

# ASX Announcement ASX Code: MAR 17 December 2015

### ASSAYS RECEIVED FOR LADY MARY DRILLING PROGRAM

- Assays have been received for the RC drilling program at the Lady Mary Prospect
- Best intersection is 2m @ 3.20g/t Au and 1.90% Cu

Malachite Resources Limited (ASX Code: MAR) ("Malachite" or the "Company") is pleased to announce that assays have been received for drill samples from the recent program of reverse circulation drilling at the Lady Mary Prospect. The Lady Mary Prospect is located 6km west of Malachite's Lorena gold mine near Cloncurry in northwest Queensland (see Figure 1 - Location Plan).

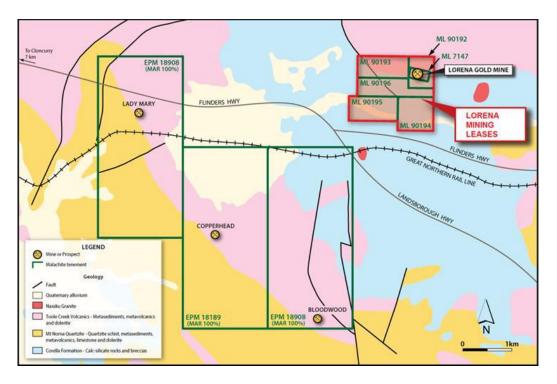


Figure 1: Location plan of Lady Mary Prospect and Lorena Gold Mine

The drilling program consisted of eight holes (total 558m), testing the Lady Mary Prospect over a strike length of 400m. Hole lengths varied between 42m and 114m (refer Table 1 for drill hole details). The holes intersected metadolerite and quartz schist/quartzite units of the Toole Creek Volcanics, and mica schist units of the Mt Norna Quartzite. Zones of quartz-carbonate veining and alteration were also intersected.

Malachite Resources Limited ABN 86 075 613 268 Suite 2, Level 10, 8-10 Loftus Street, Sydney NSW 2000 P O Box R1295, Royal Exchange NSW 1225 Tel: (02) 9251 0032 Fax: (02) 9475 0439 www.malachite.com.au Assays have now been received from the SGS laboratory in Townsville for a suite of 323 x 1m drill samples (including assay standards and duplicate samples), which were assayed for gold and a suite of accompanying elements. The only intersection of significance was in drill hole LERC04, which assayed 2m @ 3.20g/t Au and 1.90% Cu from 12m to 14m. All other drill holes returned low gold values (generally <0.05g/t Au) except LERC05 which intersected 1m @ 0.45g/t Au from 15m to 16m.

The lack of mineralized intersections in the other six drill holes suggests that the mineralization previously sampled from the dumps surrounding the old pits is sourced from discontinuous pods of mineralization, none of which were intersected in the drill holes.

However, the intersection in drill hole LERC04 is to the east of the line of old pits and the gold-copper soil anomaly (see Figure 2), and this position was not tested by any of the other drill holes in this northern section of the prospect. Hence a program of follow-up drilling along strike and down-dip of this intersection is warranted.

Drill Hole		Drill Collar			Drill	Hole	
No.	Northing	Easting	RL	Hole	Total	Azimuth	Dip
	GDA	GDA	mASL	Туре	Depth	(mag)	
LERC 01	7708407	457374	225m	RC	66m	239°	-60°
LERC 02	7708388	457324	225m	RC	42m	059°	-60°
LERC 03	7708462	457341	225m	RC	60m	239°	-50°
LERC 04	7708477	457377	225m	RC	114m	239°	-60°
LERC 05	7708282	457282	225m	RC	60m	239°	-50°
LERC 06	7708097	457521	225m	RC	66m	239°	-50°
LERC 07	7708198	457510	225m	RC	78m	255°	-50°
LERC 08	7708301	457471	225m	RC	72m	239°	-50°

### Table 1 - Lady Mary Drill Hole Details

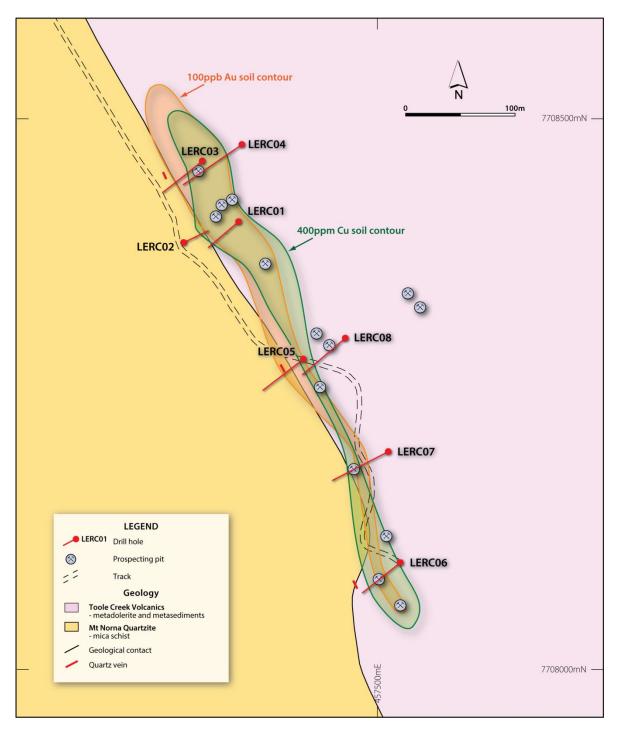


Figure2: Lady Mary Drill Hole Location Plan

For further information, please contact Malachite Resources Limited on (02) 9251 0032 or by email at <u>info@malachite.com.au</u> or visit the company's website at <u>www.malachite.com.au</u>

#### COMPETENT PERSON STATEMENT:

The information in this report that relates to Exploration Results is based on information compiled by Mr Russell Meares, a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Meares is a part-time employee of Malachite Resources Limited. Mr Meares has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' Mr Meares consents to the inclusion in this report of the matters based on his information in the form and context in which it appears. Exploration results are based on standard industry practices, including sampling, assay methods, and appropriate quality assurance/quality control (QA/QC) measures.

## JORC Table 1 – Section 1: Sampling Techniques and Data for the Lady Mary Drilling Program

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	Reverse circulation (RC) drilling was used to obtain samples for geological logging and assaying. RC drill holes were sampled at 1m intervals and each 1m sample was split using a cone splitter attached to the cyclone to generate a split of 2-3kg to ensure sample representivity.
Drilling techniques	<ul> <li>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).</li> </ul>	<i>Reverse circulation drilling utilised a 5 1/2 inch diameter hammer.</i>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	All RC samples were weighed at the drill site, and all sample recoveries were deemed acceptable.
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	All RC drill chip samples are geologically logged in 1m intervals from surface to the bottom of each hole to a level that will support appropriate future Mineral Resource studies if required. The logging of RC chip samples recorded the lithology, mineralogy, mineralisation, veining, weathering, colour and other features of the samples

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	The RC drilling rig was equipped with an in-built cyclone and splitting system, which provided one bulk sample of approximately 30kg and a sub-sample of 2-3kg per metre drilled. All samples were split using this system to maximise consistent representivity. All samples were dry. Bulk samples were placed in green plastic bags, with the sub-samples collected placed in calico sample bags. Field duplicates were collected off the splitter on the drill rig.
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The SGS laboratory in Townsville was used to analyse the drill samples, as this has been the preferred laboratory for Malachite's North Queensland work, and has always returned consistent results.</li> <li>The analytical techniques used for the Lady Mary drill samples were: <ul> <li>Sample preparation – Method PRP86</li> <li>Gold – 50g Fire Assay by Method FAA505</li> <li>Ag, As, Bi, Co, Cu, Fe, S, and Zn by Methods ICP40Q and AAS41Q for ore grade Cu analyses</li> </ul> </li> <li>QA/QC control methods included the insertion of one umpire standard every 20 samples, and one field duplicate sample every alternate 20 samples. The assays reported by the laboratory on these samples were within the industry-standard acceptable range.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	All geological logging and sampling information was completed on spreadsheets, which are then transferred to a database for validation and compilation. Electronic copies of all information are backed up periodically.

Criteria	JORC Code explanation	Commentary
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	A Garmin hand-held GPS was used to define the location of the drill hole collars. Down-hole surveys were conducted by the drill contractor 3m from the end of each hole using an Eastman multishot camera. The grid system used was MGA94 (Zone 54)
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Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral</li> </ul>	Data/drill hole spacing was variable and appropriate to the geology and the drill target geometry.
	<ul><li>Resource and Ore Reserve estimation procedure(s) and classifications applied.</li><li>Whether sample compositing has been applied.</li></ul>	No sample compositing was applied.
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	All drill holes were planned to intersect the interpreted mineralised structure as near to a perpendicular angle as possible.
Sample security	The measures taken to ensure sample security.	<ul> <li>The project geologist was responsible for sample security. Each calico sample bag was placed in polyweave sacks for road transport to Townsville, with up to five calico sample bags in each sack. Each sack was sealed and was clearly labelled with: <ul> <li>The company's name</li> <li>The name and address of the laboratory</li> </ul> </li> </ul>
		• The sample numbers in each sack
		Detailed records were kept of all samples that were dispatched, and the laboratory subsequently advised that all samples had been safely received.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	The data was validated when loading into the database.

## JORC Table 1 – Section 2: Reporting of Exploration Results for the Lady Mary Drilling Program

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	The Lady Mary Prospect is located on EPM 18908, held 100% by Malachite Resources Limited and located ~10km east of Cloncurry, Queensland.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	There has been no previous exploration conducted on the Lady Mary Prospect by other parties.
Geology	• Deposit type, geological setting and style of mineralisation.	The Lady Mary mineralisation appears to be a shear-hosted system with associated quartz and carbonate veining and sericitic alteration, near the contact of the Mt Norna Quartzite and the Toole Creek Volcanics
Drill hole Information	<ul> <li>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: <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	All this information is shown in the Table included in the ASX announcement to which this JORC Table 1 is attached.
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	None of these techniques were used.

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	As this was a program of first-pass RC drilling, no comments about the mineralisation widths and the intercept lengths can be made.
Diagrams	<ul> <li>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.</li> </ul>	A drill hole plan is included in the ASX announcement to which this JORC Table 1 is attached.
Balanced reporting	<ul> <li>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.</li> </ul>	The text of the ASX announcement to which this JORC Table 1 is attached adequately addresses this issue.
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.	The text of the ASX announcement to which this JORC Table 1 is attached adequately addresses this issue.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	The text of the ASX announcement to which this JORC Table 1 is attached adequately addresses this issue. Namely "However, the intersection in drill hole LERC04 is to the east of the line of old pits and the gold-copper soil anomaly (see Location Plan), and this position was not tested by any of the other drill holes in this northern section of the prospect. Hence a program of follow-up drilling along strike and down-dip of this intersection is warranted."