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## MORNING STAR GOLD – PROJECTS UPDATE

### KEY POINTS

- 341 grams of Gold and 74.5 grams of Silver smelted into first ever Dore bars
- First gold smelted offsite from onsite derived concentrates – results encouraging
- Extra concentrates shipped to Gekko Ballarat for testing and further refining
- Reliance Drill core has significant intersections of large-scale hydrothermal alterations
- Surface diamond-drilling at the Reliance prospect considered highly encouraging
- Mill (GPP) commissioning ongoing – latest mechanical fixes in place this week
- New winder commissioning continuing – expected for another two weeks
- MCO website re-launched and full project video to be released shortly

### Milling Update *(reported to ASX earlier this week)*

- Mill (GPP) commissioning ongoing at site
- GPP mechanical problems affecting continuity <continue to be> addressed
- High grade concentrates taken offsite to enable initial gold pour – <results below>
- Impure concentrates off Wilfley table not enabling onsite <smelting> at this stage
- Gekko working with MCO to refine concentrates for onsite smelting as per GPP design

### GRAVITY PROCESSING PLANT (GPP)

MCO has worked its way through a list of issues raised during the commissioning of the processing plant that are affecting the throughput and continuity or ore processing. The 3 major <mechanical> issues being:

- Throughput on Conveyor 1 'CV1' to the primary jaw crusher.
- Effectiveness of the Vertical Shaft Impactor (VSI) (secondary crusher)
- Continual damage and need for replacement of the lower (1mm) vibrating screen.

### CV1 (conveyor 1)

Due to high speed of the motor controlling CV1 the feed to the jaw crusher is too much for the

*crusher to operate efficiently and to overcome this MCO has had to stop-start CV1 to control the feed to the crusher which in turn has caused a pulsing effect in the crushing circuit which has led to problems with the screen and the VSI.*

*To overcome this problem a slower, higher quality gearbox has been ordered and is expected to be fitted this week.*

## **Vibrating Screen**

*MCO is finding that the jaw crusher is producing a large amount of sharp oversize material and when this material passes over the vibrating screen it is causing the undersize fine screen to rip and fail continually. Discussions between MCO, Gekko and the screen manufacturer have produced a list of possible solutions. A new tougher screen has been ordered and is being fitted currently.*

## **VSI**

*Throughput and power issues (tripping out the electrical circuit) have been resolved with the VSI - most of these issues are thought to be related to problems with CV1 as discussed above.*

## **Gold milling / gold pour and onsite concentrates**

*As continuity issues with the ore processing plant are still being sorted out MCO is feeding development ore into the plant. Development ore is a mixture of high grade Maxwell reef ore (quartz) and low grade (~5 g/t Au) gabbro dyke material. The low grade gabbro contains a mixture of gold and sulphide material which is causing separation problems in the gold room where it is difficult to separate the free gold from the sulphide material. A high grade concentrate has been shipped offsite to enable the first gold pour but it is stressed that this is not the long term plan, rather the short term plan while the end of gravity milling is sorted out by Gekko as per GPP design. To achieve separation of the two materials involves continually passing the gold/sulphide material over the table, with each pass removing more and more of the sulphide material. Each pass removes more sulphides, it also removes a percentage of the gold, which means that the concentrate becomes cleaner (contains a greater percentage of gold) but contains less gold. It should be noted that the gold that is associated with the sulphides is not lost but just cannot be used in making a gold DORE bar onsite and should be considered as a high-grade middling product, which may need to be treated off-site in the interim.*

*MCO's metallurgists in concert with Gekko are trialling different techniques to remove the sulphides without affecting the quantity of gold in the concentrate.*

## **Further comments on milling and gravity circuit (11/MAR/2011)**

### **CV1**

A new higher quality gearbox has been installed on CV1 and is designed to allow a more controlled and continuous feed from CV1 to the jaw crusher by enabling CV1 to run at a slower and more variable speed. Gekko and MCO will monitor the changes to assess whether the new set-up needs additional control between the weightometer and CV1 to work correctly thus allowing the correct amount of ore feed into the jaw crusher and onto the VSI.

### **Vibrating Screen**

A new polypropylene lower vibration and separation screen has been fitted to the GPP this week. This is after several previous screens have had to be replaced due to damage. This screen controls the separation of -1mm fines from the oversize material with the fines being sent to Gekko's IPJ (inline pressure jig) and the oversize material being sent to the VSI (vertical shaft impactor) for secondary crushing. The aperture of the new poly screen is in fact 1.4mm (up from 1mm in the initial design) and this has caused larger material to pass through to the process side of the GPP and this has impacted on the tailings pumps which will need to be adjusted to ensure the correct dispersal of tails from the mill. The poly screen is expected to be much tougher than previous screens and the only other potential issue to be monitored relates to the overall aperture mass and what material that filters as larger particles will move to the IPJ. Gekko / MCO will need to carefully monitor whether or not the new poly screen impacts the separation of gold from ore. Again more GPP continuity will help herein.

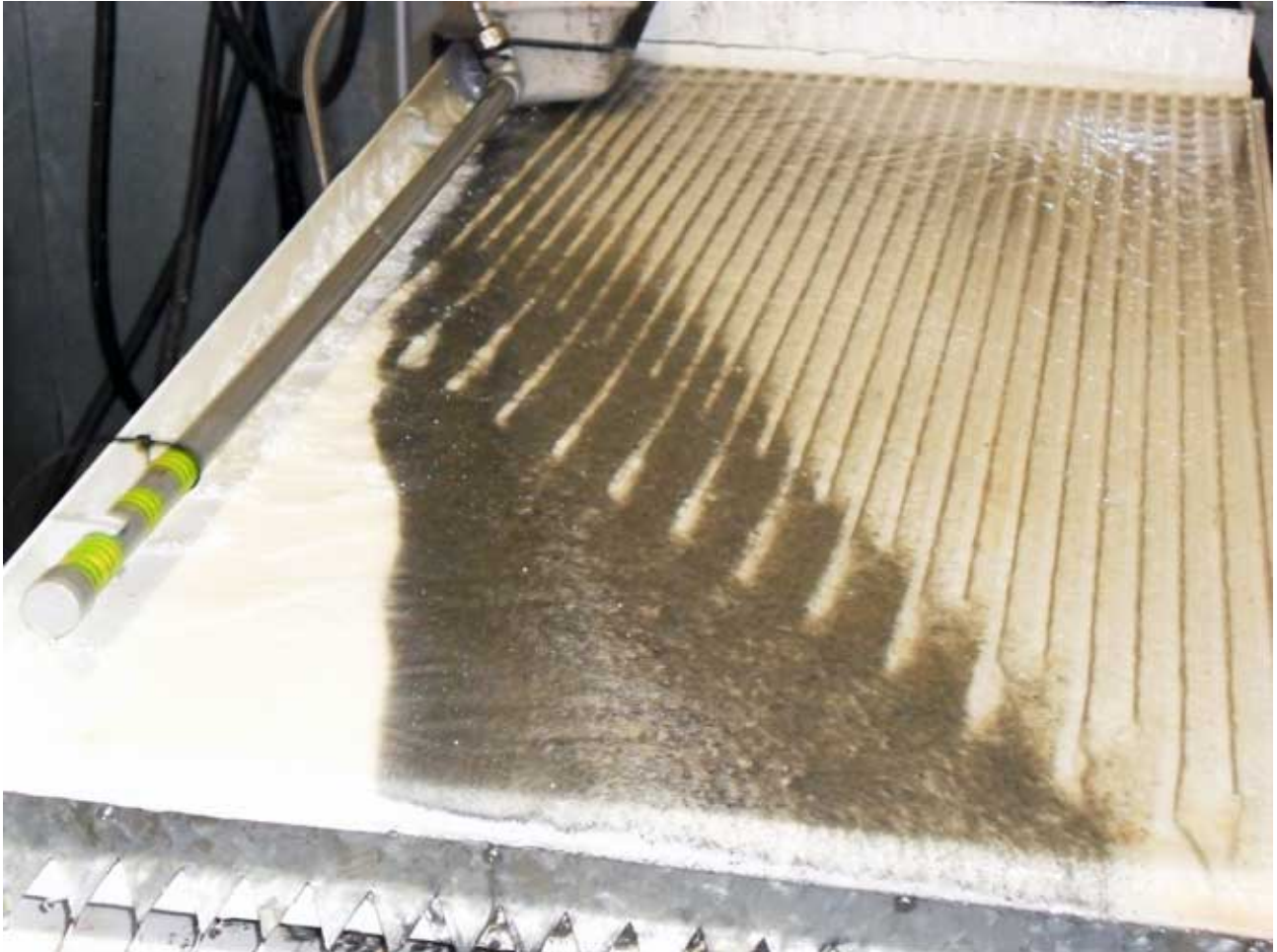
### **VSI**

Problems to date with the VSI relating to ore throughput, recirculation and power failures (tripping out) of the VSI are probably caused by the faster than desired feed rate of CV1, which led to the feed to the crusher being of a stop-start nature. Gekko and the VSI manufacturer advised that one potential solution is changing the speed that the VSI operates at to increase the throughput in that way. This is on hold at the moment until the changes to CV1 gearbox have been trialled adequately on the expectation they may resolve the VSI issues altogether. It is expected that once the feed rate is correct to the VSI as per design, that the VSI will be more effective in preparing ore for the screens and gravity processing. MCO is also considering other additional crushing alternatives should this outcome not be achieved in a desired timeframe.

### **Concentrates**

MCO consider with the issues in commissioning the mill, that on the balance it is too early to make categorical statements about the gold recovery and treatment of concentrates. Gekko have advised that as mill continuity increases and more mining grade ore is processed versus mixed or

shandied ores and rock types, concentrates should be more amenable to onsite gravity smelting and Dore production. It needs to be said that the first samples of concentrates processed by a recognised refinery in Melbourne have proved cost effective and expeditious. MCO recognise that this is a good short or medium term solution until concentrates onsite are of a standard to enable site smelting. Obviously MCO want their GPP to work as per Gekko's design. This is the desired outcome for all and we are working hard every day to enable this outcome.



**Photo of Wilfley table at Morning Star's GPP. Smelting has occurred offsite for the first time last week.**

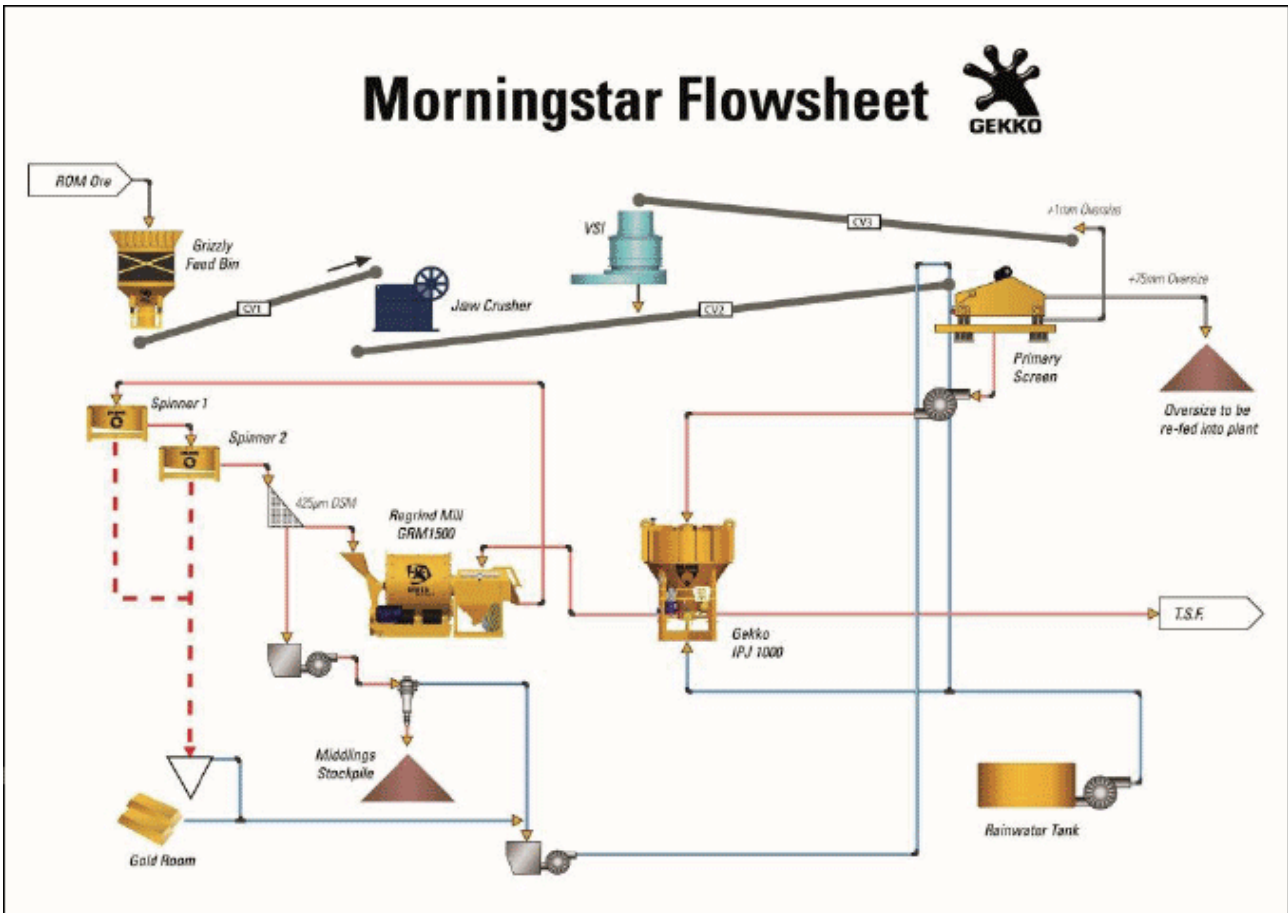
### **Gold production to date (offsite smelting)**

Morning Star sent two samples to a Melbourne lab and foundry in order to test gold recoverability from concentrates prepared onsite at the Morning Star mine and ultimate precious metals recovery. Concentrate A has been significantly 'tabled' and fractioned onsite at the Morning Star GPP and Concentrate B was less so. The resulting offsite smelt refined / recovered 341 grams of gold (Au) in a 2 bars. Also recovered was 74.5 grams of silver (Ag). See table below:

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	RAW WEIGHT	Au RECOVERY	Ag RECOVERY
<b>CONCENTRATE A</b>	<b>538 grams</b>	<b>221 grams</b>	<b>50.5 grams</b>
<b>CONCENTRATE B</b>	<b>915 grams</b>	<b>120 grams</b>	<b>24 grams</b>

This initial offsite smelt is considered a success and shows MCO can economically and expeditiously produce a gold bar from site formed concentrates with a minimum of cost and time involved. Our initial feeling is that the lower grade and less fractioned concentrate of 915 grams raw weight would cause less trouble and operational expense to produce a bar than the more fractioned higher grade concentrate tested. More concentrate will be shipped to Melbourne this coming week. Additional lab and foundry tests will be conducted to better understand the range of metallics and non-metallics present in the Morning Star ore. It's worth noting the silver metal extracted was equal to about 18% of the overall precious metal recovery. Further concentrates have been shipped to Gekko in Ballarat for assay and gold production.



GPP Flow Sheet Diagram depicting ore movement



## NEW WINDER – SHAFT UPGRADING

MCO's new winder has been installed and is undergoing stringent safety commissioning.

The main factors outstanding in the commissioning before designed usage at higher speeds and capacity can be carried out, are a new cage construction, implementation of a slack-rope detection & safety system and compliance with best practice / relevant mining standards across Australia for haulage of ore and men (different standards apply to each). In addition, MCO has been carrying out an ongoing program of shaft and headframe structural upgrading, which has been set down for some time and which is overseen and approved in its implementation ultimately by WorkSafe Victoria. MCO is working with very experienced, expert shaft and haulage engineering contractors to ensure this new system is safely operating in the soonest timeframe. It is expected this will see haulage using the new system commence in April 2011. MCO is also implementing ongoing upgrades to its old winder and obtaining certification under the same applicable best practice standards for it to be used as emergency access and egress to the mine. A third suitable winder has been obtained to cover the commissioning period in order to eliminate and/or reduce any unforeseeable delays.



Aerial View of headframe at Morning Star (2010)

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**The new winder is aimed at significant productivity improvements in the main shaft**

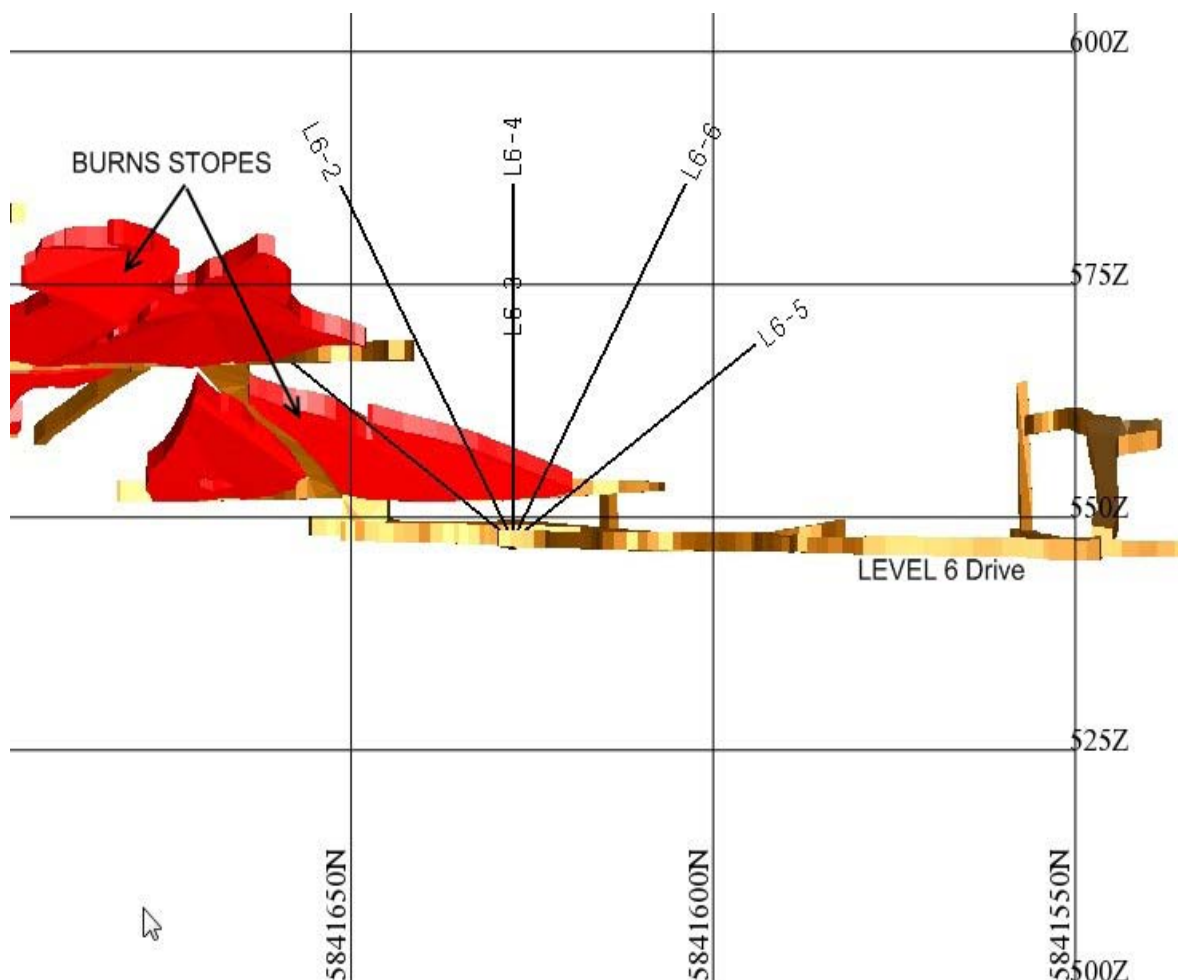
As reported earlier this year, once commissioned and coupled with the new haulage cage that is being constructed for MCO and ongoing shaft stability maintenance, the winder will be able to haul ore up the shaft at a rate at least 5 times faster than the old winder. The new unit is computer controlled and is designed so it can be easily upgraded in the future to allow fully automated haulage of ore should cost benefit analysis of this make the case clear to upgrade the haulage at the Morning Star goldmine further still.

## UNDERGROUND DRILLING

MCO has commenced a program of six planned holes in the historically high-grade Burns Reef zone from the 6 Level of the Morning Star mine (~180 metres depth). This is the first underground diamond-drilling program at the Morning Star mine since the Maxwell and Kenny Zones were discovered some 70-100 metres deeper in 2008. Drill hole (L6-1) has been completed and L6-2 is commenced with the drilling being planned to enhance the current expanding mining plans and add to the in mine resources.

L6-1 was drilled to test the southern extension of the Burns reef above the 6 Level drives and a narrow quartz reef, surrounded by intense hydrothermally altered gabbro dyke host rock was intersected where the hole was planned to pass through the Burns reef. L6-1 was then continued on to the eastern contact of the gabbro and the dyke sediment where more hydrothermally altered dyke material was encountered. MCO is awaiting assays for these two zones.

Hole L6-2 is being drilled along the same plane as L6-1 but at a steeper angle and is planned to intersect the same two potential mineralised zones and to date has not reached the first target zone. *See plan of drilling below:*



## SURFACE DRILLING

A preliminary program of seven diamond-drill holes from surface has been completed at MCO's 100% owned Reliance mine project on EL5079, northwest of Gaffney's Creek. (See Table 1 below for details). RLD 1001, 1002 & 1003 all failed to intersect significant intersections of the Reliance dyke, though REL-02 was stopped short of the potential target depth due to the loss of drilling equipment down the hole, and this led to a rethink of the conceptual geometry of the Reliance dyke. (See Table 2 below for notable assay results to date).

RLD 1004 intersected the dyke at 23 metres depth for a downhole width 83 metres. A number of zones of core loss were intersected in the weathered dyke which MCO has interpreted to be reefs that have broken down in the weathering zone. MCO has yet to receive any assays back from RLD 1004.

RLD 1005 is considered to be the best hole with a large intersection of both weathered and fresh dyke and a number of large areas of stockwork or brecciated quartz reef. The dyke material of RLD 1005 also shows significant large-scale hydrothermal alteration, which is typically a significant indicator of mineralisation in the Woods Point - Walhalla goldfield.

The presence of quartz stockwork and hydrothermal alteration such as in RLD 1004 and 1005 is also found in the ore zones of a number of gold mines in the field, especially the A1 Mine and the Rose of Denmark mine, suggesting that this zone is highly prospective for gold mineralisation.

RLD 1006 and RLD 1007 have been completed and no thorough logging of the holes has yet occurred but both holes have significant intersections of dyke (35 and 97 metres downhole intersections of dyke respectively). The holes will be logged and sampled over the next two weeks and results will be released as they come to hand.

It should be noted that RLD 1007 was drilled directly below RLD 1005 and both holes have large zones of hydrothermally altered dyke material and RLD 1007 has a wide zone of brecciated quartz adjacent to the eastern contact with the country rock sediments.

**An update on this highly exciting zone will be made once assay results have been received.**

Hole Number	Easting (GDA94)	Northing (GDA94)	Depth	Azimuth	Dip	Dyke Intersection	Best Result
RLD 1001	0425280	5853210	183.6	055°	-70°	63-69.7m	
RLD 1002	0425280	5853210	384.1	035°	-75°	149.3-154.6m & 162.8-165.45m	
RLD 1003	0425290	5853210	140.1	035°	-30°	12.1-24.7m & 26.15-38.7m	
RLD 1004	0425290	5853220	125.7	015°	-45°	22.8-106m	
RLD 1005	0425290	5853220	130	360°	-45°	42.4-106m	
RLD 1006	0425290	5853220	114	345°	-45°	61.5-96.5m	
RLD 1007	0425290	5853220	189	360°	-65°	65.7-159.4m	

**Table 1: Reliance Drillhole Locations**

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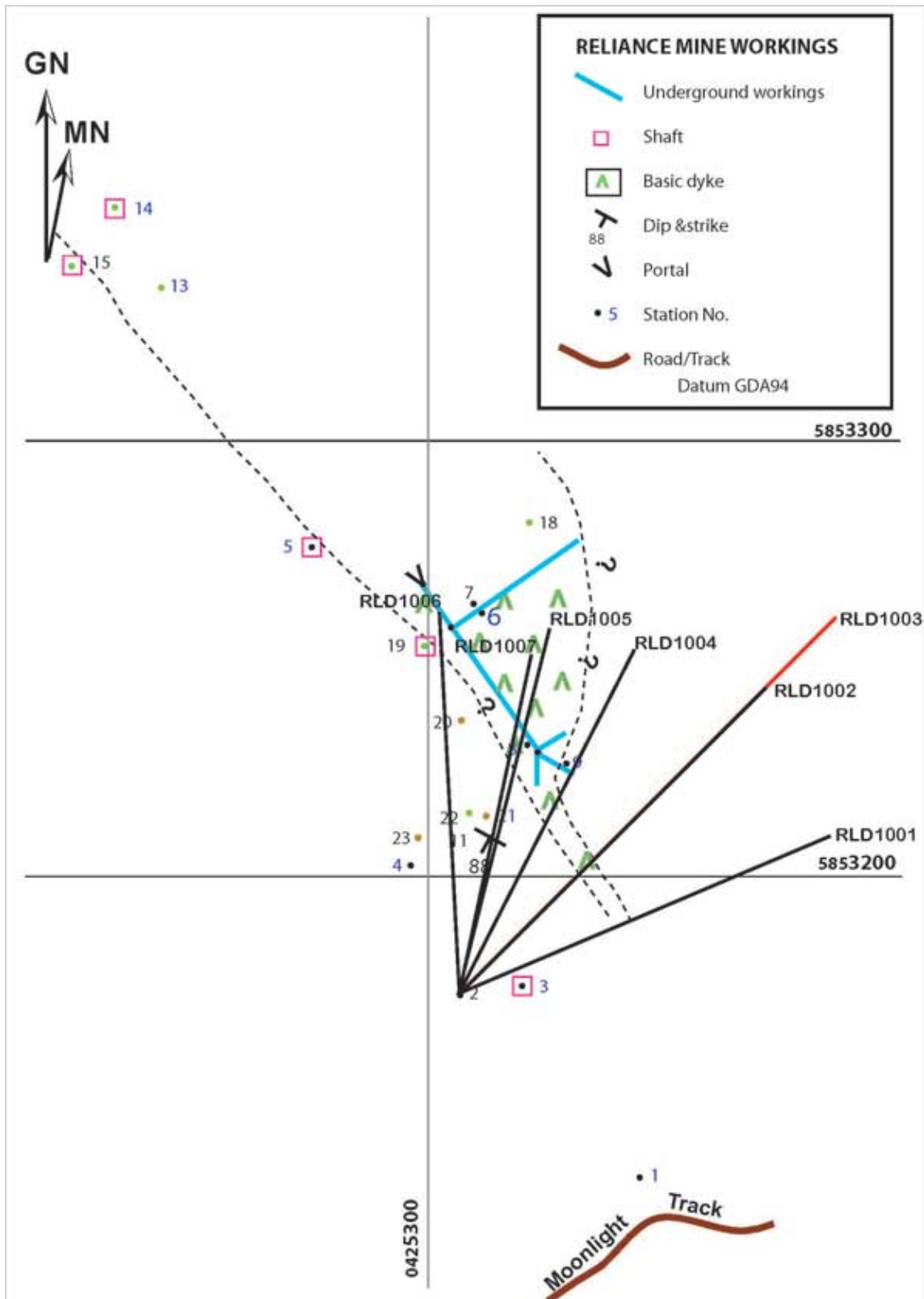


Fig 3: Reliance Drillhole Plan

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Hole Number	From	To	Intersection	Grade g/t Au
RLD 1001	63.0	69.7	6.7	0.17
incl	68.2	68.5	0.3	0.59
RLD 1002	69.4	69.6	0.2	0.67
	72.0	73.0	1.0	0.35
	131.8	132.5	0.7	4.40
	133.0	134.1	1.1	1.14
	138.0	139.0	1.0	0.48
	144.0	146.0	2.0	1.80
	162.7	163.0	0.3	1.03
RLD 1003	35.6	36.6	1.0	1.17
RLD 1004	Logged & Sampled – Assays Pending			
RLD 1005	Logged & Sampled – Assays Pending			
RLD 1006	Not Logged			
RLD 1007	Not Logged			

Table 2: Reliance Drillhole Assay Results



Image of Reliance Hole 2 (RLD1002) showing drill core & alteration

## MORNING STAR MINE – SURFACE DIAMOND DRILLING

A surface diamond drill hole (MSD 1101) was started last week to test a known zone of mineralisation located between Level 1 and Level 4 known as the 'AAA' reef zone.

The target of the drill hole is to test the lateral extension of a large mineralised zone found in drill hole MS357 which assayed 28.17 g/t Au over 2.65 metres width. MCO believes that this intersection in MS 357 lines up with mineralisation found on Level 3 and in the old workings in the Morning Star hill and MSD 1101 is planned to test this theory.

The drilling program will also test for any new zones of mineralisation not previously known or recorded. The obvious aim is to enable the quantification of shallower in mine resources & milling opportunities. At present the first drill hole has not reached the target depth.

See [Fig 4. Morning Star mine drilling cross-section on following page](#)



Drilling from surface of Morning Star dyke into AAA reef zone of Morning Star goldmine

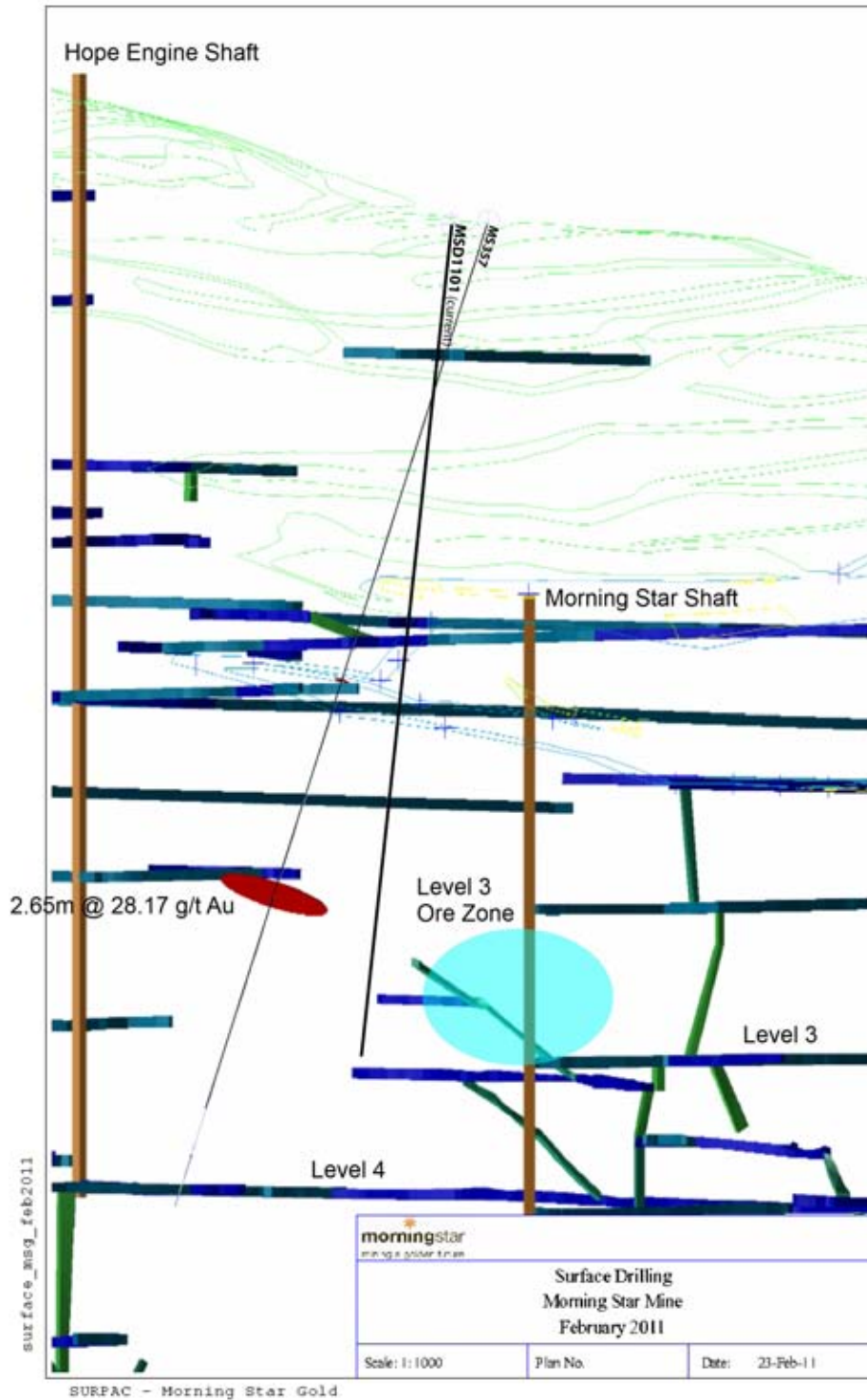


Fig 4: Morning Star Hill Drillhole Plan

## REGIONAL EXPLORATION (including Shandong JV)

### Rose of Denmark – MIN 5299

Underground works have recently recommenced at the Rose of Denmark (RoD) prospect to put in place a number of drill cuddies in preparation for diamond drilling from the main Rose of Denmark adit level this coming winter.

A drill program of 2,000 - 2,200 metres is being planned with 3 drill cuddies having been marked up for development. In addition, a 30 metre deep crosscut at the front of the dyke bulge (near the location of the recently re-entered engine room) has also been planned.

A mapping and sampling program is also underway to assist in planning a possible ore mining program that would allow an initial bulk sample of up to 2,000 tonnes to be mined and treated in the new mill at the Morning Star mine.

Significant upgrade works on the main bridge over Cannon's Creek into the RoD project area at Paradise Point have been completed. The bridge works will allow for heavy machinery and trucks to pass safely over the creek and provide better amenity to the local community and residents as well. *See image below of bridge reconstruction by MCO:*



**Loch Fyne (MIN 5241 JV at Matlock)**

A 2,000 metre drilling program of both up and down holes from the 3-Level to test the eastern contact from existing drives is being investigated at the Loch Fyne mine on MIN 5241 (JV).

**Tingha (on Waverly dyke MIN 5009 MCO)**

A 1,000 metre, 8 to 10 hole diamond drilling program is currently being planning. The holes would test the Waverly dyke and would be drilled from 3 different sites (MIN 5009 MCO).

**Waverly Dyke (MIN 5009 MCO)**

Investigations are underway into possible drill pads along the Perkins and Dearlove tracks. These tracks will be used to target northern extensions of the Waverly dyke (MIN 5009 MCO).

**All Nations (MIN 5241 JV)**

As previously reported our first drill program at All Nations was completed.

A new program of potential drill sites is being considered at the All Nations and need further investigation. These currently centre on the All Nations top adit, Lawsons Reef, and potential surface drilling east of the Emerald adit to test for continuation of the dyke, Lawsons Fault and their possible intersection. Permitting is underway.

**WEBSITE & NEW MEDIA**

Morning Star has recently unveiled it's upgraded and updated corporate website. As previously reported, MCO has engaged Heywood Innovation an experienced design group focused on branding and communications in the corporate sphere. MCO believes Heywood's are at the cutting edge of where web design and corporate communications are heading and are together increasing MCO's potency in the new instant digital age. These progress reports for instance are tailored for iPad and iPhone / Smart Phone use and each update is formatted so busy people can access the info quickly, securely and through readily available 'future tested' portals.

MCO's new corporate web offering will be unashamedly focusing more on high definition video and audio outtakes and animations in an effort to convey what MCO is about to the shareholder and public more effectively. This may also entail spreading readily available information via *YouTube* and *Boardroom Radio*. The recent 'soft' launch of the msgold.com.au site followed the sister sites released in the past few weeks. These related microsites are part of MCO's wider community relations push and form a part of the sustainable business platform the company is building. Information on the history of Morning Star Gold, the region, the town of Woods Point and surrounding goldfields and the people, community and businesses of Woods Point is all readily accessible on these new sites.



Morning Star Gold NL (ASX: MCO) launched a brand new website in the past week and will continue to focus on upgrading its high definition video and imaging available for shareholders and the general public. A significant video release of our projects and underground workings will be made in the next month for our attendance at HK Mines and Money and the following Singapore Asia Mining Congress set for early April. Please see our corporate website [msgold.com.au](http://msgold.com.au) for all updates and news.

Yours Sincerely,

Nick Garling, Chairman

#### Competent Persons Statement

The information contained in this report was compiled by Mr Greg Curnow BSc MAUSIMM who has over twenty years of relevant experience in relation to the mineralisation being reported on, to qualify as a Competent Person as defined in the 2004 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Curnow works on a full-time basis as a consultant to Morning Star Gold NL and consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.