



NORTHERN STAR
RESOURCES LIMITED

Strong metallurgy results put Ashburton on track to be stand- alone 100,000ozpa project

*Northern Star's +\$80m cash kitty to fund accelerated drill
out, testwork and development studies*

Highlights

- ▶ **Highly favourable results from initial bacterial oxidation test work at Ashburton Sulphide Project**
- ▶ **Very high 96.4% gold recovery from concentrate**
- ▶ **Possibility of higher gold recoveries to concentrate with a finer grind, as previously reported**
- ▶ **Overall total gold recovery of 80% from testwork**
- ▶ **Further test work underway to evaluate other process options for gold extraction from concentrate**
- ▶ **Strong cash position means drilling, studies and construction could all be funded internally**
- ▶ **Ashburton Sulphide Project would lift total group production to 200,000ozpa (100,000ozpa from Paulsens)**

Northern Star Resources Ltd (ASX: NST) is pleased to advise that it has committed to expediting plans to establish a 100,000ozpa stand-alone operation at its Ashburton Sulphide Gold Project in WA after metallurgy tests returned highly favourable results.

The results, which showed very high gold recoveries of 96.4 per cent from concentrate, have prompted Northern Star to accelerate a reserve and resource drill out at Ashburton, along with further metallurgical test work and development studies. Ashburton currently has Resources of 668,000oz¹.

The accelerated program will be funded from Northern Star's +\$80 million cash reserves, which includes the Company's \$45 million capital raising of late last month.

This strong cash position, which is growing by the month, means Northern Star will also be able to fund construction of the Ashburton Sulphide Project from its internal reserves should it choose to do so.



ASX ANNOUNCEMENT
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Australian Securities Exchange
Code: NST

Board of Directors

Mr Chris Rowe
Non-Executive Chairman

Mr Bill Beament
Managing Director

Mr Michael Fotios
Non-Executive Director

Mr Peter Farris
Non-Executive Director

Ms Karen Brown
Company Secretary

Issued Capital

Shares
402 M

Options 25M

Current Share Price
\$0.935

Market Capitalisation
\$375 million

Cash/Bullion in Bank: 05 Mar 2012
\$80 million

Projects

Paulsens
Ashburton
Range
Emull

Commodities

gold
gold
gold, silver
Zn, Cu, gold

Northern Star envisages that a stand-alone operation at Ashburton would produce 100,000ozpa. When combined with the planned increase in production from ~80,000ozpa to 100,000ozpa at its Paulsens Project in WA, the Company would be a 200,000ozpa producer with outstanding profit margins, cashflow and mine life.

The only consideration paid by Northern Star for Ashburton is an agreement to pay a 1.75% royalty on future production in excess of 250,000oz.

Northern Star Managing Director Bill Beament said the accelerated drilling plan and economic studies on Ashburton were aimed at bringing the project into production as soon as possible.

“There are already numerous walk-up drilling targets at Ashburton as well as vast areas of highly prospective acreage which have seen little or no exploration,” Mr Beament said.

“We are confident that the accelerated drilling program that is already underway will result in a significant increase in resources and put Ashburton well on track to being a 100,000ozpa operation.”

Northern Star plans to truck the free-milling ore from Ashburton to Paulsens as part of its strategy to expand the mill capacity and lift production there to 100,000ozpa.

Metallurgical Test Work

The metallurgical testwork performed in the laboratory was designed to replicate the specifications of an existing operating processing facility.

Two flotation tests were performed using routine flotation re-agents to yield a high sulphur recovery product for bacterial oxidation. Test parameters and results were as follows;

- Grind size was 80 per cent passing 135 micron
- 92% Sulphur Recovery
- 84% Gold recovery into concentrate
- 96.4% Gold recovery from bacterial oxidation of the concentrate

After factoring the gold recovery into concentrate, the overall total gold recovery on the test work was 80 per cent. This total gold recovery is seen as very encouraging considering it is around the same as that achieved in operating bacterial oxidation processing facilities.

There are possibilities of higher gold recoveries to concentrate with a finer grind size. Previously released (see ASX release December 2, 2011) test work on the flotation concentrate utilising an 80 per cent passing 75 micron resulted in an average 96.6 per cent of gold reporting to the concentrate.

When this optimisation of the flotation concentrate is combined with the 96.4 per cent gold recovery from bacterial oxidation, it can be seen that the project has the potential for an overall total gold recovery of 93 per cent, which would put it in the end upper end of the recovery curves for sulphide projects.

Further test works to evaluate other processing options for gold extraction from concentrate are underway.

Yours faithfully,



Bill Beament
Managing Director
Northern Star Resources Ltd

Forward Looking Statements

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Competent Persons Statements

The information in this announcement that relates to Ashburton mineral resource estimation, exploration results, data quality, geological interpretations, potential for eventual economic extraction and estimates of exploration potential, is based on information compiled by or under the supervision of Brook Ekers, (Member AIG), who is a full-time employee of Northern Star Resources Ltd. Mr. Ekers 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 Ekers consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

| | Measured | | | Indicated | | | Inferred | | | Total | | |
|-----------------------------------|------------------|----------------|-----------------|------------------|----------------|-----------------|------------------|----------------|-----------------|------------------|----------------|-----------------|
| | Tonnes (,000) | Grade (g/t) | Oz Au (,000) |
| Oxide and Transitional | 611 | 2.40 | 47 | 342 | 2.52 | 28 | 237 | 2.28 | 18 | 1,189 | 2.41 | 92 |
| Sulphide | 901 | 2.83 | 82 | 1,070 | 2.66 | 92 | 3,984 | 3.14 | 402 | 5,956 | 3.01 | 576 |
| Total | 1,512 | 2.66 | 129 | 1,412 | 2.63 | 119 | 4,221 | 3.09 | 420 | 7,145 | 2.91 | 668 |

¹ Ashburton Resources @ 0.9g/t Au Lower Cut-Off