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7 May 2014

The Manager  
ASX Limited  
Exchange Centre  
20 Bridge Street  
SYDNEY NSW 2000

### **East Kundana Joint Venture Exploration Results**

Northern Star Resources Limited (ASX: NST), as Managers of the East Kundana Joint Venture, have today released the attached exploration results.

The Company's interest in the East Kundana Joint Venture is 12.25%

Yours faithfully  
Rand Mining Ltd

A handwritten signature in blue ink, appearing to read 'Anton Billis', is written over a faint circular stamp.

Anton Billis

For personal use only



**NORTHERN STAR**  
RESOURCES LIMITED

# HITS OF 9M AT 37.8GPT STRENGTHEN CASE FOR A MAJOR RESOURCE UPGRADE AT PEGASUS DEPOSIT

*Development of Pegasus underway, with first production ore expected in March Quarter 2015*

## KEY POINTS

- ▶ **More high-grade drilling results returned from Pegasus deposit, which is part of the recently-acquired Kundana Gold Mine**
- ▶ **Consistent string of high-grade results from outside the existing 355,000oz<sup>1</sup> Pegasus resource, including some up to 500m away**
- ▶ **Latest results expected to underpin significant resource increase and maiden reserve for Pegasus in the June Quarter**
- ▶ **An access decline to the Pegasus deposit is well underway, with first production ore anticipated in the March Quarter 2015**
- ▶ **Latest Pegasus results include:**

▪ 9.0m @ 37.8gpt gold	(true width 6.8m)	5,963 mRL
▪ 5.3m @ 26.3gpt gold	(true width 3.7m)	5,901 mRL
▪ 2.5m @ 9.0gpt gold	(true width 1.7m)	5,791 mRL
▪ 2.2m @ 12.9gpt gold	(true width 1.7m)	5,889 mRL
▪ 1.2m @ 19.5gpt gold	(true width 0.9m)	6,010 mRL
- ▶ **Pegasus remains open at depth and along strike**
- ▶ **Drilling at the Rubicon-Hornet mine, which is also part of the Kundana operations, reveals that economic mineralisation continues beneath current mining reserves. Results include:**

▪ 38.4m @ 10.5gpt gold	(true width 11.1m)	5,912 mRL
▪ 5.7m @ 13.8gpt gold	(true width 2.3m)	5,879 mRL
▪ 11.4m @ 9.7gpt gold	(true width 2.7m)	5,915 mRL
▪ 2.5m @ 97.7gpt gold	(true width 0.8m)	5,889 mRL
- ▶ **A resource-reserve update for Rubicon-Hornet will be released in the September Quarter**
- ▶ **Regional reconnaissance drilling intersected new mineralisation on the recently-identified extension of the K2 structure at the Ambition prospect, 8km north of Pegasus and 2km north of historic workings. Results include:**

▪ 2.0m @ 6.0gpt gold	6,235 mRL
▪ 2.0m @ 1.8gpt gold	6,269 mRL
- ▶ **The K2 structure hosts the operating Rubicon, Hornet and Frog's Legs mines in addition to the recent Pegasus discovery**

**ASX ANNOUNCEMENT**  
**7 MAY 2014**

**Australian Securities**  
**Exchange Code: NST**

### Board of Directors

Mr Chris Rowe  
*Non-Executive Chairman*

Mr Bill Beament  
*Managing Director*

Mr Peter O'Connor  
*Non-Executive Director*

Mr John Fitzgerald  
*Non-Executive Director*

Ms Liza Carpena  
*Company Secretary*

### Issued Capital

Shares 579M

Options 3.5M

Current Share Price \$1.14

Market Capitalisation  
\$660 million

Cash/Bullion and Investments  
31 Mar 2014 - \$80 million

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Northern Star Resources Limited (ASX: NST) is pleased to announce four strong news items from its recently-acquired Kundana gold operations near Kalgoorlie, all of which point to substantial growth in the Project's mineral inventory, production and cashflow.

First, drilling at Kundana's Pegasus deposit has returned more high-grade intersections such as 9m at 37.8gpt. Assays are pending for another seven holes, with five containing visible gold and strong veining (Figure 1).

These results follow the intersection of mineralisation up to 500m outside the existing 355,000-ounce<sup>1</sup> resource (see ASX announcement dated 6 March 2014), further highlighting the potential for a substantial resource increase.

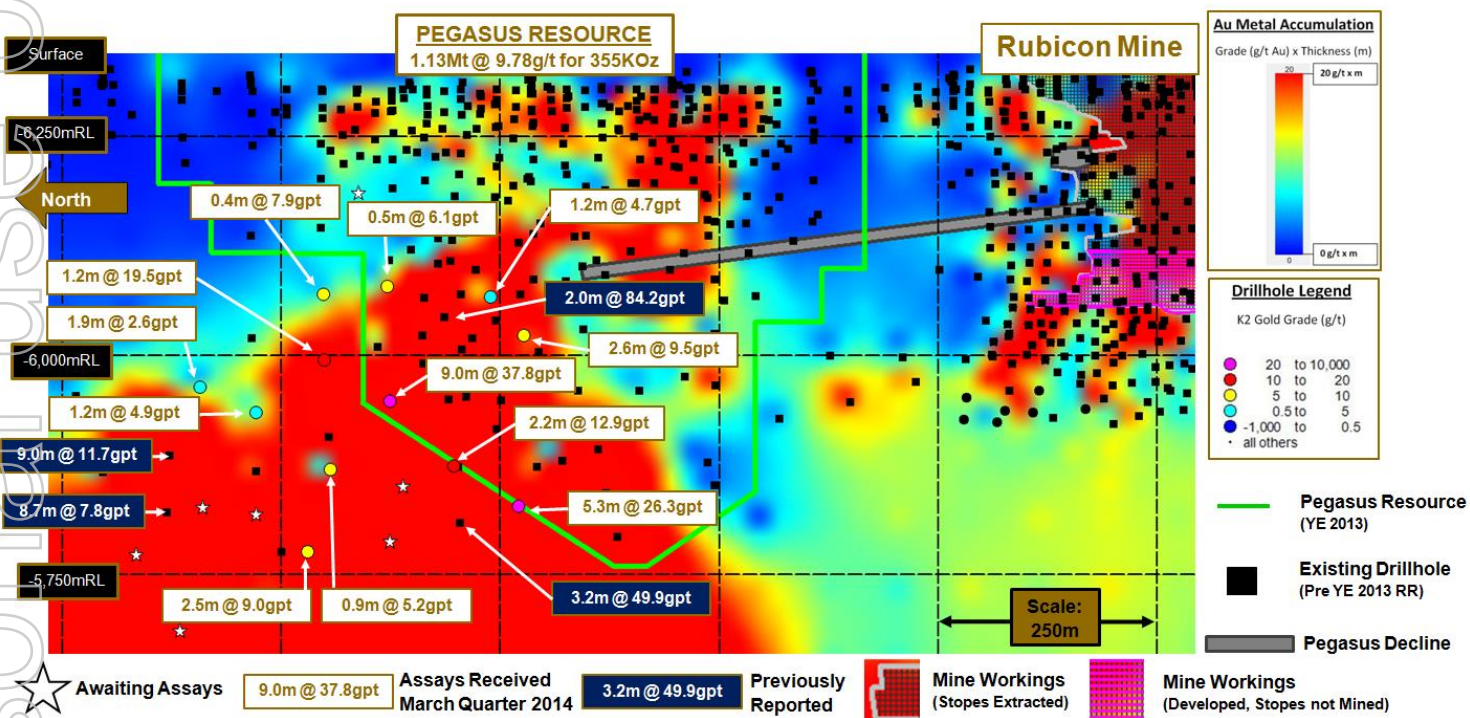


Figure 1 - Long section view (looking East) of the Pegasus drill results returned to date. Intersections denoted are uncut and downhole width.

Second, development of Pegasus is underway, with a decline to access the deposit being excavated from the adjacent Rubicon mine. The East Kundana Joint Venture partners Rand Mining and Tribune Resources have approved their share of the capital expenditure.

A Northern Star Mining Services high-speed development crew has been deployed to mine the Pegasus decline. The Northern Star Mining Services model is expected to reduce mining costs and improve productivity, specifically the speed of development to access Pegasus and bring it into production.

The first Pegasus development ore is anticipated in the December Quarter of 2014. Relatively low capital expenditure is required to bring Pegasus into production due to its close proximity to Rubicon (less than 350m).

Third, fresh drilling results have demonstrated the strong potential to increase reserves at the existing Rubicon-Hornet mine at Kundana (Figure 2).

Resource definition drilling into the 2013 inferred resource beneath the Hornet mine has yielded encouraging results to date. Further extensional drilling is planned for the June Quarter from surface.

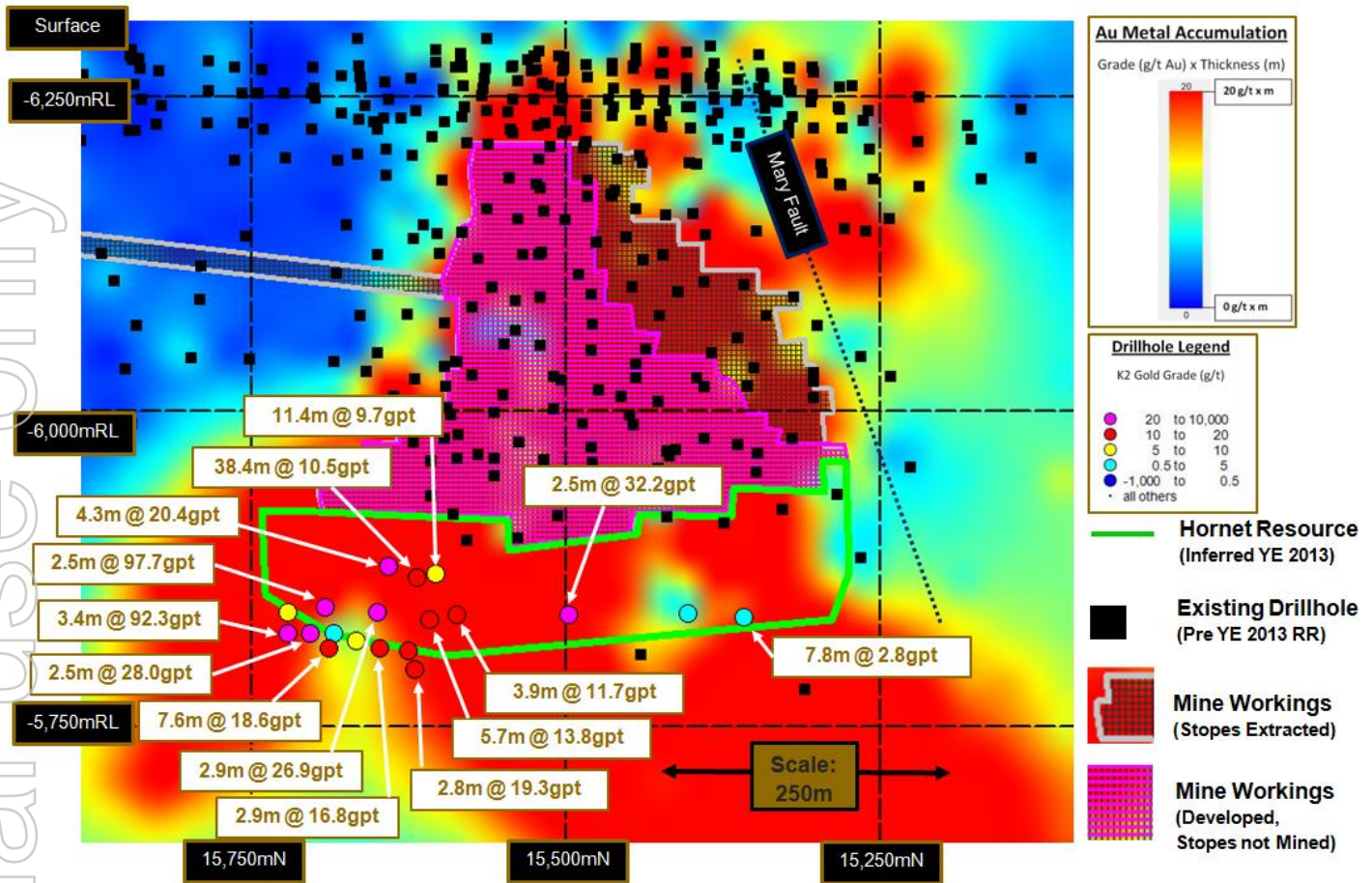


Figure 2 - Long section view (looking East) of the Hornet Resource Definition Drilling Completed since the Year End (YE) 2013 Resource Estimate. Intersections denoted are uncut and downhole width

Fourth, targeted regional exploration along the Kundana structural corridor has identified significant mineralisation 2km north of previous mining activities and 8km north of Pegasus, highlighting the regional potential for future discoveries.

Reconnaissance Reverse Circulation drilling at the Ambition prospect (Figure 3) returned assays of 2m at 6gpt and 2m at 1.8gpt gold in the interpreted K2 position, indicating the structure continues to the north of previous mining activity. This area is poorly tested at depth and along strike.

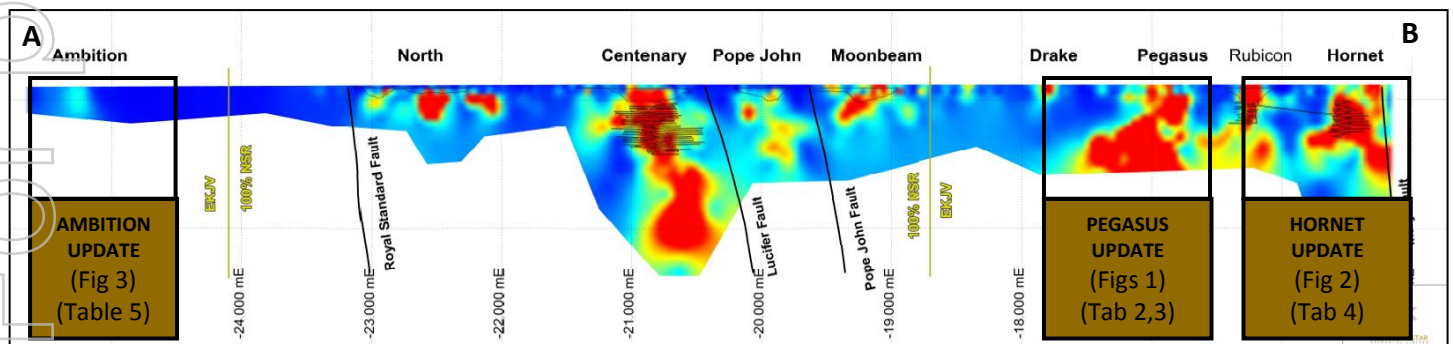


Figure 3 - Plan and long projection view (A-B) (looking East) of the K2 Structure. Red shading on the long projection is metal accumulation greater than 20gtm Au

Northern Star acquired an interest in Pegasus, Rubicon and Hornet as part of its purchase of Barrick Gold's 51 per cent stake in the East Kundana Joint Venture, effective from 1 March 2014.

Northern Star Managing Director Bill Beament said Kundana was poised to make a substantial contribution to the Company at every level.

“Pegasus is an outstanding discovery that will generate substantial cashflow at the same time as its resource and reserve inventory continues to grow,” Mr Beament said.

“I am also confident that we will enjoy more exploration success on the K2 structure, both around existing operations and further out, as these early results from the Ambition prospect show.”

Yours faithfully



**BILL BEAMENT**  
Managing Director  
**Northern Star Resources Limited**

## Competent Persons Statements

The information in this announcement that relates to mineral resource estimations, exploration results, data quality, geological interpretations and potential for eventual economic extraction, is based on information compiled by Bernd Sostak, (Member AusIMM), who is a full-time employee of Northern Star Resources Limited. Mr. Sostak 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 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" for the Pegasus, Rubicon and Hornet Deposit and the Ambition prospect. Mr. Sostak consents to the inclusion in this announcement of the matters based on this information in the form and context in which it appears.

## Forward Looking Statements

Northern Star Resources Limited has prepared this announcement based on information available to it. No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information, opinions and conclusions contained in this announcement. To the maximum extent permitted by law, none of Northern Star Resources Limited, its directors, employees or agents, advisers, nor any other person accepts any liability, including, without limitation, any liability arising from fault or negligence on the part of any of them or any other person, for any loss arising from the use of this announcement or its contents or otherwise arising in connection with it.

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## **GOLD MINERAL RESOURCES <sup>1</sup>**

As at December 31, 2013	MEASURED (M)			INDICATED (I)			(M) + (I)	INFERRED (Inf)			TOTAL (Ml & Inf)		
	Tonnes (000's)	Grade (gpt)	Ounces (000's)	Tonnes (000's)	Grade (gpt)	Ounces (000's)	Ounces (000's)	Tonnes (000's)	Grade (gpt)	Ounces (000's)	Tonnes (000's)	Grade (gpt)	Ounces (000's)
Based on attributable ounces Pegasus(EKJV-51%)													
Pegasus				351	9.0	101	101	225	11.0	80	576	9.8	181
<b>TOTAL</b>	-	-	-	<b>351</b>	<b>9.0</b>	<b>101</b>	<b>101</b>	<b>225</b>	<b>11.0</b>	<b>80</b>	<b>576</b>	<b>9.8</b>	<b>181</b>

<sup>1</sup>Table 1 - Pegasus Resources as at 31 December 2013 (see previous ASX release 23 January 2014)  
(table reflects Northern Star's 51% interest in the Total Mineral Resource of 355,000oz Au)

## PEGASUS K2 - EXTENSION DRILLING (Outside of 31 December 2013 Resource)

Drill Hole #	Collar Easting (Mine Grid)	Collar Northing (Mine Grid)	Collar RL (Mine Grid)	Collar Dip (degrees)	Azimuth (degrees, Mine Grid)	End of hole depth (m)	Downhole From (m)	Downhole To (m)	Downhole Intersection (m)	Au (gpt) uncut	Est True Thickness (m)
PGDD14001	9665	17177	6345	-63	79	417	380.2	381.4	1.2	19.5	0.9
PGDD14002	9602	17376	6345	-60	92	498	411.0	412.9	1.9	2.6	1.4
PGDD14004	9494	17229	6347	-59	94	597	562.2	563.1	0.9	5.2	0.6
PGCD14005	9448	17224	6346	-61	94	672	653.1	655.6	2.5	9.0	1.7
PGDD14008	9671	17259	6344	-70	79	456	419.7	420.9	1.2	4.9	0.9
PGDD14012	9573	17069	6348	-59	90	555	526.0	528.2	2.2	12.9	1.7
PGDD14028	9566	16991	6343	-63	90	597	552.9	558.2	5.3	26.3	3.7

Table 2 – Recent Assay results for Pegasus drilling (outside of the 31 December 2013 Resource)

## PEGASUS - K2 RESOURCE DEFINITION (Inside 31 December 2013 Inferred Resource)

Drill Hole #	Collar Easting (Mine Grid)	Collar Northing (Mine Grid)	Collar RL (Mine Grid)	Collar Dip (degrees)	Azimuth (degrees, Mine Grid)	End of hole depth (m)	Downhole From (m)	Downhole To (m)	Downhole Intersection (m)	Au (gpt) uncut	Est True Thickness (m)
PGDD14009	9645	17129	6345	-63	90	452	402.6	411.6	9.0	37.8	6.8
PGDD14010A	9690	16976	6345	-62	90	90	343.0	345.6	2.6	9.5	2.0
PGDD14011	9730	17011	6345	-62	90	336	292.8	294.0	1.2	4.7	0.9
PGDD14013	9723	17124	6345	-62	89	321	285.6	286.0	0.4	6.1	0.3
PGRC14014	9792	17099	6348	-63	90	222	196.0	198.0	2.0	4.5	1.5
PGRC14015	9787	17143	6347	-63	90	240	208.0	214.0	6.0	1.7	4.5
PGRC14016	9798	17238	6345	-63	90	204	-	-	-	NSI	-

NSI = No significant intersection

Table 3 – Recent Pegasus resource definition drilling (inside of the 31 December 2013 Resource)

## RUBICON - HORNET RESOURCE DEFINITION DRILLING

Drill Hole #	Collar Easting (Mine Grid)	Collar Northing (Mine Grid)	Collar RL (Mine Grid)	Collar Dip (degrees)	Azimuth (degrees, Mine Grid)	End of hole depth (m)	Downhole From (m)	Downhole To (m)	Downhole Intersection (m)	Au (gpt) uncut	Est True Thickness (m)
HORDD107	9837	15603	5975	-67	38	123.0	53.5	91.9	38.4	10.5	11.1
HORDD108	9837	15603	5975	-59	21	123.1	104.2	107.1	2.9	26.9	0.5
HORDD108	9837	15603	5975	-59	21	123.1	52.0	63.0	11.0	14.4	0.8
HORDD108	9837	15603	5975	-59	21	123.1	68.2	72.4	4.2	6.5	0.7
HORDD108	9837	15603	5975	-59	21	123.1	85.8	89.6	3.8	13.6	0.6
HORDD109	9836	15604	5976	-52	11	126.1	110.8	111.9	1.1	20.7	0.2
HORDD109	9836	15604	5976	-52	11	126.1	67.7	72.0	4.3	20.4	1.4
HORDD110	9836	15604	5976	-43	9	153.2	125.2	127.7	2.5	97.7	0.8
HORDD111	9836	15604	5976	-37	3	168.1	150.7	153.0	2.3	6.0	0.4
HORDD115	9836	15600	5975	-73	36	126.0	97.4	103.1	5.7	13.8	2.3
HORDD115	9836	15600	5975	-73	36	126.0	56.4	67.8	11.4	9.7	2.7
HORDD116A	9837	15600	5975	-71	107	120.2	94.5	98.4	3.9	11.7	1.8
HORDD116A	9837	15600	5975	-71	107	120.2	62.2	63.2	1.0	35.8	0.4
HORDD116A	9837	15600	5975	-71	107	120.2	68.1	70.1	2.0	19.8	0.8
HORDD116A	9837	15600	5975	-71	107	120.2	72.8	89.9	17.1	2.7	6.8
HORDD119	9750	15464	5989	-38	31	304.0	200.6	202.3	1.7	15.1	0.9
HORDD119	9750	15464	5989	-38	31	304.0	225.9	227.0	1.1	13.5	0.6
HORDD119	9750	15464	5989	-38	31	304.0	238.1	240.9	2.8	19.3	1.0
HORDD123	9749	15462	5989	-40	69	218.7	164.6	167.1	2.5	32.2	1.8
HORDD130	9751	15459	5989	-34	127	227.7	186.0	193.8	7.8	2.8	5.8

## RUBICON - HORNET RESOURCE DEFINITION DRILLING

Drill Hole #	Collar Easting (Mine Grid)	Collar Northing (Mine Grid)	Collar RL (Mine Grid)	Collar Dip (degrees)	Azimuth (degrees, Mine Grid)	End of hole depth (m)	Downhole From (m)	Downhole To (m)	Downhole Intersection (m)	Au (gpt) uncut	Est True Thickness (m)
HORDD147	9837	15604	5976	-40	2	216.1	160.7	164.1	3.4	92.3	0.6
HORDD148	9837	15604	5976	-45	5	202.2	148.5	151.0	2.5	28.0	0.5
HORDD149	9836	5976	15604	-51	7	167.3	-	-	-	NSI	-
HORDD150	9836	15604	5976	-58	11	168.0	130.8	133.0	2.2	8.9	0.5
HORDD151	9834	15600	5975	-74	33	168.1	128.3	131.2	2.9	16.8	0.5
HORDD152	9834	15600	5975	-74	32	138.0	123.6	126.5	2.9	18.7	1.0
HORDD069A	9750	15465	5989	-28	15	327.1	272.3	279.9	7.6	18.6	1.2
HORDD069A	9750	15465	5989	-28	15	327.1	297.3	296.0	1.3	10.4	0.3
HORDD069A	9750	15465	5989	-28	15	327.1	306.5	307.1	0.6	1.4	0.1
RUBDD173	9818	16320	6098	-26	51	85.0	70.5	72.3	1.8	36.6	1.4
RUBDD174	9818	16320	6098	-22	39	97.0	80.5	82.8	2.3	3.6	1.5
RUBDD174	9818	16320	6098	-22	39	97.0	86.2	86.5	0.3	56.0	0.2
RUBDD175	9817	16320	6098	-17	30	116.5	96.4	97.9	1.5	10.9	0.8
RUBDD176	9817	16320	6098	-15	23	137.0	111.7	112.2	0.5	4.9	0.3
RUBDD177	9818	16320	6098	-36	34	114.0	98.0	101.0	3.0	19.0	1.6
RUBDD178	9817	16320	6098	-27	31	123.1	103.8	107.6	3.8	13.3	2.1
RUBDD179	9817	16320	6098	-22	24	138.1	123.2	124.0	0.8	5.4	0.4
RUBDD180	9819	16320	6098	-44	6	117.9	98.1	107.0	8.9	15.0	3.8
RUBDD181	9819	16320	6098	-39	0	129.4	111.0	115.5	4.5	55.4	1.9
RUBDD183	9817	16320	6098	-27	17	168.0	143.7	145.4	1.7	5.8	0.6
RUBDD184	9819	16320	6098	-50	34	135.2	112.6	117.9	5.3	14.1	2.4
RUBDD186	9818	16320	6098	-40	23	159.0	138.5	143.8	5.3	27.4	1.9
RUBDD187	9818	16320	6098	-61	17	195.4	168.5	178.1	9.6	14.4	2.0
RUBDD188A	9818	16320	6098	-57	24	171.4	146.9	147.8	0.9	5.9	0.2
RUBDD189	9817	16320	6098	-52	10	231.2	183.1	187.5	4.4	8.2	0.7
RUBDD189	9817	16320	6098	-52	10	231.2	199.1	201.9	2.8	9.8	0.4
RUBDD190	9817	16320	6098	-45	6	237.3	216.0	222.2	6.2	10.6	0.9
RUBDD191	9817	16320	6098	-39	10	231.6	200.8	204.7	3.9	15.1	0.8
RUBDD192A	9818	16316	6097	-72.6	65	186.0	148.4	150.3	1.9	4.7	0.7

NSI = No significant intersection

Table 4 – Drilling results returned for the Rubicon-Hornet mine since completion of the 2013 Year End Resource Reserve estimate

## AMBITION EXPLORATION DRILL RESULTS (EKJV)

Drill Hole #	Collar Easting (Mine Grid)	Collar Northing (Mine Grid)	Collar RL (Mine Grid)	Collar Dip (degrees)	Azimuth (degrees, Mine Grid)	End of hole depth (m)	Downhole From (m)	Downhole To (m)	Downhole Intersection (m)	Au (gpt) uncut
AMRC14001	328238	6605383	372	-60	60	180	56	57	1.0	1.7
AMRC14002	328315	6605215	369	-60	60	150	115	117	2.0	1.8
AMRC14003	328409	6605015	368	-60	60	174	151	153	2.0	6.0
AMRC14004	328811	6604848	367	-60	60	174	-	-	-	NSI
AMRC14005	328617	6604680	368	-60	60	150	128	129	1.0	NSI
AMRC14006	328686	6604496	366	-60	60	156	-	-	-	NSI
AMRC14010	328248	6605136	332	-60	225	126	109	110	1.0	0.3

NSI = No significant intersection

Table 5 – Ambition exploration drilling results

JORC Code, 2012 Edition – Table 1 EKJV K2 Line of Deposits (Pegasus, Rubicon, Hornet, Ambition)

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Sampling was completed using a combination of Reverse circulation (RC) and Diamond Drilling (DD). RC drilling was used to drill pre-collars for many of the Resource definition holes with diamond tails. Diamond drilling constitutes the rest of the drilling.</li> <li>Diamond core was transferred to core trays for logging and sampling. Half core samples were nominated by the geologist from both NQ2 and HQ diamond core, with a minimum sample width of either 20cm (HQ) or 30cm (NQ2).</li> <li>RC samples were split using a rig-mounted cone splitter on 1m intervals to obtain a sample for assay. 4m Composite spear samples were collected for most of each hole, with 1m samples submitted for areas of known mineralization or anomalism.</li> <li>Samples were taken to Genalysis Kalgoorlie for preparation by drying, crushing to &lt;3mm, and pulverizing the entire sample to &lt;75µm. 300g Pulps splits were then dispatched to Genalysis Perth for 50g Fire assay charge and AAS analysis.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Both RC and Diamond Drilling techniques were used at the K2 deposits.</li> <li>Diamond drillholes completed pre-2011 were predominantly NQ2 (50.5mm). All resource definition holes completed post 2011 were drilled using HQ (63.5mm) diameter core</li> <li>Core was orientated using the Reflex ACT Core orientation system.</li> <li>RC Drilling was completed using a 5.75" drill bit, downsized to 5.25" at depth.</li> <li>7 RC pre-collars were drilled followed by diamond tails. Pre-collar depth was to 180m or less if approaching known mineralization.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>RC drilling contractors adjust their drilling approach to specific conditions to maximize sample recovery. Moisture content and sample recovery is recorded for each RC sample. No recovery issues were identified during 2013 RC drilling. Recovery was poor at the very beginning of each hole, as is normal for this type of drilling in overburden.</li> <li>For diamond drilling the contractors adjust their rate of drilling and method if recovery issues arise. All recovery is recorded by the drillers on core blocks. This is checked and compared to the measurements of the core by the geological team. Any issues are communicated back to the drilling contractor.</li> <li>Recovery was excellent for diamond core and no relationship between grade and recovery was observed. For RC drilling, pre-collars were ended before known zones of mineralization and recovery was very good through any anomalous zones, so no issues occurred.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean,</li> </ul>	<ul style="list-style-type: none"> <li>All diamond core is logged for Regolith, Lithology, veining, alteration, mineralisation and structure. Structural measurements of specific features are also taken through oriented zones.</li> <li>All logging is quantitative where possible and qualitative elsewhere. A photograph</li> </ul>



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Criteria	JORC Code explanation	Commentary
	<p><i>channel, etc) photography.</i></p> <ul style="list-style-type: none"> <li><i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<p>is taken of every core tray.</p> <ul style="list-style-type: none"> <li>RC sample chips are logged in 1m intervals. For the entire length of each hole. Regolith, Lithology, alteration, veining and mineralisation are all recorded.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li><i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></li> <li><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>All Diamond core is cut and half the core is taken for sampling. The remaining half is stored for later use.</li> <li>All RC samples are split using a rig-mounted cone splitter to collect a 1m sample 3-4kg in size. These samples were submitted to the lab from any zones approaching known mineralization and from any areas identified as having anomalous gold. Outside of mineralized zones spear samples were taken over a 4m interval for composite sampling.</li> <li>Field duplicates were taken for RC samples at a rate of 1 in 20</li> <li>Sample preparation was conducted at Genalysis Kalgoorlie, commencing with sorting, checking and drying at less than 110°C to prevent sulphide breakdown. Samples are jaw crushed to a nominal -6mm particle size. If the sample is greater than 3kg a Boyd crusher with rotary splitter is used to reduce the sample size to less than 3kg (typically 1.5kg) at a nominal &lt;3mm particle size. The entire crushed sample (if less than 3kg) or sub-sample is then pulverized to 90% passing 75µm, using a Labtechnics LM5 bowl pulveriser. 300g Pulp subsamples are then taken with an aluminium scoop and stored in labelled pulp packets.</li> <li>Grind checks are performed at both the crushing stage(3mm) and pulverising stage (75µm), requiring 90% of material to pass through the relevant size.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li><i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>A 50g Fire assay charge is used with a lead flux, dissolved in the furnace. The prill is totally digested by HCl and HNO<sub>3</sub> acids before Atomic absorption spectroscopy (AAS) determination for gold analysis.</li> <li>No geophysical tools were used to determine any element concentrations</li> <li>Certified reference materials (CRMs) are inserted into the sample sequence randomly at a rate of 1 per 20 samples to ensure correct calibration. Any values outside of 3 standard deviations are re-assayed with a new CRM.</li> <li>Blanks are inserted into the sample sequence at a rate of 1 per 20 samples, This is random, except where high grade mineralisation is expected. Here, a Blank is inserted after the high grade sample to test for contamination. Failures above 0.2g/t are followed up, and re-assayed. New pulps are prepared if failures remain.</li> <li>Field Duplicates are taken for all RC samples (1 in 20 sample). No Field duplicates are submitted for diamond core.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>All significant intersections are verified by another Northern Star geologist during the drill hole validation process, and later by a Competent person to be signed off</li> <li>No Twinned holes were drilled for this data set</li> <li>Geological logging was captured using excel templates. Both a hardcopy and electronic copy of these are stored, as well as being loaded in to the database using automatic acquire loaders. Assay files are received in csv format and loaded directly into the database by the Database administrator (DBA). A geologist then checks that the results have inserted correctly. Hardcopy and electronic copies of these are stored. No adjustments are made to this assay data.</li> </ul>

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<b>Location of data points</b>	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>A planned hole is pegged using a Differential GPS by the field assistants</li> <li>Underground diamond holes are picked up by mine surveyors</li> <li>During drilling single-shot surveys are every 30m to ensure the hole remains close to design. This is performed using the Reflex Ez-Trac system. Upon hole completion, a Gyroscopic survey is conducted by ABIMS, taking readings every 5m for improved accuracy. This is done in true north.</li> <li>The final collar is picked up after hole completion by Differential GPS in the MGA 94_51 grid.</li> <li>Quality topographic control has been achieved through Lidar data and survey pickups of holes over the last 15 years.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the 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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Drillhole spacing across the area varies. For the Resource definition drilling, spacing was typically 40m x 40m, to allow the resource to be upgraded to indicated. For the Pode drilling spacing was approximately 20m x 20m. The HRPD drilling was much more wide spaced, as this is largely unclassified. Spacing is wider than 160m in some areas.</li> <li>No compositing has been applied to these exploration results, although composite intersections are reported.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>The majority of the structures in the Kundana camp dip steeply (80°) to WSW. The Pode structure has a much shallower dip in a similar direction, approximately 60° . To target these orientations the drillhole dips of 60-70° towards ~060° achieve high angle intersections on all structures.</li> <li>No sampling bias is considered to have been introduced by the drilling orientation</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Prior to laboratory submission samples are stored by Northern Star Resources in a secure yard. Once submitted to the laboratories they are stored in a secure fenced compound, and tracked through their chain of custody and via audit trails</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No audits or reviews have recently been conducted on sampling techniques.</li> </ul>

## Section 2 Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section.)

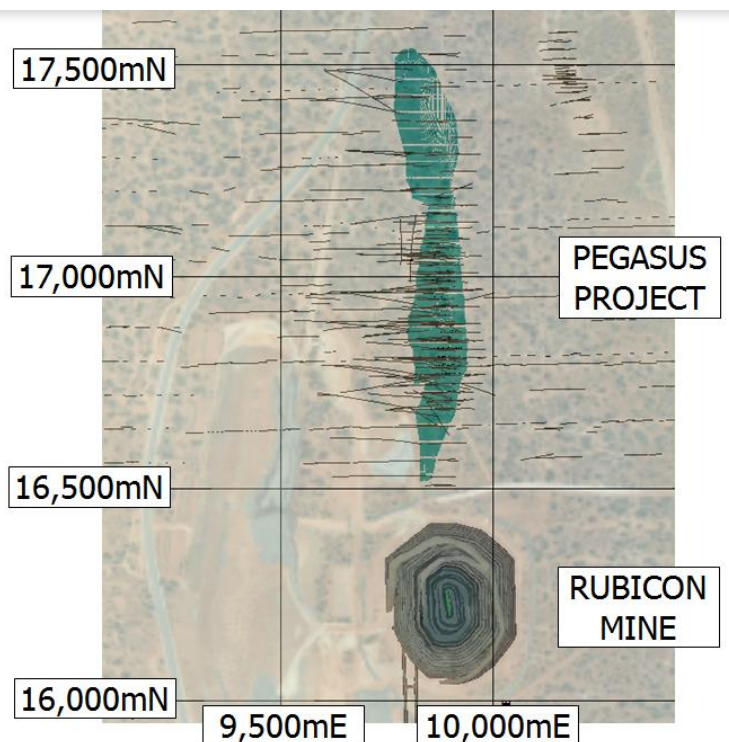
Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>All holes mentioned in this report are located within the M16/309 and M16/326 Mining leases and are held by The East Kundana Joint Venture (EKJV). The EKJV is majority owned and managed by Northern Star Resources Limited (51%). The minority holding in the EKJV is held by Tribune Resources Ltd (36.75%) and Rand Mining Ltd (12.25%).</li> <li>The tenement on which the Rubicon, Hornet and Pegasus deposits are hosted (M16/309) is subject to two royalty agreements; however neither of these is applicable to the actual Pegasus deposit. The agreements that are on M16/309 but not relevant to the Pegasus project are the Kundana- Hornet Central Royalty and the Kundana Pope John Agreement No. 2602-13.</li> <li>Ambition is located on M16/326</li> <li>No known impediments exist and the tenements are in good standing</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>The first reference to the mineralization style encountered at the Pegasus project was the mines department report on the area produced by Dr. I. Martin (1987). He reviewed work completed in 1983 – 1984 by a company called Southern Resources, who identified two geochemical anomalies, creatively named Kundana #1 and Kundana #2. The Kundana #2 prospect was subdivided into a further two prospects, dubbed K2 and K2A.</li> <li>Between 1987 and 1997, limited work was completed.</li> <li>Between 1997 and 2006 Tern Resources (subsequently Rand Mining and Tribune Resources), and Gilt-edged mining focused on shallow open pit potential which was not considered viable.</li> <li>In 2011, Pegasus was highlighted by an operational review team and follow-up drilling was planned through 2012.</li> <li>This report is concerned solely with 2014 drilling that led on from this period.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The Kundana camp is situated within the Norseman-Wiluna Greenstone Belt, in an area dominated by the Zuleika shear zone, which separates the Coolgardie domain from the Ora Banda domain.</li> <li>K2-style mineralisation (Pegasus, Rubicon, Hornet) consists of narrow vein deposits hosted by shear zones located along steeply-dipping overturned lithological contacts. The K2 structure is present along the contact between a black shale unit (Centenary shale) and intermediate volcanics (Sparogville formation).</li> <li>Minor mineralization, termed K2B, also occurs further west, on the contact between the Victorious basalt and Bent Tree Basalt (both part of the regional upper Basalt Sequence).</li> <li>A 60° W dipping fault, offsets this contact and exists as a zone of vein-filled brecciated material hosting the Podge-style mineralisation.</li> <li>Ambition is interpreted similar in style to the north of Pegasus</li> </ul>

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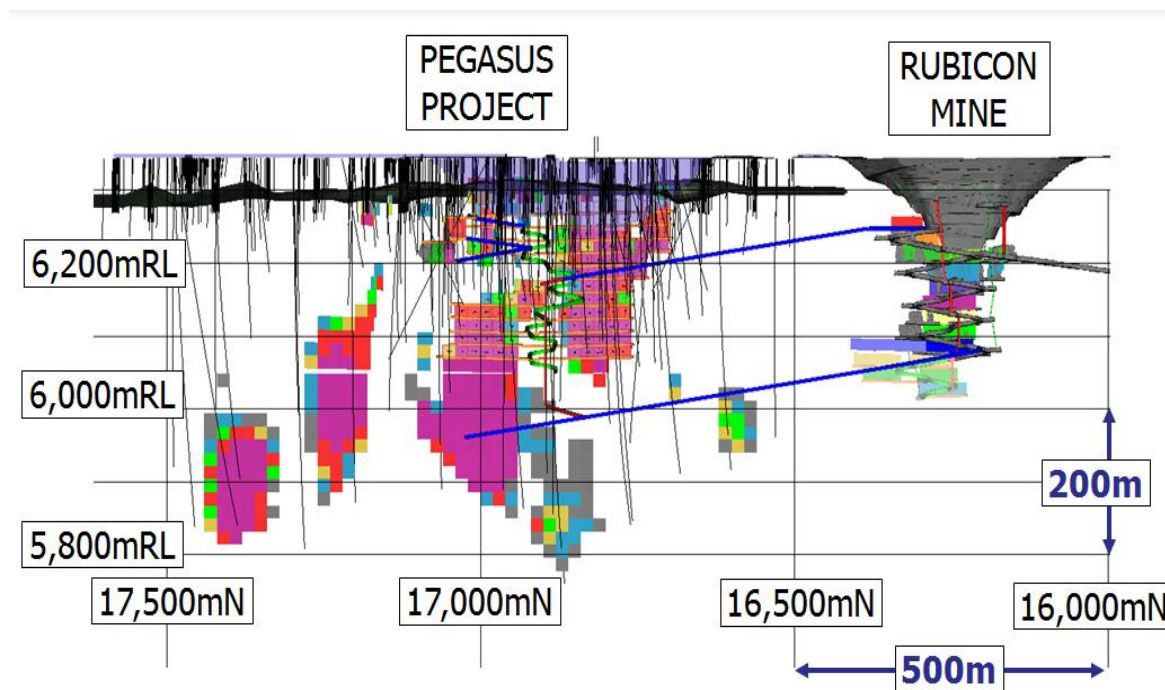
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<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:                             <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Too many holes to practically list the complete dataset, the long section and plan reflect the hole positions used for previous estimation stated.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>All reported assay results have been length weighted to provide an intersection width. A maximum of 2m of barren material between mineralized samples has been permitted in the calculation of these widths.</li> <li>No assay results have been top-cut for the purpose of this report. A lower cut-off of 1g/t has been used to identify significant results, although lower results are included where a known ore zone has been intercepted, and the entire intercept is low grade.</li> <li>No metal equivalent values have been used for the reporting of these exploration results</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>True widths have been calculated for intersections of the known ore zones, based on existing knowledge of the nature of these structures.</li> <li>Both the downhole width and true width have been clearly specified when used.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>Appropriate plans and section have been included in the body of this report</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>Both high and low grades have been reported accurately, clearly identified with the drillhole attributes and 'From' and 'To' depths.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>Metallurgical testwork was conducted on 9 Pegasus samples. The results are summarized as follows:                             <ul style="list-style-type: none"> <li>All Pegasus recoveries were above 91% for the leach tests</li> <li>Gravity gold recovery estimated at 55%</li> <li>Cyanide consumption 0.62 kg/t; Lime 2.29 kg/t</li> <li>Oxygen Consumption 60 g/t per hour</li> <li>Bond Ball mill work index average 18.1 kWh/t</li> <li>Bond Abrasion Index average 0.1522</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Further work will continue in 2014 to extend the indicated resource deeper by additional drilling. Advanced exploration work will also attempt to upgrade an area at depth spanning 1km of strike to an inferred resource. The continuation of the 'HRPD' trend will continue to be drill tested at depth, with the intention of linking the known deposits of Hornet, Rubicon, Pegasus and Drake.</li> <li>Further work will be conducted to test continuity of mineralisation at Ambition.</li> </ul>



Plan View Pegasus Drilling



Long Section Pegasus Drilling looking East

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