NORTHERN STAR
RESOURCES LIMITED

ASX ANNOUNCEMENT
16 February 2015

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 Carpene
Company Secretary

Issued Capital
Shares 592.3 million
Options 4.2 million
Current Share Price A$1.97
Market Capitalisation
A$1.17 billion
Cash and Cash Equivalents
31 Dec 2014 - $119.1 million

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KUNDANA EMERGING AS WORLD-CLASS MINING CAMP WITH PEGASUS RESOURCE INCREASING TO 1.1MOZ

Results confirm Northern Star's geological model at Kundana, highlighting strong potential for further discoveries

KEY POINTS

- **Total Resources at the Pegasus deposit within the Kundana Project (NST: 51%) near Kalgoorlie increased by 46% (~350koz) to 1.1Moz (3Mt at 11.6gpt) from the June 2014 estimate**
- **Pegasus remains open at depth and along strike; recent high-grade drilling results outside the new resource point to potential resource increases, significant results include (uncut):**
  - **2.4m at 50.2gpt (est true width 1.7m) from 495m K2**
  - **2.4m at 25.7gpt (est true width 1.7m) from 562m K2**
  - **3.0m at 20.7gpt (est true width 2.7m) from 207m Pode**
  - **4.0m at 18.9gpt (est true width 3.6m) from 164m K2B**
  - **3.0m at 18.2gpt (est true width 2.3m) from 192m K2**
- **Pegasus on track to be in production by mid-2015**
- **Success at Pegasus highlights the significant potential for further discoveries along the 14km-long Kundana corridor**
- **Exploration results at Pegasus confirm Northern Star's geological model; that high-grade shoots at Kundana plunge to the north and south, not only steeply north as previously thought**
- **Another seven targets along strike at the K2 structure that are analogous to the Pegasus deposit are currently being drill tested**
- **This geological understanding is also now being applied with drilling underway at several areas of known mineralisation, established deposits and past-producing mines along the Kundana corridor**
- **Northern Star also plans to apply this theory to the adjacent Strzelecki structure at Kundana**
- **Revised Pegasus Resource coincides with increased Resource at Jundee project (see separate ASX release today) and the recent high-grade results pointing to a potential resource increase at Paulsens (see ASX release dated 13 January 2015)**
- **Resource increases and strong drilling results demonstrate that Northern Star's $50m exploration campaign is already succeeding in growing mine lives**

Northern Star Resources Limited (ASX: NST) is pleased to announce that its Pegasus deposit near Kalgoorlie is emerging as a world-class discovery, with total JORC Resources increasing by a further 350,000oz to 1.1 million ounces.

The total revised Resource at Pegasus, which is part of the Kundana Project, is three million tonnes at 11.6gpt. Northern Star has a 51% interest and Joint Venture Partners, Rand Mining Ltd (ASX: RND) and Tribune Resources Ltd (ASX: TBR), own 12.25% and 36.75% respectively.

In addition to the Resource increase, infill drilling has substantially increased Northern Star's confidence in the estimate. The Indicated Resource has increased by 199,000oz to 743,000oz, and now constitutes 66% of the total Resource. Historic conversion rates at Kundana from Resource to Reserve are 80%.

Further step out drilling undertaken since this calculation was completed has returned more high-grade results, pointing to a further increase in Resources.

The Pegasus deposit is located on the K2 structure at Kundana. Significant results have been received on the main K2 structure both north and south of Pegasus.

In addition, exceptional results have been returned on other mineralised structures, including the Pode Vein and the K2B structure. This mineralisation also remains open down-plunge, at depth and along strike (refer to Figure 1 and 2).

Northern Star Managing Director Bill Beament said the Resource increase showed the Kundana corridor was fast becoming the hottest gold exploration property in Australia.

He said the success at Pegasus highlighted the significant exploration potential of the 14km-long Kundana corridor because its proved Northern Star's theory that high-grade gold shoots plunge to the north and south, not only steeply north as previously thought.

In light of this new understanding, Northern Star is drilling seven other targets of known mineralisation along the K2 structure. As part of this program, it is testing for high-grade shoots plunging to the north in areas where they are already known to be plunging to the south (refer Figure 3).

Mr Beament said this "shoot geometry" theory had led to the substantial growth in Resources at Pegasus.

"We are confident that our new understanding of the geology at Kundana will lead to further substantial discoveries and Resource increases along the Kundana corridor," he said.

"We also believe we are well on the way to cracking the code at Kundana and that we are now poised to unlock the full potential of this mining camp."

As well as Pegasus, Kundana hosts the producing Raleigh, Rubicon and Hornet mines and the recent Millennium discovery.

In Northern Star's current FY2015 production guidance, Kundana is forecast to produce 100,000-110,000oz at an all-in sustaining cost of A$800-850/oz. This represents Northern Star's 51% share of Kundana. Actual Kundana production for the December Quarter was 29,566oz at an all-in sustaining cost of A$632/oz.

Yours faithfully

Bill Beament

BILL BEAMENT
Managing Director
Northern Star Resources Limited

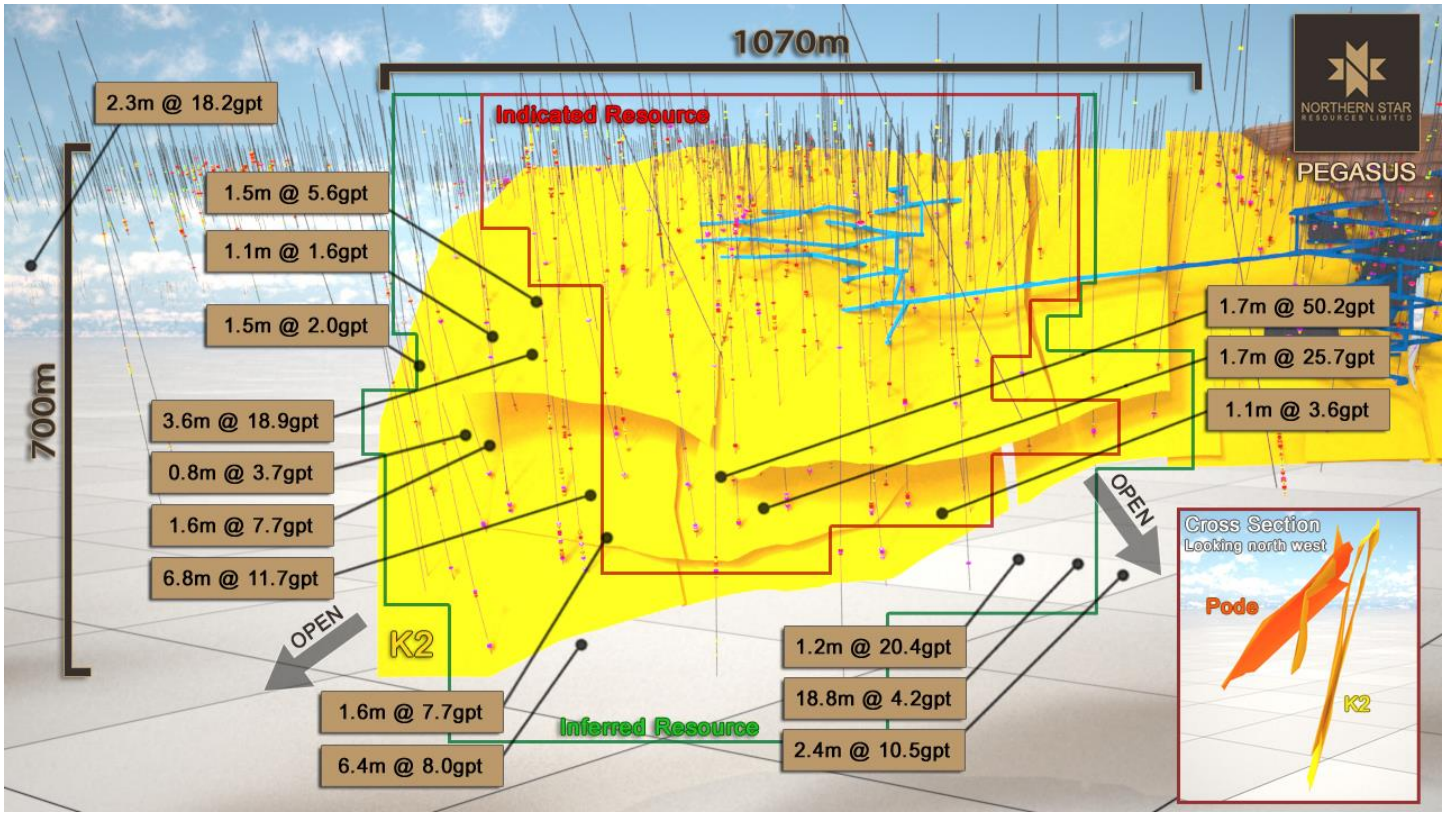


Figure 1: The high grade 1.1Moz Pegasus ore body in long section. The deposit remains open at depth, down plunge and along strike. Intercepts shown are intercepts received after the Resource estimate cut–off.

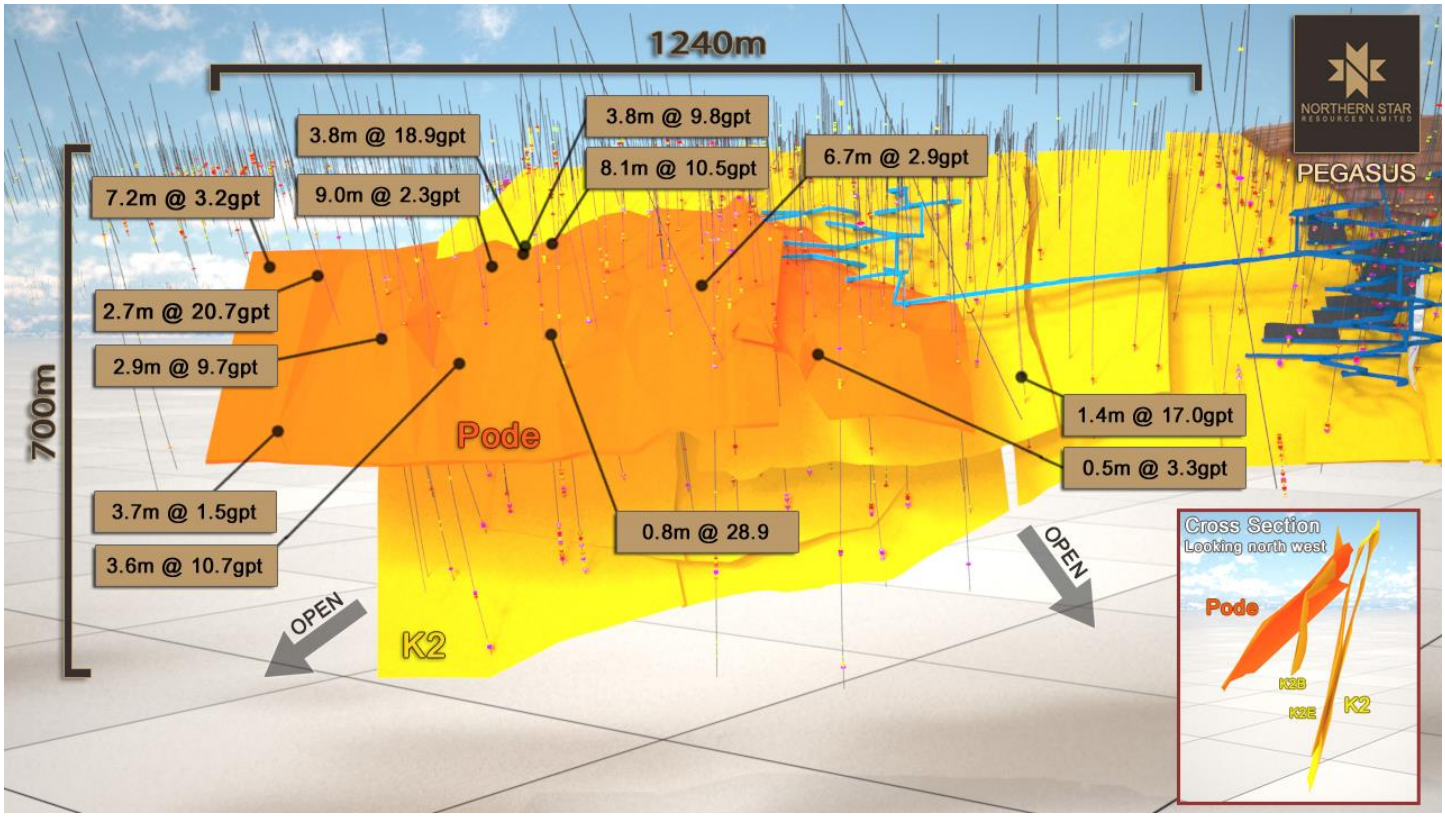


Figure 2: The flat lying Pode ore body in Long Section. Intercepts shown are intercepts received after the Resource estimate cut–off.

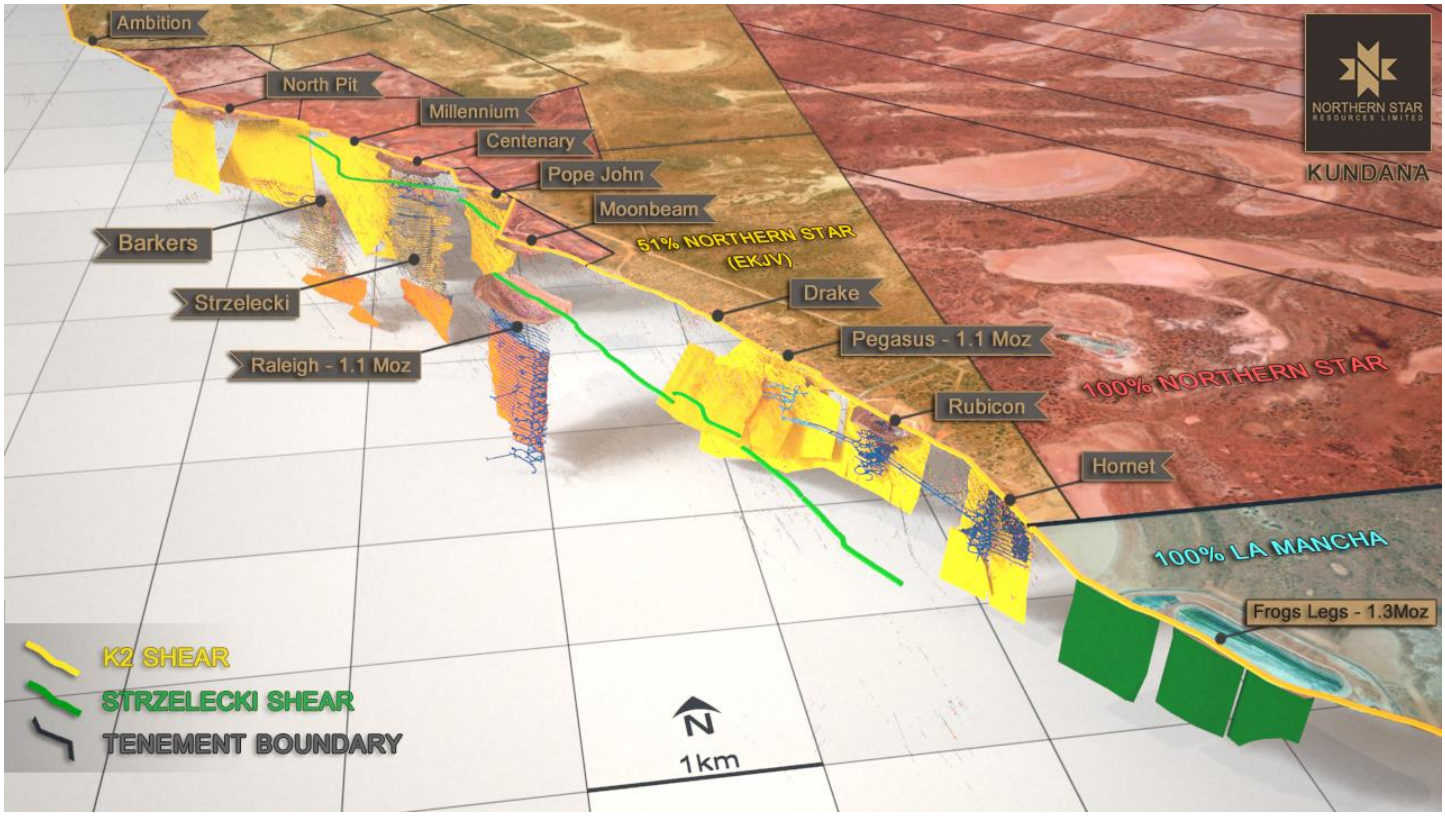


Figure 3: The high grade K2 and Strzelecki structures (looking North). NST plan to test seven other targets along this structure and apply the same geological model to the Strzelecki structure.

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 Darren Cooke, (Member Australian Institute of Geoscientists), who is a full-time employee of Northern Star Resources Limited. Mr. Cooke 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. Cooke 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.

This announcement is not an offer, invitation, solicitation or other recommendation with respect to the subscription for, purchase or sale of any security, and neither this announcement nor anything in it shall form the basis of any contract or commitment whatsoever. This announcement may contain forward looking statements that are subject to risk factors associated with gold exploration, mining and production businesses. It is believed that the expectations reflected in these statements are reasonable but they may be affected by a variety of variables and changes in underlying assumptions which could cause actual results or trends to differ materially, including but not limited to price fluctuations, actual demand, currency fluctuations, drilling and production results, reserve estimations, loss of market, industry competition, environmental risks, physical risks, legislative, fiscal and regulatory changes, economic and financial market conditions in various countries and regions, political risks, project delay or advancement, approvals and cost estimates.

GOLD MINERAL RESOURCES As at 31 December 2014	MEASURED (M)			INDICATED (I)			INFERRED (Inf)			TOTAL (MI&Inf)			
Based on attributable ounces Au	Tonnes (000's)	Grade (gpt)	Ounces (000's)	Tonnes (000's)	Grade (gpt)	Ounces (000's)	Tonnes (000's)	Grade (gpt)	Ounces (000's)	Tonnes (000's)	Grade (gpt)	Ounces (000's)	Competent Person
East Kundana Joint Venture(EKJV)													
Pegasus (51%)		-	-	883	13.2	374	639	9.4	193	1,521	11.6	567	1

Note :

1. Mineral Resources are inclusive of Reserves.
2. Mineral Resources are reported at a gold price of AUD $1,600/oz Au.
3. Rounding may result in apparent summation differences between tonnes, grade and contained metal content;
4. Numbers are 100% NSTattributable - East Kundana Joint Venture partners' (Rand Mining Limited and Tribune Resources Limited) attributable tonnes and contained ounces are not reported in this table.

Competent Persons

1. Darren Cooke

Information in this announcement that relates to the Company Mineral Resource estimations, exploration results, data quality, geological interpretations and potential for eventual economic extraction, is based on information compiled by the relevant Northern Star personnel under the supervision of Darren Cooke (Member AIG), who is a full-time employee of Northern Star Resources Limited. Mr Cooke 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 Company compilation. Mr Cooke consents to the inclusion in this announcement of the matters based on this information in the form and context in which it appears.

KUNDANA SIGNIFICANT INTERSECTIONS

Drill Hole #	Easting (Mine Grid)	Northing (Mine Grid)	Drill hole collar RL (Mine Grid)	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)
PGDD14034	9598	16792	6343	-61	81	525.0	495.15	499.00	3.85	3.4	2.9
PGDD14036	9639	17095	6343	-68	60	528.3	211.00	218.06	7.06	2.9	4.9
PGDD14036	9639	17095	6343	-68	60	528.3	220.34	226.00	5.66	2.9	4.0
PGDD14037	9524	17151	6346	-63	89	609.1	548.57	552.00	3.43	4.8	2.4
PGDD14038	9536	17023	6344	-62	88	600.0	562.00	564.42	2.42	25.7	1.7
PGDD14039	9530	16957	6343	-65	92	627.0	582.19	584.22	2.03	5.3	1.4
PGDD14041	9623	16685	6343	-69	87	570.8	535.60	537.00	1.40	9.6	1.0
PGDD14045	9461	17364	6346	-63	91	678.1	639.55	642.10	2.55	6.6	1.8
PGRC14051	9751	17611	6344	-64	91	292.0	233.00	234.00	1.00	3.8	0.7
PGRC14052	9726	17523	6346	-69	89	318.0	161.00	164.00	3.00	6.5	2.7
PGRC14053	9805	17444	6345	-67	85	192.0	144.00	145.00	1.00	3.8	0.9
PGRC14054	9738	17436	6344	-64	83	288.0	141.00	144.00	3.00	3.4	2.7
PGRC14054	9738	17436	6344	-64	83	288.0	273.00	275.00	2.00	1.3	1.4
PGRC14055	9766	17368	6344	-63	89	236.0	216.00	218.00	2.00	4.0	1.4
PGRC14056	9716	17338	6345	-63	89	326.0	164.00	168.00	4.00	18.9	3.6
PGRC14056	9716	17338	6345	-63	89	326.0	306.00	309.00	3.00	3.2	2.1
PGDD14036	9203	17339	6343	-68	60	528.0	493.00	493.63	0.63	10.4	0.4
PGDD14036	9203	17339	6343	-68	60	528.0	495.60	498.00	2.40	50.2	1.7
PGDD14036A	9639	17095	6343	-63	64	480.0	454.66	455.53	0.87	33.7	0.6
PGDD13036A	9639	17095	6343	-63	93	480.0	298.00	299.00	1.00	18.9	0.7
PGDD14044	9451	17601	6343	-49	89	732.0	549.91	550.27	0.36	67.1	0.3
PGDD14044	9451	17601	6343	-49	89	732.0	694.71	695.57	0.86	2.4	0.6
PGDD14044B	9451	17601	6343	-49	89	732.0	749.32	750.81	1.49	7.2	1.0
PGDD14044B	9451	17601	6343	-49	89	732.0	753.06	753.55	0.49	8.2	0.3
PGDD14043	9635	16613	6343	-69	90	519.0	486.20	487.00	0.80	15.7	0.6
PGDD14043	9635	16613	6343	-69	90	519.0	491.43	494.50	3.07	1.8	2.1
PGDD14042	333091	6597674	343	-66	60	546.0	408.80	413.30	4.50	4.4	3.2
PGDD14042	333091	6597674	343	-66	60	546.0	523.91	528.24	4.33	4.4	3.0
PGDD14047	332791	6598313	343	-67	57	422.7	382.10	385.02	2.92	3.8	2.0
PGDD14047	332791	6598313	343	-67	57	422.7	182.85	185.70	2.85	5.2	2.0
PGDD14044D	9451	17600	6343	-49	87	686.0	655.91	656.67	0.76	0.1	0.6
PGDD14044C	9451	17600	6343	-70	87	919.3	889.00	891.08	2.08	0.3	1.5
PGDD14046	9559	17415	6343	-58	95	516.0	470.40	472.00	1.60	11.6	1.2
PGDD14049	9622	16534	6343	-72	80	617.0	589.00	591.32	2.32	9.7	1.7
PGDD14049	9622	16534	6343	-72	80	617.0	417.00	420.23	3.23	10.5	2.4
PGDD14046	9559	17415	6343	-58	95	516.0	264.03	268.00	3.97	2.6	3.0
PGDD14044C	9451	17600	6343	-70	87	919.3	466.30	467.00	0.70	8.5	0.5
PGDD14044C	9451	17600	6343	-70	87	919.3	723.00	724.00	1.00	6.0	0.8
PGDD14049	9622	16534	6343	-72	80	617.0	554.00	557.00	3.00	4.0	2.3
PGDD14057	9567	16841	6343	-65	69	594.0	411.36	421.80	10.34	1.7	1.3
PGDD14057	9567	16841	6343	-65	98	594.0	571.00	572.50	1.50	3.6	1.1
PGDD14058	9622	16682	6343	-72	81	606.0	560.04	560.50	0.46	15.1	0.4
PGRC14063	9844	17284	6343	86	-64	318.0	147.00	156.00	9.00	10.5	8.1
PGRC14063	9844	17284	6343	86	-64	318.0	163.00	165.00	2.00	10.9	1.5
PGRC14063	9844	17284	6343	86	-64	318.0	300.00	301.00	1.00	1.9	0.8
PGRC14064	9858	17327	6343	81	-64	258.0	122.00	127.00	5.00	9.8	3.8
PGRC14064	9858	17327	6343	81	-64	258.0	162.00	165.00	3.00	3.9	2.7
PGRC14064	9858	17327	6343	81	-64	258.0	240.00	242.00	2.00	5.6	1.5
PGDD14058	9622	16682	6343	-72	81	606.0	411.70	413.25	1.55	17.0	1.4
PGRC14066	9647	17472	6343	378	89	59.5	199.00	200.00	1.00	12.0	0.9
PGRC14066	9647	17472	6343	378	89	59.5	203.00	206.00	3.00	6.4	2.7
PGRC14066	9647	17472	6343	378	89	59.5	348.00	349.00	1.00	0.3	0.8

KUNDANA SIGNIFICANT INTERSECTIONS

Drill Hole #	Easting (Mine Grid)	Northing (Mine Grid)	Drill hole collar RL (Mine Grid)	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)
PGRC14066	9647	17472	6343	378	89	59.5	356.00	358.00	2.00	2.0	1.5
PGRC14067	9663	17594	6343	378	89	63.0	207.00	210.00	3.00	20.7	2.7
PGRC14067	9663	17594	6343	378	89	63.0	364.00	365.00	1.00	5.4	0.8
DRRC14001	9684	17688	6343	-59	91	294.0	92.00	100.00	8.00	3.2	7.2
DRRC14001	9684	17688	6343	-59	91	294.0	204.00	207.00	3.00	4.2	2.3
DRRC14002	9713	17788	6343	-60	89	308.0	67.00	69.00	2.00	2.2	1.8
DRRC14002	9713	17788	6343	-60	89	308.0	278.00	280.00	2.00	4.3	1.5
PGDD14048	9519	17254	6343	-62	88	642.0	37.65	44.13	6.48	2.1	4.9
DRRC14003	9689	17857	6343	-56	89	294.0	94.00	96.00	2.00	5.5	1.8
DRRC14003	9689	17857	6343	-56	89	294.0	273.00	274.00	1.00	1.7	0.8
PGDD14048	9519	17254	6343	-62	88	642.0	289.20	290.00	0.80	28.9	0.7
PGDD14048	9519	17254	6343	-62	88	642.0	374.28	375.00	0.72	8.9	0.5
PGDD14048	9519	17254	6343	-62	88	642.0	592.40	595.05	2.11	11.9	1.6
DRRC14004	9733	17891	6343	-54	86	237.0	219.00	221.00	2.00	7.8	1.5
DRRC14005	9703	17945	6343	-59	92	300.0	273.00	274.00	1.00	1.4	0.8
DRRC14006	9810	18002	6343	-74	119	204.0	164.00	165.00	1.00	3.2	0.8
DRRC14006	9810	18002	6343	-74	119	204.0	173.00	176.00	3.00	0.5	2.3
DRRC14007	9751	18059	6343	-67	116	258.0	225.00	230.00	5.00	4.1	3.8
DRRC14008	9750	18061	6343	-59	90	222.0	192.00	195.00	3.00	18.2	2.3
PGDD14068	9605	17422	6343	-60	89	642.0	395.45	396.00	0.55	8.3	0.4
PGDD14068	9605	17422	6343	-60	89	642.0	406.74	407.83	1.09	2.8	0.8
PGDD14068	9605	17422	6343	-60	89	642.0	412.45	413.50	1.05	3.7	0.8
PGDD14069	9718	17375	6343	-63	87	315.0	160.19	164.78	4.59	5.1	4.1
PGDD14069	9718	17375	6343	-63	87	315.0	271.54	271.96	0.42	12.0	0.3
PGDD14069	9718	17375	6343	-63	87	315.0	272.74	273.00	0.26	12.3	0.2
PGDD14069	9718	17375	6343	-63	87	315.0	285.52	287.00	1.48	1.6	1.1
PGDD14059	9635	16613	6343	-72	85	624.0	564.00	589.10	25.10	4.2	18.8
PGDD14070	9667	17422	6344	-64	91	401.9	355.44	356.84	1.40	8.2	1.1
PGDD14070	9667	17422	6344	-64	91	401.9	190.98	203.00	12.02	2.3	9.0
PGDD14070	9667	17422	6344	-64	91	401.9	363.41	364.00	0.59	0.1	0.5
PGDD14071	9590	17239	6345	-62	91	546.0	338.27	342.93	4.66	4.9	3.5
PGDD14071	9590	17239	6345	-62	91	546.0	488.16	498.00	9.84	6.4	7.4
PGDD14071	9590	17239	6345	-62	91	546.0	508.00	517.00	9.00	11.7	6.8
PGDD14061	9445	17223	6345	-64	86	753.0	116.53	125.00	8.47	8.0	6.4
PGDD14061	9445	17223	6345	-64	86	753.0	180.00	183.00	3.00	4.6	2.3
PGDD14061	9445	17223	6345	-64	86	753.0	363.90	366.00	2.10	7.7	1.6
PGDD14061	9445	17223	6345	-64	86	753.0	730.58	731.15	0.57	11.9	0.4
PGDD14060	9542	17180	6345	-68	93	648.0	564.58	570.00	5.42	19.2	4.1
PGDD14060	9542	17180	6345	-68	93	648.0	598.74	600.23	1.49	4.0	1.1

JORC Code, 2012 Edition – Table 1 Report: Pegasus Underground Resource December 2014 and Post Resource Drilling

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	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.	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. 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).
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Core is aligned and measured by tape, comparing back to down hole core blocks consistent with industry practice.
	Aspects of the determination of mineralisation that are Material to the Public Report. 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.	Diamond drilling and face sampling are completed to industry standard using varying sample lengths (0.3 to 1.2m) based on geological intervals, which are then crushed and pulverised to produce a ~200g pulp sub sample to use in the assay process. Diamond core samples are fire assayed (30g charge), with the ore zone or any samples with observed visible gold assayed via screen fire assay method. Face samples are fire assays (30g charge). Visible gold is sometimes encountered in core sampling.

Criteria	JORC Code explanation	Commentary
Drilling techniques	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).	Both RC and Diamond Drilling techniques were used at the K2 deposits. 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. Core was orientated using the Reflex ACT Core orientation system. RC Drilling was completed using a 5.75" drill bit, downsized to 5.25" at depth. Some RC pre-collars were drilled followed by diamond tails. Pre-collar depth was to 180m or less if approaching known mineralisation.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	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 mineralisation and recovery was very good through any anomalous zones, so no issues occurred.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	RC drilling contractors adjust their drilling approach to specific conditions to maximise sample recovery. Moisture content and sample recovery is recorded for each RC sample. No recovery issues were identified during RC drilling. Recovery was poor at the very beginning of each hole, as is normal for this type of drilling in overburden. 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.
	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.	No relationship between sample recovery and grade was identified. Diamond recovery through ore zones typically 100% No issues with RC recovery have been identified.
Logging	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.	All diamond core is logged for Regolith, Lithology, veining, alteration, mineralisation and structure. Structural measurements of specific features are also taken through oriented zones. RC sample chips are logged in 1m intervals. For the entire length of each hole. Regolith, Lithology, alteration, veining and mineralisation are all recorded.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	All logging is quantitative where possible and qualitative elsewhere. A photograph is taken of every core tray.
	The total length and percentage of the relevant intersections logged.	100% of the drill core and RC chips are logged.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Diamond core is routinely half core sampled. The core is cut with an Almonté diamond core saw and half core sampled. The same half is collected to sample intervals defined by the Logging Geologist with samples not crossing geological boundaries. The remaining core is archived for future works. All major mineralised zones are sampled, plus visibly altered material outside the ore zone into what is deemed as barren material, >5m of hangingwall/footwall. All other structures and quartz veining that have observed alteration and/or mineralisation outside of the known orezone is sampled with up to ±5m on either side. Ideally, sample intervals are to be 1m in length, though range from 0.30m to 1.20m in length. Total weight of each sample generally does not exceed 3kg. 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 <3mm particle size. The entire crushed sample (if less than 3kg) or sub-sample is then pulverised 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. Grind checks are performed at both the crushing stage(3mm) and pulverising stage (75µm), requiring 90% of material to pass through the relevant size.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	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 and submitted for analysis. After the assay results were received, any composite that exceeded 0.2g/t was re-sampled at 1m intervals and analysed. Samples were taken to Genalysis Kalgoorlie for preparation by drying, crushing to <3mm, and pulverising the entire sample to <75µm. 300g Pulps splits were then dispatched to Genalysis Perth for 50g Fire assay charge and AAS analysis.

Criteria	JORC Code explanation	Commentary
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Sample preparation is deemed adequate.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Field duplicates were taken for RC samples at a rate of 1 in 20.
	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.	Field Duplicates are taken for all RC samples (1 in 20 sample). No Field duplicates are submitted for diamond core.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are considered appropriate.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	A 50g Fire assay charge is used with a lead flux, dissolved in the furnace. The prill is totally digested by HCl and HNO3 acids before Atomic absorption spectroscopy (AAS) determination for gold analysis.
	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.	No geophysical tools were used to determine any element concentrations.
	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.	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. 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 0.2gpt are followed up, and re-assayed. New pulps are prepared if failures remain.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	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.
	The use of twinned holes.	No Twinned holes were drilled for this data set.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	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. Data is imported directly from laboratory reports into an Acquire database. Hard copies of RC and core / assays and surveys are kept on site. Visual checks are conducted as part of the validation process of the data in Datamine.
	Discuss any adjustment to assay data.	Screen fire assays are used as priority over fire assays for diamond core. Comparisons of screen fire and fire assays are completed on a hole-by-hole basis.
Location of data points	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.	A planned hole is pegged using a Differential GPS by the field assistants. Underground diamond holes are picked up by mine surveyors. 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. The final collar is picked up after hole completion by Differential GPS in the MGA 94_51 grid.
	Specification of the grid system used.	A local grid system (Kundana 10) is used. It is rotated 29.25 degrees to the west of MGA94 grid.
	Quality and adequacy of topographic control.	Quality topographic control has been achieved through Lidar data and survey pickups of holes over the last 15 years.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Exploration data spacing is variable, dependant on the intent of the drill program.
	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.	Drillhole spacing across the Pegasus project area varies. Drillhole density and statistical methods (krigging efficiency, slope of regression) have been used to determine the resource classification categories.
	Whether sample compositing has been applied.	Sampling to geology, sample compositing is not applied until the estimation stage.

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	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.
	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.	No sampling bias is considered to have been introduced by the drilling orientation.
Sample security	The measures taken to ensure sample security.	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.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews have recently been conducted on sampling techniques. Sampling techniques and data handling are considered adequate.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	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.	Pegasus is 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%).
	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.	The tenement on which the Pegasus deposit is 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. No known impediments exist and the tenements are in good standing.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The first reference to the mineralisation style encountered at the K2 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. Between 1987 and 1997, limited work was completed. 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. In 2011, Pegasus was highlighted by an operational review team and follow-up drilling was planned through 2012.
Geology	Deposit type, geological setting and style of mineralisation.	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. 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 volcaniclastics (Spargoville formation). Minor mineralisation, 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). A 45° W dipping fault offsets this contact and is characterised by a zone of vein-filled brecciated material hosting the Pode-style mineralisation.
Drill hole Information	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: o easting and northing of the drill hole collar o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar o dip and azimuth of the hole o down hole length and interception depth o hole length.	Too many holes to practically list the complete dataset, the long section and plan reflect the hole positions used for previous estimation stated.

Criteria	JORC Code explanation	Commentary
	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.	No material information has been excluded.
Data aggregation methods	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.	All reported assay results have been length weighted to provide an intersection width. A maximum of 2m of barren material between mineralised samples has been permitted in the calculation of these widths. 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.
	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.	All reported assay results have been length weighted. Aggregations of reported intersections take into account geological boundaries (eg. Laminated quartz veining) and continuity of mineralisation.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values have been used for the reporting of these exploration results.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.	True widths have been calculated for intersections of the known ore zones, based on existing knowledge of the nature of these structures. Both the downhole width and true width have been clearly specified when used.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Due to varying intercept angles the true thickness is manually estimated on a hole by hole basis. Both true width and downhole lengths are reported.
	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').	Reporting of results includes the downhole and true width of the mineralised section.
Diagrams	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.	Appropriate plans and section have been included in the body of this report.
Balanced reporting	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.	Both high and low grades have been reported accurately, clearly identified with the drillhole attributes and 'From' and 'To' depths.
Other substantive exploration data	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.	Metallurgical testwork was conducted on 9 Pegasus samples. The results are summarised as follows: - All Pegasus recoveries were above 91% for the leach tests - Gravity gold recovery estimated at 55% - Cyanide consumption 0.62 kg/t; Lime 2.29 kg/t - Oxygen Consumption 60 gpt per hour - Bond Ball mill work index average 18.1 kWh/t - Bond Abrasion Index average 0.1522
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	Further work will continue in 2015 to infill drill the inferred resource to increase confidence for mine planning. Exploration works will continue on defining strike and depth extensions of the K2 and other mineralised structures associated with the greater Pegasus deposit (eg. Pode, K2B etc).
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Diagrams of highlighting potential extensions to mineralisation are included in this release.

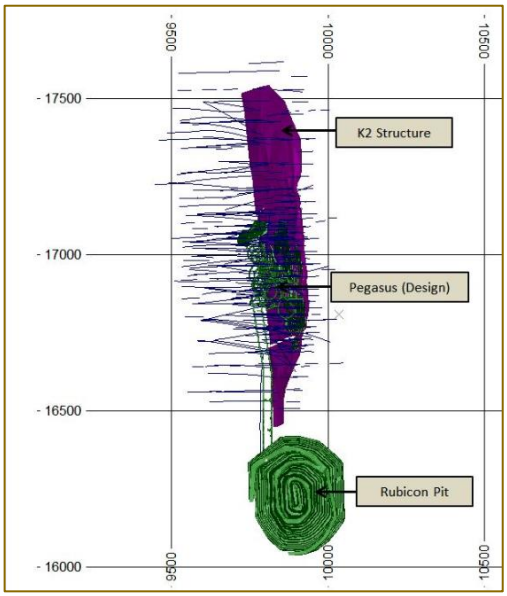
Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

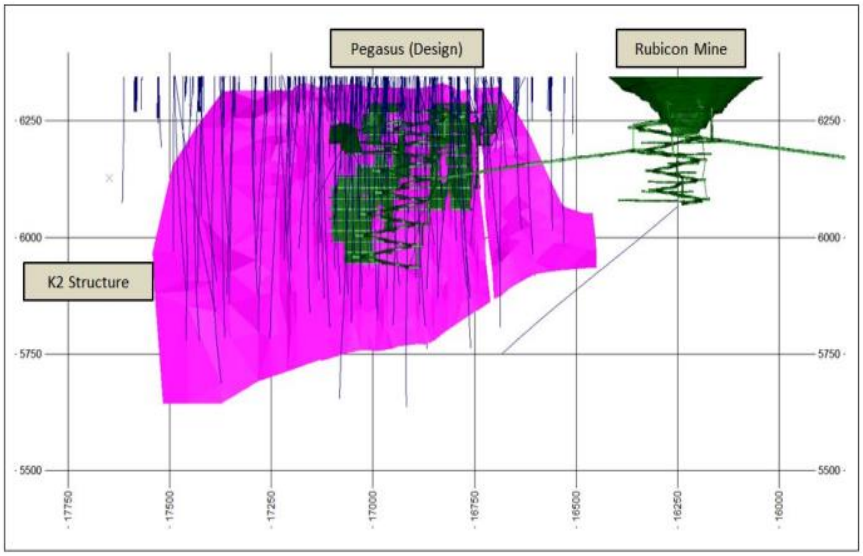
Criteria	JORC Code explanation	Commentary
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	All data is stored in a digital database with logging of changes and management of data integrity. Validation is enforced when the data is captured. Data is exported to ASCII files before importation into resource modeling software, no manual editing is undertaken on any data during the export/import process.
	Data validation procedures used.	All data is manually validated and only approved data is used for resource estimation.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	Multiple site visits undertaken by the Competent Person, Geologists supervising the drilling programs and preparing the Geological interpretation.
	If no site visits have been undertaken indicate why this is the case.	Not applicable.
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	Extensive experience mining similar deposits immediately along strike supports high confidence in the quality of the Geological interpretation.
	Nature of the data used and of any assumptions made.	The interpretation is primarily supported by Geological logging of Diamond Drill core.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	No alternative interpretations have been completed or contemplated.
	The use of geology in guiding and controlling Mineral Resource estimation.	The interpretation of the main K2 structure is based on the presence of Quartz veining and the existence of the K2 structure.
	The factors affecting continuity both of grade and geology.	Structural features are known to offset the veining and K2 structure, these are incorporated into the resource model when they are identified in drilling.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	Mineralisation has been identified over a strike length approximately of 1500m and over a depth of approximately 700m. Mineralisation typically occurs as distinct domains between 1m and 2m thick.
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	Drill holes were composited into 1m intervals down hole within each interpreted domain. The composite lengths were allowed to vary between 0.5m and 1.5m to ensure that no sampling was lost during the compositing process. The average grade and total length of the composite data was compared against the average grade and total length of the uncomposited data to check the compositing process. The distribution of composite lengths was checked to ensure that the majority of the composites were close to the targeted length. Ordinary Kriging was used in areas with good drill coverage, Simple Kriging was used to estimate areas with poor drill coverage The local mean value used for Simple Kriging was calculated from the declustered mean of the top-cut composited sample data. Search distances used for estimation based on variogram ranges and vary by domain. Grades were estimated into 10m(N/S) x 10m(elev) panels. Drill spacing is generally around 20m x 20m for the indicated resource and around 40m x 40m for the inferred resource. The Kriging neighbourhood was refined using statistical measures of Kriging quality.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	Post estimation, resource estimations do not have tonnage or grade factors applied.
	The assumptions made regarding recovery of by-products.	No assumptions are made and only gold is defined for estimation.
	Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).	No deleterious elements estimated in the model.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	Block size is 5m x 5m sub-blocked to 2.5m x 2.5m to suit the narrow north-south orientation of the majority of the domains. Average sample spacing is 3.1m in the case of face samples. Search ellipsoids are 50 * 120 * 30m to 75 * 120 * 75m, varying for each zone and the minimum number of samples required on successive passes.
	Any assumptions behind modelling of selective mining units.	No assumptions made.
	Any assumptions about correlation between variables.	No assumptions made.

Criteria	JORC Code explanation	Commentary
	Description of how the geological interpretation was used to control the resource estimates.	One domain is used to constrain the main ore zone with dilution skins of 0.5m used to constrain the immediate footwall and hangingwall outside the main ore zone. Hangingwall lodes were constrained according to geological features. Each domain is validated against the lithology, and then snapped to the drill-hole and face data to constrain the mineralised envelope as a footwall and hangingwall surface. "Ore" wireframes are created within the geological shapes based on drill core logs, face samples and grade. Low grades can form part of an ore wireframe. A dilution 'skin' is translated 0.5m on both the footwall and hangingwall of the main ore wireframe and is estimated separately to the main ore and surrounding waste but not reported.
	Discussion of basis for using or not using grade cutting or capping.	Top-cuts were applied to the sample data based on a statistical analysis of the data and vary by domain.
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	The estimated grades were assessed against sample grades and against declustered mean values.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnes were assumed to be dry.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	A cut-off grade of 3.7gpt was adopted based on calculated costs and revenue at existing operations.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	A 2m minimum mining width was assumed for the evaluation. Where required the resource was diluted to the minimum mining width using material with an assumed grade of 0.1gpt. Where the diluted grade was above the cut-off the material was added to the resource inventory. Dilution material added to make the minimum mining width was not included in the resource inventory.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	Metallurgical test work results show that the mineralisation is amendable to processing through the Kanowna Belle treatment plant. Ore processing throughput and recovery parameters were estimated based on historic performance and potential improvements available using current technologies and practices. Metallurgical recovery factors have been developed based on extensive experience processing similar material from the Kundana Area.
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	The utilization of existing infrastructure will minimise the impact of development of the project. Existing waste rock and tailings storage facilities have adequate available capacity to accommodate the project.
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	Bulk density measurements from project drilling and from production within the area were used to assign values within interpreted weathering horizons.
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.	No/minimal voids are encountered in the ore zones and underground environment.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Bulk densities are applied to domains for the ore zone, footwall and hangingwall as constrained by the lode wireframes.
Classification	The basis for the classification of the Mineral Resources into varying confidence categories.	The classification of the resource was based on a series of factors including: - Geological and grade continuity - Density of available drilling - Statistical evaluation of the quality of the kriging estimate.

Criteria	JORC Code explanation	Commentary
	Whether appropriate account has been taken of all relevant factors (ie. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	Appropriate account has been taken of all factors.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	This mineral resource estimate is considered representative.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	The resource model has been reviewed by Northern Star's staff.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	This mineral resource estimate is considered as robust and representative of the Kundana style of mineralisation. The application of geostatistical methods has helped to increase the confidence of the model and quantify the relative accuracy of the resource.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	The estimate is considered to be robust on a local scale for material classified as indicated. Material classified as inferred or sub-inferred is considered to be robustly estimated on a global scale.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	Trial mining has commenced at Pegasus. No Pegasus ore has been processed at this point and will be treated as a batch trial. Initial face sampling of development drives indicates good overall reconciliation with the model.



Plan View Pegasus Drilling with K2 Footwall Wireframe



Section View Pegasus Drilling with K2 Footwall Wireframe