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ASX: MNM and MNMO

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ASX Release
13 February 2009

Targets Major Increase in Gold Resource at Granite Castle

- **Drilling confirms high grades at shallow depths**
- **Prospecting confirms additional parallel shears**
- **Targeting drilling to define shallow resources**

Mantle Mining Corporation Limited (ASX: MNM), is pleased to report that it has recently defined a number of parallel major shears containing high grade Gold and Silver values adjacent to existing drill indicated shear-hosted gold mineralisation at its 100% owned Granite Castle Gold Project in north Queensland.

The shears identified to date are exposed at surface and in close proximity to the Company's existing JORC resource. Significantly, drill holes completed to date have consistently confirmed the presence of shear-hosted gold mineralisation below mineralised surface outcrops.

A review of drilling data, combined with the results from recent prospecting and soil sampling with a portable XRF analyser, have shown extremely good correlation of anomalous geochemistry, including gold and silver, with recognised shear zones.

The best historic drilling results include 5.8 g/t gold over 5m from 34m depth, 13.7 g/t gold over 2m at 11m depth and 25.5 g/t gold over 1m at 139m depth.

To date there are in excess of 7 line kilometres of mineralised shears defined by reconnaissance prospecting and rock chip sampling that are only partially tested by drilling. This is significant given that the mineralisation making up the current JORC resource base is contained in a 600 metre length of the Granite Castle shear.

Mantle remains confident, from work completed so far and the available lengths of partially drilled mineralised shears, that it should be possible to fast track evaluation of the shear system with a view to drilling out a number of the best shears in 2009 and subsequently deliver a major expansion of the gold resource base at Granite Castle.

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Granite Castle Gold Project

Mantle Mining's 100% owned Granite Castle Gold Project is located approximately 90 kilometres north of Hughenden in north Queensland. The project contains two prospects being the Granite Castle prospect on Range Creek EPM 14179 and the Tag Alley prospect on Oaky Creek EPM 15527 (Figure 1).

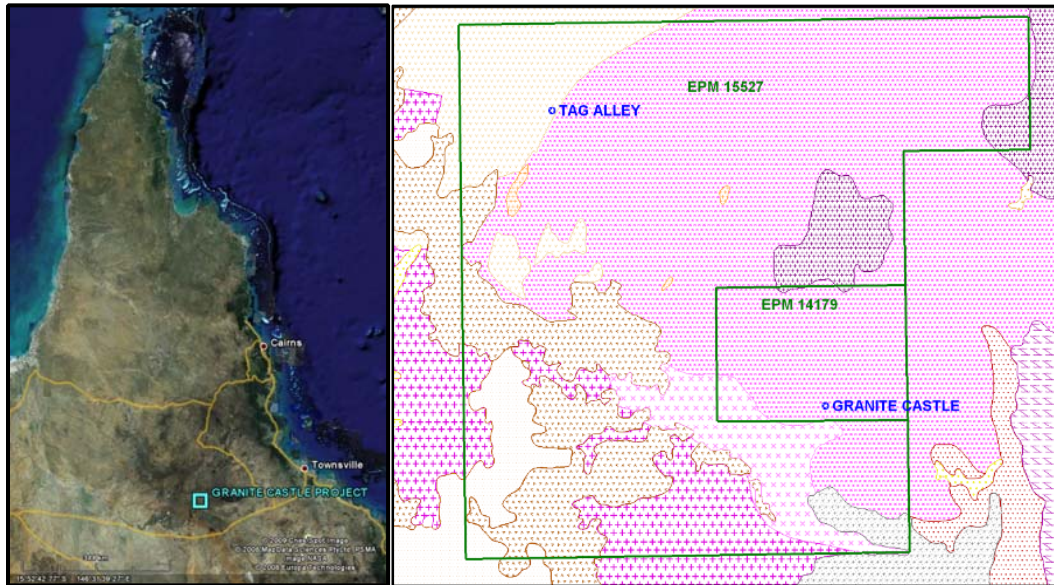


Figure 1: Granite Castle Project Regional Location.

The Granite Castle prospect contains a 2004 JORC compliant gold resource that is contained solely in the single Granite Castle shear (Figure 2). This main deposit occupies approximately 600m of strike however the shear itself can be traced on surface for over 1km to the west and 200m east from the edges of the resource.

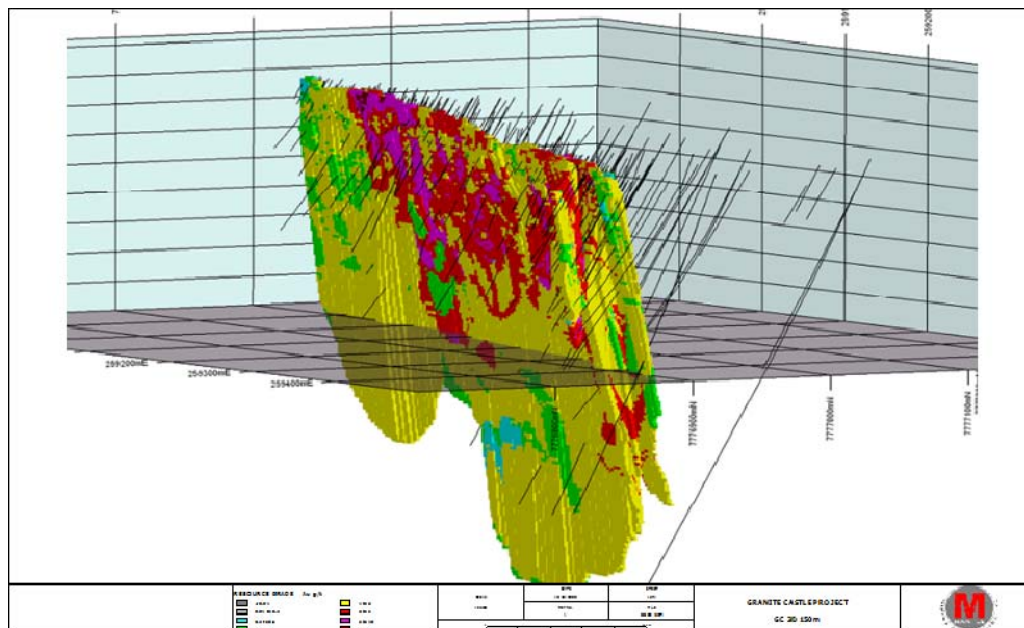


Figure 2: Granite Castle resource looking NW. (Red = 3 – 5 g/t Au, Pink = 5 – 10 g/t Au).



In 2008, Mantle undertook a reassessment of the Granite Castle resource base and the outcomes were announced mid-year (Table 1). Significantly, over 50% of the current resource base is now classified in the Measured and Indicated categories.

Granite Castle Gold and Silver Resource Estimates @ 0.2 g/t Au lower cut-off					
Class	tonnes	Au g/t	Au Ozs	Ag g/t	Ag Ozs
<i>Measured</i>	122,614	3.99	15,727	53.3	209,941
<i>Indicated</i>	264,021	3.44	29,198	67.6	574,182
<i>Inferred</i>	460,443	2.32	34,375	50.4	746,680
Total	847,078	2.91	79,301	56.2	1,530,803

Table 1: Granite Castle 2004 JORC compliant resource base.

It is now evident that the Granite Castle Project area contains a significant swarm of Gold-Silver mineralised shears. To date there are more than 7 line kilometres of recognised mineralised shears that are as yet only partially tested by drilling. This is significant given that the mineralisation making up the current JORC resource base is contained in a 600 metre length of the Granite Castle shear.

Historical Drilling Confirms Additional Prospectivity

The Coronation shear, located 600m to the north of the Granite Castle shear, includes a number of small workings containing high grade Gold and Silver in rockchips and drillholes. Historical drilling on the Coronation shear has returned very encouraging intersections (Table 2). Drill confirmation of strong gold mineralisation at depth below mineralised surface outcrops at Coronation enhances the prospectivity of recently identified shears from which significant gold values have been obtained from rock chip samples.

Hole ID	From (m)	To (m)	Width (m)	Au Grade (g/t)
MEP 57	32	34	2	6.7
MEP 57	38	40	2	10.3
MEP 56	39	41	2	3.4
MEP 56	51	53	2	4.36
MEP 56	73	75	2	4.5
MEP 26	11	13	2	13.7
MEP 25	20	21	1	5.66
EB 4	18	20	2	7.5
EB 3	13	15	2	6.77
MEP 18	39	40	1	5.3
MEP 18	55	56	1	5.61
MEP 29	15	16	1	4.07
MEP 36	17	19	2	5.35
MEP 35	23	25	2	8.33
MEP 38	23	25	2	6.61

Table 2: Historical drill results by Walhalla.

More recent scout drilling, field work and desktop analysis has highlighted a number of very prospective parallel shears close to the Granite Castle resource (Figure 3).

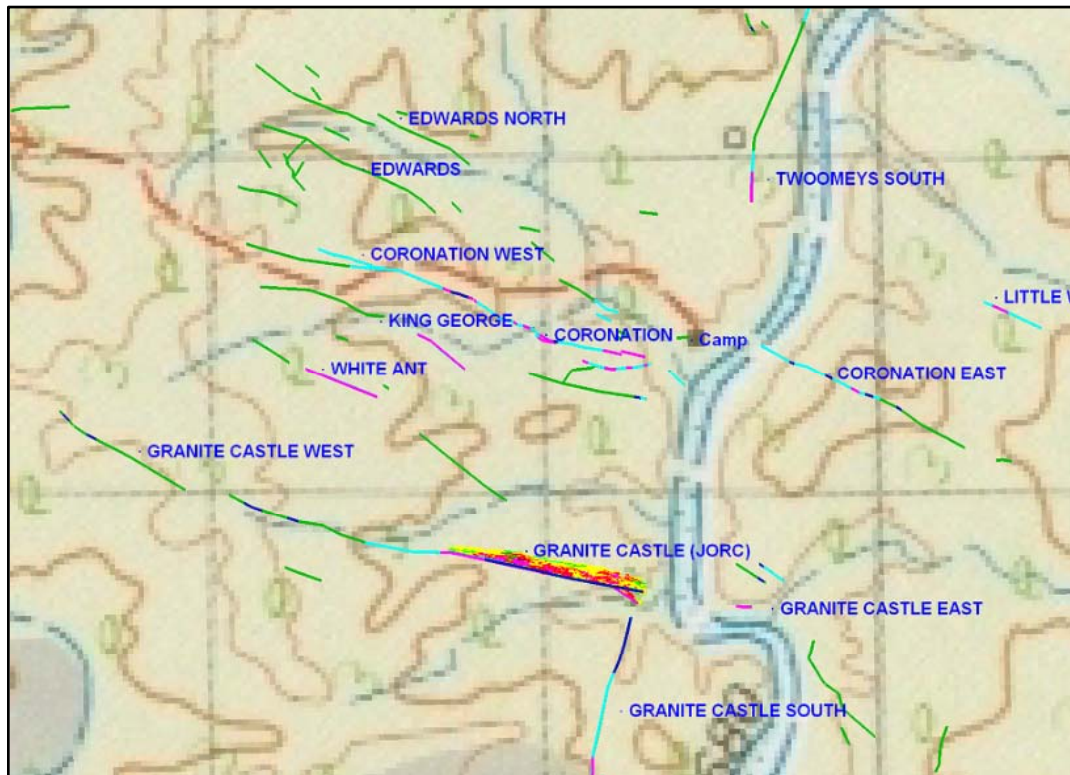


Figure 3: Granite Castle Mineralised Shears – Recently identified (green)

2008 Drilling By Mantle

Of the prospective shears known at the time, four were scout drilled by Mantle in 2008. Good intersections were obtained from Coronation, Coronation East and Stamper. Not all holes planned for the Coronation zone were drilled however a number of encouraging results were obtained (Table 3). Several prospective areas were not drilled due to wet weather, these were the Edwards, Coronation West and Edwards North. Resampling of drillhole GCD 552 at the Coronation shear returned values of 25.2 g/t Au and 237 ppm Ag over 1 metre from 139 metres, suggesting that it was stopped too soon to intersect all of the three possible parallel shears evident in other drillholes.

Location	Hole No.	From (m)	Length (m)	Au (g/t)	Ag (ppm)
Coronation	GCRC 528	33 - 34	1	4.28	135
	GCD 522	139 - 140	1	25.2	237
E. Coronation	GCRC 540	34 - 36	2	6.67	379
	GCRC 538	38 - 39	1	3.46	111

Table 3: 2008 drill results by Mantle.

Very little drilling, relative to the Granite Castle shear, has been done into the Coronation shear structures and where it has been done, moderate to high grades have been intersected (Figure 5). It is apparent, given the number of mineralised shears now identified, that there exists excellent potential to deliver a major expansion of the existing JORC resource by targeting drilling on multiple mineralised shears at shallow depths up to 100m below surface.

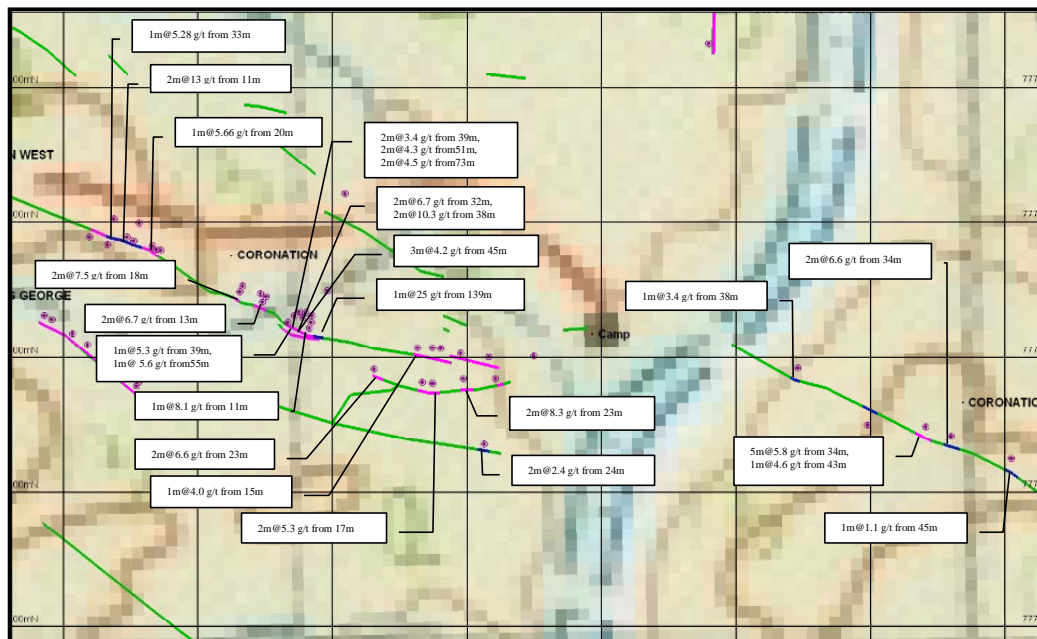


Figure 5: Drill results (1993, pink trace) and Mantle (2008, dark blue trace).

Rockchip And Soil Sampling Correlates Shears

Prospecting and rockchip sampling has located 10 additional mineralised shears over the last eight months. Five previously undocumented shears have returned anomalous gold values up to 45 g/t Au. Lines of soil samples have been analysed with a portable XRF analyser and results have shown good correlation across shears known to be mineralised from rock chip sampling and/or have returned high grade intercepts from drilling. The XRF analyser has proven accurate in locating previously unknown and difficult to find shears due to being covered with shallow sediments.

Current Work And Next Steps

Due to the annual north Queensland wet season, the Granite Castle Project area is inaccessible generally until late March. Work will continue to focus on integration of all data from recently completed regional mapping, soil and rock chip sampling. This work will culminate in detailed planning for a new drilling programme targeting shallow depths on the additional 7 line kilometres of mineralised shears. Considering that most of the shears are near surface and in close proximity to the existing JORC resource, Mantle plans to fast track evaluation of the shear system during 2009.

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The information in this report that relates to Exploration Results is based on information compiled by Mr Stuart Moore, an Executive of Mantle Mining Corporation Ltd. Mr Moore is a Member of the Australasian Institute of Mining and Metallurgy (M.AusIMM). Mr Moore 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". Mr Moore consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.