MOUNT RIDLEY MINES

ASX ANNOUNCEMENT

DRILLING RESUMES AT THE WELD RANGE WEST IRON PROJECT FOLLOWING COMPLETION OF GEOPHYSICAL SURVEYS

31 May 2021

Mount Ridley Mines Limited (ASX: **MRD**), ("**the Company**") is pleased to provide the following update on the 100%-held Weld Range West Iron Project ("WRWIP") in the mid-west of Western Australia.

- ***Haematite/goethite mineralisation observed by MRD geologists in the maiden drilling campaign.***
- ***Geophysical surveys recently completed indicate the centrally located Lulworth Formation BIF drill targets could merge into a single, three kilometre-long target zone.***
- ***Heritage Protection survey to cover expanded Lulworth Formation target zone initiated.***
- ***883 samples from the May drilling programme are with a commercial laboratory for analysis with results expected shortly.***
- ***Drilling has now resumed at the extended Lulworth Formation target zone.***

Mount Ridley's Chairman, Mr Peter Christie, commented that the break in drilling was time usefully spent interpreting the new datasets and increasing the geological understanding of the Project.

"While we are very keen to get our assay results, we are sufficiently encouraged by the geological observations of drill samples collected during the May drilling programme to resume drilling as soon as possible and have extended the drilling budget to test the central Lulworth Formation BIF." Mr Christie said.

DRILLING PROGRAMME TO DATE

On 22 April 2021 MRD commenced an RC drilling programme at the WRWIP to test for haematite zones in banded iron formation ("BIF"), which could potentially be classed as "DSO" – Direct Shipping Ore. The programme consisted of thirty-seven (37) holes completed for 2,638 metres.

In this first programme, two targets were drilled within the WRWIP: Target 1 in the southern Wilgie Mia BIF and Target 2, in the central Lulworth BIF (Refer to Figure 1). Drilling provided sufficient geological information about the development of haematite for the Company to commit to the second programme, which commenced today.

In addition, drilling demonstrated the presence of channel iron deposits ("CID"), recognised in mapping along the southern Wilgie Mia formation, but previously unrecognised along the flanks the Lulworth formation - in a layer that is up to 15m thick. (Refer to Figure 2).

The first drill programme generated 883 samples that are currently being analysed by a commercial laboratory. The return of analyses has been delayed due to large numbers of samples generated during the current exploration boom, which has created a significant backlog, however the analytical process for MRD's samples has started.

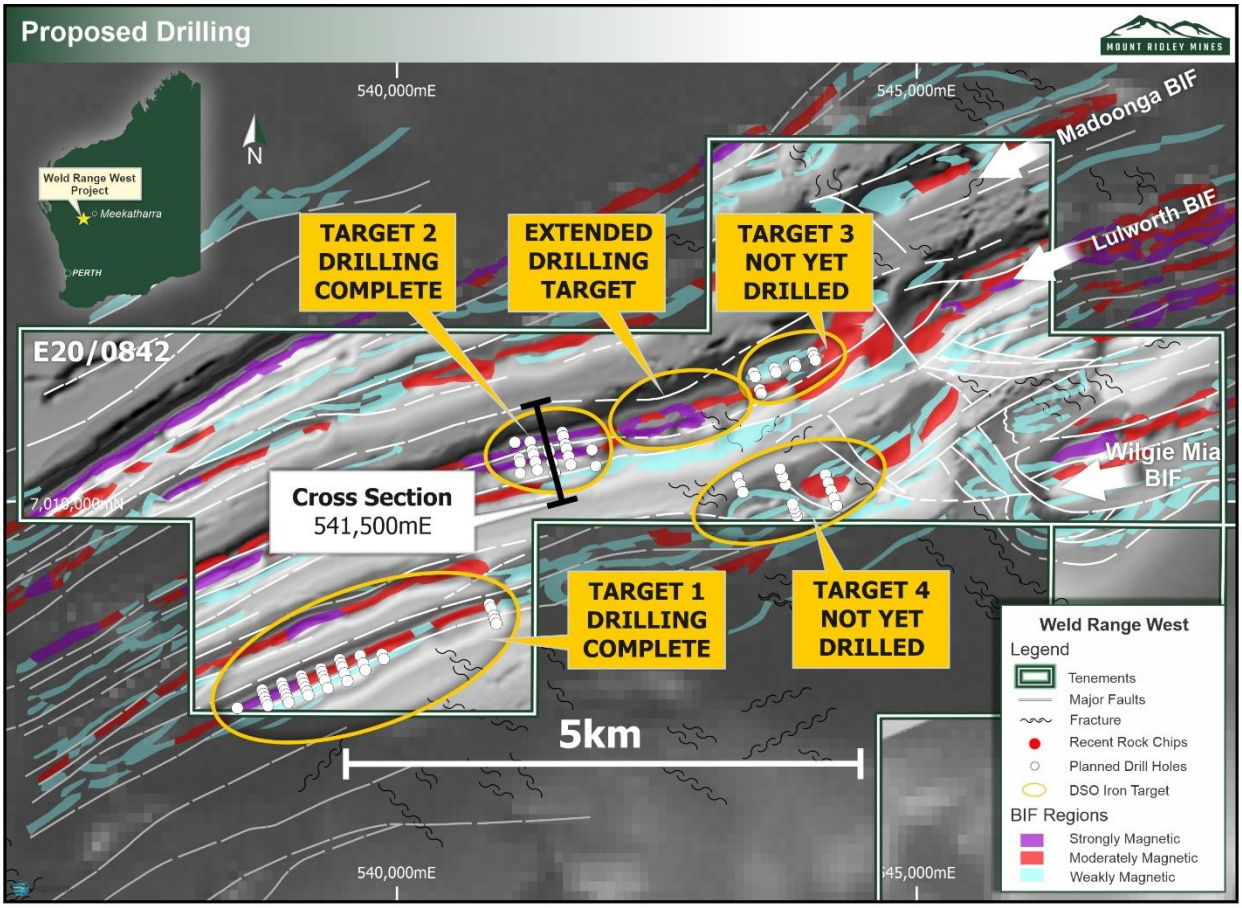

Figure 1: Drilling targets overlying interpreted aeromagnetic imagery.

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GEOPHYSICAL SURVEYS

During May, the following geophysical surveys were undertaken;

- A gravity survey, completed over much of the Wilgie Mia and Lulworth formations within the WRWIP.
- A trial ground magnetic survey over the eastern Wilgie Mia and Lulworth formations within the WRWIP.

Appraisal of the resulting geophysical imagery from both surveys confirms the continuity of the Lulworth formation under cover, and therefore not evident in the surface geological mapping.

Magnetic data imagery is used to indicate areas where the BIF units may have become structurally affected by faulting. De-magnetisation of the BIF at structurally complex areas can be the result of the alteration of magnetite (magnetic) to haematite (non-magnetic), and therefore indicative of a drill target.

The gravity survey highlights areas with dense rocks, which include BIF and CID deposits.

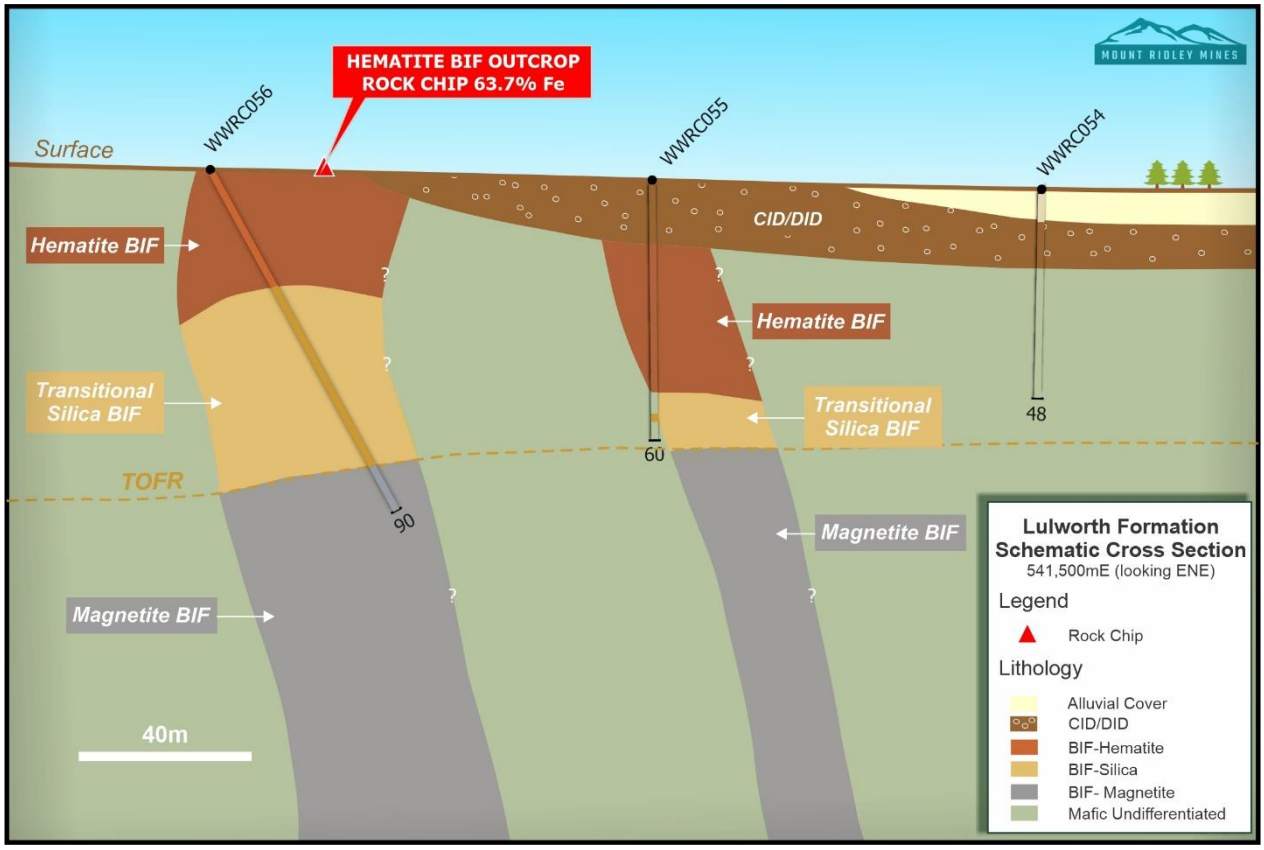

Figure 2: Geological cross section interpretation through the Lulworth Formation, where shown on Figure 1.

This announcement has been authorised for release by the Company's board of Directors.

For further information, please contact:

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ABOUT THE WELD RANGE WEST IRON PROJECT

The recently acquired Weld Range West Iron Project is in the mid-west of Western Australia and covers an area of 52km^2. Drilling is designed to target direct-shipping iron ore.

The Project covers approximately 10km or 18% of the overall Weld Range BIF sequence, which elsewhere hosts the Madoonga and Beebyn iron deposits (owned by Sinosteel Midwest Group) and the Iron Ridge iron deposit (Fenix Resources Limited). Three parallel BIF horizons are recognised, referred to from north to south as the Madoonga Formation, the Lulworth Formation and the southern-most the Wilgie Mia Formation. All are prospective for high-grade (>62.5% Fe) iron ore. Areas of the tenements are also prospective for gold.

The Company acknowledges the help of the Wajarri People, custodians of the Project area.

COMPETENT PERSON

The information in this report that relates to exploration strategy and results is based on information supplied to and compiled by Mr David Crook. Mr Crook is a consulting geologist retained by Mount Ridley Limited. Mr Crook is a member of The Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists and has sufficient experience which is relevant to the exploration processes undertaken to qualify as a Competent Person as defined in the 2012 Editions of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

CAUTION REGARDING FORWARD LOOKING INFORMATION

This announcement may contain forward-looking statements that may involve a number of risks and uncertainties. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.

APPENDIX 1: DRILL HOLE INFORMATION

Table 1 Preliminary Drill Hole Collar Locations					
Hole ID	**East**	**North**	**Dip**	**Azimuth**	**Depth**
WWRC025	541,186	7,010,272	-88	0	54
WWRC026	540,965	7,008,890	-60	342	102
WWRC027	538,465	7,008,015	-61	160	90
WWRC028	538,943	7,008,115	-89	0	42
WWRC029	538,920	7,008,213	-61	160	102
WWRC030	538,898	7,008,248	-60	163	126
WWRC031	538,881	7,008,278	-56	150	72
WWRC032	539,336	7,008,206	-90	0	42
WWRC033	539,295	7,008,318	-61	162	78
WWRC034	539,277	7,008,371	-58	163	63
WWRC035	539,262	7,008,408	-61	160	132
WWRC036	539,524	7,008,274	-89	0	42
WWRC037	539,497	7,008,349	-90	0	60
WWRC038	539,477	7,008,405	-60	162	78
WWRC039	539,463	7,008,443	-61	162	84
WWRC040	539,450	7,008,481	-61	161	78
WWRC041	538,754	7,008,060	-89	0	36
WWRC042	538,729	7,008,128	-61	162	66
WWRC043	538,715	7,008,166	-61	160	78
WWRC044	539,134	7,008,181	-89	0	42
WWRC045	539,093	7,008,290	-60	159	60
WWRC046	539,083	7,008,319	-60	161	84
WWRC047	540,953	7,008,931	-61	341	48
WWRC048	540,872	7,008,977	-60	162	78
WWRC049	540,864	7,009,012	-61	159	78
WWRC050	541,343	7,010,384	-90	0	55
WWRC051	541,339	7,010,456	-61	166	96
WWRC052	541,316	7,010,499	-60	166	120
WWRC053	541,342	7,010,306	-90	0	42
WWRC054	541,523	7,010,292	-90	0	48
WWRC055	541,493	7,010,377	-90	0	60
WWRC056	541,468	7,010,476	-61	166	90
WWRC057	541,683	7,010,365	-89	0	48

Table 1 Preliminary Drill Hole Collar Locations					
Hole ID	**East**	**North**	**Dip**	**Azimuth**	**Depth**
WWRC058	541,659	7,010,438	-89	0	48
WWRC059	541,632	7,010,511	-61	167	66
WWRC060	541,592	7,010,663	-60	350	72
WWRC061	541,601	7,010,627	-61	346	78

Notes:

- Grid is GDA94-50
- Coordinates are preliminary. Measurement is by hand-held GPS
- Dip and azimuth measured at 0-1m using a gyroscopic down-hole probe.

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JORC Code, 2012 Edition – Table 1 report Weld Range West Project

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 (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	Mount Ridley Mines Limited (ASX: MRD) has completed 35 RC drill holes for 2638 metres at its Weld Range West Iron Project. Further drill hole collar information is presented in Table 1 above. Sampling is industry standard 1m intervals using a cyclone and splitter mounted on the drilling rig. Secondary composite samples of between 2 and 4 composited meters (as determined by geology), also taken for first pass analysis.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Preliminary drill hole collar locations reported herein were picked-up using a Garmin hand-held GPS with approximately +-3m accuracy. Downhole surveying was measured by the drill contractors using a north-seeking gyroscopic alignment tool.
	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 (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	RC holes were sampled with 1m samples split on the rig using a cone splitter. The sampling system consisted of a rig mounted cyclone with cone splitter and dust suppression system. The cyclone splitter is configured to split the majority of the cuttings (approximately 90%) to 'bulk' (captured in a bucket and systematically laid out in rows) with the primary sample, being approximately 3.5kg, taken from the sample port and into a draw-string calico sample bag. Samples were submitted to Bureau Veritas Laboratory, Perth for analysis by XRF (Iron suite) and aqua regia ICP (gold) techniques. No assays are reported herein.
Drilling techniques	*Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	Reverse circulation drilling system. Face sampling hammer .
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	RC recovery was visually assessed, recorded on drill logs and considered to be acceptable within industry standards.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	RC samples were visually checked for recovery, moisture and contamination. A cyclone and cone splitter were used to provide a uniform sample and these were routinely cleaned. The drill contractor blew out the hole at the beginning of each drill rod to remove excess water and maintain dry 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 material.	Assays are not reported herein. No analysis made.
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.*	Geological logging appropriate for this style of drilling and the lithologies encountered.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Geological logging is inherently qualitative. More specific logging may be undertaken if chemical analyses warrant it.
	The total length and percentage of the relevant intersections logged.	All drill holes were logged in full.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	Not applicable.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Primary RC samples were collected by a cyclone and cone splitter immediately beneath the cyclone to produce an approx. 3.5kg sample. Secondary composite samples were 'speared' from the bulk sample piles.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Sampling technique is appropriate and industry standard.
	Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples.	Field QAQC procedures included the insertion of field duplicates and commercial standards at pre-specified intervals.
	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.	Duplicates have been submitted during the analysis of preliminary composite samples at the rate of 1:33. A specific programme of duplicate sampling will be undertaken of mineralised intervals at a later date.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample size is considered to be appropriate to accurately represent the iron mineralisation.
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.*	Iron analysis by fusion XRF is industry-standard best practice. Bureau Veritas is an accredited laboratory which has a specialist iron section. The assay technique is considered 'total'. Aqua regia analysis ICP finish is considered a partial, albeit near total analysis for gold, and is considered fit for purpose at the stage of the project.
	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.	None used

	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	Commercially obtained iron standards included periodically (approx. 1:33). Other checks will be introduced as the Project develops.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	No assays reported
	The use of twinned holes.	Not applicable.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Samples have been geologically logged into a computerised database system (Logchief), and stored in a commercially managed database.
	Discuss any adjustment to assay data.	No assays reported
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.*	Preliminary drill hole collar locations noted in Table 1 were surveyed using a hand-held GPS with +- 3m accuracy. Drill hole positions will be formally surveyed at a later date. Downhole surveying of drill holes was conducted using a north-seeking gyroscopic tool to determine the true dip and azimuth of each hole.
	Specification of the grid system used.	GDA94-50
	Quality and adequacy of topographic control.	Not measured. Drill hole positions will be formally surveyed at a later date.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	No assays reported
	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.	Not applicable.
	Whether sample compositing has been applied.	2-4m composites sampled and are being analysed. No assays reported
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.*	Not applicable in this style of deposit.
	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.	No assays reported.
Sample security	*The measures taken to ensure sample security.*	Samples are promptly sent to the laboratory by courier.
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.*	E20/842, located 50km north west of Cue, Western Australia. Registered Holder is Zeedam Enterprises Pty Ltd (Zeedam), on trust for Mount Ridley Mines Limited (100%). Zeedam, Oresource Pty Ltd and Manor Ventures Pty Ltd have a production-based royalty. The tenement is subject to a Native Title claim: Wajarri Yamatji #1 NNTT Number : WC2004/010, Federal Court Number : WAD28/2019
	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 tenement is in good standing, and there are no impediments to operating in the targeted areas other than requirements of the DMIRS and Heritage Protection Agreements, all of which are industry-standard.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	Mapping, geophysical surveys and rock chips by Crosslands Resources Limited. Rock chips by Zeedam.
Geology	*Deposit type, geological setting and style of mineralisation.*	Banded iron formation-hosted haematite.
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:*	All relevant data for the drilling conducted is tabulated in Appendix 1 of this announcement.
	• *easting and northing of the drill hole collar*	
	• *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*	
	• *dip and azimuth of the hole*	
	• *down hole length and interception depth*	
	• *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 (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	Assay results not reported.

	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.	
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.*	Assay results not reported.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	
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 figures 1 and 2 in the 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.*	Assay results not reported.
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.*	All new, meaningful and material exploration data has been reported
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	Analysis of samples is progressing and will be reported when received. Further drilling is 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.	