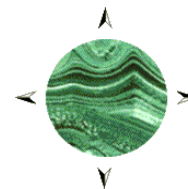


# Malachite Resources Limited

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ASX Announcement

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## CONRAD SILVER PROJECT – NEW DRILLING RESULTS

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### SUMMARY

- Assay results have been received for six new diamond drill holes completed at the southeastern end of the Conrad mining leases, intersecting the Princess Shoot.
  - The best intersection in the latest drilling was 1.6m @ 819g/t Ag, 0.59% Cu, 0.71% Sn and 8.35% Pb in drill hole CMDD113.
  - The results confirm that a significant body of near-surface, silver-copper-tin-(lead) mineralisation is present within the Princess Shoot.
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Malachite Resources Limited (ASX: MAR) advises that it has received assay results for six diamond drill holes that were recently completed at the Conrad Silver Project, located about 25km south of Inverell in northern New South Wales. Details of these drill results are provided in Tables 1 and 2 below.

All six holes were aimed at better delineating a zone of mineralisation rich in silver, copper and tin, with some lead but very little zinc, located at the southeastern end of the Conrad mining leases (Fig. 1) and partly defined by previous, widely spaced drill holes. This zone has been dubbed the Princess Shoot. Not all of the intersections produced high grade results, but that is to be expected in seeking to find the limits of a lode deposit of this type. However, there are now sufficient high grade hits, from this and previous drilling within the Princess Shoot, to confirm that it contains significant high grade mineralisation, with an attractive metal mix (Fig. 2). For example, at current metal prices, the contained metal value of the lode intersection in CMDD113 is roughly \$1,000 per tonne, with about 60% of that represented by silver.

Commenting on the results, Malachite Managing Director, Garry Lowder, noted:

*“With silver and tin prices currently at near-record highs and the outlook very positive for these metals, the Princess Shoot is emerging as an important discovery and a key part of the Conrad metal inventory. Unlike the high grade shoots at the King Conrad (northwestern) end of the system, the Princess Shoot comes virtually to surface and does not appear to have been mined historically to any meaningful extent.”*

One issue highlighted by the latest results is the variability of grade within a defined ore shoot at Conrad (Fig. 2). While this is a common problem with lode deposits generally, it is exacerbated at Conrad by the very coarse grained nature of the mineralisation and the tendency for the sulphide minerals to clump together within the quartz-rich lode. At the production stage this characteristic would represent a significant metallurgical benefit, but at the exploration stage it makes resource definition more difficult.

Malachite is considering ways in which this problem can be addressed at Conrad. Additional drilling is only part of the answer, as it would take many holes to provide enough intersections to allow a high quality

geostatistical resource estimate to be made. Furthermore, given the narrow width and near vertical orientation of the Conrad Lode, it takes many metres of drilling through barren granite to intersect the lode at depth, pushing up drilling costs per lode intersection substantially, especially for the deeper ore shoots. The particular value of the Princess Shoot is that it comes virtually to surface and the upper part of it can be targeted with reasonably economic, close spaced drilling to increase the confidence level of resource definition. A drilling program to do that is being planned.

At the same time, the presence of high grade mineralisation near surface in the Princess Shoot raises the prospect of sinking an exploration decline<sup>1</sup> to provide underground access to the Conrad Lode, allowing bulk sampling for better assessment of mineable grade and metallurgical behaviour, as well as more efficient resource drilling from underground sites, closer to the target zone. Such a decline could have its portal on Malachite’s privately owned ‘Jadree’ property, which immediately adjoins the Princess Shoot (Fig. 1), and the waste rock produced by the excavation could be stored on Jadree. Furthermore, because the Princess Shoot is physically isolated from the main old workings at Conrad it should not be necessary to dewater those old workings before sinking a decline, saving considerably on cost and environmental impact.

A cost/benefit analysis for the excavation of an exploration decline into the Princess Shoot will be a key part of the ongoing economic assessment of Conrad. The cost of a decline is likely to be substantially less than a comprehensive new, surface-based diamond drilling program.

**Table 1: Drill Hole Location Details**

Hole No.	Collar Details				Objectives	Final Hole Depth (m)
	Northing (m) GDA94	Easting (m) GDA94	Magnetic Azimuth (Degrees)	Inclination (Degrees)		
CMDD108	6683921	310337	210	-57.5	Intersect Princess Shoot of the Conrad Lode between CMRD90 & 91, (6725mE) approx 109m below surface	153.4
CMDD109	6683934	310214	210	-62.5	Intersect Princess Shoot of the Conrad Lode 50m above CMRD68, (6625mE) approx 48m below surface	77.3
CMDD110	6683892	310430	210	-61.5	Intersect Princess Shoot of the Conrad Lode between CMRD92 & 93, (6825mE) approx 160m below surface	242.5
CMDD111	6683954	310481	207	-62	Intersect Princess Shoot of the Conrad Lode 50m below CMRD93, (6825mE) approx 250m below surface	350.7
CMDD112	6683994	310404	210	-57	Intersect Princess Shoot of the Conrad Lode 60m below CMRD91, (6725mE) approx 222m below surface	308.5
CMDD113	6683970	310252	210	-66.5	Intersect Princess Shoot of the Conrad Lode between CMRD68 & 69, (6625mE) approx 160m below surface	209.1

<sup>1</sup> A decline is an inclined tunnel, usually with a 1 in 7 slope, that allows underground access for men and equipment.

Table 2: Assay Results for CMDD108 – CMDD113

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 ENCOUNTERED
CMDD108	131.45	132.64	1.19 [0.8]	25	0.05	0.31	0.13	0.06	*	Conrad lode (131.85-132.29m) with low grade mineralised envelope
Including	131.85	132.29	0.44 [0.3]	45	0.09	0.27	0.01	0.08	*	
CMDD109	57.00	60.00	3.00 [1.6]	54	0.34	0.18	0.13	0.26	5	Conrad Lode (57.60-59.54m) with low grade mineralised envelope
Including	57.60	59.54	1.94 [1.0]	71	0.46	0.09	0.08	0.33	8	
CMDD110	181.00	182.90	1.90 [1.3]	43	0.05	0.30	0.07	0.06	1	Conrad Lode (181.47-182.43m) with low grade mineralised envelope
Including	181.47	182.43	0.96 [0.7]	73	0.09	0.43	0.06	0.07	1	
CMDD111	327.92	329.49	1.57 [0.9]	10	0.06	0.14	0.09	0.06	*	Conrad Lode (327.92-329.49m) low grade mineralised envelope
CMDD112	286.10	288.00	1.90 [1.3]	32	0.03	0.32	0.06	0.04	1	Conrad lode over 286.54-287.32m with low grade mineralised envelope
Including	286.54	287.32	0.78 [0.5]	70	0.05	0.53	0.01	0.05	1	
CMDD113	105.63	106.45	0.82 [0.4]	58	0.01	1.59	0.55	0.01	*	Un-named vein 105.63-106.45m and Conrad Lode (185.10-186.70m) with low grade mineralised envelope
And	184.10	187.30	3.20 [1.5]	415	0.31	4.37	0.16	0.39	8	
Including	185.10	186.70	1.60 [0.7]	819	0.59	8.35	0.08	0.71	14	

Notes: \* indicates that indium has not been assayed for this interval.  
Half core samples; full core recovery; core size HQ, except CMDD110 which is NQ.

For further information please telephone Garry Lowder on 02 9411 6033 or email the company at [info@malachite.com.au](mailto:info@malachite.com.au) and visit the website: [www.malachite.com.au](http://www.malachite.com.au)

G. G. LOWDER  
Managing Director  
21 September 2010

**COMPETENT PERSON STATEMENT:**

*The information in this report that relates to Exploration Results is based on information compiled by Dr Garry Lowder and Mr Michael Donnelly, who are full time employees of the Company and are respectively a Fellow and a Member of the Australasian Institute of Mining and Metallurgy. Dr Lowder and Mr Donnelly have sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activities which they are undertaking to qualify as Competent Persons as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' Dr Lowder and Mr Donnelly consent to the inclusion in this report of the matters based on their information in the form and context in which it appears.*

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**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, tin, copper and associated base metals in eastern Australia. The Company's key assets are:

**CONRAD:** The Conrad Silver Project is located 25km south of Inverell in northern NSW. The Company is evaluating the scope to reopen the old Conrad mine, which has had two previous periods of production but has not operated for over 50 years. Drilling at Conrad by Malachite has intersected narrow high grade, massive sulphide, silver-rich base metal veins, like those mined in the past, and wide zones of lower grade, disseminated and stockwork veined, polymetallic mineralisation. At current prices, silver represents 50% of total recoverable metal value in the Conrad ore and tin, copper, lead and zinc make up the balance. The currently defined mineral resource at Conrad contains approximately 10Moz of silver, or 19Moz of silver equivalent. This resource remains open along strike and at depth.

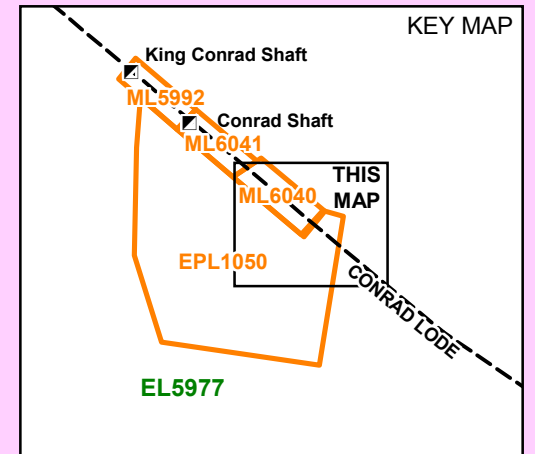
Malachite also has excellent exposure to tin, through its **ELSMORE** Project, located 20km east of Inverell, where the Company is considering the possible development of a paleo-alluvial tin deposit, known as the **Karaula Lead**, at the Newstead Prospect. The Karaula Lead appears to have the potential to support a small surface mining operation, which could be developed with low capital and operating costs and generate useful cash flow for the Company. Work is now underway to better quantify the Karaula Lead deposit, determine an appropriate processing route and assess the economic viability of mining. Hard rock tin exploration is being conducted at Newstead and at Old Mill.

The **TOOLOOM GOLD PROJECT** also in northeastern NSW, is based on a forgotten goldfield rediscovered by Malachite. 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. Current focus is on the **Joes Gully** prospect, where recent drilling has produced encouraging results, with gold assays up to 28g/t Au within quartz vein stockwork systems that are thought to contain coarse grained free gold.

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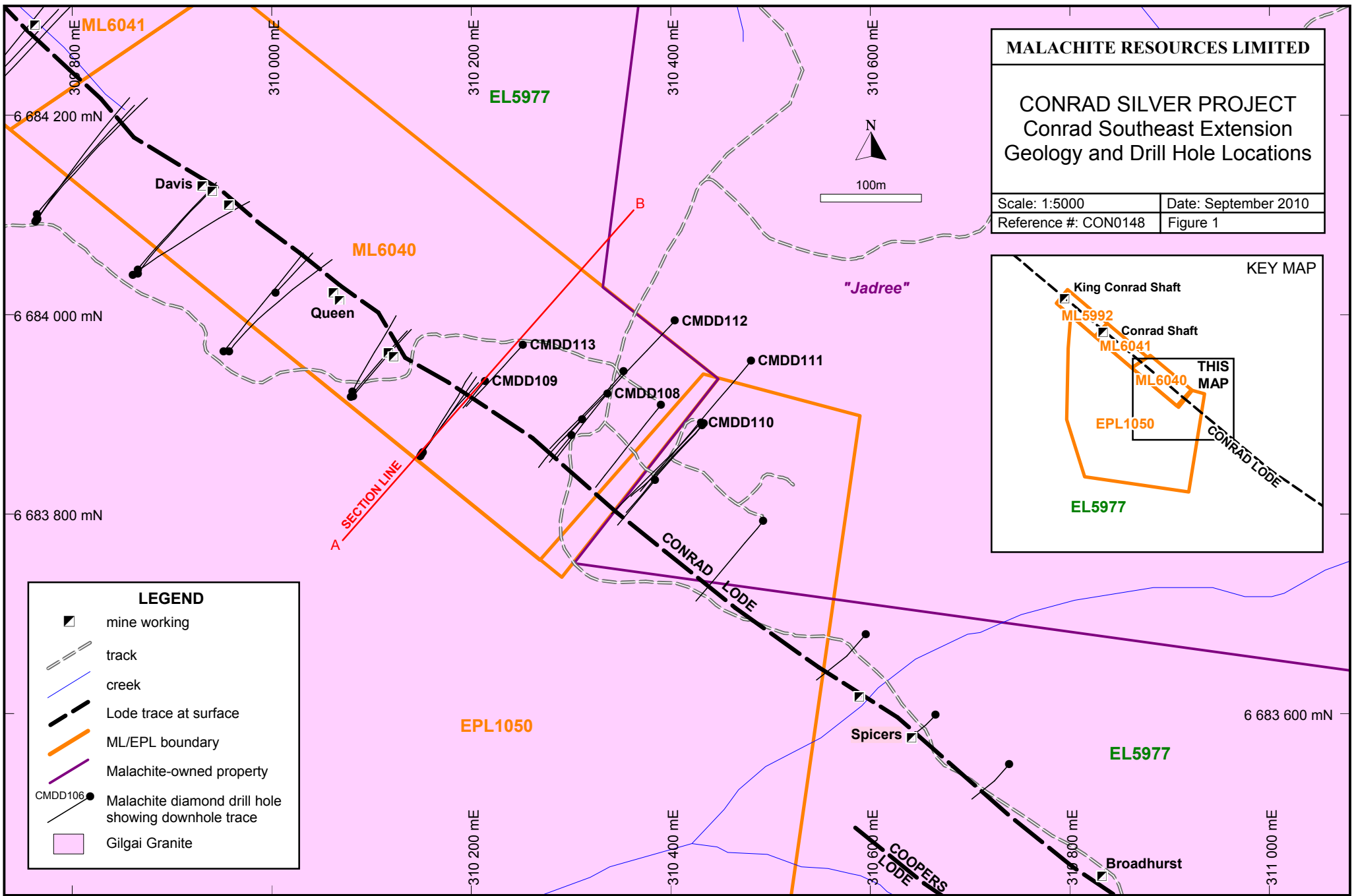
# CONRAD SILVER PROJECT Conrad Southeast Extension Geology and Drill Hole Locations

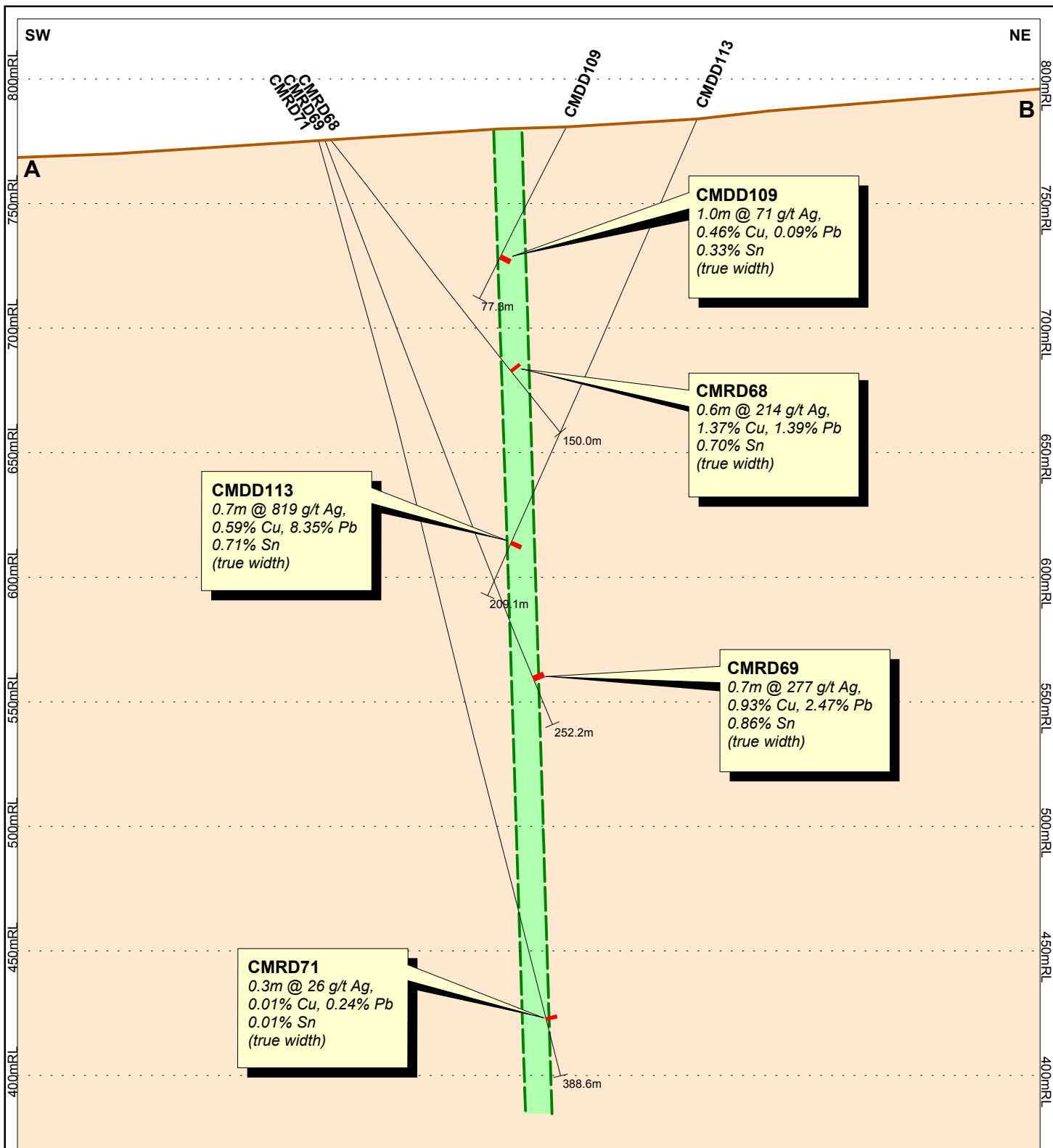
Scale: 1:5000      Date: September 2010  
Reference #: CON0148      Figure 1



**LEGEND**

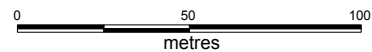
- mine working
- track
- creek
- Lode trace at surface
- ML/EPL boundary
- Malachite-owned property
- Malachite diamond drill hole showing downhole trace
- Gilgai Granite





**LEGEND**

- Lode intersection (true width) in drill hole
- Conrad Lode
- Gilgai Granite



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**CONRAD SILVER MINE  
DRILL HOLE SECTION**

Scale: 1:2200

Date: September 2010

Reference #: CON-0147

Figure 2