

29 August 2014

ASX Market Announcements ASX Limited Exchange Centre 20 Bridge Street Sydney NSW 2000



# Kalgoorlie North Gold Project Development Update

- Preliminary Mining Schedule defines 3.3 million tonnes of ore at a mine diluted grade of 2.64g/t Au for 280 500 ounces mined
- Up to 6.5 years of processing under the proposed Paddington co-operative milling arrangement
- Milling arrangement provides flexibility on delivery of higher grade resources
- Additional resources and satellite deposits to be included in Mining Schedule
- Mining approvals for submission by November 2014 for potential commencement of mining as early as mid 2015

Excelsior Gold Limited (**Excelsior Gold** or **Company**) is pleased to advise that significant progress has been achieved in preparation for mine production in 2015 since execution of a Binding Term Sheet with Norton Gold Fields Limited (**Norton**) (ASX:NGF) in June 2014 (*refer ASX announcement 18 June 2014*).

The preliminary mining schedule was developed under the Paddington co-operative ore treatment scenario utilising selected material contained within the larger existing Ore Reserve inventory for the Project *(refer ASX announcement 4 March 2014).* This initial schedule delivers approximately 3.3 million tonnes of ore with a mine diluted grade of 2.64g/t Au from open pit and underground operations.

The current tonnages are sufficient to supply ore at the minimum rate of 500,000 tonnes per annum (**tpa**) for approximately 6.5 years, or approximately 5.4 years if processing at a rate of 650,000tpa for the first 5 years.

The preliminary mining schedule rates have been process restricted to the agreed allocation with Norton of up to 650,000tpa compared to the 1.0Mtpa rate investigated under the March 2014 Pre-Feasibility Study (**PFS**). This reduced milling component allows the exclusion of

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the Excelsior base load deposit and higher cost satellite mining projects. As a result the projected mill grade of 2.64g/t Au has improved compared to the PFS Ore Reserve grade of 2.00g/t Au allowing Excelsior Gold to deliver ounces more cost effectively from the smaller tonnages processed.

The preliminary schedule is based on mineral inventories contained within PFS open pit and underground mine designs. These PFS mine designs may be less than optimal when the final cost structure for the mining and processing operations are established and mine redesign will be inevitable. The mineral inventories do however give a strong indication of the capacity of the Project to deliver tonnages at robust gold grades to accommodate the Paddington mill allocations.

The preliminary schedule was developed utilising the same mining cost estimates as the PFS which are now potentially dated and offer scope for reduction. The processing costs were provided by Norton based on existing processing and haulage costs factored for estimated cost improvements resulting from the proposed mill upgrade from 3.5 to 4.5Mtpa. The projected processing cost, inclusive of haulage are similar to those predicted in the PFS for a standalone 1.0Mtpa plant but come at a \$56 million lower capital cost to the Kalgoorlie North Gold Project.

Source	Mineral Inventory <sup>1</sup>			Mine Recovered <sup>2</sup>		
	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces
Zoroastrian Central						
Stage 1 OP	164,000	2.47	13,000	167,000	2.35	12,600
Stage 2 OP	194,000	1.72	10,700	197,000	1.64	10,300
Stage 3 OP	1,354,000	2.51	109,300	1,377,000	2.39	106,000
Jackorite OP	87,000	2.71	7,600	88,000	2.58	7,300
Zoroastrian Extended OP	24,000	4.75	3,700	24,000	4.52	3,600
Big Blow South OP	45,000	2.92	4,200	45,000	2.79	4,100
Bulletin South OP	207,000	2.21	14,700	210,000	2.11	14,200
Nerrin Nerrin OP	39,000	2.92	3,700	40,000	2.78	3,600
Castlereagh OP	88,000	2.12	6,000	89,000	2.02	5,800
Zoroastrian South						
Stage 1 OP	83,000	1.47	3,900	84,000	1.40	3,800
Stage 2 OP	62,000	1.75	3,500	63,000	1.67	3,400
Zoroastrian UG	897,000	3.94	113,700	916,000	3.59	105,800
TOTAL	3,244,000	2.82	294,000	3,300,000	2.64	280,500

Ore sources utilised in the preliminary mine schedule are summarised in Table 1.

#### Table 1. Preliminary Mining Schedule – Ore Source Summary

Notes:

<sup>1</sup> Mineral Inventory – Indicated resource within PFS mine design

<sup>2</sup> Mine Recovered – mine production including mining dilution and mine ore loss

Numbers may not sum due to rounding

Further refinement of the schedule will follow:

- a) re-pricing of mining costs to deliver new open pit and underground cost models,
- b) geotechnical drilling and assessment at Zoroastrian to refine pit design parameters with anticipated improvements in strip ratio and potential deepening of the open pit,
- c) optimised pit and underground designs specifically tailored for provision of ore to the Paddington Mill,
- d) infill drilling to upgrade Inferred resources currently captured within mine designs to the Indicated category to facilitate conversion to Ore Reserves, which will also contribute to improved open pit strip ratios and extension of underground mine designs; and
- e) confirmation of upgraded mill processing costs based on studies currently in progress by Norton's engineering consultants.

# **Call for Mining Contract Tenders**

It is currently envisaged that mining operations at the Project will be managed by Excelsior and conducted by way of contract mining. To this end, Excelsior has recently called for definitive tender submissions for the mining and earthwork contract. Final pricing submissions from participating contractors are expected before the end of September 2014 with selection of the preferred contractor to follow.

The mining cost model will subsequently be updated to incorporate final contract volume rate, site establishment, mobilisation/demobilisation, personnel, maintenance and drill and blast operations.

Re-optimisation of open pits and final pit designs will precede submission of mining approvals with the Department of Mines and Petroleum.

## Ore Treatment Agreement with Norton

To accommodate the timing of the mill upgrade engineering studies and to facilitate the complex procedural documentation of a long term co-operative processing agreement of this nature, Excelsior Gold and Norton have agreed to extend the signing of the Ore Treatment Agreement (**Agreement**) to 30 September 2014.

The extension is necessary for both parties to finalise the processes and procedures associated with milling, proposed mill upgrade, and capital contribution. The Company is also seeking inputs from potential project financiers prior to finalising and executing the Agreement.

## **Other Resources and Satellite Deposits**

Whilst the preliminary mining schedule demonstrates a potential 6.5 years mine life consisting of the Zoroastrian Deposit, open pit and underground, and five satellite open pits, significant improvements in economics may be achieved by the inclusion of higher grade open pit and underground ore feeding into the milling schedule.

There are 15 additional satellite deposits yet to be assessed by Excelsior under the Paddington milling scenario. It is currently intended that operations at satellite deposits are by way of open pits only due to restriction of drilling at depth. However knowledge gained

from the mining of many of these deposits has the potential to open up underground mining opportunities from high grade mineralisation at depth below current open pit designs.

The Excelsior Deposit is a modest grade, broad shear mineralised zone with 20-50 metres true width mineralised zones which are highly amenable to bulk, low strip ratio, open pit mining. This deposit is excluded from the Paddington milling scenario at present although the Company recognises the significance of Excelsior Deposit as a base load for a potential standalone gold processing plant or treatment option for the Paddington plant in a future higher gold price environment. The Excelsior Deposit therefore remains an important asset to Excelsior Gold in the event a standalone plant within the Kalgoorlie North Gold Project or as a source of ore for the potential extension options available under the Paddington milling agreement.

For further information visit www.excelsiorgold.com.au or contact

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#### **Competent Person Statements- Exploration Results and Mineral Resources:**

Information in this announcement that relates to Mineral Resource and exploration results is based on information compiled by Mr. David Potter who is the Technical Director of Excelsior Gold Limited. Mr. Potter is a Member of The Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking, to qualify as Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Potter consents to the inclusion in the document of the information in the form and context in which it appears.

#### **Competent Persons Statements – Ore Reserves**

The information in this announcement which relates to Ore Reserve estimates and Mineral Inventories accurately reflects information prepared by competent persons (as defined by the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves). The information in this public statement that relates to the Ore Reserves and the Mineral Inventories at the Excelsior Gold Kalgoorlie North Gold Project is based on information resulting from Pre-Feasibility works carried out by Auralia Mining Consulting. Both Mr. Daniel Tuffin (Open Pits) and Mr Anthony Keers (Underground Workings) completed the Ore Reserve estimate. Mr Daniel Tuffin and Mr Anthony Keers are Members and Chartered Professionals (Mining) of the Australasian Institute of Mining and Metallurgy and have sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that they are undertaking to qualify them as Competent Persons as defined in accordance with the Australasian Joint Ore Reserves Committee (JORC).