

# 31 January 2017

# Quarterly Report for the quarter ended 31 December 2016

#### **OVERVIEW**

- Ground gravity surveys including detailed infill over priority target areas
- Commencement of MRDD017 and MRDD018
- CSA's technical review summary announced

# **Diamond Drilling**

On the 14<sup>th</sup> November 2016, the Company announced a progress update on diamond drill hole MRDD017 targeting an off-hole >10,000 Siemens conductor located at approximately 650 metres downhole depth, immediately off-hole below and to the east of MRDD016 (refer to ASX announcement 12<sup>th</sup> October 2016).

The hole was drilled to a depth of 410 meters. A previously unknown shear zone sub-parallel to the new hole axis was encountered from approximately 200 meters downhole depth. Drilling this fractured and highly foliated shear zone caused the hole to deviate substantially to the west, off course from the intended target. The Company had decided to step back up the hole and prepared a wedge from 270 meters depth. This was designed to steer the hole back on course to the targeted EM anomaly, only to again encounter fractured shear zones not encountered in the adjacent hole MRDD016.

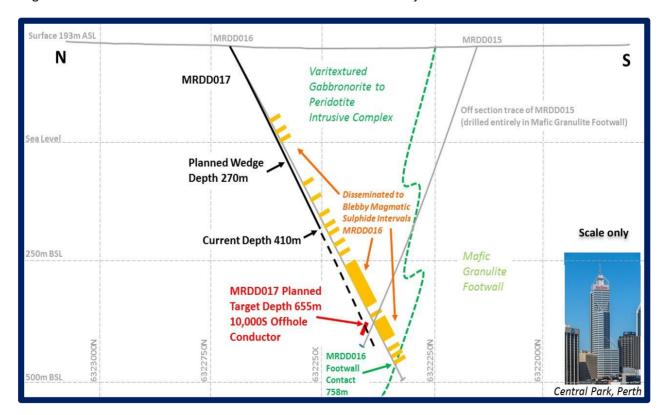


Figure 1: Drill holes MRD015 to MRDD017 with geological and mineralisation interpretation.

(ASX: MRD)



In Figure 1, note that drill hole MRDD015 was drilled entirely in barren footwall mafic granulite, indicating that the contact between the footwall and the magmatic sulphide mineralised intrusive drilled in hole MRDD016, and targeted in hole MRDD017, passes off section between MRDD016-017 and MRDD015.

The substantial shear zone encountered contains abundant late carbonate-pyrite brittle fracture fill veinlets. Five reconnaissance core samples of the sheared material were taken and sent for assay at ALS Laboratory in Perth WA (see ASX announcement 28<sup>th</sup> November 2016). Assay results returned from the carbonate-pyrite mineralised shear encountered at approximately 220 meters depth in MRDD017 unfortunately had no significant results to report.

On the 28<sup>th</sup> November 2016, Hole MRDD017 had been terminated at 410 meters after a Gyro survey, due to excess deviation that had taken the hole too far off the planned course. The extreme deviation due to geological conditions nullified the effects of the course correction and will now need to be replaced with a new hole.

A new hole, MRDD018, was planned to allow for the exact type of deviation encountered lower in MRDD016, and encountered in hole MRDD017. Please refer to On Going Work below in relation to the completion of MRDD018.

# **Exploration**

On the 12<sup>th</sup> December 2016, the CSA Global - Mt Ridley Review was announced. The Company was proactive and had already been active in implementing exploration techniques and methods on a regional scale to best place the project and company for success in 2017.

Mount Ridley Mines noted in its ASX announcement dated 12 December 2016 that it appreciated the dedicated efforts by CSA's Ni expert Tony Donaghy and CSA Global for the review and look forward to a successful partnership at the Company's flagship Mt Ridley Project.

#### 12<sup>th</sup> December 2016: Executive Summary – Key Findings:

The Mt Ridley Nickel-Copper sulphide project has demonstrated potential for discovery of magmatic nickel-copper sulphide. The geology and geochemistry of the mafic-ultramafic intrusive-hosted nickelcopper sulphide systems drilled to date offer significant encouragement to continue exploration efforts. The Mt Ridley project area most likely represents a previously unidentified Fraser Zone crustal element with what appear to be identical geochemical, geological and geophysical characteristics. The Fraser Zone is the host tectonic terrane to the Nova nickel-copper sulphide ore body some 400 kilometres to the northeast.

Previous exploration has apparently followed a somewhat narrow focus and an exploration model based on an incomplete understanding of the geological processes and physical properties of tholeiite intrusive-hosted nickel sulphide systems. Exploration targeting has been limited to follow-up on selected regional aeromagnetic anomalies interpreted to be intrusive complexes. To date, only four such features have received detailed follow-up - Targets 1, 2, 19 and 20. Other features, and other applicable techniques such as regional gravity and regional geochemistry, have not been tested. The great majority of the project area remains essentially unexplored, with many features indicated from the aeromagnetic and ongoing gravity data collection requiring follow-up exploration. Also, potential exists for intrusive complexes in the area with poor or no recognised aeromagnetic expression.

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To avoid missed opportunity, a targeting approach of utilising as a minimum a combined magnetics and gravity data set is recommended.

Initial assay geochemistry conducted by MRD utilised a very basic eight-element package that did not allow for meaningful assessment of mineralisation potential. A newer, expanded assay package now in use allows comparative geochemistry within the project as well as correlation with the Fraser Zone mafic intrusive suites from publicly available data. Such correlation shows that the Mt Ridley intrusive complexes drilled to date share telling similarities in magmatic and mineralisation history with the Fraser Zone mafic intrusives, and particularly the mineralised intrusive system that hosts the Nova orebody. Texturally, the mafic-ultramafic intrusive suites comprise for the main part varitextured gabbronorites, the varitexture indicating significant magmatic interaction with the surrounding country rocks, an essential process in forming magmatic nickel-copper sulphides. Albeit of low grade due to low sulphide content in the disseminated systems intersected to date, the tenor of the sulphides, or the nickel content of the sulphide phase, is moderate at approximately 3.5 to 4% nickel in sulphide. This is average for a true magmatic nickel sulphide system and indicates that sulphur saturation has occurred sufficiently early in the magmatic history to form good quality nickel sulphides. Such consistency of tenor offers encouragement that nickel grades can be reasonably expected to increase linearly with sulphide content.

The great majority of the drilling (14 of 16 diamond drill holes) has been concentrated into a limited area of target 19, leading to redundancy of drill and borehole geophysical data in such a limited space without consideration of the required size of target footprint. Within Target 19, targeting was driven primarily by poorly constrained geophysical interpretations, particularly of magnetotelluric data. The anomalies thought to be indicative of bedrock conductors interpreted in the 2D magnetotelluric data inversions have subsequently been repudiated by more sophisticated 3D inversion of the data. This 3D inversion shows these features are not real and are artificial artefacts of the 2D inversion process caused by a widespread highly conductive cover sequence. Such highly conductive cover means that magnetotellurics is ineffective as a direct detection technique in this type of terrain.

Target 19 has demonstrated excellent potential for hosting good tenor magmatic nickel-copper sulphides and remains open in all directions. Further exploration is recommended, utilising an approach of drilling and borehole geophysics that maximises area coverage while covering off the expected target footprint. The limited exploration conducted to date at Target 2 and Target 20 have not closed out opportunity for discovery at those targets. Target 2 offers encouragement for immediate continued exploration as previously identified ground EM anomalies have not been adequately tested. Further work is needed to constrain these EM anomalies prior to further drilling.

Detailed interpretation of the magnetic and gravity data is recommended to provide a geological framework for exploration, not just for nickel-copper, but also for other base metals and gold. To constrain the geological framework, regional geochemistry of bedrock is also recommended on traverses across features, structures and horizons identified from the geophysical data as areas of interest for these commodities. The area is considered prospective for Broken Hill-type Lead-Zinc deposits, and although of a lesser priority exploration should remain opportunistic to gold. Base metal prospectivity is interpreted to be greatest at the transition from magnetically complicated areas to areas that are magnetically quiescent, as this may represent the transition from active rifting to sagphase sedimentation analogous to the Broken Hill orebody setting in NSW.

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On the 28<sup>th</sup> November 2016, the Company announced and presented a power point presentation at its annual AGM which was very well received. Please refer to the ASX announcement on the 28<sup>th</sup> November 2016 or on the Company's website which has also been updated during the December quarter.

Detailed ground gravity surveying was conducted throughout the November and December period as a follow up to the successful stage 1 completed and announced on the 13<sup>th</sup> September 2016 and is covered below.

# **Ongoing Work**

On the 11<sup>th</sup> January 2017, the Company announced that the High Powered Moving Loop Electro Magnetic (HPMLTEM) survey has commenced at The Lake target closely followed by Tyrells target. GAP Geophysics are currently conducting the surveys using the Sampson Receiver system. These surveys are still ongoing. Figures 2 & 3 below are part of the announcement on the 11<sup>th</sup> January 2017.

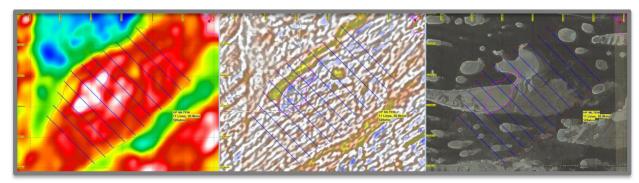


Figure 2: The Lake HP MLTEM survey planning - GRAV, AMAG (separation filtered) and BING satellite imagery.

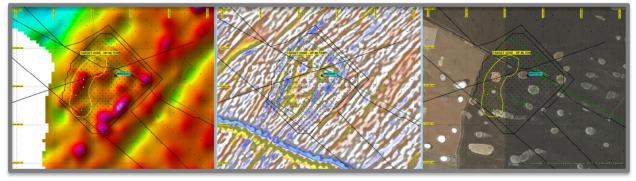


Figure 3: Tyrrell's target EM planning, GRAV, AMAG (separation filtered) and BING satellite imagery.

On the 22<sup>nd</sup> January 2017, the Company's announced that drill hole MRDD018 has been completed at 732 meters downhole depth. The hole was terminated in barren homogenous gabbronorite. Due to hole deviation that resulted in the hole path steepening with depth, the hole passed down dip beneath the targeted EM plate (see ASX announcement 12th October 2016) by approximately 30 meters. The hole encountered an over-pressurised pocket of hypersaline water and clay in a fault at a downhole depth of 705 meters. The hole did not encounter any other geological features that would give a

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conductive response. Due to the positive overpressure and flowing water from the fault system encountered, it is not possible at this stage to conduct a downhole electromagnetic survey.

MRDD018 was drilled down-dip of the EM plate modelled from MRDD016 and did not encounter any increased sulphide content, and has closed off the size potential for the conductive target. The decision was made to cease drilling operations for the time being at Target 19. Efforts are now being focused on the ongoing exploration programs following up on The Lake and Tyrrells target areas.

An air core drilling bedrock geochemistry program and moving loop SAMSON electromagnetic survey has commenced at The Lake target. On completion of these surveys, air core drilling and moving loop SAMSON surveys will commence at Tyrrells target. The programs will then move through the other untested target areas identified from the combined magnetic and gravity anomaly data, commencing with Keith's, Marcellus, Winston and Vincent targets. Any anomaly targets identified from these programs will be followed up immediately with diamond drilling.

Detailed gravity surveying along the gravity ridge to the southwest of Tyrrells is expected to recommence imminently. In addition, the detailed gravity survey will be extended to the northwest of the gravity ridge testing for Broken Hill type lead-zinc targets.

#### **CORPORATE**

On 10<sup>th</sup> October 2016, the Company announced a capital raising via a placement of 158,763,031 fully paid ordinary shares ("Shares") at \$0.005 each for a total amount raised of \$793,815 (before costs) to sophisticated investors of the Company ("Placement"). The Company also issued free attaching unlisted options on a 1 for 2 basis, exercisable at \$0.0125 on or before 31 August 2019 ("Options"). The Options were issued following shareholder approval at the 2016 Annual General Meeting held on 28 November 2016.

For and on behalf of the board

Mr Ashley Hood

**Managing Director** 

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#### **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 Registered Professional Geoscientist (P.Geo) with the Association of Professional Geoscientists of Ontario (APGO), a Recognised Professional Organisation. Mr Donaghy is a technical advisor 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

#### **CORPORATE INFORMATION**

#### **Board**

Michael Pedley Non-Executive Chairman
Ashley Hood Managing Director
Guy Le Page Non-Executive Director

Keith Bowker Non-Executive Director/Company Secretary

#### **Registered Office & Principal Place of Business**

Suite 1, 56 Kings Park Road, West Perth WA 6005

Telephone: + 61 8 9481 0544 Facsimile: +61 8 9481 0655

### **Forward Shareholder Enquiries to**

Security Transfer Australia Pty Ltd 770 Canning Highway, Applecross WA 6153

Telephone: +61 8 9315 2333

#### **Issued Share Capital**

As at the date of this report, the total fully paid ordinary shares on issue were 1,217,183,243.

#### **TENEMENT INFORMATION (ASX Listing Rule 5.3.3)**

The table below shows the interests in tenements held by Mount Ridley Mines and is provided in accordance with ASX Listing Rule 5.3.3.

Location	Project Name	Tenement #	Ownership	Titleholder
Western Australia	Mt Ridley	EL63/1547	100%	Mount Ridley Mines Limited
Western Australia	Mt Ridley	EL63/1564	100%	Mount Ridley Mines Limited
Western Australia	Mt Ridley	EL63/1617	100%	Mount Ridley Mines Limited
Western Australia	Mt Ridley	EL63/1719	100%	Mount Ridley Mines Limited



# **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.

Mount Ridley Mines Ltd is actively targeting nickel and copper sulphide deposits in the Albany-Fraser Range Province of Western Australia, the site of Independence Groups Nova Nickel-Copper Deposit. The Company currently has a tenement portfolio of approximately 1,000sq/kms in what is fast becoming the world's most exciting emerging nickel and copper province.

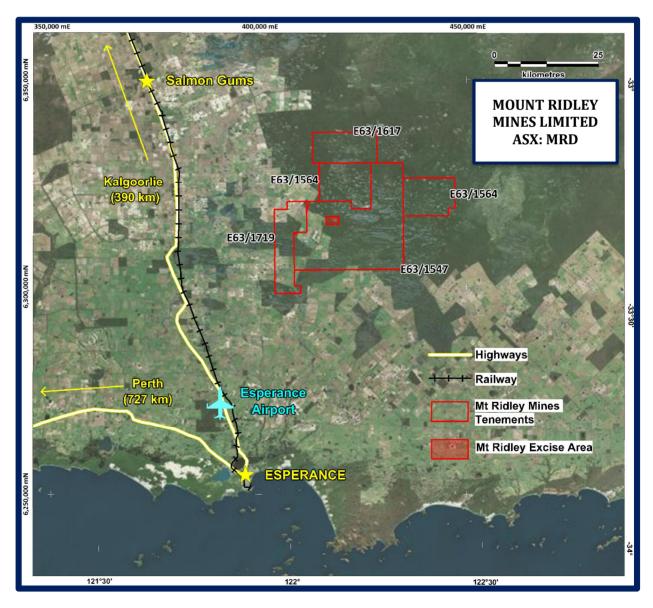


Figure 4: Location of Mount Ridley Mines - Mt Ridley Project.

+Rule 5.5

# **Appendix 5B**

# Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

# Name of entity

MOUNT RIDLEY MINES LIMITED

ABN

Quarter ended ("current quarter")

93 092 304 964

31 December 2016

Con	solidated statement of cash flows	Current quarter	Year to date (6 months)
		\$A'000	\$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation	(689)	(1,177)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(65)	(97)
	(e) administration and corporate costs	(139)	(187)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	8	16
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Research and development refunds	-	-
1.8	Other (rental bond refund)	16	16
1.9	Net cash from / (used in) operating activities	(869)	(1,429)

2.	Cash flows from investing activities	
2.1	Payments to acquire:	
	(a) property, plant and equipment	-
	(b) tenements (see item 10)	-
	(c) investments	-
	(d) other non-current assets	-

<sup>+</sup> See chapter 19 for defined terms

<sup>1</sup> September 2016

Consolidated statement of cash flows		Current quarter	Year to date (6 months)
		\$A'000	\$A'000
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment	-	-
	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	-	(2)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of shares	-	-
3.2	Proceeds from issue of convertible notes	-	-
3.3	Proceeds from exercise of share options	794	2,736
3.4	Transaction costs related to issues of shares, convertible notes or options	(52)	(169)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	_	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	742	2,567

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	2,206	943
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(869)	(1,429)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	(2)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	742	2,567
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	2,079	2,079

<sup>+</sup> See chapter 19 for defined terms 1 September 2016

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5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	2,079	2,206
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	2,079	2,206

6.	Payments to directors of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to these parties included in item 1.2	96
6.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	-

6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2

Payments for director fees: \$70,067
Payments for consulting and exploration: \$25,449

All payments are on normal commercial terms

7.	Payments to related entities of the entity and their associates	Current quarter \$A'000
7.1	Aggregate amount of payments to these parties included in item 1.2	-
7.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	ı

7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2

N/A		

1 September 2016

<sup>+</sup> See chapter 19 for defined terms

8.	Financing facilities available Add notes as necessary for an understanding of the position	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
8.1	Loan facilities	-	-
8.2	Credit standby arrangements	-	-
8.3	Other (please specify)	-	-

8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.

N/A

9.	Estimated cash outflows for next quarter \$A'000	
9.1	Exploration and evaluation	650
9.2	Development	-
9.3	Production	-
9.4	Staff costs	55
9.5	Administration and corporate costs	100
9.6	Other (provide details if material)	-
9.7	Total estimated cash outflows	805

10.	Changes in tenements (items 2.1(b) and 2.2(b) above)	Tenement reference and location	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
10.1	Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced	-	-	-	-
10.2	Interests in mining tenements and petroleum tenements acquired or increased	-	-	-	-

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<sup>+</sup> See chapter 19 for defined terms

Date: 31 January 2017

#### **Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Sign here:

Company Secretary

Print name: Keith Bowker

#### **Notes**

- 1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
- 2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

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<sup>+</sup> See chapter 19 for defined terms