





# ASX ANNOUNCEMENT 10 DECEMBER 2010

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

Options 79M (\$6.4M Funding)

Current Share Price \$0.40

Market Capitalisation \$119 million

### **Project**

### Commodities

Paulsens Golden Crown Range Emull gold gold gold, silver Zn, Cu, gold



# Paulsens gold bonanza: more high-grade results, more production, more mine life

# **Highlights**

- New high-grade drilling results reveal strong likelihood of a third level being added to Stage 2 mine plan
- Significant results include (all true width):

2.0 m @ 77.1 g/t gold	(692mRL) Depth extension of LZ
1.2 m @ 73.1 g/t gold	(703mRL) Depth extension of LZ
1.4 m @ 29.6 g/t gold	(660mRL) Depth extension of UZ
3.3 m @ 13.0 g/t gold	(667mRL) Depth extension of UZ
0.7 m @ 58.0 g/t gold	(675mRL) Depth extension of UZ
0.5 m @ 63.6 g/t gold	(674mRL) Depth extension of UZ
0.3 m @ 97.9 g/t gold	(657mRL) UZ2

- Latest results show the Voyager 1 lode currently being mined continues, and remains open, at depth
- ▶ A third level in Stage 2 would underpin an increase in production and mine life into 2011 and beyond
- Drilling also continuing at the recently-discovered Voyager 2 lode, which has strong potential for further significant increases in production and life

Northern Star Resources Ltd (ASX: NST) is pleased to advise that it has again increased the known depth of the Voyager 1 lode at the Paulsens gold mine in WA, opening the door to further significant increases in production and mine life.

A host of bumper drilling results grading as high as 98gpt shows that Voyager 1, which has provided all the ore mined at Paulsens to date, extends to at depth of at least 600m and remains open at depth.

These results come from below the bottom level of the Stage One mine plan at Voyager 1 and therefore highlight the strong prospect of a third level being developed for the Stage 2 mine plan.

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The latest results are also in addition to those reported from the recently discovered Voyager 2 lode at Paulsens (see ASX releases October 14 and December 2), which is the next lode down plunge of and beneath the Voyager 1 lode and has significant potential to underpin further significant increases in production and mine life.

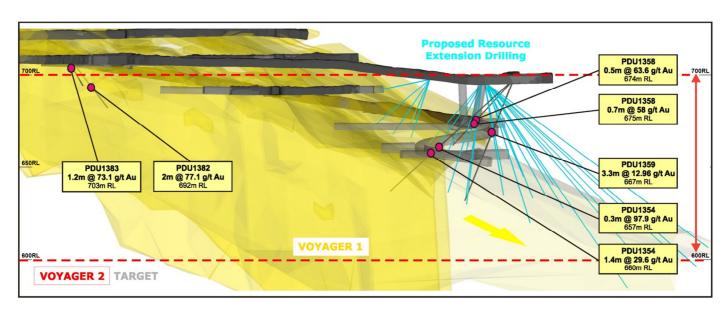
Further drilling is underway at both Voyager 1 and Voyager 2, with more results expected shortly.

When Northern Star agreed in June to pay Intrepid Mines \$40 million for Paulsens, it did so on the basis that it had the Stage 1 mine plan containing 55,000 ounces.

Drilling by Northern Star quickly increased this to 65,000oz and has since established that there is sufficient mineralisation to warrant development of Stage 2, at the Voyager 1 lode.

Northern Star Managing Director Bill Beament said the results continued to highlight the growth potential at Paulsens.

"Stage 2 development is already under way with the first two ore levels being developed," Mr Beament said. "Even greater profit margins will be generated because production from Stage 2 levels will not be subject to the royalties Northern Star is paying Intrepid as part of the acquisition."



Assay results from underground diamond drilling since the last release on November 09 2010 are listed in the attached table. Further announcements will be released regarding ongoing underground diamond drilling as results become available. Yours faithfully.

Bill Beament

**Managing Director** 

Bill Bemont

**Northern Star Resources Ltd** 

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RESOURCE DEFINITION							
Hole #	Downhole Intersection (m)	Est. True Thickness (m)	Grade (g/t) cut to (100g/t)	Gram/mts	Ore zone and comments	RL of intersection	
PDU1354	4.09	1.4	29.6	41.4	VOY UZ	660m RL	
PDU1354	0.98	0.3	97.9	29.4	VOY UZ2	657m RL	
PDU1354	2.8	1.6	8.41	13.5	VOY LZ	638m RL	
PDU1357	0.96	0.96	7.3	7.0	VOY UZ	678m RL	
PDU1357	1.87	1.1	3.4	3.7	VOY LZ	660m RL	
PDU1358	0.82	0.7	58	40.6	VOY UZ	675m RL	
PDU1358	0.59	0.5	63.6	31.8	VOY UZ	674m RL	
PDU1358	0.9	0.7	13.9	9.7	VOY LZ	671m RL	
PDU1359	3.71	3.3	12.96	42.8	VOY UZ	667m RL	
PDU1359	NSR				VOY LZ	690m RL	
PDU1360	0.96	0.7	17.3	12.1	VOY UZ	674m RL	
PDU1360	1	0.6	33.9	20.3	vein in gabbro	671m RL	
PDU1360	NSR				VOY LZ	645m RL	
PDU1366	0.81	0.6	18.2	10.9	VOY UZ	760m RL	
PDU1366	0.44	0.4	6.78	2.7	VOY LZ	762m RL	
PDU1366	NSR			0.0	VOY UZ (Zone Z)	770m RL	
PDU1368	3.02	2.2	11.88	26.1	VOY UZ	768m RL	
PDU1368	1	0.7	3.52	2.5	VOY UZ (Zone Z)	779m RL	
PDU1369	0.6	0.5	6.15	3.1	VOY UZ Splay	758m RL	
PDU1369	4.37	3.6	2.69	9.7	VOY UZ	760m RL	
PDU1369	1	0.7	3.07	2.1	VOY LZ	760m RL	
PDU1369	NSR				VOY UZ (Zone Z)	772m RL	
PDU1370	0.78	0.7	2.65	1.9	VOY UZ	755m RL	
PDU1370	1	0.9	6.51	5.9	VOY LZ	757m RL	
PDU1370	NSR				VOY UZ (Zone Z)	762m RL	
PDU1372	2	1.6	2	3.2	VOY UZ Splay	745m RL	
PDU1374	2.3	1.9	10.8	20.5	VOY UZ Splay	711m RL	
PDU1382	4.83	2	77.1	154.2	VOY LZ	692m RL	
PDU1383	1.45	1.2	73.1	87.7	VOY LZ	703m RL	
PDU1383	2.74	2.4	8.3	19.9	VOY UZ	698m RL	
PDU1384	2.14	1.1	11.9	13.1	VOY LZ	691m RL	
PDU1385	2	0.9	22.8	20.5	VOY LZ(?)	686m RL	
PDU1386	1.2	0.8	11.4	9.1	VOY LZ	697m RL	

At a nominal 3g/t lower cut off and a 100g/t upper cut off NSR means no significant result

## **Quality Control - Paulsens**

All core is logged and whole core samples (if LTK48 size, NQ2 sized core is cut and half cored) are marked and prepared for shipping at the Paulsens Mine Property and sent to an independent Laboratory for assay. The remaining half core is stored on site. All samples from which information in this document is derived were received by ALS Chemex – Australian Laboratory Services Pty ('ALS') Limited in Karratha, Western Australia. Samples are weighed and crushed to 70% passing -6mm mesh. The crushed material is split and a portion is pulverised. A 100-gram pulp is sent to ALS Perth, Western Australia for assay. A 30-gram portion of the pulp is treated by fire assay method with atomic absorption finish (Au-AA25). A second pulp sample split (150-200 g) is kept in Karratha. Sample rejects are discarded after 90 days.

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Limit samples (>100 grams per tonne gold) are re-analysed using ALS' dilution method (Au-DIL). Northern Star Resources inserts one standard in each hole, and one blank is now inserted in each ore zone, although this practice has only recently been adopted. Laboratory standards and blanks are inserted by ALS and several pulp duplicates are also assayed as a determinant of mineralisation variability.

ALS has AS/NZS ISO 9001:2000 certification in Perth. This does not cover the sample preparation facilities; however these preparation laboratories follow the same quality management system. They are not audited by NCSI but are audited internally.

### **Competent Persons Statements**

The information in this announcement that relates to exploration results, data quality, geological interpretations and potential for eventual economic extraction, 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 this announcement of the matters based on his information in the form and context in which it appears.

### **Forward Looking Statements**

Some of the information contained in this Announcement has been obtained from third parties and has not been independently verified by NST. In particular the financial projections model on which the forward looking statements included in this Announcement has not been prepared by the Company and the Company has not undertaken any verification of the model. The Company takes no responsibility and is not liable for the projections in any way. Given the risks and uncertainties that may cause the Company's actual future results, performance or achievements to be materially different from that expected, expressed or implied by the forward looking statements included in this announcement, undue reliance should not be placed on these statements. Nothing contained in this Announcement is a promise or representation as to the future. No assurance or representation is made by any person that any forecast or projection will be achieved. Accordingly, investors must make their own investigations and inquiries regarding all assumptions, uncertainties and contingencies, which may affect the future operations of the Company."