ASX ANNOUNCEMENT

ASX: MRD

16 February 2015

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Company Announcements Office
ASX Limited

Multiple Intrusions Containing Primary Disseminated Nickel and Copper Sulphides Confirmed at Mt Ridley

Highlights

- **Ten aircore holes on very broad spacing hit primary disseminated nickel and copper sulphides.**
- **Nickel bearing sulphides include pentlandite, violarite and millerite.**
- **Two separate olivine bearing mafic-ultramafic Intrusions, Targets 19 and 20, confirmed by drilling with apparent strike lengths of 7 km and 400 m respectively.**
- **Both olivine bearing Intrusions contain primary disseminated nickel and copper sulphides.**
- **Significant nickel intersections include 19m @ 0.31% Ni from 42m including 6m @ 0.56% Ni from 53m and 1m @ 0.91% Ni from 57m in MRAC020 and 23m @ 0.29% Ni from 40m including 4m @ 0.49% Ni from 56m in MRAC021.**
- **Nickel and copper sulphides have been independently verified in both fresh rock aircore hand sample and thin section.**
- **Transported overburden in the areas of interest is relatively thin at around 10-14m thick.**

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Mount Ridley Mines Ltd (ASX: **MRD**) (or "the **Company**") is pleased to announce that it has identified primary nickel and copper sulphides from aircore drilling at its 100% owned Mt Ridley Project in the Albany-Fraser Range Province.

Primary disseminated nickel sulphides including pentlandite, violarite and millerite have been identified in minor amounts in ten holes from two separate olivine bearing intrusions.

Significant intersections from these and other holes include 19m @ 0.31% Ni and 178ppm Cu from 42m including 6m @ 0.56% Ni and 421ppm Cu from 53m in MRAC020 and 23m @ 0.29% Ni and 110ppm Cu from 40m in MRAC021.

The results of the first pass aircore drilling program is a significant step forward for the Company and represents the commencement of an exciting period of exploration activity at the Mt Ridley Nickel-Copper Project. The Company's first ever drilling program was designed to test several high priority aeromagnetic intrusive style targets (see announcement dated 7th January 2015). Drilling was conducted as single traverses on existing cleared tracks and gridlines at very broad spacings with lines up to several kilometres apart (Figure 1). To date approximately two thirds of the drilling program has been completed and assayed amounting to 60 holes for 2752m.

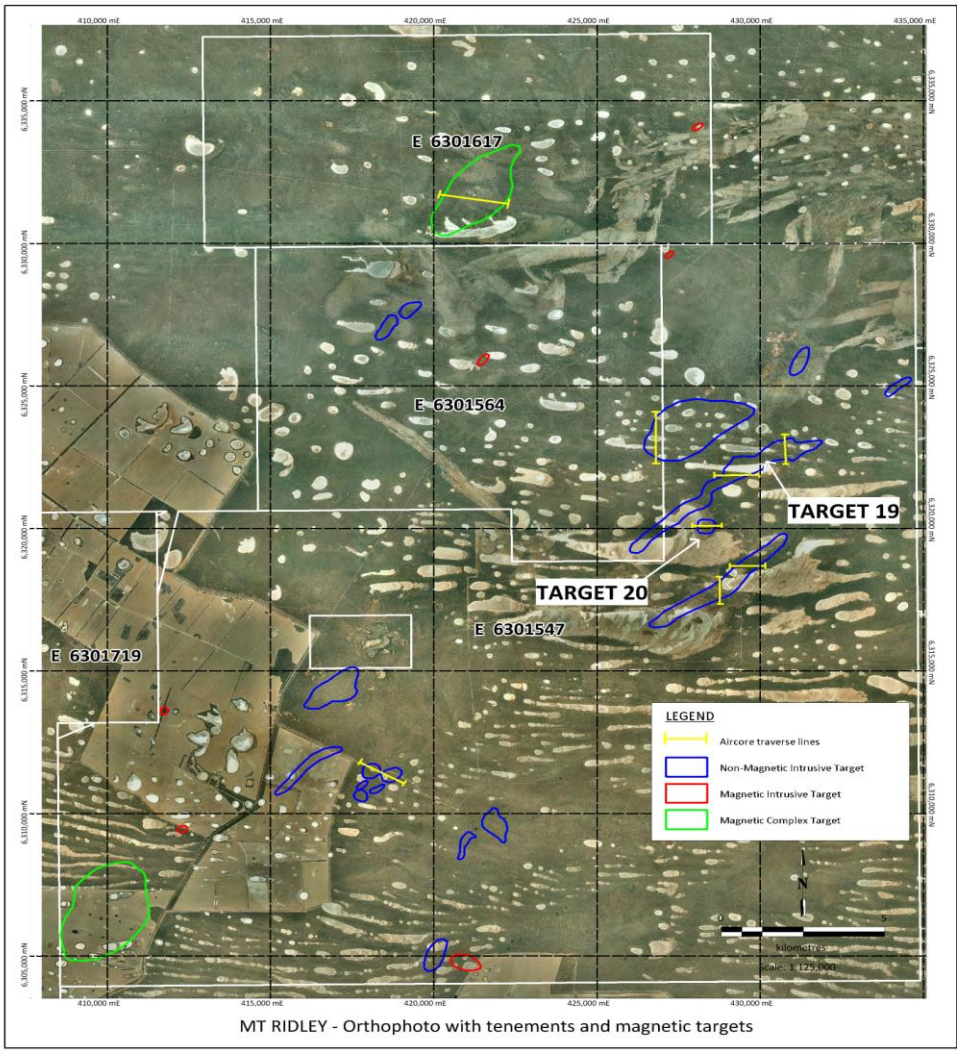

Figure 1: Orthophoto image showing aircore drill traverses marked in yellow and location of Targets 19 and 20, over aeromagnetic targets.

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Reconnaissance aircore drilling intersects up to 0.90% Ni

To date six aircore holes have returned anomalous nickel and copper mineralisation from both Targets 19 and 20. Significant results returned to date include 19m @ 0.31% Ni and 178ppm Cu from 42m including 6m @ 0.56% Ni and 421ppm Cu from 53m in MRAC020 and 23m @ 0.29% Ni and 110ppm Cu from 40m in MRAC021. The highest nickel results appear to be focused at or near the transition, the boundary between partly oxidised and fresh rock. This differs from lateritic nickel which tends to have its better grading nickel values much higher up in the weathering profile. Lateritic deposits also tend to be devoid of copper. A full list of significant results can be found in Table 1.

Prospect	Hole #	Northing	Easting	From (m)	To (m)	Length (m)	Ni (%)	Cu ppm	Co (%)
Target 20	MRAC020	6320076	428399	42	61	19	0.31%	178	0.04%
		including		53	59	6	0.56%	421	0.09%
				56	57	1	0.91%	75	0.15%
Target 20	MRAC021	6320071	428298	40	63	23	0.29%	110	0.03%
		Including		56	60	4	0.49%	60	0.08%
Target 20	MRAC022	6320065	428191	50	60	10	0.23%	72	0.03%
		including		54	58	4	0.36%	35	0.07%
Target 19	MRAC028	6322600	431103	52	57	5	0.15%	113	0.01%
Target 19	MRAC030	6322800	431099	36	51	15	0.15%	42	0.03%
Target 19	MRAC031	6322897	431108	26	50	24	0.12%	76	0.01%

TABLE 1: Significant nickel, copper and cobalt values from Targets 19 and 20 from the January-February 2015 reconnaissance aircore program.

Olivine Gabbro's and Troctolites confirmed by drilling

Aircore drilling has successfully identified the presence of olivine bearing mafic-ultramafic intrusions within the Mt Ridley Project area. These intrusions were originally interpreted from the recently flown detailed aeromagnetics. Drilling has confirmed significant thicknesses of olivine gabbro and troctolite, an olivine-plagioclase bearing rock, within these intrusions up to several hundred metres thick.

The two main intrusions identified to date from drilling include Target 19 which has a slightly irregular sheet like or tabular shape with an interpreted strike length in-excess of 7kms and Target 20 which has a circular pipe-like shape approximately 400m in diameter. Both contain varying amounts of olivine bearing gabbro or troctolite up to 550m thick (Figure 2).

Current drilling is too widely spaced to ascertain the facing or way-up direction for either intrusion however limited evidence suggests both are potentially northwest facing. That would place any potential accumulation of magmatic nickel and copper sulphides at or near the south-eastern contact of both intrusions.

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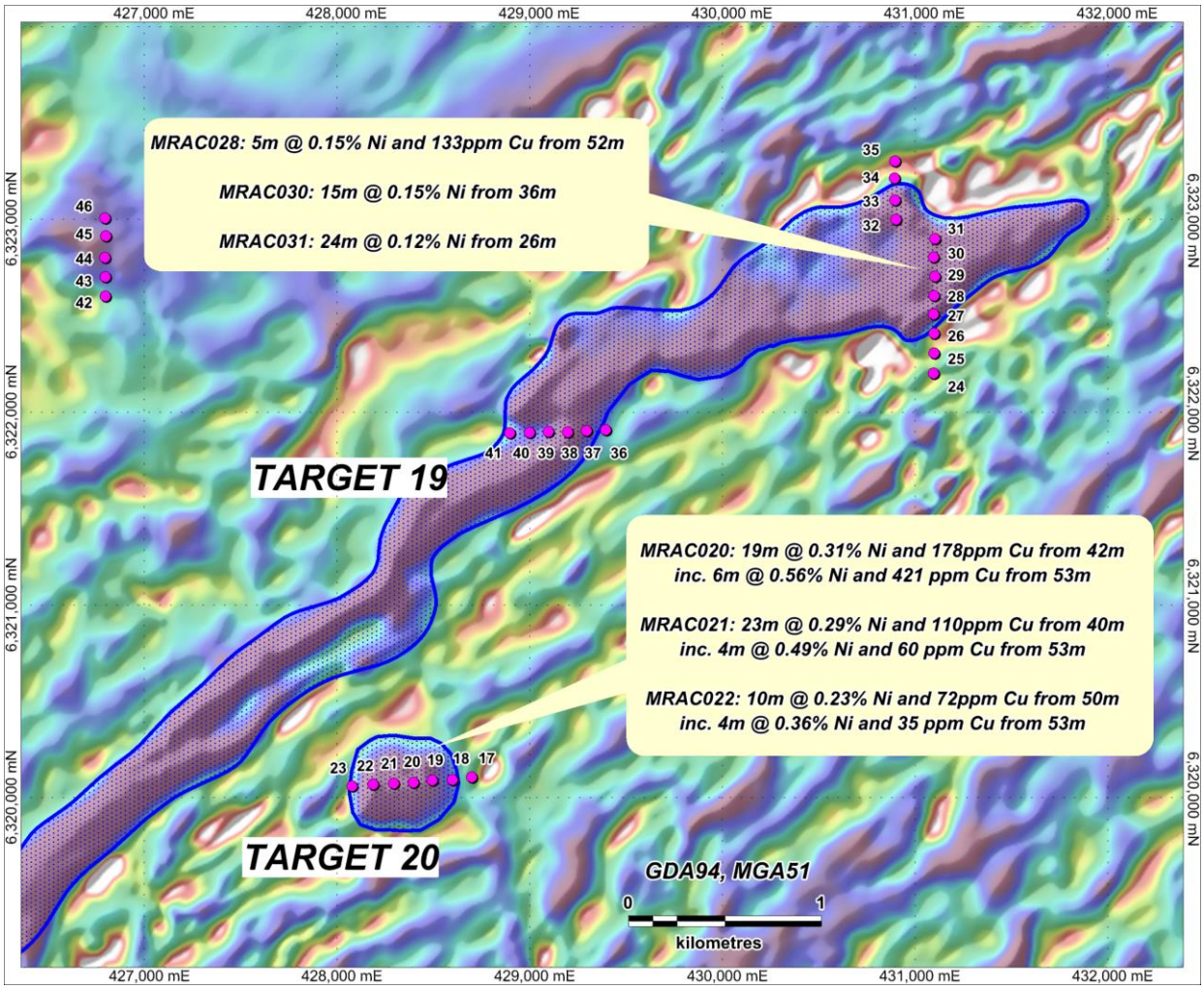

FIGURE 2: Aeromagnetic image showing location of aircore drill traverses, significant intersections and location of Targets 19 and 20.

Primary Magmatic Disseminated Nickel & Copper Sulphides Identified

Primary magmatic nickel and copper sulphides in minor amounts have been identified in the matrix or groundmass of the olivine bearing gabbros at both Targets 19 and 20. These were initially noted in hand specimen from the aircore samples but later confirmed in thin section by petrological consultants **Minerex Services Pty Ltd** of Esperance. Both primary and remobilised sulphides have been identified in at least ten holes to date, including MRAC020-022 and MRAC028-034.

The main nickel bearing sulphide is pentlandite, however supergene variants of pentlandite including violarite and millerite have been confirmed. Other sulphides including pyrite, pyrrhotite, magnetite and chalcopyrite have been identified (See Appendix 1 for more details).

It is also important to note that the aircore traverse testing the north-eastern corner of Target 19, containing holes MRAC024-035, intersected a 550m thick sequence of olivine bearing gabbro with holes MRAC028-034 all containing minor to trace amounts of primary disseminated magmatic nickel sulphides.

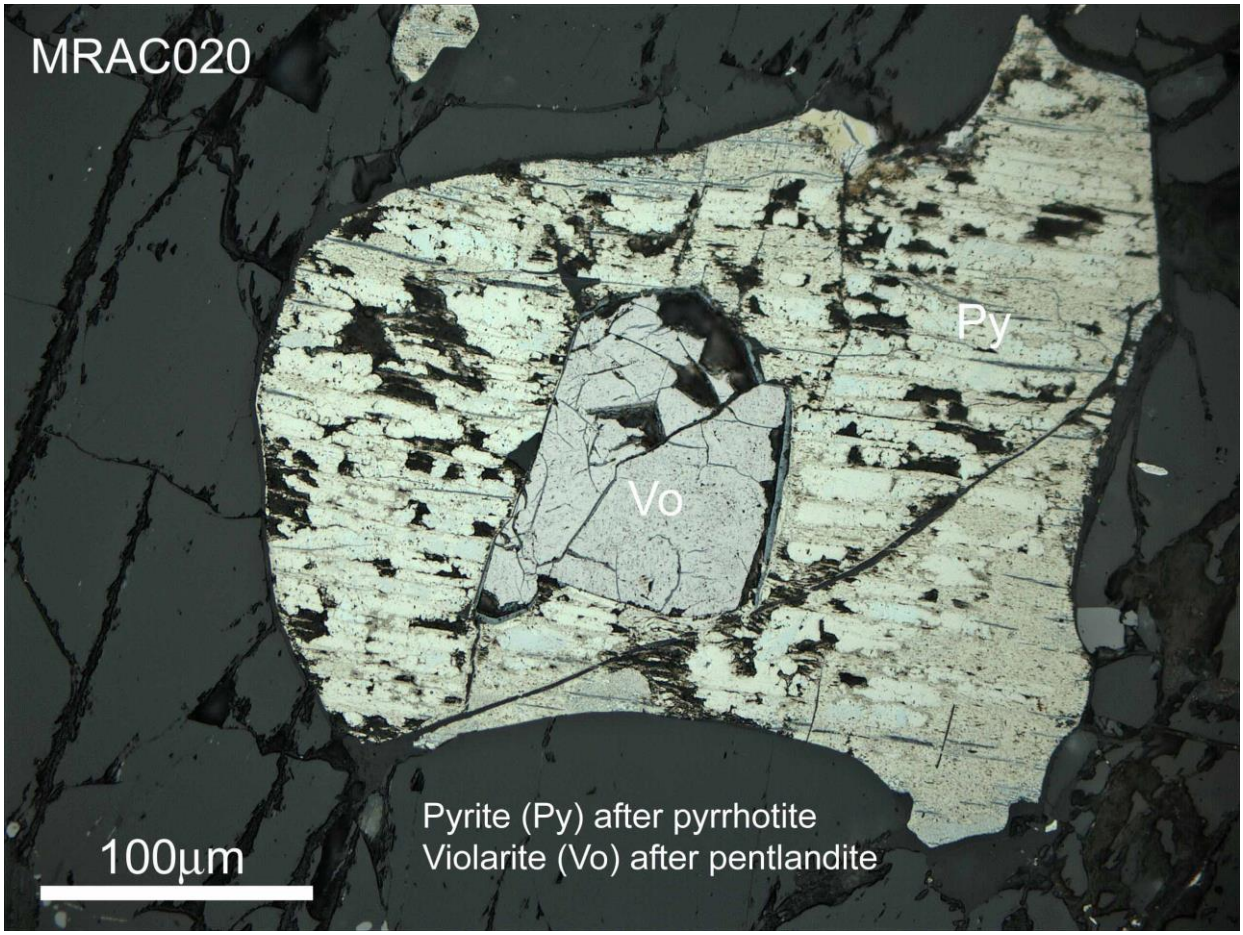

FIGURE 3: Photograph taken down the microscope of primary nickel sulphides in aircore hole MRAC020 at end of hole (66-67m).

Significance of Primary Nickel Sulphides and Mafic-Ultramafic Intrusions at Mt Ridley

Despite the limited geological data generated at the Mt Ridley Project to date, petrological descriptions of rock compositions from the recent drilling together with mineralisation assemblages and metal ratios over a broad area indicate that Mt Ridley has similarities with other known Proterozoic nickel sulphide deposits.

- **Host Lithologies:** The predominant rock type identified in MRAC 20-34 is troctolite, a mafic intrusive rock comprising olivine, calc plagioclase and minor pyroxene which likely represents a partial melt or peridotite. This is the predominant rock type found in the Voisey Bay (**Vale SA**) Ni-Cu-Co deposit of northern Labrador (JORC Inferred and Indicated Resources of 136.7Mt @ 1.59% Ni and 0.85% Cu).

- **Metallogenic Assemblage:** The average ratio (based on mineralisation intersected in Table 1) of Ni to Cu is approximately 2:1 – a similar ratio to mineralisation found at Raglan (**Glencore PLC**), Voisey Bay and Thompson Bay (**Vale SA)**.

In summary the nickel, copper and cobalt mineralisation identified at Targets 19 and 20 has many features commonly associated with the larger tonnage Canadian Lower Proterozoic sulphide deposits, namely Raglan, Voisey Bay and Thompson Bay.

Proposed Exploration

Follow up exploration is likely to comprise (subject to approvals) the following exploration at Mt Ridley:

Target 19

- Infill and step out aircore drilling to delineate the extent and tenor of the mafic-ultramafic intrusion.
- An initial two to three diamond hole program (comprising RC drillholes with diamond tails) in order to gain a greater knowledge of stratigraphy including the identification of crystal layering or sequences within the intrusion and basal olivine layers which have the potential to host both disseminated and massive sulphides.
- Downhole electromagnetic surveys in order to identify potential conductors that may be indicative of massive or disseminated sulphides.
- Subject to results, and once a greater understanding of the geology of Target 19 is obtained, it is proposed to undertake high-powered surface EM surveys that are capable of identifying conductors at depths of up to 400 metres below the surface.

Target 20

- Infill and step out aircore drilling to delineate the extent and tenor of the mafic-ultramafic intrusion.
- An initial one to two diamond hole program (comprising RC drillholes with diamond tales) in order to gain a greater knowledge of stratigraphy.
- Downhole and surface Electromagnetic surveys (subject to the results of the RC and diamond drilling program).

Conclusion

On behalf of the board I am delighted with this first phase of exploration which has not only identified mafic-ultramafic lithologies known to host world class nickel deposits such as Voisey Bay, Thompson Bay and Raglan, but also the presence of primary nickel and copper sulphides. Furthermore the hypothesis that the gravity corridor, also observed on and around the Nova-Bollinger tenements, was attributable in part to mafic-ultramafic rocks, has been confirmed on the Mt Ridley tenements by this first phase of exploration. We have shown categorically that the gravity corridor is the place to be.

I believe that the results of this aircore program have given the Company the impetus to pursue an aggressive exploration program in the medium term in the search for disseminated and massive nickel-copper sulphides deposits.

In the short term we look forward to receiving the results of a further 30 aircore drill holes at Target 19 and 20.

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For and on behalf of the board

Mr Dean Goodwin. AIG

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The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Dean Goodwin who is a Member of the Australian Institute of Geoscientists. Mr Goodwin is the Managing Director of the Company. Mr Goodwin 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 Goodwin consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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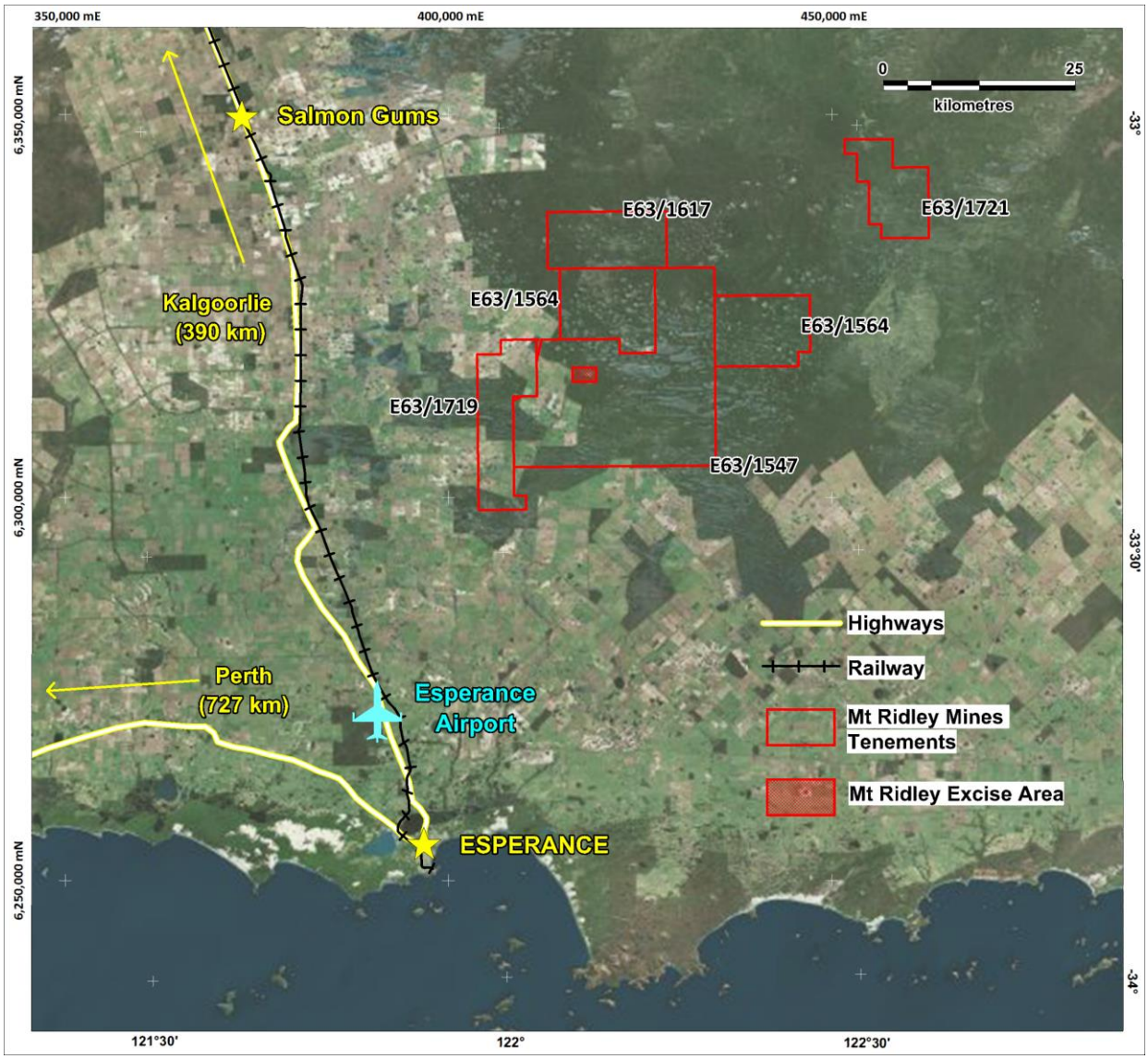
About Mt Ridley Mines Ltd

Mt Ridley Mines Ltd is a Perth based Australian exploration company focusing primarily on projects in the Fraser Range region with the potential to host major mineral deposits in base and precious metals including nickel, copper, cobalt, silver and gold.

The Company is managed by a team of highly motivated professionals with significant expertise in mineral exploration, mining operations, finance and corporate management with a proven track record of successfully delivering value to shareholders.

Mt Ridley Mines Ltd is actively targeting nickel sulphide deposits in the Albany-Fraser Range Province of Western Australia, the site of Sirius Resources Nova Nickel-Copper Deposit. The Company currently has a portfolio of tenements totaling in excess of 1000sq/kms in what is fast becoming the world's most exciting emerging nickel province.



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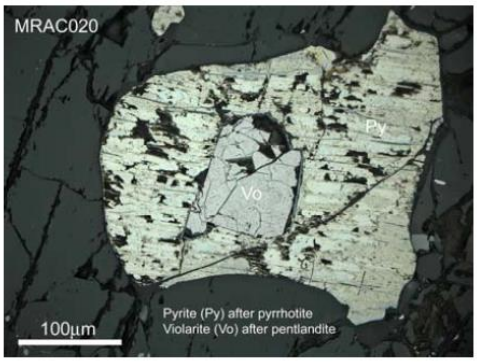
Appendix 1

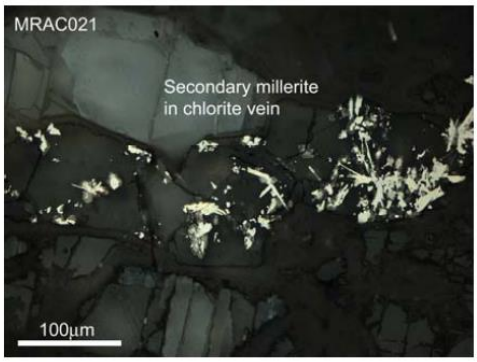
PETROGRAPHIC OVERVIEW

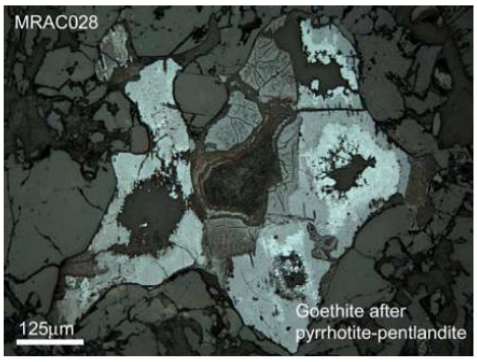
Ten air core samples were submitted to Minerex Services Pty Ltd for petrographic analysis from Dean Goodwin from Mt Ridley Mines Limited. This report is a petrographic overview of samples MRAC020 to 022 and MRAC028 to 034.

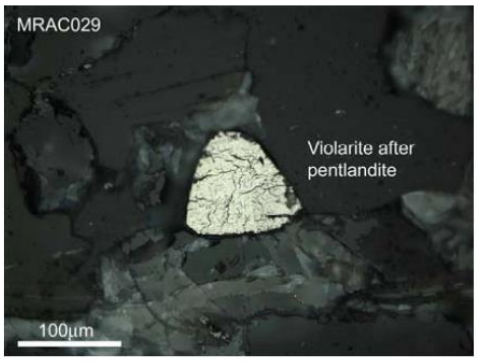
The samples are generally fresh rock, with minor oxidation evident and range in composition from olivine gabbro/norite to troctolite. The rocks have been subject to Granulite Facies metamorphism with some retrograde alteration to Amphibolite Facies.

Trace (<<1%) amounts of disseminated sulphides occur throughout the samples and consist of primary, composite blebs up to 0.75mm of pyrrhotite, pentlandite and chalcopyrite. Most of the grains show some supergene alteration, with secondary pyrite and violarite forming pseudomorphs of the primary pyrrhotite-pentlandite respectively. Fine, secondary millerite grains are also associated with late carbonate-chlorite alteration of the rocks.









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Appendix 2 Mt Ridley Mining Limited – Mt Ridley Project – Aircore 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.*	• **All aircore drill samples were collected using a hand held spear.** • **A full and level spear is consistently collected for each sample. Samples were composited by sampling the individual 1 metre sample spoils and combining 4 for each composite sample** • **Aircore drilling was used to obtain 1 metre samples which are used to make 4m composites, these were pulverised and a 40g charge was taken 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.).*	• **The aircore drilling was conducted by ONQ Exploration using a 92mm blade bit to blade refusal**
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.*	• **Sample recoveries were not measured.** • **The sampling cyclone and buckets were cleaned regularly.** • **Not applicable.**

	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*	• **Aircore drill chips were geologically logged.** • **Qualitative descriptions of colour, grain size, texture and lithology are recorded for each sample. Thin sections of significant samples were made for petrological analysis.** • **Drill holes are geologically logged in their entirety.**
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.*	• **Not applicable** • **Aircore samples are not riffle split.** • **Samples consisted of 4 metre composites. Submitted sample weights vary from 1 to 2 kg. Samples were collected using hand spearing of each of the sample spoils.**
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.*	• **For aircore drilling sample analysis was completed by Bureau Veritas Minerals Pty Ltd of Perth, W.A. using a 4 acid digest, which is regarded as total digest. Elements (As, Co, Cr, Cu, Fe, Mg, Ni and Zn) were measured using inductively coupled plasma (ICP) Optical Emission Spectrometry. Au and AuR were measured by Atomic Absorption Spectrometry. These are considered the most cost effective techniques for the measurement of gold and base metals.** • **For aircore drill samples, QAQC standards were routinely inserted within the sample batches at an approximate rate of 1 standard per 50 samples. In addition reliance is placed on laboratory procedures and laboratory batch standards**

	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** • **Sampling data is collected in the field and data entry and validation is completed in the office by experienced database personnel assisted by geological staff.** • **No adjustments are made to assay data.**
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 and +/ 10m vertical. This is considered acceptable for broad spaced ground activities.** • **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.*	• **Aircore drill spacing was dictated by access; drill traverses were planned along existing cleared tracks over the targets to be tested. The drill collar spacing was nominally 100m along each traverse.** • **Not applicable.** • **Composite sampling has been applied to the aircore drilling. 4 metre composite samples have been used.**
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.*	• **The orientation of the aircore traverses is considered to achieve an unbiased sampling at these broad spacings given it is an early stage of exploration** • **Not applicable**

	JORC Code explanation	Commentary
Sample security	• *The measures taken to ensure sample security.*	• **Not applicable for first pass shallow aircore drilling. Sample bags are clearly marked and addressed for assay laboratory and are delivered using commercial freight carriers. Assay pulps are retained and stored in a company facility for future reference if required.**
Audits or reviews	• *The results of and audits or reviews of sampling techniques and data.*	• **No audits or reviews of sampling techniques have been completed.**

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*	• **The aircore drill hole coordinates and details are outlined in Table 1 of this ASX Announcement.** • **Due to the nature of this drilling and the early phase of exploration all holes with significant intersections of nickel (>1000 ppm) and/or copper (>35 ppm) have been reported and tabulated. The remaining holes do not have any significant results and are considered barren. Drilling was undertaken testing conceptual targets, although 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.*	• **Weighted averaging techniques have been applied to the composite samples when calculating grade intervals.** • **The composite intervals have been calculated using a minimum assay of 900 ppm Ni and 30 ppm Cu.** • **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 anomalous nickel assays 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**

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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 aircore 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.** • **A fixed loop TEM survey was completed in December 2014 over targets 1 and 2. A mid-late time EM conductor detected at target 2 was tested with an aircore traverse; however, the conductor remains unexplained at this point in time. The TEM data and results have been discussed in a previous ASX release and exploration update.**
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 targets 19 and 20 to delineate high priority areas for follow-up electromagnetic (TEM) surveying.** • **RC and / or diamond drill holes are being planned for targets 19 and 20 to obtain additional stratigraphic information, samples for assay and analysis and to allow down hole TEM surveying**