



NORTHERN STAR  
RESOURCES LIMITED

# ASHBURTON RESOURCE SOARS 66% TO 1.7MOZ

*Inventory includes 647,000oz of oxide ore, putting Northern Star on track to develop its second low-cost operation*

**ASX ANNOUNCEMENT**  
**28 FEBRUARY 2013**

**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 O'Connor  
*Non-Executive Director*

Mr John Fitzgerald  
*Non-Executive Director*

Ms Karen Brown  
*Company Secretary*

#### **Issued Capital**

Shares 424M

Options 4M

Current Share Price \$0.945

Market Capitalisation  
\$400 million

Cash/Bullion and Investments  
31 Dec 12 - \$62 million

Level 1, 1 Puccini Court, Stirling  
WA 6021  
T +6 8 6188 2100  
F +6 8 6188 2111  
E info@nsr ltd.com  
www.nsr ltd.com

## KEY POINTS

- ▶ **JORC Resources at Ashburton Gold Project in WA significantly increase 66% to 1.7Moz<sup>1</sup>, lifting Northern Star's group resources to more than 2Moz<sup>1</sup>**
- ▶ **Expanded inventory strengthens Northern Star's strategy to establish a stand-alone 100,000ozpa operation at Ashburton**
- ▶ **New Resource includes 647,000oz of oxide ore, underpinning plans to develop Ashburton with low costs and strong cashflow**
- ▶ **Maiden sulphide reserve for Ashburton scheduled for second half of this year**
- ▶ **Economic and technical studies well advanced**
- ▶ **Two-stage development strategy. Stage One based on an oxide project with a sulphide processing circuit to follow in Stage Two**
- ▶ **Recent high-grade results and new geological understanding at the main Mt Olympus deposit highlight strong potential for further resource increases. Drilling to resume next Quarter**
- ▶ **Plus, extensive exploration potential at several new targets**
- ▶ **Resource additions come at a discovery cost of <\$10/oz**

Northern Star Resources (ASX: NST) is pleased to advise that resources at its Ashburton Gold Project in WA have increased by 66 per cent to 1.67 million ounces<sup>1</sup>.

The increased inventory, which comprises 21.3 million tonnes at 2.4gpt, underpins Northern Star's plan to establish a stand-alone operation at Ashburton. In line with this strategy, a maiden sulphide reserve for Ashburton is scheduled for completion in the second half of this year.

Ashburton sits 200km from Northern Star's Paulsens Gold Mine, where a recently-completed plant expansion has put the Company on track to produce up to 115,000oz this calendar year, generating up to \$85 million in surplus cash.

Economic and technical studies on the development of Ashburton are well advanced. These are based on a two-staged strategy, with Stage One comprising an oxide project and Stage Two being based on a sulphide plant.

The updated resource includes 7.4 million tonnes of oxide ore grading 2.7gpt for 647,000oz<sup>2</sup> and a further 13.9 million tonnes of sulphide ore grading 2.3gpt for 1.02Moz<sup>2</sup>.

Commencing production at Ashburton as a free-milling operation will de-risk the subsequent establishment of a long life, high-grade sulphide operation and bring earlier cashflow.

Metallurgical test work on the Ashburton sulphide ore has produced encouraging results, with total gold recoveries between 80 and 90 per cent (see ASX announcement September 10, 2012). Historical oxide processing recovery was 95 per cent at the Ashburton Gold Project from 1998 to 2004.

Northern Star Managing Director Bill Beament said Ashburton was now a major deposit by any standard.

"To establish a 1.7Moz resource, with clear scope for further increases, is a great outcome anywhere in the world," Mr Beament said. "But to have it in WA, just 200km from our existing Paulsens project, with all the certainty and other significant benefits that it brings, is very valuable for Northern Star shareholders.

"It is becoming increasingly clear that Ashburton will be another stand-alone operation with low costs and strong cashflow, giving Northern Star the project diversity and critical production mass being demanded by investors.

"And we will be delivering that outstanding production growth and cashflow from the backyard of Western Australia."

Late last year, successful remodelling of the geological structure of Mt Olympus enabled the Company to target the mineralisation more effectively. This resulted in a substantial 350 m down plunge extension to the Resource (see Figure 1).

This new understanding of the mineralisation will be further evaluated when drilling resumes in the next Quarter.

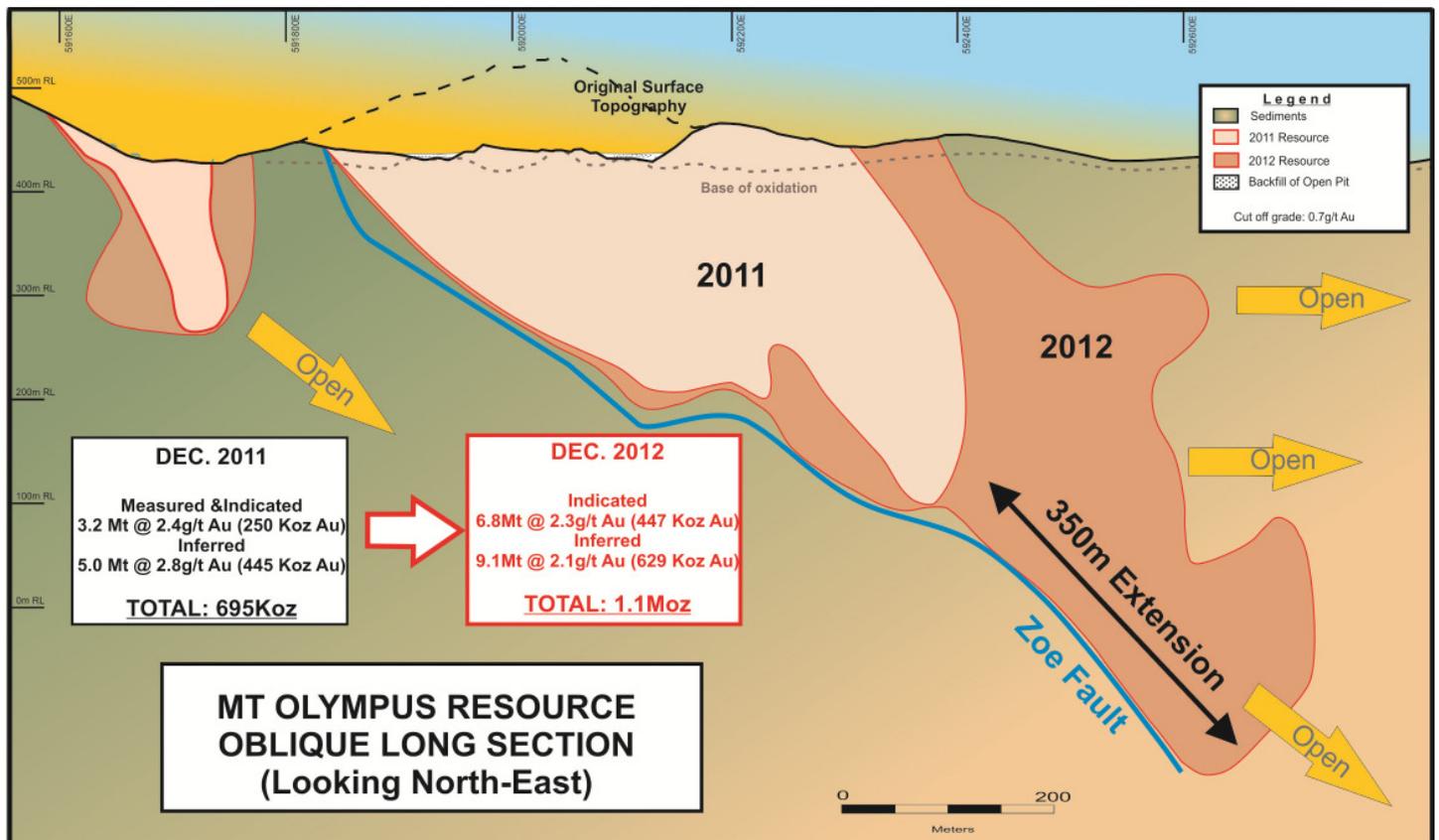


Figure 1 – Long Section of Ashburton's Main Deposit – 1.1Moz Mt Olympus Gold Deposit

Part of the drilling campaign at Ashburton last year focused on the Peake Prospect which is located 3km from the Mt Olympus deposit. The Peake prospect is an open pit that was mined in 2001 and produced approximately 89,000t at 6.5gpt for 18,700oz from the oxide zone. The mined ore body has a strike length of 600m, true width of 2-4m and dips 70-85 degrees south.

A significant resource increase of more than 200 per cent was achieved at the Peake Prospect (see figure 2) as part of the current upgrade. The resource now stands at 3.7 million tonnes at 3.4gpt for 399,000 ounces<sup>1</sup>. With only limited drilling, there has seen a substantial increase in the known strike length at Peake. This will form the basis of a further phase of drilling in 2013.

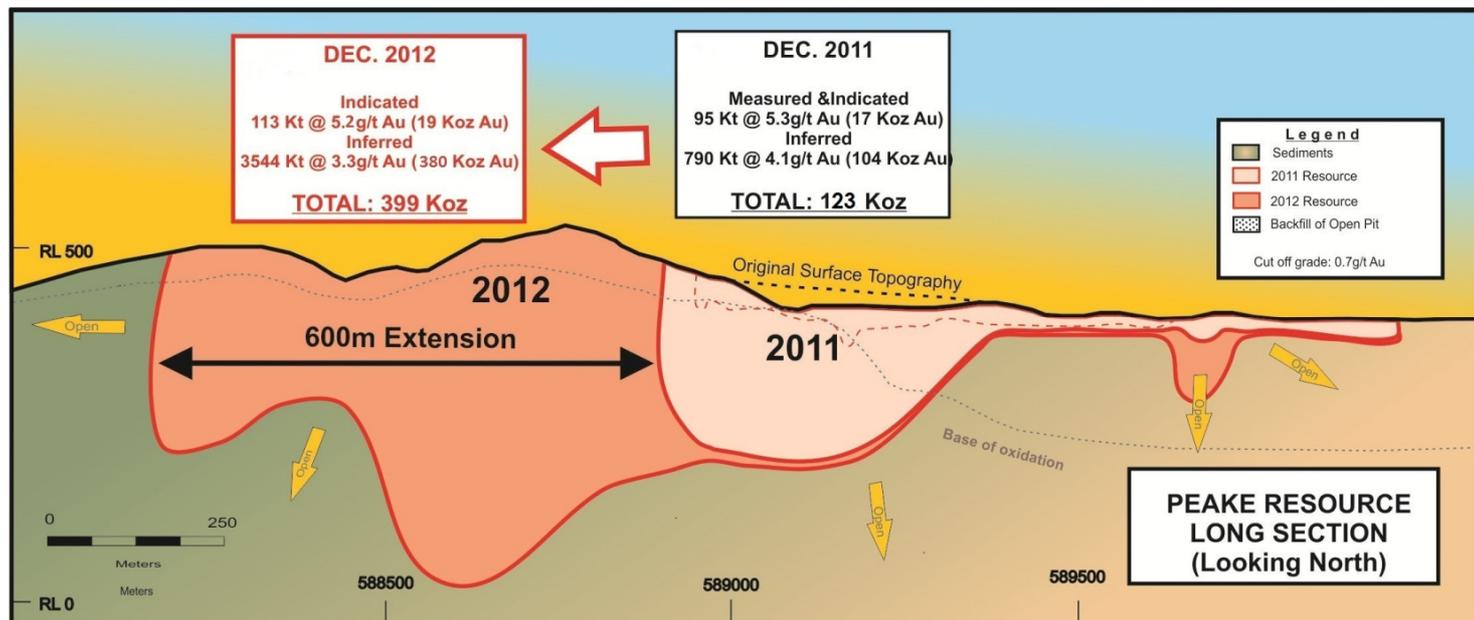


Figure 2 – Long Section of Ashburton, Peake Deposit

Yours faithfully,

*Bill Beament*

Bill Beament  
Managing Director

GOLD MINERAL RESOURCES <sup>1</sup>													
As at December 31, 2012													
	MEASURED (M)			INDICATED (I)			INFERRED (Inf)			TOTAL (MI&Inf)			
Based on attributable ounces	Tonnes (000's)	Grade (g/t)	Ounces (000's)	Tonnes (000's)	Grade (g/t)	Ounces (000's)	Tonnes (000's)	Grade (g/t)	Ounces (000's)	Tonnes (000's)	Grade (g/t)	Ounces (000's)	Cut Off Grade
<b>PAULSENS GOLD PROJECT</b>													
<b>Surface</b>													
Paulsens				573	2.5	47	169	2.5	14	745	2.5	61	1.0 g/t Au
Belvedere				45	8.3	4	123	3.5	14	168	3.3	18	1.0 g/t Au
Merlin				-	-	-	523	1.4	24	523	1.4	24	1.0 g/t Au
Mt Clement (20%)				-	-	-	226	1.8	13	226	1.8	13	0.5 g/t Au
<b>Underground</b>													
Upper Paulsens				136	7.1	31	32	5.0	5	168	6.7	36	2.5 g/t Au
Voyager UG	227	8.8	78	161	15.7	81	154	16.3	80	592	12.6	240	2.5 g/t Au
Stockpiles												11	
Gold in Circuit/Transit													
<b>Subtotal Paulsens</b>	<b>227</b>	<b>10.7</b>	<b>78</b>	<b>915</b>	<b>5.5</b>	<b>163</b>	<b>1,227</b>	<b>3.8</b>	<b>150</b>	<b>2,422</b>	<b>5.0</b>	<b>403</b>	
<b>ASHBURTON GOLD PROJECT</b>													
<b>Surface</b>													
Mt Olympus	-	-	-	6,038	2.3	448	9,138	2.2	632	15,176	2.2	1,080	0.7 g/t Au
Peake	-	-	-	113	5.2	19	3,544	3.3	380	3,657	3.3	399	0.9 g/t Au
Waugh	-	-	-	347	3.6	40	240	3.6	28	587	3.6	68	0.9 g/t Au
Zeus	-	-	-	508	2.1	34	532	2.2	38	1,040	2.2	72	0.9 g/t Au
Electric Dingo	-	-	-	98	1.6	5	444	1.2	17	542	1.3	22	0.9 g/t Au
Romulus	-	-	-	-	-	-	329	2.6	27	329	2.6	27	0.9 g/t Au
<b>Subtotal Ashburton</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>7,104</b>	<b>2.4</b>	<b>546</b>	<b>14,227</b>	<b>2.5</b>	<b>1,122</b>	<b>21,331</b>	<b>2.4</b>	<b>1,668</b>	
<b>TOTAL RESOURCES</b>	<b>227</b>	<b>10.7</b>	<b>78</b>	<b>8,019</b>	<b>2.7</b>	<b>709</b>	<b>15,454</b>	<b>2.6</b>	<b>1,272</b>	<b>23,753</b>	<b>2.7</b>	<b>2,071</b>	

<sup>1</sup>Resources are inclusive of Reserves

<sup>2</sup>Rounding errors may occur

<sup>1</sup>Table 1 - Paulsens Mineral Resources inclusive of Reserves effective June 30 2012 and updated Ashburton Mineral Resources Inclusive of Reserves

## GOLD MINERAL RESOURCES

As at December 31, 2012	MEASURED (M)			INDICATED (I)			INFERRED (Inf)			TOTAL (M&Inf)		
	Tonnes (000's)	Grade (g/t)	Ounces (000's)	Tonnes (000's)	Grade (g/t)	Ounces (000's)	Tonnes (000's)	Grade (g/t)	Ounces (000's)	Tonnes (000's)	Grade (g/t)	Ounces (000's)
Based on attributable ounces												
Ashburton Oxide	-	-	-	1,819	2.4	142	5,567	2.8	505	7,386	2.7	647
Ashburton Sulphide	-	-	-	5,285	2.4	404	8,660	2.2	617	13,945	2.3	1,021

<sup>2</sup>Table 2 - Ashburton Mineral Resource split by material type (Oxide and Sulphide)

RESOURCE ESTIMATION PARAMETERS				
Tenements	Mount Olympus M52/639	Peake M52/734	Zeus M52/640	Waugh M52/735
Section 1 - Sampling Techniques and Data				
Sampling Techniques	RC – Rig-mounted static cone splitter used with the aperture set to yield a primary sample of approximately 4kg (representing approximately one eighth of the total sample). Off-split retained. DD – Core is half cut with an Almonté diamond core saw. Sample intervals are defined by the geologist to honour geological boundaries.		Sampling techniques are assumed industry standard	
Drilling Techniques	Reverse circulation drilling is carried out using a face sampling hammer and a 5¼ inch diameter bit. Diamond drilling is carried out using both HQ3 (triple tube) and NQ2 (standard tube) techniques. Sampled sections are generally NQ2. Core is orientated using the ORI-shot device		RC -233 holes face sampling hammer 4 to 5 inch bit size. DD – 4 holes, assumed to be NQ2. All drilling took place between 1996 and 2005. Historical drilling procedures have not been reviewed	RC – 319 holes, face sampling hammer 4 to 5 inch bit size, DD – 5 holes, expected to be NQ2. 785 in pit grade control holes were not used for this resource. All drilling was completed between 1998 and 2004
Drill Sample Recovery	RC – Approximate recoveries are sometimes recorded as percentage ranges based on a visual and weight estimate of the sample. DD – Recoveries are recorded as a percentage calculated from measured core versus drilled intervals. For RC drilling, efforts are made to ensure good recoveries are achieved by the use of auxiliary compressors and high pressure booster units supplying compressed air at a high enough pressure to keep water from the hole and the samples dry in most circumstances. Where water is encountered in the pre-collar and wet samples result, more frequent cleaning of the cyclone and splitter is carried out and the hole is thoroughly flushed at the end of each sample.		Historical sample recovery data was not reviewed for this report	
Logging and Photography	Core and chip samples have been logged by qualified Geologist to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. The level of detail in geological logging of diamond core was sufficient for the resource estimate. Percussion holes logging were carried out on a metre by metre basis and at time of drilling. All diamond holes were photographed before cutting, both a wet and dry state. The logging is both qualitative and quantitative in nature. It is assumed that historical logging is of a similar standard.		It is assumed that core and chip samples have been logged to a level of detail to support appropriate Mineral Resource estimation, as mining of 3 open pits was successfully undertaken on this data.	It is assumed the core and chip samples have been logged to a level of detail to support appropriate Mineral Resource estimation
Sub-sampling techniques and sample preparation	RC - Rig-mounted static cone splitter used for dry samples. DD - Core is half cut with Almonté diamond core saw. Following drying at 105°C to constant mass, all samples below approximately 4kg are totally pulverised in LM5's to nominally 90% passing a 75µm screen. The very few samples generated above 4kg are crushed to <6mm and riffle split first prior to pulverisation. For RC drilling, duplicate samples are taken from the cone splitter at an incidence of 1 in 25 samples. Repeat analysis of pulp samples (for all sample types – diamond, RC, rock and soil) occurs at an incidence of 2 in 50 samples. Although no formal heterogeneity study has been carried out or nomograph plotted, informal analysis suggests that the sampling protocol currently in use is appropriate to the mineralisation encountered and should provide representative results.		DD sampling was nominally on 1 m intervals unless broken by lithological or mineralised contacts. It is not known if the core was whole or half sampled. Samples for most RC drilling was initially collected as 4m composites, then any composites over 0.1g/t were re-split and re-assayed as 1m composite samples. No sampling QAQC data was available for this resource.	Sampling techniques and sample prep were not assessed in this report
Quality of assay data and laboratory tests	For all drill samples the total gold is determined by fire assay using the lead collection technique with a 50 gram sample charge weight. An AAS finish is used. Various multi-element suites are analysed for using a four acid digest with an ICP-OES finish. The field QAQC protocols used include the following for all drill samples: - Duplicate samples are taken from the cone splitter at an incidence of 1 in 25 samples, - Coarse blanks are inserted at an incidence of 1 in 30 samples, - Commercially prepared certified reference materials(CRM) are inserted at an incidence of 1 in 25 samples. The CRM used is not identifiable to the laboratory, - NST's QAQC data is assessed on import to the database and reported monthly and yearly. The laboratory QAQC protocols used include the following for all drill samples: - Repeat analysis of pulp samples occurs at an incidence of 2 in 50 samples, - Screen tests (percentage of pulverised sample passing a 75µm mesh) are undertaken on 1 in 100 samples, - The laboratories own standards are loaded to the NST database, - The laboratory reports its own QAQC data on a quarterly basis. In addition to the above, about 5% of samples are sent to an umpire laboratory. Failed standards are followed up by re-assaying a second 50g pulp sample of all samples in the fire above 0.1ppm by the same method at the primary laboratory. Both the accuracy component (CRM's and umpire checks) and the precision component (duplicates and repeats) of the QAQC protocols are thought to demonstrate acceptable levels of accuracy and precision.		No historical QAQC was available for review at the time of this resource estimate. SIPA duplicate data allows calculation of sampling and assaying precision of 70%. Barely reasonable for a lower grade gold deposit. SIPA repeat data shows a precession of 90%	Quality of assay data and laboratory tests were not assessed in this report. Some minor overlapping intervals were modified
Verification of sampling and assaying	Significant intersections are automatically generated by the Database, and then validated by a qualified geologist and their supervisor as required to suit geology. There are no purpose twinned holes		There has been no independent verification of sampling and assaying data for this resource.	Sampling was not specifically verified but fairly consistent across section and between drill holes
Location of data points	NST collar positions were surveyed using DGPS, and were set-out and pick-up in MGA 1994 Zone 50 grid. This information is digitally transferred to the geology database. Multi shot cameras and gyro units were used for down-hole survey. Previous drilling have been set-out and picked up in both national and local grids using a combination of GPS and Survey instruments. Topographic control is from the Fugro 2002 Aerial photo data.		Collar points were picked up by contract surveyors on completion of drilling, SIPA survey department also picked up all the later holes. Eastman single shot camera surveys were used during drilling on 30 to 50m intervals. Later down hole surveys by Surtron using DHEMS, noted a difference of 30 in Azimuth to the Eastman and subsequently corrections for this were applied to all relevant Eastman camera survey. Topographic control is provided by Survey of Open pits and surrounds.	Drill hole accuracy is unknown but compares well with surveyed pit voids. Topographic control was in the form of surveyed pits and surrounds. It is assumed to be of good quality. Some down hole survey entries, showing unrealistic deviations were removed

## RESOURCE ESTIMATION PARAMETERS

Tenements	Mount Olympus M52/639	Peake M52/734	Zeus M52/640	Waugh M52/735
Section 1 - Sampling Techniques and Data				
Data spacing and distribution	The resource development drilling over the deposit was generally 20m x 20m or better for the indicated resource and up to 50m x 50m for the inferred resource. The data spacing and distribution is sufficient to establish geological and/or grade continuity appropriate for the Mineral Resource and classifications to be applied. Compositing of the data to 1m was used in the estimate.	The resource development drilling over the deposit was generally 20m x 20m or better for the indicated resource and up to 200m x 200m for the inferred resource. The data spacing and distribution is sufficient to establish geological and/or grade continuity appropriate for the Mineral Resource and classifications to be applied. Compositing of the data to 1m was used in the estimate.	Drill hole spacing averages about 25m deemed appropriate for the Mineral Resource estimation procedure(s) and classifications applied. Samples were composited to 1 metre honouring interpreted geological solids	Generally the Central portion of Waugh deposit has been tested on 10m spaced traverses. Peripheral areas may be as much as 20m spaced traverses. Data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Samples have been composited (report does not state to what length), broken by resource domains.
Orientation of data in relation to geological structure	The orientation of sampling is generally perpendicular to Zoe shear zone mineralisation and slightly oblique to the main sedimentary beds and mineralisation. Steep topography as also affected the orientation of drilling. The orientation achieves unbiased sampling of all possible mineralisation and the extent to which this is known.	The orientation of sampling is generally perpendicular to mineralisation. Steep topography may also affected the orientation of drilling. The orientation achieves unbiased sampling of all possible mineralisation and the extent to which this is known.	It is not thought that drilling orientation would have a biased effect on this resource though restricted surface access has led to some less than optimal drill intersection angles	For the most part drill hole orientation is unbiased, however in the flatter flexure zone holes can run down dip, resulting in longer than true thickness intersections.
Audits or reviews	There has been no audit of the sampling techniques, however all recent NST sample data has been extensively QAQC reviewed both internally and externally.		There have been no external reviews or audits	
Section 3 - Estimation and Reporting of Mineral Resources				
Database integrity	Sampling and logging data is entered directly into the logging package OCRIS. Constrained look-up lists, depth and some interval validation are inbuilt and ensure that the data collected is correct at source. Data is imported to a GBIS relational geological database where additional validation checks are carried out, including depth checks, interval validation, out of range data and coding. Where possible, raw data is loaded directly to the database.		No data validation back to original sources was performed. When all assay and lithology fields were imported into Vulcan, 436 overlapping intervals were found. All were corrected at time of report, mostly due to 4m composites overlapping 1m resplit data.	Database was not validated except to replace negative (indicating a below detection result) with 0.001g/t. Assumed to be robust as the bulk of Waugh mineralisation has been mined on this database
Geological interpretation	The interpretation of the deposit was carried out using a systematic approach to ensure continuity of the geology and estimated mineral resource. Continuity of the grade closely follows sedimentary bedding planes, particularly the coarser grained units. The Confidence in the geological interpretation is moderate to high. All available valid data was used in the interpretation(including historical resource drilling)	The interpretation of the deposit was carried out using a systematic approach to ensure continuity of the geology and estimated mineral resource. The Confidence in the geological interpretation is high. All available valid data was used in the interpretation(including historical resource drilling)	Confidence in the geological interpretation of the mineral deposit is high due to the amount of drilling and previous mining. Twelve zones were modelled based on a cut off of greater than 0.3g/t and a minimum of 2m width. Grade of less than 0.3 g/t are included if within mineralised trends. Bedrock and oxidation surfaces were created from logging data. An alternative regional interpretation does not invalidate this resource but does limit is possible extensions.	Confidence in the geological interpretation is high, based to a large extent on pit grade control shapes. Based to such a large extent on mined data leaves little room for alternative interpretations on Mineral Resource estimation. Geological domains were created to guide and controlling this Mineral Resource estimation. A flex in the main mineralisation coincides with an increase in grade; this section however has already been mined out.
Dimensions	Strike length = 800m (east – west) Width = 200m (North-south) Depth = surface to -90mRL (~500m below surface)	Strike length = 1850m (east – west), Width = 5-10m (North-south), Depth = surface to 50mRL (~450m below surface)	The most extensive domain is approximately 220m along strike, the others range from 20m to 200m, near surface to 150m below surface	Waugh Mineral Resource extends over a strike length of 550 meters and is extrapolated below the base of drilling to a consistent elevation of 300m RL (nominally 200m below the local surface) below the surface. Thickness ranges from around 2 to rarely around 20 meters and averages approximately 5 meters
Estimation and modelling techniques	The ordinary kriging interpolation (OK) method was used in the first 2 passes of the estimation. A final nearest neighbour method was used to fill empty blocks. 73% of blocks were estimated in the first 2 passes. All drillhole were composited to 1 metre within the ore domain wireframes. Top Cuts were determined by statistical techniques and vary by domain. Maximum distance of extrapolation from data points was statistically determined and varies by domain. The parent block size is 10m (Y) x 10m (X) x 10m (Z), with sub-block to 1.25m x 1.25m x 1.25m. In the fresh material there is a correlation between the Au grade and the bulk density measurement (see bulk density section). Block model was validated against drill hole data, visually by section, using declustered means, and comparing Swath plots. Blockmodel volumes were compared to wireframe volumes to validate sub-blocking. Reconciled historical production from open pit operations is comparable with new estimate.	The ordinary kriging interpolation (OK) method was used in the first 2 passes of the estimation. A final nearest neighbour method was used to fill empty blocks. 99.3% of the blocks were filled in the first 2 passes. Top Cuts were determined by statistical techniques and vary by domain. Maximum distance of extrapolation from data points was statistically determined and varies by domain. The parent block size is 16m (Y) x 8m (X) x 8m (Z), with sub-block to 1m x 0.5m x 0.5m. Three validation processes were used to compare the block model against drill-hole data, including visual, declustered means and Swath plot. The block model volumes were compared to wireframe volumes to validate sub-blocking. Reconciled historical production from open pit operations is comparable with new estimate.	Resource estimated by OK, ID2 and NN with OK taken to be the most credible. Block spacing of 10 by 10 by 5 was selected through extensive analyses of Kriging neighbourhood Analysis. Sub blocks of 1 by 1 by 1 allows better definition of interpreted wireframes. Grade was estimated into sub blocks(not parent blocks) Estimation search ellipses were dependant on estimating domain and varied from 16 by 16 by 3 to 40 by 44 by 6. High grades in all domains were cut to 20g/t. Top cut determined by using histograms and log-probability plots, 5 values in two domains were cut. Average sample distances were not recorded in this model. Zeus has previously been estimated by MRT in 2000 and Golder in 2001/02. Resource tenor in both cases is in line with current estimate. Resource model was validated by visually comparing block grades to drill hole data, comparing global mean grade between OK, ID2 and NN estimates, and comparing Swath plots.	This resources' primary use is to estimate remnant material using MIK. Variogram models developed for this estimation were modelled from the main mineralised domain composites. Four search passes were used with ellipsoids ranges from 15 by 15 by 5 to 60 by 60 by 2, minimum data ranges from 16 to 8 and minimum octants from 4 to 2. Block sizes of 10m by 10m by 5m (x, y, z, directions) selected based on sample spacing in the more closely drilled portion of the deposit. Block model was rotated 30 degrees from MGA grid north, to match drill orientation. Average sample distance was not recorded. Model data was compared to historic pit production (6% overall on tonnes, 0% variation on grade) and visually by section. H&S produced a pre mining resource estimate for Waugh in 2002.
Moisture	Tonnes are estimated on a dry basis. Moisture content within the ore is expected to be low		Tonnes are estimated on a dry basis there has been no determination of the moisture content	Moisture content was not considered, all tonnes are assumed dry.

## RESOURCE ESTIMATION PARAMETERS

	Mount Olympus M52/639	Peake M52/734	Zeus M52/640	Waugh M52/735
Section 3 - Estimation and Reporting of Mineral Resources				
<b>Cut-off parameters</b>	Resource Reporting cut off = 0.7g/t for all resources. Resource modelling cut off = 0.5g/t nominally	Resource Reporting cut off = 0.9g/t for all resources. Resource modelling cut off = 0.5g/t nominally	Modelling lower cut nominally 0.3 g/t. Reporting cut-off is 0.9 g/t.	Grade domains used a lower cut-off of 0.3g/t. Reporting grade is at a 0.9g/t lower cut-off
<b>Mining factors or assumptions</b>	It is assumed that the surface portion of the resource will be mined via conventional surface mining techniques (diesel excavator and haul truck). Mining of the underground portion of the resource has been assumed to be via conventional underground mining technique. A 3m minimum mining width for both the surface and underground environment is assumed.		Mining methods same as actual. 3:1 stripping ratio. Operating costs of \$14.3/tonne. Gold price \$US1350/troy oz. \$US to \$AUS conversion of 0.98. Gold recovery of 92%	Mining factors considered are in line with actual Waugh pit
<b>Metallurgical factors or assumptions</b>	No Metallurgical assumptions have been built into the mineral resource model		Metallurgical test work (Golder 2002) shows recoveries ranging from 90% in oxide material down to 50% in fresh. Zeus mined to date recovery is 90%	All but 1% of the resource is reported as totally oxidised and is assume to be free milling
<b>Bulk density</b>	A total of 4,440 bulk density measurements from 30 diamond drill holes have been taken from mineralised and unmineralised intervals within the project area. Bulk Density measurements were calculated using a water dispersion technique. The bulk density for oxide and transition material was assumed due to the low number of measurements within these zones. In fresh material, a correlation between the bulk density valve and gold assay grade exists and was used to assign bulk density values.	A total of 899 bulk density measurements from 12 recent diamond drill holes have been taken from mineralised and unmineralised intervals within the project area. Bulk Density measurements were calculated using a water dispersion technique. The bulk density for oxide and transition material was assumed due to the low number of measurements within these zones. The bulk density in fresh material was an average of all measurements from Peake	No specific gravity of bulk density measurement data was available. For this report SG's of 2.55, 2.65, 2.75 were used for oxide, transitional and fresh respectively. Mining data suggest these are accurate enough for the purpose of this report. Historically an sg of 2.55 has been applied to all the resources at Zeus.	2.2t/bcm is used for oxide estimate, compared to as mined density of between 2 and 2.2t/bcm
<b>Classification</b>	The resource classification is based primarily on the geological and grade continuity as shown by drilling (open pit Grade control data not considered). If a wireframe has been constructed with geological or grade continuity, all block within the wireframe are assigned as inferred. Assignment of the indicated resource category was done on each ore zone individually using a number of different criteria including continuity of both grade and geology, drill holes density, number of passes to fill the blocks and the quality of the estimate (kriging efficiency). The Halo (non wireframed material) is assigned a resource category of inferred if it is within the inferred wireframe and the block is filled in the first pass.		Classification of the Mineral Resources is based on number of estimation pass. Pass one for Indicated, second pass becomes Inferred. Second pass uses double the search radius in each direction. Drill spacing, available grade control data and mining reconciliation allow enough confidence to assign inferred and indicated classifications, despite lacking QAQC, SG data and other verification issues. The result appropriately reflects the Competent Person(s)' view of the deposit.	Classification of the Mineral Resources into varying confidence categories is based on geological continuity and number of search pass, panels informed on pass 1 and 2 being indicated. The entire lower domain, being poorly define by drilling, is classified as inferred.
<b>Audits or reviews</b>	The Mineral resource has been subjected to a review by Northern Star Resources' senior technical personal. The results and validation of Mineral Resource estimates was conducted by an Optiro Consultant.		There are no audits or reviews of this Mineral Resource estimate.	
<b>Discussion of relative accuracy/confidence</b>	This mineral resource estimate is considered as robust and representative of the Mount Olympus mineralisation. The application of geostatistical methods has helped to increase the confidence of the model and quantify the relative accuracy of the resource on a global scale. The relevant tonnages and grade are variable on a local scale.	This mineral resource estimate is considered as robust and representative of the Peake mineralisation. The application of geostatistical methods has helped to increase the confidence of the model and quantify the relative accuracy of the resource on a global scale. The relevant tonnages and grade are variable on a local scale.	This Table 1 has been collated from data contained in the Tetrattech, Zeus, March 2012 Resource report. The Table 1 format was not a JORC recommendation at the time of its release. Confidence in this resource is gained by comparing reconciliation. Data, other estimates, other estimation techniques. This resource is expected to be fairly accurate on a local scale as well as global due to the amount of drill data and previous mining. The mineral model has been constructed in conformance with industry stand practices.	This Table 1 has been collated from data contained in the MPR, Waugh, Jan 2011 Resource report. The Table 1 format was not a JORC recommendation at the time of its release. The report's Author recommends a thorough programme of database validation including comparison with original source records where possible. MPR take responsibility for the resource estimation, NSR take responsibility for the data. The estimation approach is robust, confirmed by close reconciliation to production.

### Competent Persons Statements

The information in this announcement that relates to Paulsens and Ashburton mineral resource estimations, 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 and Graeme Bland, who are both AIG members who are a full-time employees of Northern Star Resources Ltd. Mr Ekers and Mr Bland have 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 a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Ekers and Mr Bland consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

### Forward Looking Statements

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