

**ASX Announcement**

**ASX Code: MAR**

**19 April 2012**

## **NEW HIGH GRADE GOLD ZONE DISCOVERED AT LORENA GOLD PROJECT**

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### **SUMMARY**

- The first of several new drill holes at Lorena has intersected a new zone of high grade gold mineralisation like that in the A Lode open pit resource.
- The zone contains two high grade intersections: 5.3m @ 12.9g/t Au (including 1.4m @ 32.9g/t Au) and 0.4m @ 20.3g/t Au.
- The newly discovered zone is located approximately 200m southeast of the existing open pit and more than 200m vertically below the surface.
- This greatly increases the known lateral and depth extent of gold mineralisation at Lorena.
- The new zone is off-set from the known A Lode trend by faulting, opening up previously unrecognised gold potential.
- The result gives strong encouragement that further drilling will continue to grow the Lorena resource.

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Malachite Resources Limited (“Malachite” or “the Company”; ASX: MAR) is pleased to advise that drilling recently initiated at the Company’s Lorena Gold Project has intersected a new, high grade gold zone that appears to be an off-set extension of the high grade Lorena A Lode.

**The new zone was intersected about 200m southeast of the existing open pit at a depth of over 200m vertically below surface (Fig. 1). This more than doubles both the lateral and depth extent of gold mineralisation at Lorena and adds substantially to the deposit’s resource potential.**

The primary objective of the new drilling program is to provide a platform for down-hole electromagnetic (“DHEM”) geophysical surveying that will test for off-hole electrical conductors like the massive, gold-rich arsenopyrite bodies in the A Lode resource. The first of the new holes, LMRD092 was drilled on ML90192 about 200m southeast of the existing open pit and intersected 5.3m @ 12.9g/t Au (including 1.4m @ 32.9g/t Au) from 224m down-hole and 0.4m @ 20.3g/t Au at 255m down-hole (refer Table 1).

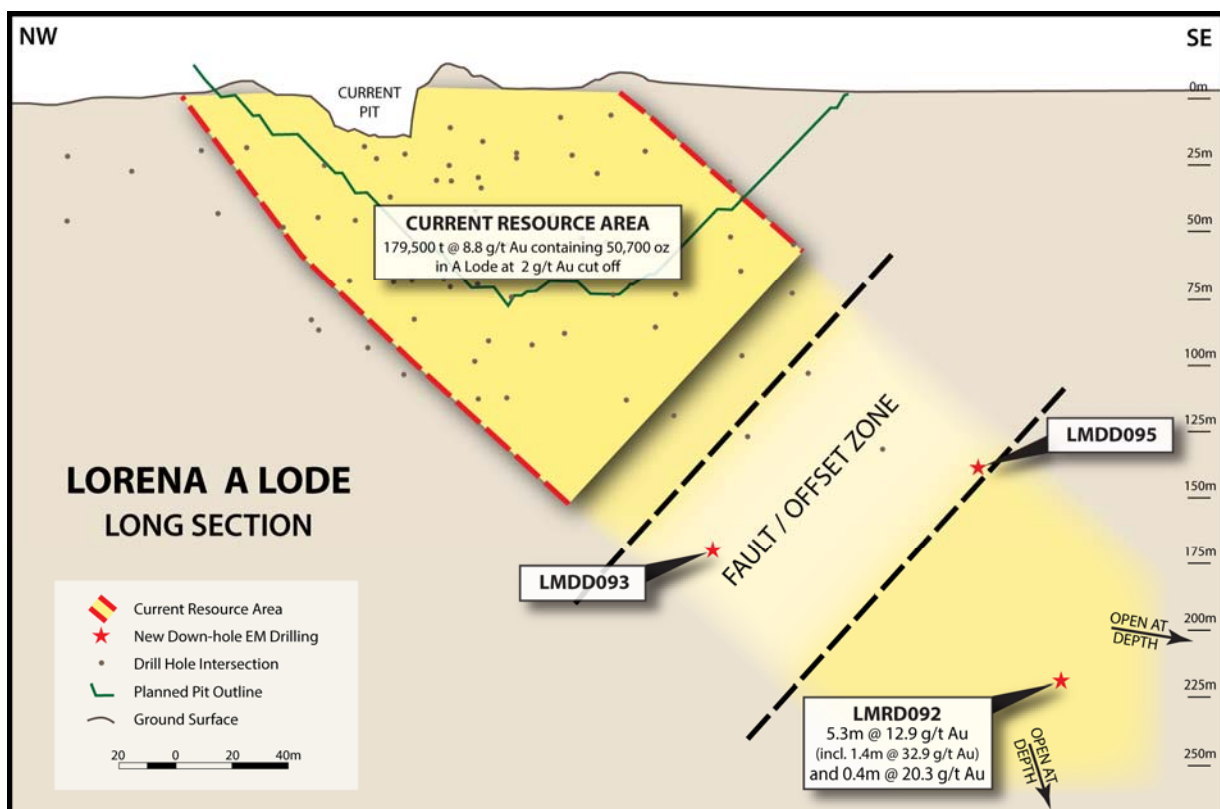
Malachite Chief Executive, Geoff Hiller, commented:

**“To get such a good gold intersection with our first new hole, before we even start the geophysics, is a real bonus and gives us strong encouragement that further drilling will increase the Lorena resource and significantly extend the life of the mine we expect to develop at the site.”**

The grades of the intersections, the nature of the host rock and the abundance of arsenopyrite and other sulphide minerals, are all typical of the ore zone already defined in the Lorena A Lode resource estimate. The new zone is therefore expected to have metallurgical characteristics very similar to those of the A Lode resource. The width and grade of the main new intersection are considered wide enough for economic underground mining.

The intersections achieved in LMRD092 are interpreted as the extension of A Lode at Lorena (refer Figure 1) but their position indicates that the down-plunge extension may have been displaced to the northeast by faulting. The previous drilling program, carried out late in 2011, assumed the A Lode followed an unbroken plunging trend to the southeast and, by not allowing for the faulting, was not an effective test of the A Lode extensions at depth. The result for LMRD092 greatly increases the depth potential at Lorena.

Figure 1: Lorena A Lode Long Section – Schematic



Recognising that there is a strong positive correlation between the abundance of electrically conductive arsenopyrite and the grade of gold mineralisation, further drilling is planned to commence after the DHEM survey is completed and interpreted and is considered to have an excellent chance of success. By combining DHEM data from the several holes it should be possible to enhance the strike rate of that drilling by targeting the conductors specifically and the zone discovered in LMRD092 serves to reinforce strongly the target concept.

The DHEM survey is scheduled to be undertaken next month.

Two additional holes (LMDD093 and LMDD095) have now been drilled between LMRD092 and the existing resource (Fig. 1); this completes the drilling required for the DHEM survey. Both encountered mineralisation (assays pending) that looks weaker than that in LMRD092 but both are also within the interpreted off-setting fault zone so their significance as tests for extending the Lorena A Lode is reduced. They will, however, prove very useful for the upcoming geophysical program, as the DHEM will detect conductors up to 100m from each hole. LMDD093 is also to be used for ground water monitoring purposes as part of the project's environmental requirements. LMDD094 and LMDD096 are holes drilled for geotechnical purposes near the existing open pit (refer Table 2); they will provide information on rock strength and structure which is required for the open pit design. No assays are required for these holes as they are located in the waste rock, which form the walls of the proposed open pit.

Malachite wishes to acknowledge the funding of \$66,000 provided by the Queensland Government Department of Employment, Economic Development and Innovation's Collaborative Drilling Initiative which is being used to assist with drilling costs for two of the diamond drill holes in the current drill program.

**-ENDS-**

Malachite Resources Ltd

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#### *About Lorena:*

*The Lorena Gold Project is wholly owned by Malachite and is located about 15km east of Cloncurry in northwest Queensland. Malachite is the holder of six mining leases (ML7147, MLs 90192-90196), one EPM (EPM18189) and two EPMA's at Lorena.*

*Lorena has a total mineral resource containing approximately 56,000 ozs of gold at a 2g/t cut-off grade. It has a resource of 179,500t at 8.8g/t Au containing 50,700 ozs ("A Lode") and a resource of 23,700t at 7.8g/t Au containing 5,900 ozs ("B Lode"). The resource is within a potential open pit mine and is open at depth. The gold bearing ore is principally of massive and stringer sulphide type and copper-gold mineralisation occurs in conjunction with the gold ore body.*

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#### **COMPETENT PERSON STATEMENT:**

*The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Dr Garry Lowder, who is non-executive Chairman of the Company and a former full time employee. Dr Lowder is a Fellow of the Australasian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activities which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' Dr Lowder consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.*

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For further information, please contact the Company on (02) 9411 6033 or by email at [info@malachite.com.au](mailto:info@malachite.com.au) or visit the Company's website at [www.malachite.com.au](http://www.malachite.com.au)

Table 1: Assay Results for LMRD092

From (m)	To (m)	Interval Length	Au (g/t)	Ag (g/t)	Cu (ppm)	Co (ppm)
223.00	224.00	1.00	0.93	0.7	586	108
224.00	225.00	1.00	7.44	6.1	1030	388
225.00	226.00	1.00	0.25	-	2270	130
226.00	227.00	1.00	14.70	2.5	437	478
227.00	227.90	0.90	0.05	-	614	23
227.90	228.53	0.63	14.50	1.1	1980	1570
228.53	229.28	0.75	48.35	3.6	74	3100
229.28	230.00	0.72	0.14	-	671	35
230.00	231.00	1.00	0.03	-	435	41
231.00	232.00	1.00	0.07	-	833	45
232.00	233.00	1.00	0.61	-	398	69
251.00	252.00	1.00	1.48	-	622	9
252.00	253.00	1.00	0.31	-	432	-
253.00	254.00	1.00	1.29	-	114	18
254.00	254.80	0.80	0.12	1.2	517	6
254.80	255.20	0.40	20.25	12.5	384	418
255.20	256.00	0.80	0.32	0.8	348	6
256.00	257.00	1.00	0.60	-	888	7

NB. True widths are uncertain but are thought to be about 70% of interval length.

Table 2: Lorena Drilling

Hole No.	Hole purpose	Total Depth (m)	Azimuth (deg MGA)	Dip (deg)	Collar Coordinates MGA (UTM Zone 54)		Comment
					Easting	Northing	
LMRC091		40	68	-79	463446	7708696	Hole abandoned in broken ground
LMRD092	Down-hole EM	272.9	42	-66	463512	7708703	Refer Table 1 for assays
LMDD093	Down-hole EM and Groundwater Monitoring	278.6	46	-61	463401	7708780	Assays pending
LMDD094	Geotechnical	60	0	-75	463412	7708840	For open pit feasibility work; no assays required
LMDD095	Down-hole EM	245.6	42	-66	463522	7708757	Assays pending
LMDD096	Geotechnical	60	34	-70	463485	7708936	For open pit feasibility work; no assays required