



## UPDATE ON RETURN OF NORTON GOLD MINE TO PRODUCTION

ASX ANNOUNCEMENT

13 MAY 2016

**Mantle Mining Corporation Limited (ASX: MNM, MNMOB and MNMOC)** (Mantle or the Company) is pleased to advise that, following confirmation of recently secured financing, Mantle has prioritised its activities on the return to production of its Norton Gold Mine.

The plan for the return to production includes the following steps:

- Final engineering design and confirmation of delivery schedules for the processing plant required for the production of high grade saleable concentrate.
- To that end a bulk sampling program has commenced (Pictures 1 through 6). Trials will allow for final Ore Sorter calibration and specification and ultimately for finalisation of plant design.
- Construction and onsite commissioning is to be fast tracked, using in house and external expertise, once equipment delivery schedules are confirmed.
- Concentrate production will initially come from surface stockpiles targeting early cash flow and enabling a smooth transition into production from the main mineralised shear zones.

Important additional progress has also been made recently in readying for operational status:

- Plan of Operations and Environmental Authority approvals were sought with approvals pending.
- Road Maintenance and Camp Rental agreements were finalised and executed with the Gladstone Regional Council.
- Mantle received a successful determination from the Department of Natural Resources and Mines to allow water-harvesting from overland flows from on and around the mine site.
- Mine Operations Contract drafting was completed and readied for execution.

As each milestone occurs further ASX announcements will be made so that investors remain fully informed.

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**Bulk Sampling Program Mobilisation:**

**Picture 1:** Mobilising to site.



**Picture 2:** Excavating Never Never shear.



**Picture 3:** Site earthmoving and crushing fleet at Frampton stockpiles.



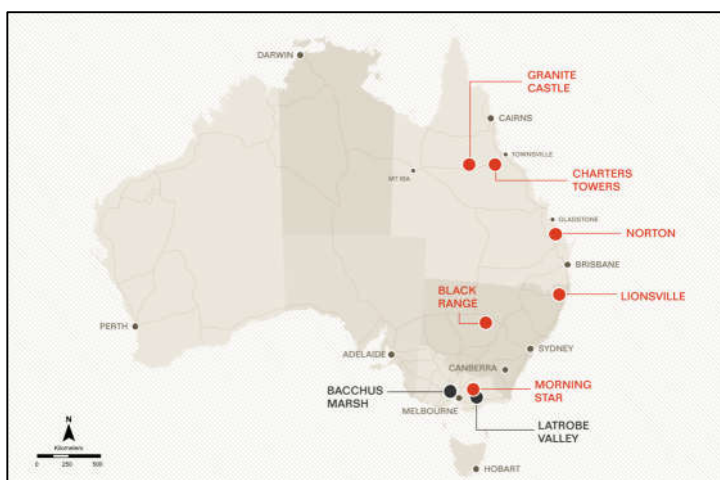
**Pictures 4, 5 and 6:** General site preparation and earthworks.



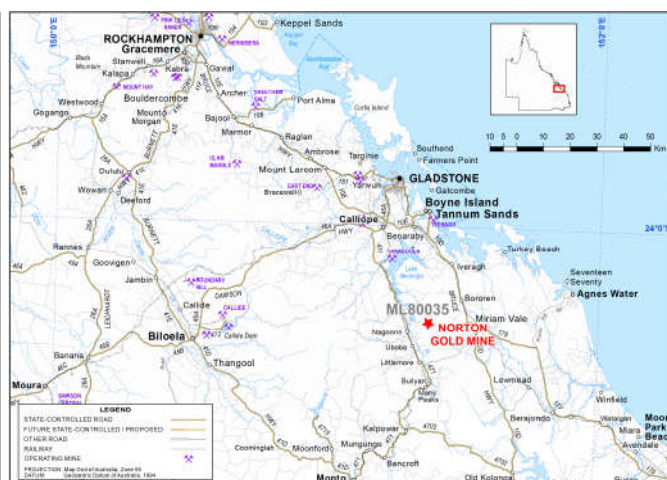
## Overview of the Norton Gold Mine:

The Norton Gold Mine is located less than 100 km south of Gladstone in south central Queensland. Gladstone is a regional industrial hub with a deep water port (Figures 1 and 2).

**Figure 1:** Mantle’s project locations.



**Figure 2:** Norton Gold Mine project location.



At Norton, gold is contained in high grade, sub-vertical shears, which outcrop near the surface. Two of the eight currently defined shears at Norton remain open from previous mining operations in 2006 and require only minimal preparatory work to allow for a restart of mining.

Mantle acquired the mine in mid 2014 and by May 2015 had announced the estimation of an updated Gold Resource Base. This Resource base was focussed, in the main, on the surface minable component of the deposit only to allow for the development of an initial surface mining operation (Table 1).

**Table 1:** Norton Mineral Resource (90% held by Mantle).

Class	Tonnes	Au (g/t)	Au (oz)	Ag (g/t)	Ag (oz)
Indicated	107,000	6.2	21,100	15	50,300
Inferred	141,000	3.9	17,700	12	52,600
<b>Total</b>	<b>248,000</b>	<b>4.9</b>	<b>38,800</b>	<b>13</b>	<b>103,000</b>

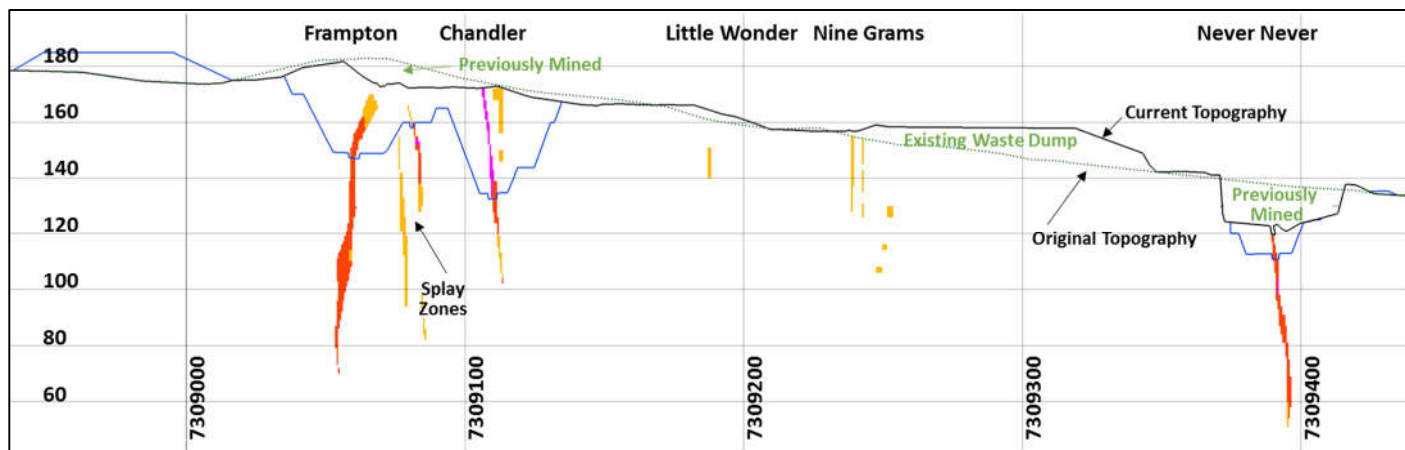
The information in Table 1 is extracted from the report entitled “Norton Gold Mine Resource Estimate” created on 15 May 2015 and is available to view on [www.mantlemining.com](http://www.mantlemining.com).

Following completion of the initial Resource base estimation, and in order to provide a level of confidence that the deposit had the underlying fundamentals for an economic operation with a mine life worthy of investment, Mantle set about undertaking additional exploration to define extension mineralisation.

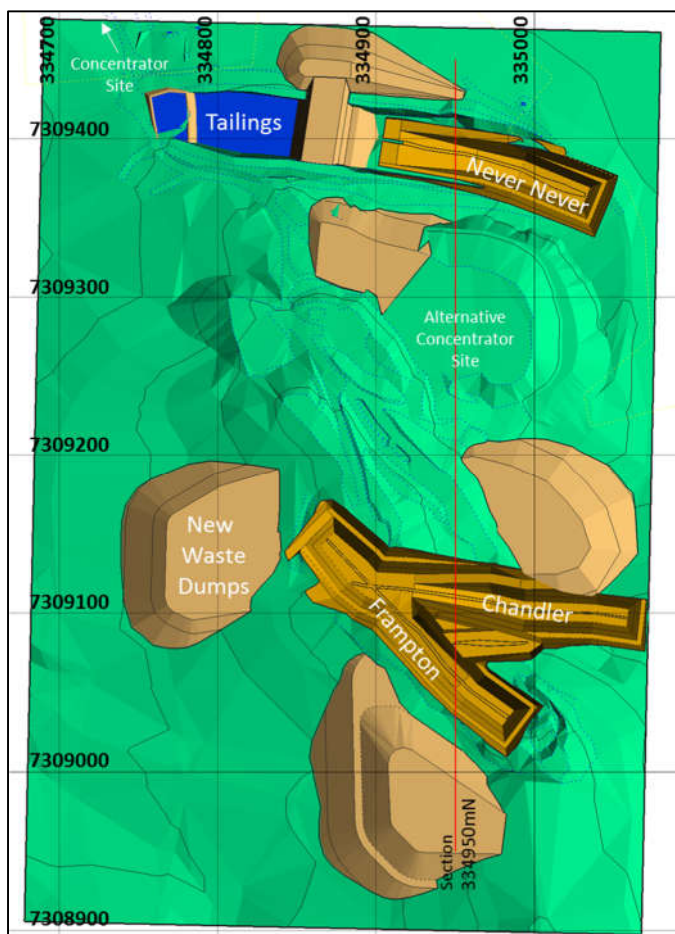
Numerous grade carrying stockpiles remain on surface from prior operations and Mantle undertook a program of stockpile sampling to estimate contained grades. A detailed trenching program was undertaken to progress the geologic understanding of the major mineralised veins that are not currently included in the Resource estimate. Results of the trenching program show the presence of gold mineralisation in structures where not previously confirmed. This supports the potential for improvement in the Norton project life and economics and provide focus for targeted exploration and resource drilling (Figure 5).

At the same time the Company engaged the original mine contractor and a number of metallurgical and geological consultants and began detailed mine and process engineering design in order to develop the base case for for an internal scoping study covering just an initial surface mine subset of the Resource base. In July 2015, the Company completed the internal scoping study which forecast a robust project delivering favourable returns. Mining is proposed to maximum depths of 30 m, similar to the existing 25 m depth at Never Never shear (Figures 3 & 4 and Table 2).

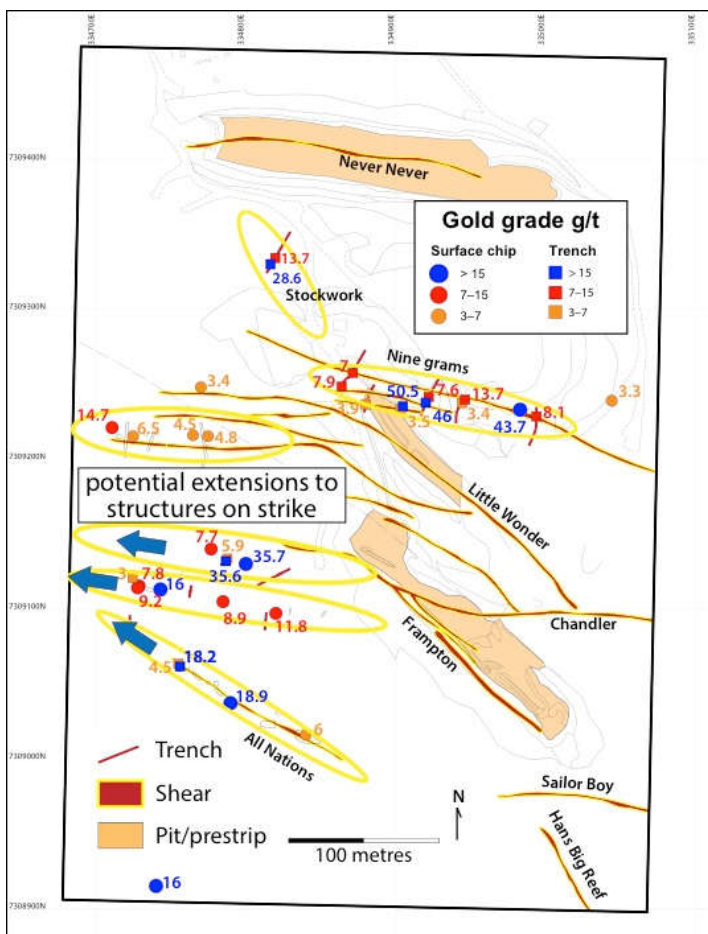
**Figure 3:** Norton Gold Mine proposed mining cross-section (Figure 4 for section location).



**Figure 4:** Scoping study mine layout plan.



**Figure 5:** Trench and rock chip locations.



The Scoping Study is based on low-level technical and economic assessments, and is insufficient to support estimation of Ore Reserves or to provide assurance of an economic development case at this stage, or to

provide certainty that the conclusions of the Scoping Study will be realised. There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.

**Table 2: Norton Gold Mine Scoping Study key aspects.**

	<b>Parameter</b>	<b>Assumption or Output</b>
Resource	% in Indicated category	76%
	% in Inferred category	24%
Mine Design	Initial mine life	2.5 years
	Mining rate	25 000 t/yr ROM
	ROM head grade	6.5 g/t
Gold Recovery	Onsite concentrate	90%
	Toll Treatment	90%
Revenue	Gold Recovered	10 340 oz
	Gold price	\$1 500 /oz
Justification	All in sustaining cost (AISC)	\$775 /oz
	NPV (8% discount rate)	\$4.7 million

The information discussed in this report that relates to the internal scoping study is extracted from the report entitled “Positive Norton Gold Mine Scoping Study” created on 8 July 2015 and available to view on [www.mantlemining.com](http://www.mantlemining.com).

**Competent Persons Statement:**

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Stuart Moore, an Employee of Mantle Mining Corporation Ltd. Mr Moore is a Member of the Australasian Institute of Mining and Metallurgy and 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 2012 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 their information in the form and context in which it appears.