Malachite Resources NL



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CONRAD SILVER PROJECT: NEW DRILLING RESULTS EXCEED EXPECTATIONS

HIGHLIGHTS

- The latest results from drilling at Conrad are the best yet.
- Very high grade mineralisation continues to be intersected.
- Some holes have intersected multiple lodes.
- Well developed mineralised envelopes encompass most lodes.
- Lode envelope packages up to 6m in true width.
- Coarse grain size implies good metallurgy.
- Initial resource estimate to be completed in September Quarter.
- Scoping study to commence in August.

Best results so far at Conrad – Malachite Resources NL (ASX: MAR) advises that assays for mineralised intersections in drill holes CMDD39 to CMDD45 at the Conrad Silver Project have been received and collated. The new results are the best so far generated in the on-going resource delineation drilling program at Conrad.

Detailed information – Detailed results are set out below, where Table 1 lists drill collar coordinate information and Table 2 sets out the intervals, true widths and assay results for the main mineralised intersections in these holes. Figure 1 below is a plan showing the locations of the holes whose results are reported here. Figure 2 is a cross-section showing the intersections in holes CMDD42 and CMDD43. Figures 3 and 4 are diagrammatic longitudinal sections of



the Conrad Mine, showing historic underground workings, the results of historic underground sampling for lead¹ and the areas being drilled by Malachite in the first two stages of resource delineation at Conrad. Some photographs of high grade mineralisation encountered in CMDD43 are presented in Figure 5.

Multiple lodes intersected – Several holes intersected more than one lode, best exemplified by drill hole **CMDD43**, which produced three excellent intersections, the high grade core zones of which assayed as follows:

King Conrad Lode: 1.0m @ 137g/t Ag, 0.2% Cu, 3.5% Pb, 3.6% Zn, 0.2% Sn & 28g/t In

Conrad Lode: 1.7m @ 539g/t Ag, 1.1% Cu, 5.8% Pb, 5.6% Zn, 1.4% Sn & 48g/t In

Allwell's Lode: 0.8m @ 692g/t Ag, <0.1% Cu, 17.9% Pb, 0.7% Zn, 0.1% Sn & 6g/t In

¹ Lead correlates very well with silver and hence can be regarded as a proxy for silver.

Very high grade lodes – The latest drilling is concentrated to the southeast of the King Conrad Shaft, close to and beneath historic underground workings (Fig. 3), where it is noted that grades and overall widths have increased significantly over those intersected northwest of the King Conrad shaft. Not only are the silver grades very high but also the values for copper, lead, zinc, tin and indium are substantial, turning many of these intersections into quite spectacular results.

With mineralised envelopes – A particularly pleasing aspect of the latest results is that in most cases the mineralised envelopes to the high grade lodes are well developed, with attractive grades in themselves. When added to the high grade cores they enclose, the whole package looks promising for mechanized underground mining, over true widths of up to 6 metres.

And coarse grain size – Another very positive feature of the new results is the consistently coarse grained nature of the mineralisation (Fig. 5), which augurs well for the future production of separate metallic concentrates. Furthermore, indium, which at this time is only being assayed in the high grade lodes, correlates very well with zinc (correlation coefficient of 0.95), which suggests that indium would be recovered successfully into a zinc concentrate.

Resource estimation – The rig is currently drilling CMDD48 and a further two or three holes will be needed at King Conrad to complete this first stage of the resource delineation program. The rig will then move about 1.3km southeast to begin the next stage of resource drilling, which will be in the Davis Shaft area (Fig. 3). Upon completion and assaying of the remaining holes near King Conrad the Company's resource consultants will prepare an initial estimate of resources in this part of the system. That estimate should be available in the September Quarter.

Scoping study – The Company has engaged a mining engineering consultant to commence a scoping study at Conrad in August. This will assist the Company to optimise ongoing resource definition and will provide an indicative target for economic evaluation of the project.

For further information please visit the Company's website: <u>www.malachite.com.au</u> or contact: **Garry Lowder, Managing Director** at (02) 9411 6033 or 0417 212 099, or by email at: <u>glowder@malachite.com.au</u>

G.G. LOWDER Managing Director 20 July 2007

The information in this report that relates to Exploration Results is based on information compiled by Dr Garry Lowder, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Dr Lowder has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity 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.

Table 1: Drill Location Hole Details

Hole No.		Collar	[·] Details	Lodos		
	Northing (m) GDA94	Easting (m) GDA94	Magnetic Azimuth	Inclination	Targeted	Depth (m)
CMDD39	6684907	309008	50	-58	Allwells Lode	70.9
CMDD40	6684907	309008	17	-70.5	King Conrad Lode	122.2
CMDD41	6684885	309027	51	-59	Conrad Lode	155.8
CMDD42	6684885	309027	25	-78	Conrad & Allwells Lodes	305.6
CMDD43	6684885	309027	25	-74	King Conrad, Conrad & Allwells Lodes	225
CMDD44	6684932	309147	200	-69	Conrad Lode	212.9
CMDD45	6684932	309147	194	-76	Conrad Lode	291

Table 2: Key Assay Results for CMDD39 to CMDD45

Notes for Table 2:

- 1. No true width calculated for this interval in CMDD39 as the veins have an unknown orientation.
- 2. At 70.9m CMDD39 entered a void, believed to be an old mined out stope, and was consequently terminated without hitting the targeted lode. Even so, it did hit a massive sulphide vein in the envelope zone.
- 3. 'NA' in indium column indicates that this element was not analysed for the entire interval.
- 4. Silver equivalent values have not been calculated for these results.

{TABLE 2 FOLLOWS ON NEXT PAGE}

	HOLE NO.	FROM (m)	TO (m)	DOWN- HOLE LENGTH [& EST. TRUE WIDTH] (m)	SILVER g/t Ag	COPPER % Cu	LEAD % Pb	ZINC % Zn	TIN % Sn	INDIUM g/t In	MINERALISATION TYPE
\geq	CMDD39	63.7	70.9	7.2 [Note 1]	73	0.1	1.3	1.5	0.2	NA	Vein Zone above stoped-out Allwells Lode
	including	64.5	65.4	0.9 [Note 1]	445	0.6	6.5	9.0	0.6	109	Massive sulphide vein; affinity uncertain
\bigcirc	CMDD40	84.3	103	18.7 [6.1]	124	0.1	2.8	1.0	0.2	NA	Broad envelope zone around King Conrad Lode
10	including	92.2	94.1	1.9 [0.7]	850	0.7	18.4	3.3	0.3	18	King Conrad Lode
	CMDD41	100.2	112.3	12.1 [6.2]	101	0.3	0.9	1.0	0.3	NA	Broad envelope zone around Conrad Lode
	including	100.2	101.3	1.1 [0.6]	671	2.2	1.0	8.0	2.1	55	Conrad Lode
	and	111.8	112.3	0.5 [0.3]	436	0.4	8.5	0.2	0.4	NA	Un-named lode
	CMDD42	221.8	239	17.2 (3.6)	87	0.1	0.8	0.5	0.2	NA	Broad envelope zone around King Conrad & Conrad Lodes
U	including	221.8	222.3	0.5 [0.1]	522	1.8	1.5	5.9	2.3	53	King Conrad Lode
	including	227.4	227.7	0.3 [0.1]	1,860	2.0	8.5	0.2	2.3	29	Conrad Lode
\bigcirc	CMDD43	155.7	157.4	1.7 [0.5]	87	0.1	2.3	2.4	0.1	NA	Envelope zone around King Conrad Lode
	including	156.4	157.4	1.0 [(0.3]	137	0.2	3.5	3.6	0.2	28	King Conrad Lode
	and	164	175	11.0 [3]	100	0.2	1.3	1.2	0.3	NA	Broad envelope zone around Conrad Lode
)	including	165.3	167	1.7 [0.5]	539	1.1	5.8	5.6	1.4	48	Conrad Lode
5	and	205	206.2	1.2 [0.3]	464	<0.1	11.8	0.6	0.1	NA	Envelope zone around Allwells Lode
	including	205.4	206.2	0.8 [0.2]	692	<0.1	17.9	0.7	0.1	6	Allwells Lode
	CMDD44	175.4	179	3.6 [1.3]	90	0.2	1.4	0.8	0.2	NA	Envelope zone around Conrad Lode
Ľ	including	175.4	178	2.6 [(0.9]	101	0.2	1.5	0.5	0.2	8	Conrad Lode
	CMDD45	255	263.4	8.4 [(2.0]	225	0.3	2.5	0.8	0.3	NA	Broad envelope zone around Conrad Lode
	including	257	263	6 [1.5]	309	0.4	3.4	0.93	0.4	NA	Conrad Lode





Figure 3: Longitudinal composite section of the Conrad Lode System, showing areas of current and future resource delineation.





Figure 4: Longitudinal composite section of the Conrad Lode System, showing leadrich ore shoots delineated by underground sampling in the 1950s. Strong correlation of lead with silver makes lead a valid proxy for silver in this diagram.



Figure 5: Examples of mineralisation in drill hole CMDD43 at Conrad.



KEY;

- a. King Conrad Lode, showing sphalerite (ZnS; black) and galena (PbS; grey) in a quartz gangue. Silver is closely associated with galena. Note coarse grain size.
- b. Conrad Lode, showing well developed, coarse grained sphalerite and galena.
- c. Conrad Lode, showing a very zinc-rich part, also high in indium.
- d. Allwell's Lode, with somewhat finer grained galena and sphalerite.
- e. Example of stringer vein in the mineralised envelope.

About Malachite – Malachite Resources is a Sydney-based resources company that listed on the ASX in November 2002 and is an active explorer for gold, silver and base metals in eastern Australia. The Company's key assets are:

The **TOOLOOM GOLD PROJECT** in northeast NSW. Tooloom is a forgotten goldfield rediscovered by Malachite where numerous prospects have been identified, including a significant greenfields discovery called **Phoenix**. The company is systematically exploring Phoenix and the other prospects at Tooloom, which are intrusion-related and have major ore potential.

The **CONRAD SILVER PROJECT** also in northern NSW, where the Company is evaluating the scope to reopen the old **Conrad** Silver Mine near Inverell. Drilling at Conrad by Malachite has intersected narrow high grade, massive sulphide, silver-rich base metal veins and wide zones of lower grade, disseminated, polymetallic mineralisation. The outlook for the project is very promising and detailed drilling for resource estimation purposes is underway.

The VOLGA COPPER PROJECT in northwest Queensland, east and northeast of Mt Isa, where the Company is exploring for copper-gold at the Mt Lidster and Volga Elderberry properties. Drilling by Malachite at Mt Lidster and by the current holders at Volga has produced some superb high grade copper intersections and detailed follow up exploration is now underway.

Malachite also has excellent exposure to tin, through its **ELSMORE** Project, near Inverell in northern NSW. The Company is considering the possible development of a small open pit tin-tungsten mine at one or more of several prospects known in the district.