13 September 2016

Company Announcements Office, ASX Ltd

Highlights

- **Three near surface (100-200 metres depth) gravity anomalies identified south of Target 19 and Target 2 with high modeled specific gravity readings.**
- **Gravity anomalies are interpreted to be situated within ultramafic intrusions and could be attributed to sulphide mineralisation.**
- **High powered EM proposed to follow up these gravity anomalies.**
- **Diamond hole MRDD016 proposed to be extended to original planned depth of 800 metres from its current depth of 620 metres due to identification of magmatic sulphides near the bottom of hole.**
- **CSA technical review underway and likely to be completed within two weeks with recommendations to follow.**

Exploration Update

Mount Ridley Mines Ltd (ASX: **MRD**) (or "the **Company**") is pleased to announce an update on the Company's flagship project Mt Ridley.

Geophysical Surveys

A recent broader scale gravity survey program utilising a 200x400m pattern and 100x100m infill pattern over primary target areas of interest has been completed.

Two new key areas of priority interest have been delineated, being areas immediately south of Target 19 and Target 2 - localised gravity highs/clusters that could be indicative of thicker accumulations of more dense mafic/ultramafic rock types with the possibility to also include well developed sulphide mineralisation (see **Figure 1**).

The new priority target at the southern end of Target 19 where the majority of the Company's past exploration has concentrated is associated with mafic/ultramafic rock types (a similar gravity feature was associated with the gabbro-norite intersected in drill hole **MRDD015**).

The gravity cluster (modeled at around 4g/cc from 3D inversion results) sits immediately adjacent to the regional geochemistry target corridor and appears to be structurally controlled. The geochemical corridor is characterized by nickel and copper values above 100ppm. High powered moving loop electromagnetic (HP MLTEM) surveying is currently being planned/optimized (see **Figure 3**) as part of the Company's technical review by CSA Global nickel expert Tony Donaghy (refer to ASX announcement 2 September 2016). Mr Donaghy will be assisted by well-respected geophysical consultant Russell Mortimer of SGC/GeoPotential Consulting.

Review of Recent Diamond Drilling

Further investigations by the Company have revealed that the drill rods stuck down diamond hole **MRDD015** (ASX announcement 19 July 2016) may in fact be retrievable. This process will take approximately two to three days. By completing this exercise, the Company will then have access to the end of the hole to conduct critical high powered downhole electromagnetics (HP DHTEM). Subject to results, this may require an extension of the drill hole.

Diamond drill hole **MRDD016** intersected 287m of mafic to ultramafic intrusives from 333m to the end of the hole at 620m. The intrusive contains complex intercalated barren and mineralized mafic to ultramafic zones.

Mineralised sections contain lightly disseminated and globular blebby sulphides, which is encouraging. The sulphides are present in coarse grained mafic to ultramafic intrusive rocks identical to the units encountered in holes 10, 11 and 12. **MRDD016** was originally planned for a target depth of 750 - 800m (see ASX announcement 25 July 2016) to test a priority Audio Magnetotelluric (AMT) phase anomaly modelled at this depth.

The hole was terminated at 620m in sulphide-bearing mafic intrusive, and has not yet encountered the lower most contact of the intrusive with the surrounding footwall rocks. The geology and sulphides encountered in the end of the hole (620m) suggest that the hole should be re-entered and continued to its original planned depth of 750 - 800m.

The down hole geophysics (HP DHTEM) conducted to date at this specific hole have not detected any off hole conductors. However, the survey did not have the capacity to see beyond the terminated end of hole depth at 620m to the planned target depth of 750 - 800m, and current results are therefore inconclusive.

The Company's newly appointed expert review team will be conducting a site visit early next week to familiarize with the project as well as re-examine the entire diamond core library. This information combined with the geochemical, assay and geophysical data will form the frame work for the technical review. This comprehensive review process is expected to take approximately three weeks to complete.

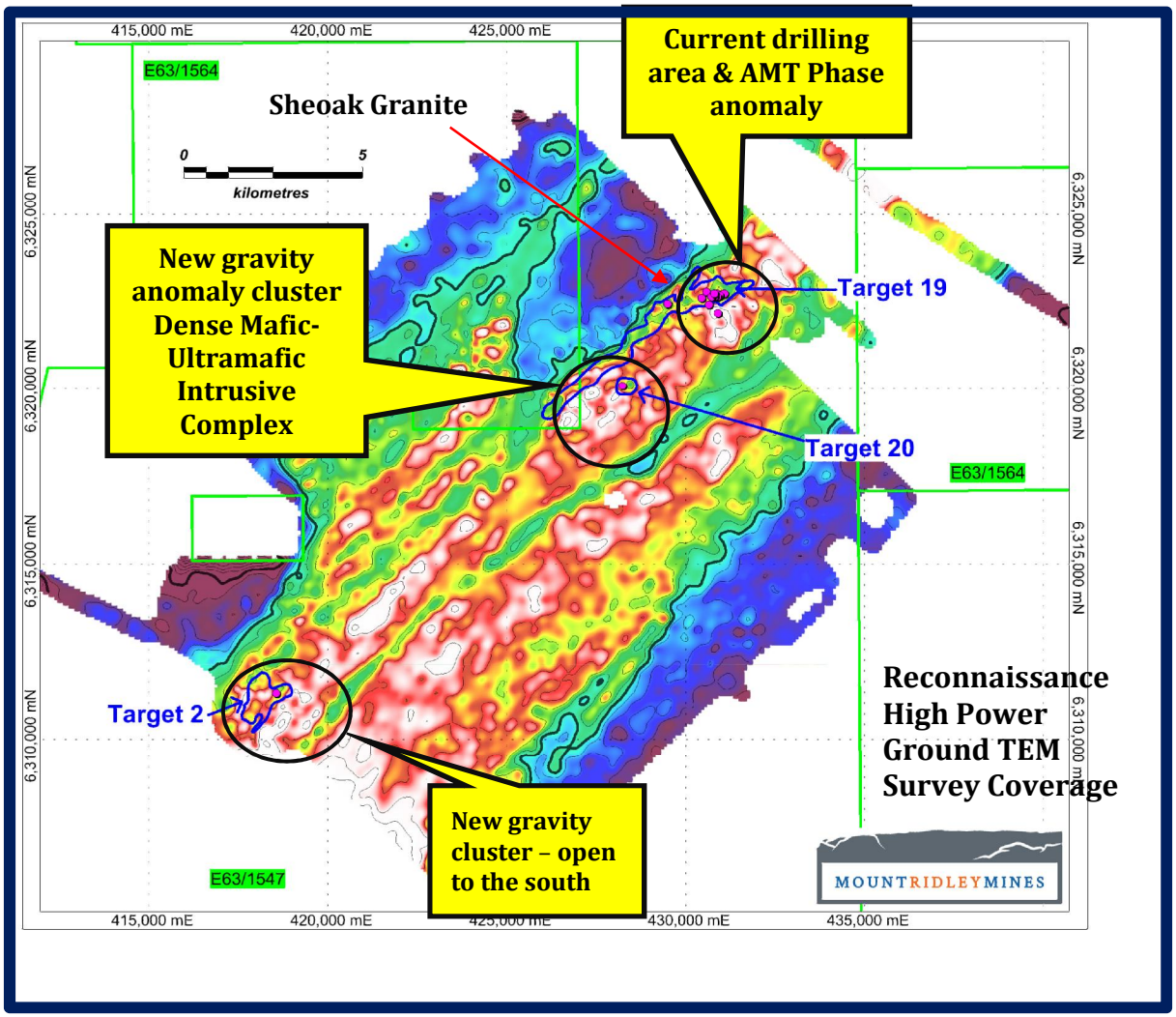

Figure 1: Project Scale Gravity Survey Program - Bouguer Anomaly First Vertical Derivative Imagery (2.67g/cc correction) - Non-Linear Colour Stretch - utilizing a 200x400m pattern and 100x100m infill pattern over primary target areas.

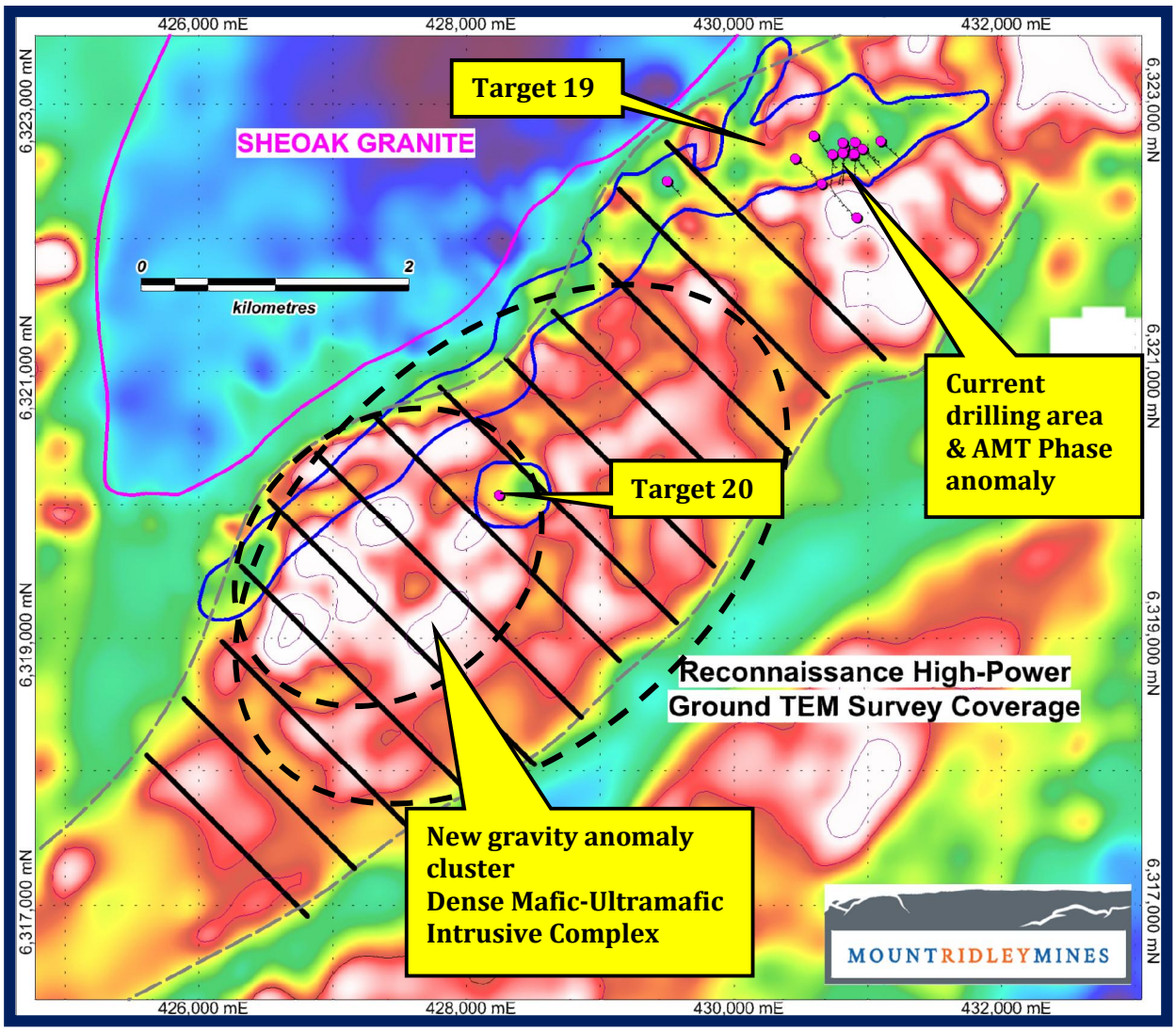

Figure 2: Zoomed Gravity Survey Program - Bouguer Anomaly First Vertical Derivative Imagery (2.67g/cc correction) - Non-Linear Colour Stretch - Defining detailed local infill gravity survey results.

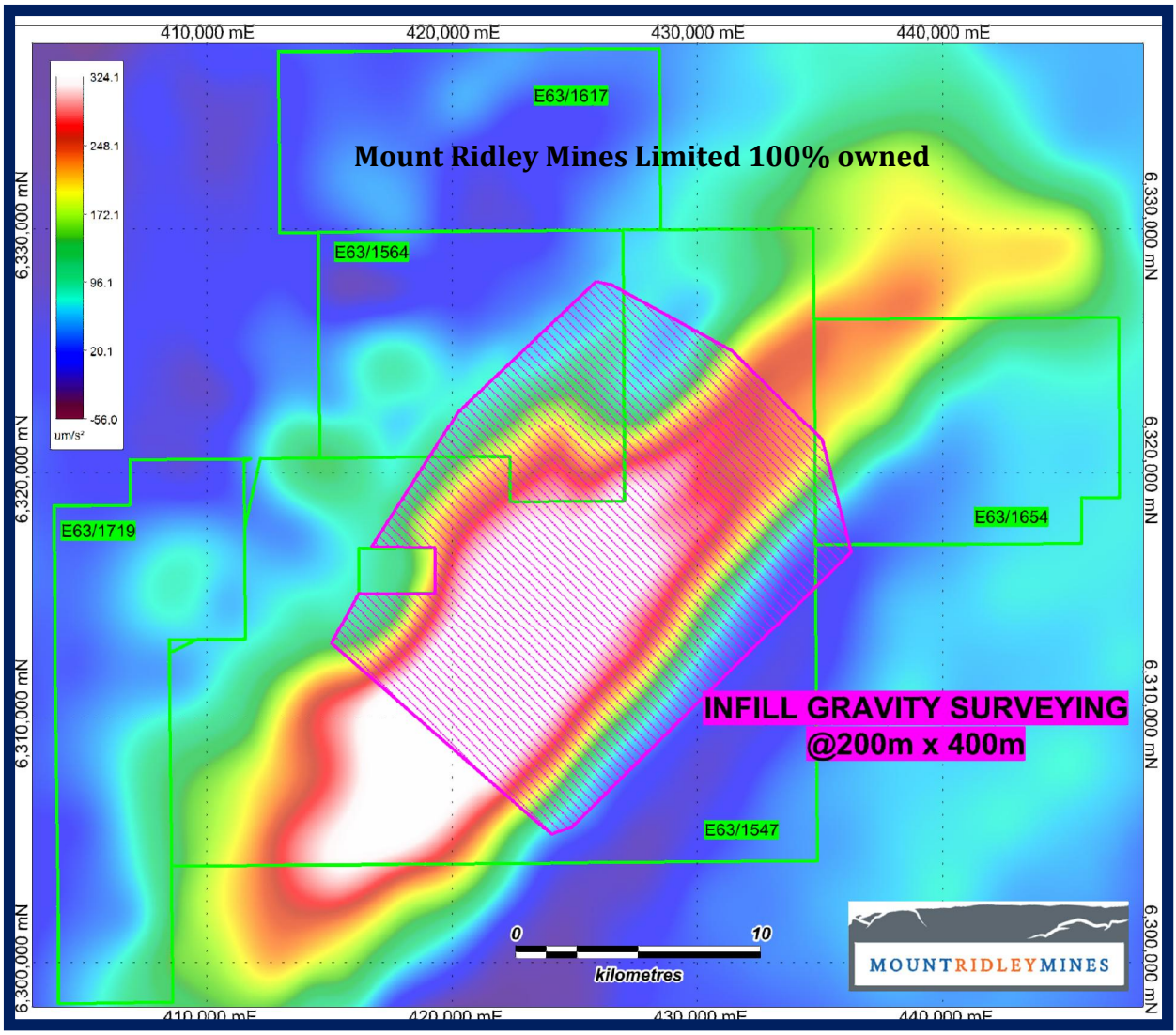

Figure 3; Regional Gravity Imagery - Highlighting the location of the new priority exploration target are and infill gravity program – domal style gravity target corridor.

For and on behalf of the board

Mr Ashley Hood

Managing Director

Competent Person's Statement

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Tony Donaghy who is a Member of the Australian Institute of Geoscientists. Mr Donahy is a consultant to the Company. Mr Donaghy has sufficient experience which is relevant to the style 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 Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves. Mr Donaghy consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Forward Looking Statements Disclaimer

This announcement contains forward-looking statements that 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 Mt Ridley Mining Limited – Mt Ridley Project – Diamond Drilling JORC CODE 2012.

Section1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling technique	• *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 XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used* • *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 1m samples from which 3kg was pulverised to produce a 30g 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.*	• **Diamond core samples analysed in field using a Niton XL3t Gold plus field portable XRF analyser.** • **Diamond core samples are being sent to Perth for laboratory analysis.**
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.).*	• **The diamond drilling was conducted by ONQ Exploration using a NQ2 (50.6 mm diameter) bit** • **Drill collars are surveyed using hand-held GPS (+/- 5m horizontal accuracy)** • **All core, where possible, are orientated using a Reflex ACT II RD orientation tool**
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed* • *Measurements taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and wether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• **Core recoveries are physically measured by drillers for every drill run.** • **Appropriate measures are taken to maximize sample recovery and ensure the representative nature of the samples. This includes diamond core being reconstructed on angle iron racks for orientation, metre marking and reconciled against core block markers**

	JORC Code explanation	Commentary
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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel etc.) photography.* • *The total length and percentage of the relevant intersections logged*	• **All drill holes are geologically logged in their entirety.** • **Logging is both qualitative and quantitative** • **Qualitative descriptions of colour, grain size, texture and lithology are recorded for each sample.** • **Thin sections of significant samples are to be made for detailed petrological analysis.**
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and wether quarter, half or all core taken.* • *If non-core, whether riffles, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• **No blanks or standards were used for the Niton XRF analysis. Measurements were taken on significant mineralisation that were visually identified.** • **No measure of repeatability or representivity of measurements are provided**
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.* • *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.* • *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.*	• **Drill core geochemical results taken from XRF Niton XLt3 Gold plus model. Dureation 20 seconds per filter with 40 seconds in total.** • **No calibration factors applied. No standards or blanks used.** • **Field portable XRF analysis does not provide whole rock analysis but rather single point beam over <1mm² of rock and should not be considered whole rock representative analysis. Laboratory analysis of grinding, splitting, pulverizing and analytic technique is the industry standard acceptable method of whole rock analysis** • **Analysis conducted for Ni, Cu and Co.**

	JORC Code explanation	Commentary
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes* • *Documentation of primary data, data entry procedures, data verification, data storage (physically and electronic) protocols.* • *Discuss any adjustment to assay data.*	• **Not applicable at this early stage of exploration** • **Not applicable at this early stage of exploration** • **The Niton XRF was carried in the field and used at the core storage facility.** • **Niton analytical results are deemed fit for purpose to indicate confirmation of Ni and Cu sulphide mineralisation.**
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 Resources estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• **Drill collar positions were recorded with handheld GPS system with expected accuracy of +/- 5m horizontal. Drill core are located and orientated with a Reflex ACT II RD orientation tool and physical measurement of core intervals / lengths.** • **The grid system for the Mt Ridley Project is GDA94, MGA Zone 51** • **Topographic control is based on the GPS heights and radar altimeter data from an airborne magnetic and radiometric survey (100m line spacing).**
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Reserve and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• **Niton XRF analysis has been undertaken on visible sulphide mineralisation to detect the presence of Ni and Cu. This analysis is not suitable for establishing continuity of grade over any interval. Samples will be sent for laboratory analysis using standard industry techniques.**
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.* • *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.*	• **Niton XRF measurements are undertaken on sulphide mineralisation of economic interest.** • **Drilling has been undertaken on mineralized horizons which are thought to be sub-vertical. The true width of intersections are not known at this point**

	JORC Code explanation	Commentary
Sample security	• *The measures taken to ensure sample security.*	• **Drill core are logged in field and transferred to a locked storage facility in Gibson**
Audits or reviews	• *The results of and audits or reviews of sampling techniques and data.*	• **Each drill run is witnessed by MRD geologists or field technicians. No audits or reviews have been undertaken.**

Section2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenements 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 interest, 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.*	• **Tenement E 63 /1547. Dundas mineral field. The tenement is 100% held by Mt Ridley Mines Ltd.** • **The tenure is secure and in good standing at the time of writing**
Exploration done by other parties	• *Acknowledgement and appraisal of exploration by other parties.*	• **Previous exploration has primarily targeted lignite**
Geology	• *Deposit type, geological settings and style of mineralisation.*	• **Mt Ridley Mining is exploring primarily for magmatic hosted Ni-Cu sulphide.**
Drill hole information	• *A summary of all information material for the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *Easting and northing of the drill hole collar* ○ *Elevation or RL (Reduced level-elevation above sea level in metres)and the drill hole collar* ○ *Dip and azimuth of the hole* ○ *Down hole length and interception depth* ○ *Hole length*	• **Due to the nature of this drilling and the early phase of exploration all holes with significant intersections of visible nickel and/or copper sulphides have been assayed. Holes have not been reported due to the fact that most intersections have been anomalous only. The remaining holes do not have any significant results. Drilling was undertaken testing conceptual targets, although some of the holes are barren they do provide valuable geological information.**

Criteria	JORC Code explanation	Commentary
	• *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, weighing 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 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.*	• **No assay results are reported** • **No assay results are reported** • **No metal equivalent values have been reported.**
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *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 (e.g. 'down hole length, true width not known')*	• **The geometry of mineralized horizon is unknown** • **All drill hole intercepts are measured in down hole metres**
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts would be included for any significant discovery being reported. These should include, but not be limited too plan view of drill hole collar locations and appropriate sectional views.*	• **Appropriate plans have been included in the body of the 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.*	• **Not applicable at this early stage of exploration**

Criteria	JORC Code explanation	Commentary
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 containing substances.*	• **A detailed aeromagnetic survey was completed in October 2014; the drill targeting is based on the interpretation of this dataset for intrusive features that could potentially be associated with magmatic hosted nickel sulphides. The data and interpretation have been discussed in previous ASX releases and exploration updates.** • **Detailed ground aircore drilling has been undertaken which identifies a mineralised horizon with elevated Ni and Cu in the supergene zone** • **Ground TEM surveys have been undertaken that have identified a conductive horizon that is coincident with the elevated Ni and Cu assays from aircore drilling. The target conductor has not been intersected or confirmed by drilling and downhole EM. Ambiguity exists in the interpretation of the EM data due to the highly conductive overburden**
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).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, providing this information is not commercially sensitive.*	• **Infill aircore drilling is being planned over target 19 to delineate high priority areas for follow-up electromagnetic (TEM) surveying and diamond drilling. Diamond drill hole MRDD011 has been planned to test the strike extent of the mineralized horizon (as indicted in Figure 1)** • **DHTEM surveying of MRDD007, 008, 010 and 011 will be undertaken to detect conductors associated with massive sulphide mineralisation near these holes.**