41.8	69.2	70.5	73.4	0.97	3.64	3.30	0.16	1.05

Note no gravity gold recovery test.

Above recoveries calculated on solution and leach residue assays.

Total Ag recovery 38.5% calculated as per above. Ag head assay 6.5 g/t.

## Flotation Test Composite – 2 Auralia

A rougher flotation test using 4 collectors was also completed to produce 5 separate concentrates on Composite – 2 with results as detailed below.

	Grind Size p80 μm	Average Gold Con Grade (Au g/t)	Gold Recovery (%)	Average Silver Con Grade (Ag g/t)	Silver Recovery (%)	Con Mass pull (%)	As Recovery (%)	Zn Recovery (%)	Cu Recovery (%)	S Recovery (%)
9	106	55.3	75.8	122	69.7	5.4	89	96.9	89.5	93.5

Intense leaches on the concentrate returned gold recovery ranging from 71% (P<sub>80</sub> 106 µm grind) to 73% (P<sub>80</sub> 10 µm grind) noting the finer grind only gave a 2% increase in Au recovery but a 22% increase in Ag recovery. The leach on the tail recovered 84.8% of the gold (106 µm grind) with low CN consumption 0.16 kg/t and low lime usage 0.65 kg/t resulting in an overall combined recovery of flotation gold (concentrate and tail leach) of 75.9%. Note all recoveries calculated on solution and final residue assays.

#### **Discussion of Metallurgical Testwork Results**

Sighter level metallurgical testwork on two composites made up of ¼ diamond drill core indicates high average gold recovery (average 83.3% gold), 95.8% gold in 24hrs for the low-As gold mineralisation type and 70.7% gold in 48hrs for the high-As type both using standard industry leaching technology. Both leach tests indicate low CN usage, low lime consumption and fast leach kinetics. A gravity gold recovery test of the low-As mineralisation style returned a very-high 61.2% gravity gold recovery confirming the presence of significant amounts of free gold, as has been noted in drill core logging and screen fire assay tests. No gravity gold recovery was attempted on the high arsenic sample.

A flotation test was also completed to make a sulphide concentrate grading 55.3g/t Au representing only 5.4% of the sample mass. Resultant leaching of the concertrate both coarse and finely ground returned 71-73% gold recovery from the concentrate. Leaching of the concentrate tail recovered 84.8% of the gold resulting in total gold recovery using this method of 75.9%. No gravity gold recovery was attempted on the high arsenic sample.

Initial metallurgical results are highly encouraging but further detailed variability testing will need to be completed as the project moves forward. The testwork completed to date indicates there are industry standard metallurgical processing options to extract the gold at Red Mountain.

#### **Background on Red Mountain**

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) (refer to ASX Release 19-May-21) – Figure 1.

The current drill program has focused on the western part of the prospect area. This area is part of a larger total target zone extending some 2.2 km around the rim of the breccia pipe, now supporetd by the 3D IP geophysical survey data.

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.

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. 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).

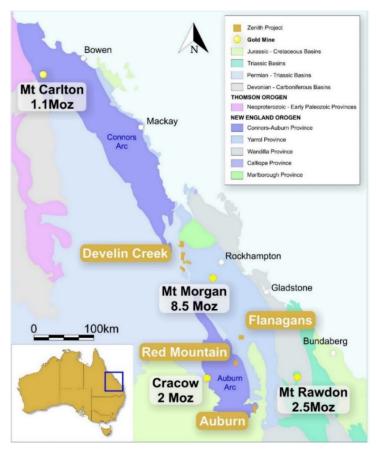


Figure 1: Red Mountain Gold Project Location Map

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 – 7 December 2021

For further information contact Zenith Minerals Limited:

Director: Michael Clifford E: mick@zenithminerals.com.au Phone: +61 8 9226 1110

## **Competent Persons Statement**

The information in this report that relates to metallurgical testwork is based on information reviewed by Mr Gavin Beer, who is a Member and Chartered Professional of the Australasian Institute of Mining and Metallurgy and a consultant to the Company. Mr Beer 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 Beer consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Exploration Results and Mineral Resources 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.

## Zenith Minerals Limited (ASX:ZNC)

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:

Earaheedy	Zinc	Western Australia	25% free carry to BFS

New major zinc discovery to be fast tracked with extensive accelerated exploration program underpinned by a recent \$40M capital raising by partner Rumble Resources Limited (ASX:RTR) (ASX Releases 28-Apr-21, 2-Jun-21, 8-Jun-21, 18-Oct-21).

Develin Creek	Copper - Zinc	Queensland	100% Owned
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Inferred Mineral Resource 2.57Mt @ 1.76% Cu, 2.01% Zn, 0.24% Au & 9.6g/t Ag (ASX Release 15-Feb-15). Testing 8 targets with multi-rig drill campaign.

Sulphide City (ASX Release 5-Jul-21).	34m @ 3.5% Cu+Zn incl 10m @ 6.0% Cu+Zn	29m @ 3.5% incl 12.3m @	ራ Cu+Zn ፬ 6.7% Cu+Zn	
Red Mountain	Gold	Queensland	100% Owned	ſ

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).

Split Rocks	Gold	Western	100% Owned	
	5m @ 10.4 g/t Au	12m @ 4	.9 g/t Au	
Results incl:	13m @ 8.0 g/t Au	15m @ 3	.5 g/t Au	

Zenith drilling returned - high-grade near surface gold mineralisation at multiple targets (ASX Release 5-Aug-20, 2-Sep-20, 19-Oct-20, 28-Oct-20, 15-Jan-21, 11-Mar-21, 21-Apr-21, 24-Jun-21). Results include:

@ 1.3 g/t Au
@ 2.0 g/t Au
@ 70 g/t Au
@ 4.8 g/t Au
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#### Investments

43.9M shares in Bradda Head Holdings Limited (AIM)



Australia

3.88M shares in Rumble Resources Limited (ASX:RTR)



2.5M shares in American Rare Earths (ASX:ARR)

NICKEL X 0.5M shares in Nickel-X Limited (ASX:NKL)

## **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.	Gold leach and flotation concentrate metallurgical testwork on diamond drill core composite samples from the Red Mountain high-grade western gold zone.
Sampling techniques	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Metallurgical testwork was completed on two composite samples of diamond drill core from the high- grade western gold zone at Red Mountain. One composite samples represents gold with low arsenic levels (Composite-1 <500ppm As), the other contained higher levels of arsenic (Compoiste-2 >500ppm As). The low-As gold mineralisation style represents 2/3 of all drilled gold intersections at Red Mountain with the high-As type the remaining 1/3. By the amount of gold in those intersections (caluclated as metal content) it is the opposite with approximately 1/3 of the contained gold in the low-As gold mineralisation style and 2/3 in the high-As stye.
	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.	Sighter level industry standard cyanide leach and flotation testwork.
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.).	No new drilling results reported this release, metallurgical testwork on NQ diamond drill core.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Recovery is recorded for all drill core

	Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse	Composite samples were selected so as to form a high As (>500ppm) sample and a low As (<500ppm As) considered to be representative of likely end members of gold mineralisation styles. Other elements such as Cu, Ag, Bi, Zn, Pb are similar in both composites.	
Logging	material. 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.	All diamond drill core both geologically and geotechnically logged	
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Qualitative logging with local quantitative spectral logging	
	The total length and percentage of the relevant intersections logged.	All core has been logged	
	If core, whether cut or sawn and whether quarter, half or all core taken.	Sawn ½ core NQ	
Sub-sampling techniques and sample preparation	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	NA	
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	<sup>1</sup> / <sub>4</sub> core samples crushed and riffle split to form a composite for testwork	
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Head, multiple leach liquor and tail assays allow for reconciliation of contained gold to ensure quality control.	
Sub-sampling techniques and sample	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.	Duplicate head assays, original exploration assays, screen fire assays	
preparation - continued	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are appropriate	
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.	Leach testwork is a partial technique to assess cyanide leachable gold that approximates gold recovery in a standard industry commercial processing facility	
	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.	NA	

	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.	Head, multiple leach liquor and tail assays allow for reconciliation of contained gold to ensure quality control.
	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.	Not applicable
sampling and assaying		Field data were all recorded in field laptops and sample record books and then entered into a database
GV5	Discuss any adjustment to assay data.	No adjustments were made.
Location of da 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.	All drill holes surveyed by DGSP
	Specification of the grid system used.	The grid system used to compile data was MGA94 Zone 56
Location of da points - continued	Ata Quality and adequacy of topographic control.	Topography control is +/- 25mm.
$\bigcirc$	Data spacing for reporting of Exploration Results.	Refer above (sample techniques).
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
	Whether sample compositing has been applied.	Yes refer to sampling techniques
Orientation of data in relation to geological structure		Drilling on approximately E-W sections with holes orientated from east and west to reduce any bias pertaining to hole orientations
	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 secur	rity 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.)

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 security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	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. Tenure is 100% held by Zenith and is 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.	
	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:	Refer to ASX Release 19 Mat 2021 – Table 2 for details of all Red Mountain drill hole locations Batch No Hole ID Sample_ID Metallurgy Sample Sample ID Type FROM TO Width	
15	o easting and northing of the drill hole collar	ZRMCD040 D22461 D22461-M 1/4 Core 140 141 1   ZRMDD041 D22957 D22957-M 1/4 Core 52 53 1	
	o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	ZRMDD041 D22993 D22993-M 1/4 Core 81 81.3 0.3   ZRMDD041 D22999 D22999-M 1/4 Core 84.7 85 0.3   ZRMDD042 D23670 D23670-M 1/4 Core 172.6 173 0.4	
	o dip and azimuth of the hole	RMM001- Composite 1 ZRMDD042 D23689 D23689-M 1/4 Core 188 189 1   ZRMDD042 D23707 D23707-M 1/4 Core 204 205 1	
	o down hole length and interception depth	Low-As ZRMDD042 D23707 D23707-M 1/4 Core 204 205 1   ZRMDD042 D23816 D23816-M 1/4 Core 310 311 1	
Drill hole		ZRMDD043 D22755 D22755-M 1/4 Core 209 209.5 0.5   ZRMDD044 D23403 D23403-M 1/4 Core 307 308 1	
Information	o hole length.	ZRMDD044 D23403 D23403-M 1/4 Core 307 308 1   ZRMDD044 D23439 D23439-M 1/4 Core 342 342.4 0.4	
		ZRMDD044 D23473 D23473-M 1/4 Core 370 370.4 0.4	
		ZRMCD038 D22242 D22242-M 1/4 Core 139.35 139.65 0.3   ZRMCD040 D22427 D22427-M 1/4 Core 111.3 112.25 0.95	
Y I	If the evolution of this information is in the Charles of	ZRMCD040 D22427 D2242744 T/4 Cole TTL: TTL: 0.55   ZRMCD040 D22432 D22432-M 1/4 Core 114 115 1	
	If the exclusion of this information is justified on the basis that the information is not Material and this	ZRMCD040 D22441 D22441-M 1/4 Core 123.22 123.74 0.52	
	exclusion does not detract from the understanding of	RMM002- ZRMCD040 D22489 D22489-M 1/4 Core 165.88 166.91 1.03 ZRMCD040 D22516 D22516-M 1/4 Core 191 191.79 0.79	
	the report, the Competent Person should clearly explain	Composite 2 High - As ZRMDD041 D22978 D22978-M 1/4 Core 70 70.3 0.3	
	why this is the case.	ZRMDD042 D23625 D23625-M 1/4 Core 131 131.5 0.5	
		ZRMDD042 D23801 D23801-M 1/4 Core 295 296 1   ZRMDD043 D22738 D22738-M 1/4 Core 194.5 195 0.5	
		ZRMDD043 D22783 D22783-M 1/4 Core 232 232.7 0.7	
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. Where aggregate intercepts incorporate	No new drilling reported this ASX Release	
	short lengths of high-grade results and	No new drilling reported this ASX Release	

	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.		
Data aggregation methods - continued	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No new drilling reported	d this ASX Release
	These relationships are particularly important in the reporting of Exploration Results.	Refer below	
Relationship between mineralisation widths and intercept lengths	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	drill holes, indicates two moderate to steep so dipping. The shallow frequently measured veins) versus >30 steep orientation bias. Further that drilling achieves ur Overall gold mineralise	d envelops are interpreted as east dips near surface rolling
905	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. 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.		
	Approximately 19 square k terrain-draped, magnetic dat DJI Matrice UAV flying at six a GEM Systems GSMP-35U		are kilometres of low-level, ic data was acquired using a at six metres per second with P-35U sensor over 8 days of ras flown at a height of 35m th 20m line-spacing.
$(\bigcirc)$	material, should be reported including (but	Summary of Survey Specifications	
	not limited to): geological observations;	UAV Type	DJI Matrice
Other	geophysical survey results; geochemical	Magnetometer	GEM Systems GSMP-35U
substantive	survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Area (km²)	19 total
exploration data		Line Spacing (m)	20
		Line Orientation	West-east
		Drape Height (m)	30
		Start Date	26-Mar-21
		End Date	06-Apr-21
		Absolute Accuracy	<0.1nT
		Data Acquisition (Hz)	20
		Flight Speed (ms <sup>-1</sup> )	5-7
		Projection & Zone	MGA 55 & 56

		To investigate the potential geometry of the magnetic
		response at Red Mountain, unconstrained 3D inversion modelling was completed by RAMA Geoscience consultants using MGinv3D produced by Scientific Computing and Applications Pty Ltd. MGinv3D determines a 3D distribution of magnetic susceptibility that satisfies the observed TMI data to within an acceptable error level. The model consists of a 3D mesh of cells, in this case with horizontal dimensions of 20m x 20m and vertical dimension of 10m to a depth of 700m.
		The extent of the model is shown in Figure 1. Topography information using SRTM data transformed to the AusGeoid09 datum was integrated into the modelling process. The 3D inversion modelling is unconstrained so there are no controls on the magnetic susceptibility that can be allocated to each cell, except that the susceptibility remain positive. It should be noted that any unconstrained magnetic inversion model is only one possible solution to a non-unique problem and should be treated with some caution.
		Magnetic susceptibilities at the core of the magnetic body reach over 50000 SIx10-6.
		For the Red Mountain DODDIP data, 3D inversion modelling was completed by RAMA Geoscience consultants using Res3D from Geotomo Software. Res3D determines three-dimensional resistivity and chargeability distributions that satisfy the observed IP data to within an acceptable error level. Data from all of the IP data collected at Red Mountain was used as the input data. The resulting 3D models consist of values of resistivity and chargeability distributed over a 3D mesh of cells. The cell dimension used for the model mesh was 25m x 25m, with the surface cell being 12.5m thick. The thickness of the cells increase by a factor of 1.05 with increasing depth.
		Using default parameters for the inversion processing generally produces smooth models. To add more geological structure to the models, weighting towards sub-vertical formations has been applied to all the models presented.
	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 drilling planned
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.	Not relevant to this release, refer earlier releases of future drill targets.