



EKJV Exploration Report

December 2017 Quarter

ASX ANNOUNCEMENT

23 January 2018

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EAST KUNDANA JOINT VENTURE



December 2017 Quarter EKJV Exploration Report

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1 EXECUTIVE SUMMARY

Exploration activity in the December 2017 quarter consisted of in-mine exploration within the Hornet-Rubicon-Pegasus and Raleigh mining centres.

Regional exploration consisted of drilling on two projects with assay results returned for a third program drilled in the previous quarter.

Project	Prospect	Tenement	RAB/AC Metres	RAB/AC Samples	RC Metres	RC Samples	DD Metres	DD Samples	ME Samples
Regional	Pegasus Footwall	M16/309			1,114	1,265	746		347
	Papa Bear	M16/309			84	95	1,814		170
	Falcon	M16/309						1,260	270
RHP In-mine	Rubicon	M16/309					4,816	2,822	
	Hornet	M16/309					605	236	
Raleigh In-mine	Raleigh Footwall	M15/993					-	1,243	
TOTAL			-	-	1,195	1,360	7,981	5,561	787

Table 1. EKJV exploration activity for the September Quarter.

2 EXPLORATION ACTIVITY

Regional exploration on EKJV tenure for the December quarter consisted of:

- Two EIS co-funded diamond drill holes at Papa Bear to assist in determining the stratigraphy of the Black Flag Group.
- A single RC drill hole at Papa Bear to twin a previous diamond hole that had poor core recovery through a mineralised zone.
- A RC/diamond drilling program at the Pegasus Footwall project.

In mine exploration consisted of programs on the following prospects:

- Rubicon K2
- Hornet K2
- Raleigh Footwall

2.1 Pegasus Footwall

The program comprised a total of three HQ diamond holes (746m) and six RC holes (1,114m) were drilled to resolve the geometry of the geology units in the area which were imaged in the 2015 seismic survey.

Hole ID	Tenement	Start Date	End Date	Depth	East (Local)	North (Local)	RL (Local)	Hole Type	Dip	Azimuth (Local)
STRC17005	M16/309	8-Oct-17	9-Oct-17	204	332474	6599650	345	RC	-60	60
STRC17006	M16/309	10-Oct-17	10-Oct-17	42	332604	6599517	345	RC	-60	60
STRC17007	M16/309	11-Oct-17	12-Oct-17	210	332534	6599462	345	RC	-60	60
STRC17008	M16/309	12-Oct-2017	13-Oct-17	210	332682	6599237	345	RC	-60	60
STRC17010	M16/309	13-Oct-17	16-Oct-17	232	332940	6598850	345	RC	-60	60
STRC17013	M16/309	16-Oct-2017	17-Oct-17	216	333353	6598373	345	RC	-60	60
STDD17009	M16/309	30-Oct-17	2-Nov-17	198	332876	6598983	343	DD	-60	60
STDD17011	M16/309	3-Nov-17	6-Nov-17	331	333115	6598806	345	DD	-60	240
STDD17012	M16/309	7-Nov-17	10-Nov-17	217	333137	6598611	344	DD	-60	60

Table 2. Drilling summary for Pegasus Footwall, December 2017.

2.2 Papa Bear

Two drilling projects were completed at the Papa Bear prospect in the December quarter.

Two EIS co-funded diamond drill holes were drilled (1,814m) to determine and refine the stratigraphy internal to the Black Flag Group. Downhole gamma surveys, extensive multi-element analysis (pXRF and whole rock), petrography and geological logging will be used to refine the stratigraphic sequence.

One RC hole was drilled to twin anomalous results recorded in one diamond drill hole the previous quarter. The diamond hole returned grades between 1.5 and 18 g/t across a zone of 75% core loss.

Hole ID	Tenement	Start Date	End Date	Depth	East (Local)	North (Local)	RL (Local)	Hole Type	Dip	Azimuth (Local)
PBDD17108	M16/309	13-Oct-2017	02-Nov-2017	907	333328	6598866	343	DD	-60	45
PBDD17109	M16/309	03-Nov-2017	23-Nov-2017	907	333702	6599185	342	DD	-60	45
PBRC17110	M16/309	04-Nov-2017	04-Nov-2017	84	332942	6599891	345	RC	-55	45

Table 3. Drilling summary for Papa Bear project, December 2017.

2.3 Rubicon- Hornet-Pegasus (RT)

A total of 14 underground diamond holes (5,422 metres) were drilled targeting various mineralised positions in the Hornet-Rubicon-Pegasus (RHP) Mine. This included:

- 13 holes targeting Rubicon K2 at depth;
- 1 hole targeting the lower portion of Hornet K2

Hole ID	Depth	East (MGA)	North (MGA)	RL (AHD)	Hole Type	Dip	Azimuth (MGA)
RUBRT17118	251.82	333306.9891	6597289.261	-303.03	DD_NQ	46.45	-26.28
RUBRT17119	323.82	333306.864	6597289.208	-303.118	DD_NQ	37.97	-41.1
RUBRT17120	335.83	333306.7565	6597289.16	-303.249	DD_NQ	29.06	-50.46
RUBRT17121	443.9	333306.7151	6597289.146	-303.378	DD_NQ	33.82	-62.67
RUBRT17122	435	333306.2796	6597289.154	-303.505	DD_NQ	21.56	-56.67
HORRT17061	605.6	333537.1072	6596856.789	-238.078	DD_NQ	80.39	-72.65
RUBRT17139	278.98	333221.7021	6597431.167	-328.569	DD_NQ	35.63	-19.37
RUBRT17140	320.83	333221.6669	6597431.126	-328.758	DD_NQ	31.84	-37.36
RUBRT17141	368.85	333221.5816	6597431.112	-328.766	DD_NQ	27.57	-47.91
RUBRT17142	468.49	333221.5869	6597431.066	-328.823	DD_NQ	25.83	-61.43
RUBRT17143	351.49	333220.9302	6597431.564	-328.298	DD_NQ	25.22	-12.12
RUBRT17144	360.04	333221.1157	6597431.685	-328.647	DD_NQ	21.61	-26.23
RUBRT17145	410.63	333221.0924	6597431.628	-328.773	DD_NQ	18.69	-37.56
RUBRT17146	466.75	333221.111	6597431.613	-328.843	DD_NQ	19.85	-50.87

Table 4. Drilling physicals for the in-mine exploration at RHP.

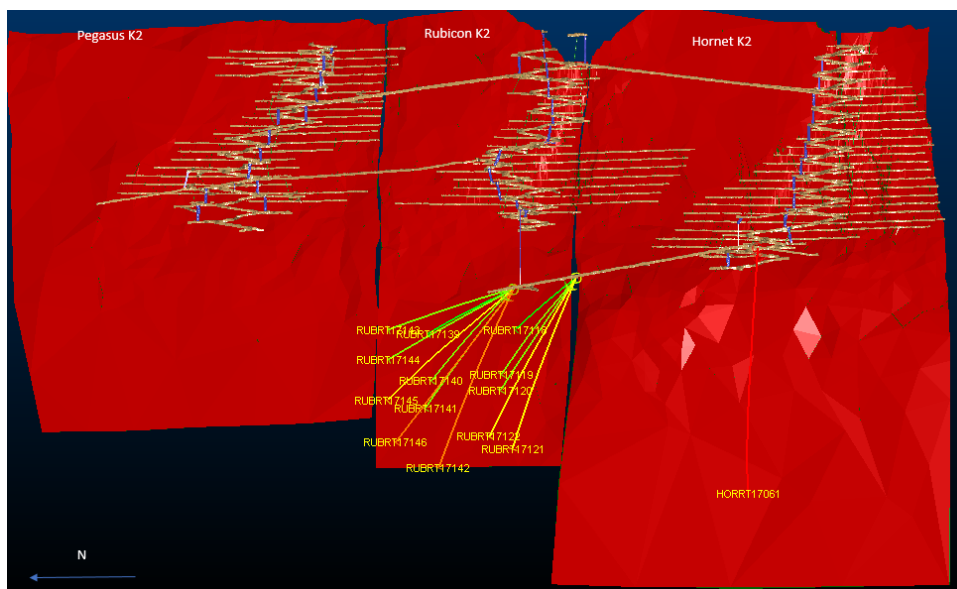


Figure 1. Overview of Hornet-Rubicon-Pegasus project showing in-mine drill programs targeting the Rubicon K2 and Hornet K2 during the quarter.

3 EXPLORATION RESULTS

3.1 Pegasus Footwall

All results from the RC component of the Pegasus Footwall program were received with a best result of 5 m at 1.05 g/t in STRC17013. Diamond drill hole results are still outstanding and are expected early January.

Hole ID	East (MGA)	North (MGA)	RL (AHD)	Dip	Azi (MGA)	Hole Depth	From	To	DH Width	Grade g/t Au
STRC17005	332474	6599650	345	-60	60	204	158	159	1	3.6
STRC17013	333353	6598373	345	-60	60	216	200	205	5	1.05

Table 5. Significant Intercepts returned during the December quarter.

3.2 Papa Bear

Results were received for the one RC drill hole drilled at Papa Bear during December. This hole twinned PBDD17002 which returned grades between 1.5 and 18g/t across a zone of 75% core loss. The result from this RC hole confirmed the previous diamond drilling result.

Hole ID	East (MGA)	North (MGA)	RL (MGA)	Dip	Azi (MGA)	Hole Depth	From	To	DH Width	Grade g/t Au
PBRC17110	332937	6599887	345	-55	45	84	60	61	1	3.99

Table 6. Significant Intercepts returned during December quarter.

No results have been returned from the EIS co-funded Papa Bear diamond program completed in the quarter.

3.3 Falcon

All assay results from previous drilling programs at the Falcon prospect were received during the quarter.

Except for FLDD17003, all holes intersected the Starbuck structure and returned encouraging results. This drilling has highlighted the apparent complexity of the Falcon mineralisation in this area. While the Starbuck structure appears as a wide, coherent corridor, gold grades are widely variable with additional moderate mineralisation up to 80 m into the footwall of the main structure. This footwall zone contains some visible gold although the final assay results do not always reflect this.

The Starbuck structure remains open at depth with further surface and underground drilling required to define this structure at depth.

Hole ID	East (MGA)	North (MGA)	RL (MGA)	Dip	Azi (MGA)	Hole Depth	From	To	DH Width	Grade g/t Au
FLDD17001	332651	6598237	345	-60	060	138.7	91.80	92.63	0.83	11.0
FLDD17002	332619	6598273	345	-60	060	183.6	54.23	56.46	2.23	6.9
FLDD17002	332619	6598273	345	-60	060	183.6	72.00	80.95	8.95	2.52
FLDD17003	332581	6598276	345	-60	060	219.7				NSI
FLDD17004	332627	6598153	345	-60	060	286.0	114.64	117.88	3.24	2.86
FLDD17004	332627	6598153	345	-60	060	286.0	122.40	123.74	1.34	6.55
FLDD17005	332557	6598170	345	-60	060	399.6	149.22	150.79	1.57	0.76
FLDD17005	332557	6598170	345	-60	060	399.6	187.78	188.38	0.6	17.7

Table 7. Falcon significant intercepts returned during December quarter.

3.4 Hornet-Rubicon Pegasus

3.4.1 Rubicon K2

Three of the thirteen diamond holes drilled successfully intercepted significant gold mineralisation whilst nine diamond holes intercepted the shale/IVT contact with either no structure or minor structure with no grade. Assay results for the final diamond hole is still pending.

The best intersection was recorded in RUBRT17143 (northern most hole) which intersected a laminated K2 quartz vein on the contact assaying 0.4 m (Tw) @ 14.8g/t from 297.48m.

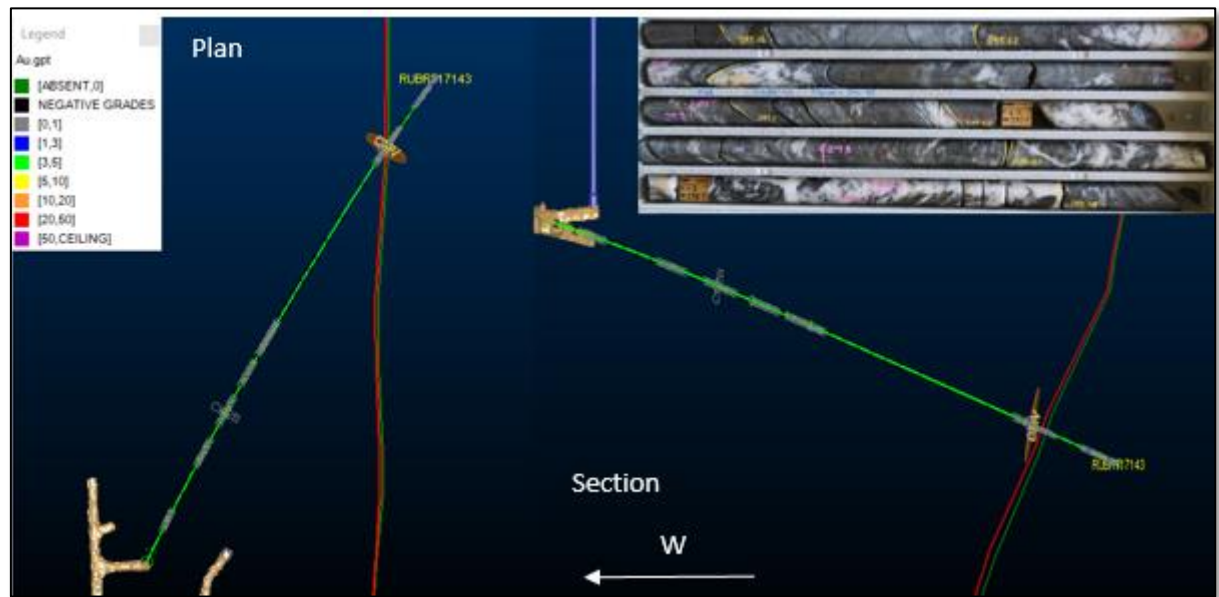


Figure 2. Plan and cross section view of Rubicon K2 drilling with core photographs of the significant result from RUBRT17143.

Hole ID	East (MGA)	North (MGA)	RL (ADH)	Dip	Azi (MGA)	Hole Depth	From (m)	To (m)	Width (m)	Grade (g/t)	True Width
RUBRT17120	333307	6597289	-303	-51	360	335.8	303.22	305.50	2.28	4.20	0.74
RUBRT17135	333223	6597430	-329	-20	034	221.8	168.53	169.65	1.12	5.19	0.98
RUBRT17143	333221	6597432	-328	-13	356	351.5	297.48	298.32	0.84	14.8	0.40

Table 8. Summary of significant assay results for Rubicon K2

3.4.2 Hornet K2

The single diamond drill hole completed during the quarter successfully intercepted significant gold mineralisation on the K2 structure.

HORRT17061, one of the most southern and deepest holes in the planned Hornet extension drilling, intersected the Hornet K2 structure which presents as a strongly mineralised quartz veins on the hanging wall contact. Selected high grade assay results include:

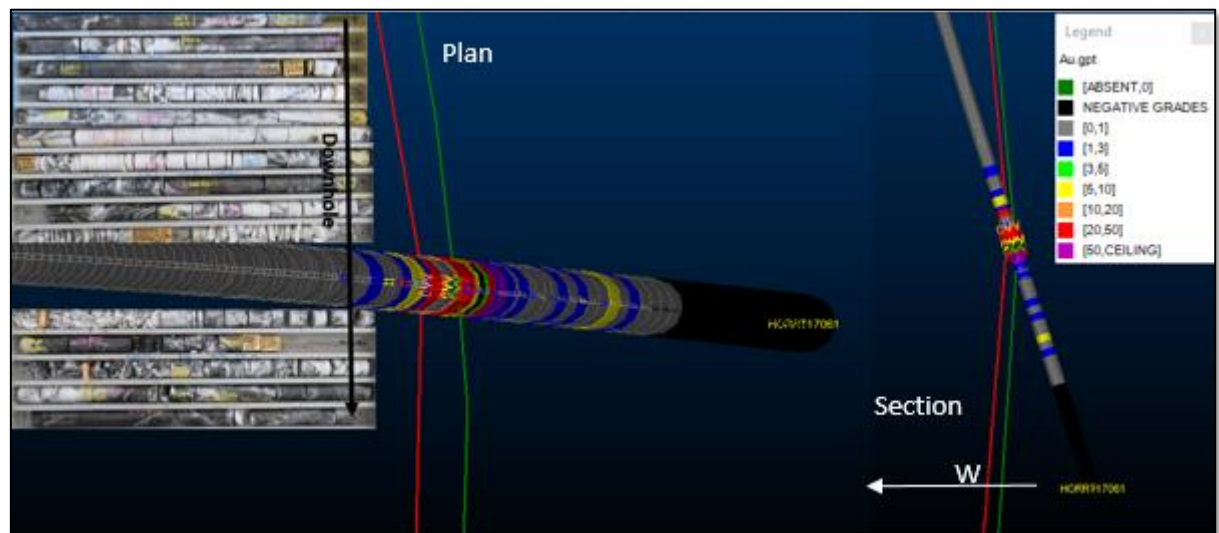


Figure 3. Plan and cross section view of Rubicon K2 with close-up and core photographs of the significant result in hole HORRT17061

Hole ID	East (MGA)	North (MGA)	RL (ADH)	Dip	Azi (MGA)	Hole Depth	From (m)	To (m)	Width (m)	Grade (g/t)	True Width
HORRT17061	333537	6596857	-238	-72	051	605.6	563.75	571.29	7.54	13.03	2.95
HORRT17061	333537	6596857	-238	-72	051	605.6	568.80	571.29	2.49	24.41	0.97
HORRT17061	333537	6596857	-238	-72	051	605.6	571.90	574.00	2.10	52.97	0.82

Table 9. Summary of significant assay results for Hornet K2.

3.5 Raleigh

Final assay results were received for two diamond drill holes completed into the footwall of the Raleigh structure during the previous quarter.

The gold mineralised zones are characterised by narrow, laminated quartz veins either cross-cutting or slightly oblique to the surrounding foliation

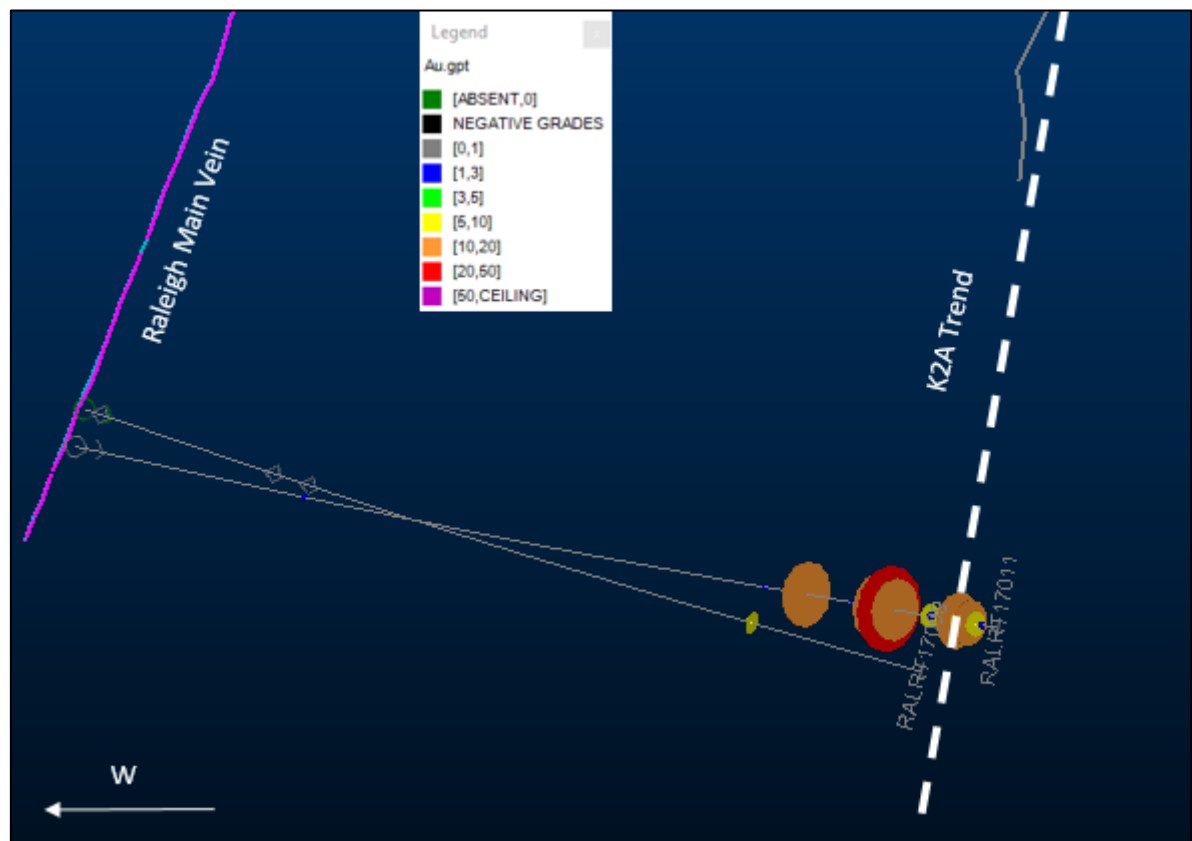


Figure 4. Cross section of Raleigh showing in-mine exploration results of the Footwall prospect.

Hole ID	East (MGA)	North (MGA)	RL (ADH)	Dip	Azi (MGA)	Hole Depth	From (m)	To (m)	Width (m)	Grade (g/t)	True Width
RALRT17009	331917	6598723	-97	-13	097	498.5	394.4	394.8	0.4	2.04	0.25
RALRT17009	331917	6598723	-97	-13	097	498.5	396.30	396.75	0.45	5.67	0.32
RALRT17011	331991	6598508	-92	-6	109	634.3	496.0	497.0	1.0	16.6	0.52
RALRT17011	331991	6598508	-92	-6	109	634.3	548.04	548.42	0.38	17.5	0.35
RALRT17011	331991	6598508	-92	-6	109	634.3	554.95	556.70	1.75	11.0	1.5
RALRT17011	331991	6598508	-92	-6	109	634.3	560.0	561.0	1.0	15.9	0.9
RALRT17011	331991	6598508	-92	-6	109	634.3	585.41	586.55	1.14	4.70	1.0
RALRT17011	331991	6598508	-92	-6	109	634.3	605.00	606.83	1.83	7.30	1.6
RALRT17011	331991	6598508	-92	-6	109	634.3	609.15	609.6	0.45	5.00	0.4
RALRT17011	331991	6598508	-92	-6	109	634.3	614.0	615.0	1.0	11.6	0.8
RALRT17011	331991	6598508	-92	-6	109	634.3	618.0	619.0	1.0	6.48	0.8
RALRT17011	331991	6598508	-92	-6	109	634.3	623.0	624.0	1.0	2.05	0.8

Table 10. Summary of significant assay results for Raleigh Footwall.

4 FUTURE WORK

4.1 In-mine Exploration

Drilling will continue to test the extents of K2 between 5650RL and 5290RL at Rubicon K2 north from the Link drill drive. The northern down-dip extents of PODEN will be targeted from the Pegasus 5920 drill drive with some holes extended towards the Falcon prospect. The Falcon area will also be targeted from the Pegasus 6245 level.

4.2 Regional Exploration

Interpretation of the significant amount of data gathered from the Papa Bear EIS co-funded diamond drill holes will result in a better understanding of the Black Flag formation which will aid future drill targeting in this area.

Competency statement

The information in this report relating to Exploration Results is based on information compiled by Mr Michael Mulroney who is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient exploration experience which is relevant to the style of mineralisation under consideration to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Mulroney is a full-time employee of Northern Star Resource Limited and consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

5 APPENDIX 1

JORC Code, 2012 Edition – Table 1

Section 1 - Sampling Techniques and Data

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

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (e.g. 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 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 (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g 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 (e.g. submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> Sampling was completed using Diamond (DD) and Aircore (AC) drilling. Diamond core was transferred to core trays for logging and sampling. Full core samples were nominated by the geologist from HQ or NQ diamond core, with a minimum sample width of 20cm and a maximum width of 120cm. Scoop samples were taken by scooping across the top of the pile from one side to the other. Where recovery was poor the majority of the sample was taken, with care not to sample any underlying dirt/topsoil. RC samples were split using a rig-mounted cone splitter on one metre intervals to obtain a sample for assay. These one metre samples were immediately submitted for assay. Samples were transported to various analysis laboratories in Kalgoorlie for preparation by drying, crushing to <3mm, and pulverizing the entire sample to <75µm. 300g Pulp splits were analysed in laboratories in both Kalgoorlie and Perth for 50g Fire assay charge and AAS analysis for gold.
Drilling techniques	<ul style="list-style-type: none"> Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.). 	<ul style="list-style-type: none"> Diamond drilling was used from surface. HQ (63.5mm) diameter core was used where practical for surface diamond holes. For underground drilling and where HQ drilling was impractical from surface, NQ2 (50.6mm) diameter core was used. Core was orientated using an electronic 'back-end tool' core orientation system. RC Drilling was completed using a 5.25" drill bit.
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	<ul style="list-style-type: none"> 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. Recovery was excellent for diamond core and no relationship between grade and recovery was observed. RC drilling contractors adjust their drilling approach to specific conditions to maximize sample recovery. Moisture content and sample recovery is recorded for each sample. Recovery was often poor for the first four metres of each hole, as is normal for this type of drilling in overburden. For RC drilling no relationship has been observed between recovery and grade.

Criteria	JORC Code Explanation	Commentary
Logging	<ul style="list-style-type: none"> 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> All diamond core is logged for regolith, lithology, veining, alteration, mineralisation and structure. Structural measurements of specific features are taken through oriented zones. All logging is quantitative where possible and qualitative elsewhere. A photograph is taken of every core tray. All RC sample chips are logged in one metre intervals for regolith and veining, and for lithology, mineralisation, and alteration where visible. A photograph is taken of the collected chip trays of each hole. All data for diamond and RC was recorded digitally.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> All diamond core was half-core sampled after cutting longitudinally with an automated core saw. All RC samples are split using a rig-mounted cone splitter to collect a one metre sample 3-4kg in size. Moisture content of the sample is recorded, and noted if wet samples are obtained. Sample sizes for RC are considered appropriate for the mineralisation style targeted. Field duplicates were taken for RC samples at a rate of 1 in 50. RC duplicates are taken as a second one metre direct from the cyclone splitter mounted on the rig. Sample preparation was conducted at various laboratories in 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. The entire crushed 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. Grind checks are performed at both the crushing stage (3mm) and pulverising stage (75µm), requiring 90% of material to pass through the relevant size to ensure consistent sample preparation. Screen Fire Assay (SFA) analysis was completed on selected samples where coarse visible gold was observed in the core.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	<ul style="list-style-type: none"> A 50g fire assay charge is used with a lead flux, dissolved in the furnace. The prill is totally digested in HCl and HNO₃ acids before Atomic Absorption Spectroscopy (AAS) determination for gold analysis. This method ensures total gold is reported appropriately. Screen Fire Assay (SFA) analysis using a 75-micron screen separates a sample into oversize and undersize which are then both fire assayed, with a total gold content calculated from these results. This method is equivalent to assaying an entire sample to extinction and ensures total gold is reported appropriately. No geophysical tools were used to determine any element concentrations Certified Reference Materials (CRMs) are inserted into the sample sequence randomly at a rate of 1 per 20 composite samples to ensure correct calibration. Any values outside of 3 standard deviations are scrutinised and re-assayed with a new CRM if the failure is deemed genuine. Blanks are inserted into the sample sequence at a rate of 1 per 20 composite samples. Failures above 0.2g/t are scrutinised, and re-assayed if required. New pulps are prepared if failures remain. All sample QAQC results are assessed by geologists to ensure the appropriate level of accuracy and precision when the results have been returned from the laboratory.

Criteria	JORC Code Explanation	Commentary
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> All significant intersections are verified by the project geologist and senior geologist during the drill hole validation process. No holes were twinned as part of the programs in this report. Geological logging was captured using Acquire database software. Both a hardcopy and electronic copy of these are stored. Assay files are received in csv format and loaded directly into the database by the supervising geologist who then checks that the results have inserted correctly. Hardcopy and electronic copies of these are also kept. No adjustments are made to this assay data.
Location of data points	<ul style="list-style-type: none"> 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. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> A planned hole is pegged using a GPS by the field assistants for RC holes and a differential GPS for diamond holes. During RC drilling, single-shot surveys are every 30m to ensure the hole remains close to design. This is performed using the Reflex Ez-Trac system which measures the gravitational dip and magnetic azimuth results are uploaded directly from the Reflex software export into the Acquire database. During diamond hole 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 a specialist downhole survey contractor, taking readings every 5m for improved accuracy. This is done in true north. The final hole collar for each diamond hole is picked up after drillhole completion by DGPS in the MGA 94_51 grid. Good quality topographic control has been achieved through regional topographic maps ($\pm 2.5\text{m}$) based on photogrammetry data.
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> Early stage diamond and RC drilling is variably spaced to effectively test the desired target. Spacings of the regional drilling programs range from 80m apart through to several hundred metres apart through to isolated single drillholes in some cases. These variable spacings are considered appropriate for early-stage testing of exploration targets. In-mine diamond drillholes spacings are also variable from 80m apart through to isolated single drillholes. Closer spaced drilling is considered operational drilling, beyond the scope of this report. No compositing has been applied to these exploration results, although composite intersections are reported.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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. 	<ul style="list-style-type: none"> All drilling both underground and surface is oriented as close as practical to perpendicular to the target structures. The orientation of all in-mine target structures is well known and drill holes are only designed where meaningful intercept angles can be achieved. No sampling bias is considered to have been introduced by the drilling orientation.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Prior to laboratory submission samples are stored by Northern Star in a secure yard. Once submitted to the laboratories they are stored in a secure fenced compound, and tracked through their chain of custody via audit trails.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> No audits or reviews have recently been conducted on sampling techniques, however lab audits are conducted on a regular basis.

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	<ul style="list-style-type: none"> 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. 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. 	<ul style="list-style-type: none"> All diamond holes mentioned in this report are located within the M16/309 and M15/993 Mining leases held by The East Kundana Joint Venture (EKJV). The EKJV is majority owned and managed by Northern Star Resources Ltd (51%). The minority holding in the EKJV is held by Tribune Resources Ltd (36.75%) and Rand Mining Ltd (12.25%). The tenement on which the Papa Bear and Raleigh prospects are hosted (M16/309) is subject to two royalty agreements; however, neither of these is applicable to the Prospects described in this report. The agreements concerned are the Kundana- Hornet Central Royalty and the Kundana Pope John Agreement No. 2602-13. No known impediments exist and the tenement is in good standing
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Previous work on the Papa Bear area consists only of very sparse and patchy RAB and air core drilling in 2000 and 2002 by Goldfields Limited. The area has received very limited attention since that time. Underground drilling on the Raleigh and Hornet-Rubicon-Pegasus mines extends the mineralised trends from older drilling including that of previous operators of those mines including Barrick Gold, Placer Dome Asia-Pacific, Aurion Gold and other predecessors.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> 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. The Zuleika Shear Zone in the Kundana area comprises multiple anastomosing shears the most important of which are the K2, the K2A and Strzelecki Shears. Information contained in this report specific to the Papa Bear project relates to a package of yet undifferentiated volcanogenic sedimentary rocks of the Black Flag Group east of the Zuleika Shear Zone and west of the Kurrawang Formation, as well as conglomerates and sandstones of the Kurrawang Formation. Also present are granitic intrusions ranging in thickness from one metre to hundreds of metres thick emplaced along the Kurrawang Unconformity, the contact between the Black Flag Group and the Kurrawang Formation. Raleigh mineralisation is hosted on the Strzelecki Structure. Strzelecki mineralisation consists of very narrow, very high grade mineralisation on a laminated vein hosted in the camp-scale Strzelecki Shear which abuts a differentiated mafic intrusive, the Powder Sill Gabbro against intermediate volcanoclastic rocks (Black Flag Group). A thin 'skin' of volcanogenic lithic siltstone-sandstone lies between the gabbro and the Strzelecki shear. Being bound by an intrusive contact on one side and a sheared contact on the other, the thickness of the sedimentary package is highly variable from absent to about forty metres true width. The Hornet-Rubicon-Pegasus mineralisation consists primarily of high-grade laminated vein hosted gold on the K2 plane of the Zuleika shear with additional mineralisation on associated lower order structures. The Falcon target is a related mineralised zone in the hanging wall to Pegasus and between the two main Zuleika structures, the K2 and Strzelecki structures.

Criteria	JORC Code Explanation	Commentary
Drill hole Information	<ul style="list-style-type: none"> 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"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 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. 	<ul style="list-style-type: none"> Refer to the various tables in the body of this report. Exploration results that are not material to this report are excluded for some drill programs, however the drill physicals are all detailed for all drilling regardless of the outcome.
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. 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. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> Diamond drill and RC results are reported as aggregates across the target zone.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). 	<ul style="list-style-type: none"> The orientation of target structures is well known for all in-mine exploration targets and true widths can be accurately calculated and are reported accordingly. Both the downhole width and true width have been clearly specified when used. Results for regional drilling are reported as downhole width. Location and orientation of structures/mineralisation is not known, therefore the true width of intercepts is not known.
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Refer to the figures the body of this report for the spatial context of all holes planned and drilled to date.
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Exploration results that are not material to this report are excluded for some drill programs, however the drill physicals are all detailed for all drilling regardless of the outcome. Only anomalous results are reported for aircore results. The drilling physicals of all aircore holes are individually listed, those without corresponding results reported had no significant intercepts.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No other material exploration data has been collected for this drill program.

Criteria	JORC Code Explanation	Commentary
Further work	<ul style="list-style-type: none"> ▪ The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). ▪ Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<ul style="list-style-type: none"> ▪ Interpretive work will be undertaken on the Falcon and Papa Bear prospects once all results are returned. ▪ Thin but well mineralised veins in the Pegasus Footwall drilling will be followed-up with a combination of surface diamond and RC drilling. ▪ In-mine drilling will continue to test the extents of K2 between RL's of 5650 and 5290. Drilling will be from the Hornet drill drive.