

# EKJV Exploration Report March 2017 Quarter

#### **ASX ANNOUNCEMENT**

27 April 2017

Australian Securities Exchange Code: RND

#### **Board of Directors:**

Mr Otakar Demis Chairman and Joint Company Secretary

Mr Anton Billis

Managing Director

Mr Gordon Sklenka
Non-Executive Director

Mr Roland Berzins

Joint Company Secretary

Rand Mining Ltd (ASX code: RND) has pleasure in providing the Quarterly EKJV Exploration Report dated 26 April 2017.

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# EAST KUNDANA JOINT VENTURE



March 2017 Quarterly EKJV Exploration Report

#### For distribution to JV Partners:

- Northern Star Resources Limited
- Tribune Resources Limited
- Rand Mining Limited



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# 1 EXECUTIVE SUMMARY

Exploration activity in the March 2017 quarter consisted of RAB/aircore drilling programs at Far Kundana West and Papa Bear areas in addition to ongoing diamond drilling at Raleigh South.

Table 1 summarises the activities.

Project	Prospect	Tenement	RAB/AC Metres	RAB/AC Samples	RC Metres	RC Samples	DD Metres	DD Samples	ME Samples
EKJV	Papa Bear	M16/309	3,442	908	-	-	-	-	83
EKJV	Papa Bear	M16/308	58	23	-	-	-	-	2
EKJV	Kundana Far West	M16/421	4,195	1087	-	-	-	-	109
EKJV	Raleigh South	M15/993	-	-	-	-	5,231	1,774	-
	TOTAL		7,695	1,110	-	-	5,231	1,774	111

Table 1- EKJV exploration activity for the December Quarter

#### 2 EXPLORATION ACTIVITY

# 2.1 Raleigh South

Twenty-eight diamond holes (5,231m) were completed at Raleigh South in the quarter as part of the Phase Two Upper Infill program. Of the twenty-eight holes completed, fourteen are diamond tails from RC pre-collars initiated in 2016 and fourteen are diamond holes drilled from surface.

Hole ID	Depth	East (MGA)	North (MGA)	RL (AHD)	Hole Type	Dip	Azimuth (MGA)
			RC pre-co	ollar - DDH			
RRCD16004	249.3	331975	6598677	345	DD Tail	-68	56
RRCD16006	303.6	331916	6598644	345	DD Tail	-69	79
RRCD16007	110	331921	6598645	345	DD Tail	-58	62
RRCD16008	290.4	331945	6598606	345	DD Tail	-69	74
RRCD16009	249.5	331946	6598606	345	DD Tail	-68	68
RRCD16010	231.5	331976	6598545	344	DD Tail	-57	73
RRCD16011	291.6	331980	6598545	344	DD Tail	-69	65
RRCD16012	246.4	331987	6598475	344	DD Tail	-61	62
RRCD16013	321.7	331991	6598476	344	DD Tail	-64	68
RRCD16014	198.6	331962	6598406	344	DD Tail	-67	71
RRCD16015	231.7	332053	6598484	344	DD Tail	-58	83
RRCD16016	291.8	332026	6598427	345	DD Tail	-66	74
RRCD16017	340.1	332013	6598387	345	DD Tail	-58	78
RRCD16018	261.9	331969	6598316	344	DD Tail	-66	68
			Diamond fr	om Surface			
RRDD16002	193.9	331900	6598805	346	DD	-55	60
RRDD16005	270.6	331916	6598644	345	DD	-64	66
RRDD16007	240	331945	6598606	345	DD	-58	62
RRDD16009	267.5	331976	6598545	344	DD	-68	68
RRDD17019	210.9	331944	6598603	345	DD	-50	67
RRDD17020	264.9	331942	6598600	345	DD	-64	70
RRDD17022	165.1	331955	6598566	345	DD	-55	64
RRDD17023	234.6	331956	6598566	345	DD	-61	64
RRDD17024	258.9	331957	6598566	345	DD	-66	65
RRDD17026	213.5	331986	6598546	344	DD	-51	63
RRDD17027	252.5	331985	6598546	344	DD	-62	64
RRDD17028	304.4	331983	6598546	344	DD	-72	60
RRDD17037	58.2	331962	6598406	344	Abandone d	-54	74
RRDD17039	300.5	332015	6598389	345	DD	-70	71

Table 2 - Raleigh South Drill hole summary



#### 2.2 Far Kundana West

The completed RAB/aircore program tested three NW-SE trending structures over an area of 3km<sup>2</sup>. highlighted by the 2016 SAM survey.

Eight drill lines, spaced 400m apart with drill hole spacings either 40m or 80m apart, were completed for a total of 218 drill holes. Four metre composite samples were collected for the entire drill hole length with one bottom-of-hole sample collected for multi-element analysis from each drill hole.

Drilling commenced in December 2016 with 125 of the 218 planned holes completed prior to the Christmas break period. Drill holes KWRB16001-76 were RAB drilled but persistent ground water issues prevented the drill rig drilling into fresh rock to produce fresh rock samples.

Drilling recommenced on 11 January 2017 with the remaining holes completed using aircore drilling. The program was completed on 6 February 2017 with a total of 4,195m drilled.

Twelve RAB holes were redrilled using aircore in order obtain fresh rock samples with all but one successful in reaching fresh rock. Five additional drill holes (KWRB16251-255) were added to the southernmost line of the program (Line H) to follow up observed veining along strike to the north which corresponded to a SAM lineation and anomalous assays.

Table 3 summarises the drill hole details with **Error! Reference source not found.** displaying the drill hole collar locations for program.

Hole ID	Depth	East (MGA)	North (MGA)	RL (MGA)	Hole Type	Dip	Azimuth (Local)
KWRB16009A	50	326132	6598987	343	AC	-90	0
KWRB16016A	36	326408	6599213	343	AC	-90	0
KWRB16017A	36	326437	6599237	343	AC	-90	0
KWRB16037A	48	326605	6598856	343	AC	-90	0
KWRB16040A	42	326703	6598941	343	AC	-90	0
KWRB16058A	44	326403	6598162	343	AC	-90	0
KWRB16059A	46	326435	6598194	343	AC	-90	0
KWRB16069A	9	326766	6598463	343	AC	-90	0
KWRB16072A	31	326936	6598612	343	AC	-90	0
KWRB16074A	31	326987	6598654	343	AC	-90	0
KWRB16075A	51	327014	6598675	343	AC	-90	0
KWRB16076A	45	327053	6598710	343	AC	-90	0
KWRB16126	39	326119	6596880	343	AC	-90	0
KWRB16127	40	326175	6596929	343	AC	-90	0
KWRB16128	30	326211	6596954	343	AC	-90	0
KWRB16129	28	326243	6596981	343	AC	-90	0
KWRB16130	14	326274	6597004	343	AC	-90	0
KWRB16131	25	326300	6597032	343	AC	-90	0
KWRB16132	22	326364	6597088	343	AC	-90	0
KWRB16133	38	326429	6597138	343	AC	-90	0
KWRB16134	34	326487	6597182	343	AC	-90	0
KWRB16135	44	326546	6597239	343	AC	-90	0
KWRB16136	31	326572	6597267	343	AC	-90	0
KWRB16137	45	326615	6597294	343	AC	-90	0
KWRB16138	32	326646	6597315	343	AC	-90	0
KWRB16139	44	326673	6597331	343	AC	-90	0
KWRB16140	38	326736	6597392	343	AC	-90	0
KWRB16141	26	326797	6597442	343	AC	-90	0
KWRB16142	26	326858	6597497	343	AC	-90	0
KWRB16143	47	326885	6597522	343	AC	-90	0
KWRB16144	54	326916	6597545	343	AC	-90	0
KWRB16145	58	326944	6597569	343	AC	-90	0
KWRB16146	71	326971	6597597	343	AC	-90	0
KWRB16147	60	327008	6597629	343	AC	-90	0
KWRB16148	54	327038	6597650	343	AC	-90	0
KWRB16149	43	327073	6597679	343	AC	-90	0
KWRB16150	42	327098	6597699	343	AC	-90	0
KWRB16151	39	327134	6597729	343	AC	-90	0
KWRB16152	39	327193	6597780	343	AC	-90	0
KWRB16153	41	327255	6597825	343	AC	-90	0
KWRB16154	42	327314	6597880	343	AC	-90	0
KWRB16155	58	327387	6597930	343	AC	-90	0



Hole ID   Depth   East (MGA)   North (MGA)   R. (MGA)   Hole Type   Dip   Azimuth (Local EXPRETED 156 - 39)   327-460   6-599033   343   AC   -90   0   0   NORTH (MGA)   R. (MGA)   Hole Type   Dip   Azimuth (Local EXPRETED 156 - 39)   327-461   4-59-6522   343   AC   -90   0   0   NORTH (MGA)   R. (MGA)								
EWR816157   57   326313   6595522   343   AC   -90   0	Hole ID	Depth	East (MGA)	North (MGA)	RL (MGA)	Hole Type	Dip	Azimuth (Local)
EWRB16159	KWRB16156		327460	6598003	343			
KWRB 1619								
KWRB16160   37   326437   6596624   343   AC   -90   0     KWRB16161   34   326475   6596655   343   AC   -90   0   0     KWRB16162   36   326469   6596779   343   AC   -90   0   0     KWRB16163   36   326531   6596779   343   AC   -90   0   0     KWRB16165   45   326556   6596864   343   AC   -90   0   0     KWRB16165   45   326656   6596864   343   AC   -90   0   0     KWRB16167   45   326676   6596881   343   AC   -90   0   0     KWRB16167   45   326757   6596967   343   AC   -90   0   0     KWRB16169   39   326803   6596932   343   AC   -90   0   0     KWRB16169   39   326803   6596932   343   AC   -90   0   0     KWRB16171   35   32687   6596967   343   AC   -90   0   0     KWRB16173   48   326876   6597091   343   AC   -90   0   0     KWRB16173   48   326895   6597014   343   AC   -90   0   0     KWRB16175   33   327053   6597091   343   AC   -90   0   0     KWRB16176   38   327036   6597091   343   AC   -90   0   0     KWRB16177   48   326895   6597091   343   AC   -90   0   0     KWRB16178   33   327053   6597144   343   AC   -90   0   0     KWRB16179   35   327142   3597140   343   AC   -90   0   0     KWRB16179   35   327142   3597140   343   AC   -90   0   0     KWRB16179   35   327142   3597140   343   AC   -90   0   0     KWRB16179   35   327142   3597140   343   AC   -90   0   0     KWRB16179   35   327142   3597140   343   AC   -90   0   0     KWRB16189   36   327130   343   AC   -90   0   0     KWRB16189   36   327130   343   AC   -90   0   0     KWRB16180   37   327247   3597340   343   AC   -90   0   0     KWRB16180   37   327387   3597340   343   AC   -90   0   0     KWRB16180   37   327387   3597340   343   AC   -90   0   0     KWRB16180   34   3273731   327574   349744   349745   349   AC   -90   0   0     KWRB16180   38   326654   3597591   343   AC   -90   0   0     KWRB16180   38   326654   3597591   343   AC   -90   0   0   0								
KWRB16162								
KWRB16162   36   326531   65967979   343   AC   -90   O								
KWRB16163								
KWRB16164								
KWRB16165								
KWRB16166   40   326719   6596857   343   AC   90   0   0   0   0   0   0   0   0								
KWRB16167								
KWRB16168   34   326777   6596907   343   AC   90   0								
KWRB16170								
KWBB16172		39					-90	
KWRB16172	KWRB16170	41	326837	6596957	343	AC	-90	0
KWRB16174		35	326871	6596991	343	AC	-90	0
KWRB16176	KWRB16172		326895	6597014	343		-90	0
KWRB16175   33   327053   6597144   343   AC   90   0	KWRB16173	48	326928	6597035	343	AC	-90	
KWRB16176   28   327108   6597190   343   AC   90   0								
KWRB16178   36   327142   6597223   343   AC   -90   0   0   0   0   0   0   0   0   0								
KWRB16178   36   327170   6597247   343   AC   -90   0   0								
KWRB16179								
KWRB16180								
KWRB16181   35   327262   6597321   343   AC   -90   0								
KWRB16182								
KWRB16184								
KWRB16185   37   327358   6597391   343   AC   -90   0   0								
KWRB16185   37   327387   6597421   343   AC   -90   0								
KWRB16187								
KWRB1618B								
KWRB16189								
KWRB16190   31   327546   6597552   343   AC   -90   0	KWRB16188	49	327481	6597507	343	AC	-90	0
KWRB16191   23   327578   6597580   343   AC   -90   0	KWRB16189	48	327511	6597524	343	AC	-90	0
KWRB16192   31   327596   6597604   343   AC   -90   0	KWRB16190	31	327546	6597552	343	AC	-90	0
KWRB16193         34         327630         6597627         343         AC         -90         0           KWRB16194         32         327656         6597650         343         AC         -90         0           KWRB16195         42         326484         6596136         343         AC         -90         0           KWRB16197         52         326575         6596215         343         AC         -90         0           KWRB16198         34         326601         6596234         343         AC         -90         0           KWRB16209         38         326634         6596264         343         AC         -90         0           KWRB16200         50         326665         6596299         343         AC         -90         0           KWRB16201         51         326699         6596321         343         AC         -90         0           KWRB16203         40         326764         6596377         343         AC         -90         0           KWRB16203         40         326764         6596377         343         AC         -90         0           KWRB16204         33         326802	KWRB16191	23		6597580	343	AC	-90	0
KWRB16194         32         327656         6597650         343         AC         -90         0           KWRB16195         42         326484         6596136         343         AC         -90         0           KWRB16196         42         326544         6596191         343         AC         -90         0           KWRB16197         52         326575         6596215         343         AC         -90         0           KWRB16198         34         326601         6596234         343         AC         -90         0           KWRB16200         50         326665         6596299         343         AC         -90         0           KWRB16201         51         326699         6596321         343         AC         -90         0           KWRB16202         26         326723         6596372         343         AC         -90         0           KWRB16203         40         326764         6596377         343         AC         -90         0           KWRB16203         40         326802         6596410         343         AC         -90         0           KWRB16203         40         326802	KWRB16192		327596	6597604	343		-90	0
KWRB16195         42         326484         6596136         343         AC         -90         0           KWRB16196         42         326544         6596191         343         AC         -90         0           KWRB16197         52         326575         6596215         343         AC         -90         0           KWRB16198         34         326601         6596234         343         AC         -90         0           KWRB16199         38         326634         6596266         343         AC         -90         0           KWRB16200         50         326655         6596299         343         AC         -90         0           KWRB16201         51         326699         6596321         343         AC         -90         0           KWRB16202         26         326723         6596321         343         AC         -90         0           KWRB16203         40         326744         6596377         343         AC         -90         0           KWRB16204         33         326802         6596372         343         AC         -90         0           KWRB16204         39         3268040								
KWRB16196         42         326544         6596191         343         AC         -90         0           KWRB16197         52         326575         6596215         343         AC         -90         0           KWRB16198         34         326601         6596234         343         AC         -90         0           KWRB16199         38         326634         6596266         343         AC         -90         0           KWRB16200         50         326665         6596299         343         AC         -90         0           KWRB16201         51         326699         6596321         343         AC         -90         0           KWRB16202         26         326723         6596343         343         AC         -90         0           KWRB16203         40         326744         6596377         343         AC         -90         0           KWRB16204         33         326789         6596372         343         AC         -90         0           KWRB16205         40         326802         659410         343         AC         -90         0           KWRB16206         39         326814								
KWRB16197         52         326575         6596215         343         AC         -90         0           KWRB16198         34         326601         6596234         343         AC         -90         0           KWRB16199         38         326634         6596266         343         AC         -90         0           KWRB16200         50         326665         6596299         343         AC         -90         0           KWRB16201         51         326699         6596321         343         AC         -90         0           KWRB16202         26         326723         6596343         343         AC         -90         0           KWRB16203         40         326764         6596372         343         AC         -90         0           KWRB16204         33         326896         6596392         343         AC         -90         0           KWRB16205         40         326802         6596392         343         AC         -90         0           KWRB16206         39         326834         6596449         343         AC         -90         0           KWRB16207         31         326870								
KWRB16198         34         326601         6596234         343         AC         -90         0           KWRB16199         38         326634         6596266         343         AC         -90         0           KWRB16200         50         326665         6596299         343         AC         -90         0           KWRB16201         51         326699         6596321         343         AC         -90         0           KWRB16202         26         326723         6596343         343         AC         -90         0           KWRB16203         40         326764         6596377         343         AC         -90         0           KWRB16204         33         326789         6596392         343         AC         -90         0           KWRB16205         40         326802         6596410         343         AC         -90         0           KWRB16205         40         326870         6596449         343         AC         -90         0           KWRB16207         31         326870         6596468         343         AC         -90         0           KWRB16208         27         326911								
KWRB16199         38         326634         6596266         343         AC         -90         0           KWRB16200         50         326665         6596299         343         AC         -90         0           KWRB16201         51         326699         6596321         343         AC         -90         0           KWRB16202         26         326723         6596343         343         AC         -90         0           KWRB16203         40         326764         6596377         343         AC         -90         0           KWRB16204         33         326789         6596392         343         AC         -90         0           KWRB16205         40         326802         6596410         343         AC         -90         0           KWRB16206         39         326834         6596449         343         AC         -90         0           KWRB16207         31         326870         6596488         343         AC         -90         0           KWRB16208         27         326911         6596504         343         AC         -90         0           KWRB16210         24         326979								
KWRB16200         50         326665         6596299         343         AC         -90         0           KWRB16201         51         326699         6596321         343         AC         -90         0           KWRB16202         26         326723         6596343         343         AC         -90         0           KWRB16203         40         326764         6596377         343         AC         -90         0           KWRB16204         33         326789         6596392         343         AC         -90         0           KWRB16205         40         326802         6596410         343         AC         -90         0           KWRB16206         39         326870         6596448         343         AC         -90         0           KWRB16207         31         326870         6596468         343         AC         -90         0           KWRB16208         27         326911         6596504         343         AC         -90         0           KWRB16209         39         326940         6596547         343         AC         -90         0           KWRB16210         24         326970								
KWRB16201         51         326699         6596321         343         AC         -90         0           KWRB16202         26         326723         6596343         343         AC         -90         0           KWRB16203         40         326764         6596377         343         AC         -90         0           KWRB16204         33         326789         6596392         343         AC         -90         0           KWRB16205         40         326802         6596410         343         AC         -90         0           KWRB16206         39         326834         6596449         343         AC         -90         0           KWRB16207         31         326870         6596468         343         AC         -90         0           KWRB16208         27         326911         6596504         343         AC         -90         0           KWRB16209         39         326940         6596524         343         AC         -90         0           KWRB16210         24         326970         6596574         343         AC         -90         0           KWRB16211         26         326999								
KWRB16202         26         326723         6596343         343         AC         -90         0           KWRB16203         40         326764         6596377         343         AC         -90         0           KWRB16204         33         326789         6596392         343         AC         -90         0           KWRB16205         40         326802         6596410         343         AC         -90         0           KWRB16206         39         326834         6596449         343         AC         -90         0           KWRB16207         31         326870         6596468         343         AC         -90         0           KWRB16208         27         326911         6596504         343         AC         -90         0           KWRB16209         39         326940         6596524         343         AC         -90         0           KWRB16210         24         326970         6596547         343         AC         -90         0           KWRB16211         26         326999         6596571         343         AC         -90         0           KWRB16212         13         327064								
KWRB16203         40         326764         6596377         343         AC         -90         0           KWRB16204         33         326789         6596392         343         AC         -90         0           KWRB16205         40         326802         6596410         343         AC         -90         0           KWRB16206         39         326834         6596449         343         AC         -90         0           KWRB16207         31         326870         6596468         343         AC         -90         0           KWRB16208         27         326911         6596504         343         AC         -90         0           KWRB16209         39         326940         6596544         343         AC         -90         0           KWRB16210         24         326970         6596547         343         AC         -90         0           KWRB16211         26         326999         6596571         343         AC         -90         0           KWRB16212         13         327064         6596626         343         AC         -90         0           KWRB16213         30         327122								
KWRB16204         33         326789         6596392         343         AC         -90         0           KWRB16205         40         326802         6596410         343         AC         -90         0           KWRB16206         39         326834         6596449         343         AC         -90         0           KWRB16207         31         326870         6596468         343         AC         -90         0           KWRB16208         27         326911         6596504         343         AC         -90         0           KWRB16209         39         326940         6596524         343         AC         -90         0           KWRB16210         24         326970         6596547         343         AC         -90         0           KWRB16211         26         326999         6596571         343         AC         -90         0           KWRB16212         13         327064         6596626         343         AC         -90         0           KWRB16213         30         327122         6596677         343         AC         -90         0           KWRB16214         25         327181								
KWRB16205         40         326802         6596410         343         AC         -90         0           KWRB16206         39         326834         6596449         343         AC         -90         0           KWRB16207         31         326870         6596468         343         AC         -90         0           KWRB16208         27         326911         6596504         343         AC         -90         0           KWRB16209         39         326940         6596524         343         AC         -90         0           KWRB16210         24         326970         6596547         343         AC         -90         0           KWRB16211         26         326999         6596571         343         AC         -90         0           KWRB16212         13         327064         6596626         343         AC         -90         0           KWRB16213         30         327122         6596677         343         AC         -90         0           KWRB16214         25         327181         6596729         343         AC         -90         0           KWRB16215         23         327245								
KWRB16206         39         326834         6596449         343         AC         -90         0           KWRB16207         31         326870         6596468         343         AC         -90         0           KWRB16208         27         326911         6596504         343         AC         -90         0           KWRB16209         39         326940         6596524         343         AC         -90         0           KWRB16210         24         326970         6596547         343         AC         -90         0           KWRB16211         26         326999         6596571         343         AC         -90         0           KWRB16212         13         327064         6596626         343         AC         -90         0           KWRB16213         30         327122         6596677         343         AC         -90         0           KWRB16214         25         327181         6596729         343         AC         -90         0           KWRB16215         23         327245         6596778         343         AC         -90         0           KWRB16216         27         327317								
KWRB16207         31         326870         6596468         343         AC         -90         0           KWRB16208         27         326911         6596504         343         AC         -90         0           KWRB16209         39         326940         6596524         343         AC         -90         0           KWRB16210         24         326970         6596547         343         AC         -90         0           KWRB16211         26         326999         6596571         343         AC         -90         0           KWRB16212         13         327064         6596626         343         AC         -90         0           KWRB16213         30         327122         6596677         343         AC         -90         0           KWRB16214         25         327181         6596729         343         AC         -90         0           KWRB16215         23         327245         6596778         343         AC         -90         0           KWRB16216         27         327317         6596833         343         AC         -90         0           KWRB16218         15         327428								
KWRB16209         39         326940         6596524         343         AC         -90         0           KWRB16210         24         326970         6596547         343         AC         -90         0           KWRB16211         26         326999         6596571         343         AC         -90         0           KWRB16212         13         327064         6596626         343         AC         -90         0           KWRB16213         30         327122         6596677         343         AC         -90         0           KWRB16214         25         327181         6596729         343         AC         -90         0           KWRB16215         23         327245         6596778         343         AC         -90         0           KWRB16216         27         327317         6596833         343         AC         -90         0           KWRB16217         19         327368         6596881         343         AC         -90         0           KWRB16218         15         327428         6596934         343         AC         -90         0           KWRB16251         34         327494							-90	
KWRB16210         24         326970         6596547         343         AC         -90         0           KWRB16211         26         326999         6596571         343         AC         -90         0           KWRB16212         13         327064         6596626         343         AC         -90         0           KWRB16213         30         327122         6596677         343         AC         -90         0           KWRB16214         25         327181         6596729         343         AC         -90         0           KWRB16215         23         327245         6596778         343         AC         -90         0           KWRB16216         27         327317         6596833         343         AC         -90         0           KWRB16217         19         327368         6596881         343         AC         -90         0           KWRB16218         15         327428         6596934         343         AC         -90         0           KWRB16251         34         327494         6596996         343         AC         -90         0           KWRB16252         46         327569	KWRB16208	27	326911	6596504	343		-90	0
KWRB16211         26         326999         6596571         343         AC         -90         0           KWRB16212         13         327064         6596626         343         AC         -90         0           KWRB16213         30         327122         6596677         343         AC         -90         0           KWRB16214         25         327181         6596729         343         AC         -90         0           KWRB16215         23         327245         6596778         343         AC         -90         0           KWRB16216         27         327317         6596833         343         AC         -90         0           KWRB16217         19         327368         6596881         343         AC         -90         0           KWRB16218         15         327428         6596934         343         AC         -90         0           KWRB16251         34         327494         6596996         343         AC         -90         0           KWRB16252         46         327569         6597051         343         AC         -90         0           KWRB16253         41         327646	KWRB16209	39	326940	6596524	343	AC	-90	
KWRB16212       13       327064       6596626       343       AC       -90       0         KWRB16213       30       327122       6596677       343       AC       -90       0         KWRB16214       25       327181       6596729       343       AC       -90       0         KWRB16215       23       327245       6596778       343       AC       -90       0         KWRB16216       27       327317       6596833       343       AC       -90       0         KWRB16217       19       327368       6596881       343       AC       -90       0         KWRB16218       15       327428       6596934       343       AC       -90       0         KWRB16251       34       327494       6596996       343       AC       -90       0         KWRB16252       46       327569       6597051       343       AC       -90       0         KWRB16253       41       327646       6597114       343       AC       -90       0								
KWRB16213       30       327122       6596677       343       AC       -90       0         KWRB16214       25       327181       6596729       343       AC       -90       0         KWRB16215       23       327245       6596778       343       AC       -90       0         KWRB16216       27       327317       6596833       343       AC       -90       0         KWRB16217       19       327368       6596881       343       AC       -90       0         KWRB16218       15       327428       6596934       343       AC       -90       0         KWRB16251       34       327494       6596996       343       AC       -90       0         KWRB16252       46       327569       6597051       343       AC       -90       0         KWRB16253       41       327646       6597114       343       AC       -90       0								
KWRB16214         25         327181         6596729         343         AC         -90         0           KWRB16215         23         327245         6596778         343         AC         -90         0           KWRB16216         27         327317         6596833         343         AC         -90         0           KWRB16217         19         327368         6596881         343         AC         -90         0           KWRB16218         15         327428         6596934         343         AC         -90         0           KWRB16251         34         327494         6596996         343         AC         -90         0           KWRB16252         46         327569         6597051         343         AC         -90         0           KWRB16253         41         327646         6597114         343         AC         -90         0								
KWRB16215       23       327245       6596778       343       AC       -90       0         KWRB16216       27       327317       6596833       343       AC       -90       0         KWRB16217       19       327368       6596881       343       AC       -90       0         KWRB16218       15       327428       6596934       343       AC       -90       0         KWRB16251       34       327494       6596996       343       AC       -90       0         KWRB16252       46       327569       6597051       343       AC       -90       0         KWRB16253       41       327646       6597114       343       AC       -90       0								
KWRB16216         27         327317         6596833         343         AC         -90         0           KWRB16217         19         327368         6596881         343         AC         -90         0           KWRB16218         15         327428         6596934         343         AC         -90         0           KWRB16251         34         327494         6596996         343         AC         -90         0           KWRB16252         46         327569         6597051         343         AC         -90         0           KWRB16253         41         327646         6597114         343         AC         -90         0								
KWRB16217       19       327368       6596881       343       AC       -90       0         KWRB16218       15       327428       6596934       343       AC       -90       0         KWRB16251       34       327494       6596996       343       AC       -90       0         KWRB16252       46       327569       6597051       343       AC       -90       0         KWRB16253       41       327646       6597114       343       AC       -90       0								
KWRB16218     15     327428     6596934     343     AC     -90     0       KWRB16251     34     327494     6596996     343     AC     -90     0       KWRB16252     46     327569     6597051     343     AC     -90     0       KWRB16253     41     327646     6597114     343     AC     -90     0								
KWRB16251     34     327494     6596996     343     AC     -90     0       KWRB16252     46     327569     6597051     343     AC     -90     0       KWRB16253     41     327646     6597114     343     AC     -90     0								
KWRB16252       46       327569       6597051       343       AC       -90       0         KWRB16253       41       327646       6597114       343       AC       -90       0								
KWRB16253 41 327646 6597114 343 AC -90 0								
NAME   100   02/12/   00//102   040   /\C   -/0   U								
KWRB16255 37 327774 6597210 343 AC -90 0								

Table 3. Far Kundana West drill hole details



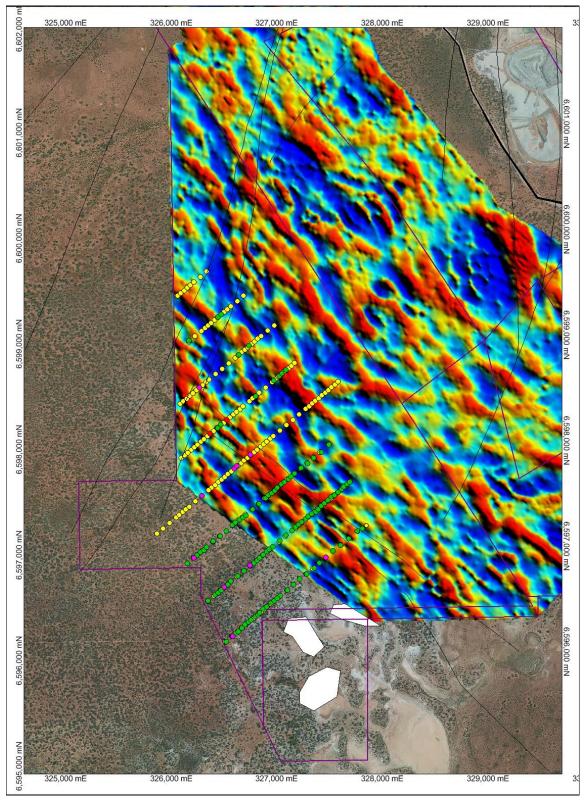


Figure 1 - Far Kundana West drill hole collar locations and assay results >0.1g/t overlain on SAM survey results



### 2.3 Papa Bear

At the Papa Bear prospect, aircore drilling tested NW-SE trending lithological contacts adjacent to the Kurrawang Unconformity over a 3 kilometre strike distance. The drilling covered an area measuring 6km<sup>2</sup> with most holes on M16/309 with only two holes drilled on M16/308 (PBAC17019-20).

Ten drill lines, spaced 200m to 400m apart with hole spacing of either 100m or 200m were completed for a total of 110 holes. Four metre composite samples were collected for the entire drill hole length with one bottom-of-hole sample collected from each drill hole for multi-element analysis.

Drilling was hampered by the presence of running sands and clays in paleochannels with four planned holes abandoned due to boggy conditions following heavy rainfall events.

Hole ID	Depth	East (MGA)	North (MGA)	RL (MGA)	Hole Type	Dip	Azimuth (Local)
PBAC17001	56	332105	6600663	343	AC	-60	45
PBAC17002	74	332172	6600715	343	AC	-60	45
PBAC17003	90	332240	6600737	343	AC	-60	45
PBAC17004	57	332314	6600795	343	AC	-60	45
PBAC17005	96	332366	6600427	343	AC	-60	45
PBAC17006	89	332436	6600427	343	AC	-60	45
PBAC17007	75	332509	6600541	343	AC	-60	45
PBAC17008	58	332633	6600604	343	AC	-60	45
PBAC17009	41	332709	6600679	343	AC	-60	45
PBAC17010	34	332769	660077	343	AC	-60	45
PBAC17011	15	332838	6600804	343	AC	-60	45
PBAC17011	6	332918	6600867	343	AC	-60	45
PBAC17013	23	332980	6600918	343	AC	-60	45
PBAC17013	10	333076	6600995	343	AC	-60	45
	3						45
PBAC17015	29	333222	6601126	343 343	AC AC	-60	45
PBAC17016		333374	6601255			-60	
PBAC17017	37	333527	6601383	343	AC	-60	45
PBAC17018	35	333678	6601514	343	AC	-60	45
PBAC17019	50	333839	6601651	343	AC	-60	45
PBAC17020	38	333981	6601768	343	AC	-60	45
PBAC17022	33	332739	6600461	343	AC	-60	45
PBAC17023	35	332887	6600593	343	AC	-60	45
PBAC17024	11	333038	6600717	343	AC	-60	45
PBAC17025	59	333201	6600844	343	AC	-60	45
PBAC17029	52	332868	6600304	343	AC	-60	45
PBAC17030	60	332955	6600378	343	AC	-60	45
PBAC17031	54	333023	6600437	343	AC	-60	45
PBAC17032	41	333097	6600509	343	AC	-60	45
PBAC17033	37	333174	6600563	343	AC	-60	45
PBAC17034	16	333220	6600630	343	AC	-60	45
PBAC17035	26	333327	6600695	343	AC	-60	45
PBAC17036	9	333483	6600822	343	AC	-60	45
PBAC17037	15	333637	6600949	343	AC	-60	45
PBAC17038	29	333793	6601077	343	AC	-60	45
PBAC17043	57	332915	6600000	343	AC	-60	45
PBAC17044	44	333010	6600093	343	AC	-60	45
PBAC17045	48	333074	6600221	343	AC	-60	45
PBAC17046	51	333152	6600287	343	AC	-60	45
PBAC17047	54	333227	6600352	343	AC	-60	45
PBAC17048	23	333300	6600417	343	AC	-60	45
PBAC17049	7	333377	6600478	343	AC	-60	45
PBAC17050	5	333457	6600542	343	AC	-60	45
PBAC17051	12	333606	6600658	343	AC	-60	45
PBAC17052	50	333756	6600797	343	AC	-60	45
PBAC17053	22	333926	6600940	343	AC	-60	45
PBAC17054	45	333358	6600206	343	AC	-60	45
PBAC17055	44	333424	6600255	343	AC	-60	45
PBAC17056	47	333488	6600233	343	AC	-60	45
PBAC17057	7	333575	6600402	343	AC	-60	45
PBAC17058	9	333726	6600519	343	AC	-60	45
PBAC17063	90	333010	6599716	343	AC AC	-60	45
PBAC17064	63	333073	6599772	343	AC	-60	45
PBAC17065	54	333140	6599827	343	AC	-60	45



Hole ID	Depth	East (MGA)	North (MGA)	RL (MGA)	Hole Type	Dip	Azimuth (Local)
PBAC17066	53	333330	6599911	343	AC	-60	45
PBAC17067	49	333411	6599974	343	AC	-60	45
PBAC17068	48	333490	6600023	343	AC	-60	45
PBAC17069	52	333553	6600092	343	AC	-60	45
PBAC17070	48	333640	6600169	343	AC	-60	45
PBAC17071	35	333697	6600214	343	AC	-60	45
PBAC17072	30	333858	6600362	343	AC	-60	45
PBAC17075	54	333132	6599479	343	AC	-60	45
PBAC17076	52	333237	6599571	343	AC	-60	45
PBAC17077	56	333306	6599645	343	AC	-60	45
PBAC17078	51	333515	6599673	343	AC	-60	45
PBAC17079	48	333615	6599748	343	AC	-60	45
PBAC17080	45	333687	6599816	343	AC	-60	45
PBAC17081	43	333745	6599882	343	AC	-60	45
PBAC17082	46	333821	6599939	343	AC	-60	45
PBAC17083	47	333897	6600010	343	AC	-60	45
PBAC17084	51	333995	6600204	343	AC	-60	45
PBAC17088	57	333477	6599183	343	AC	-60	45
PBAC17089	58	333529	6599235	343	AC	-60	45
PBAC17090	50	333615	6599311	343	AC	-60	45
PBAC17091	46	333704	6599375	343	AC	-60	45
PBAC17092	51	333767	6699453	343	AC	-60	45
PBAC17093	56	333892	6599578	343	AC	-60	45
PBAC17094	51	333982	6599640	343	AC	-60	45
PBAC17095	52	333651	6598877	343	AC	-60	45
PBAC17096	30	333706	6598917	343	AC	-60	45
PBAC17097	24	333789	6598958	343	AC	-60	45
PBAC17098	61	333888	6599014	343	AC	-60	45
PBAC17099	61	333967	6599050	343	AC	-60	45

Table 4 - Papa Bear prospect drill hole summary

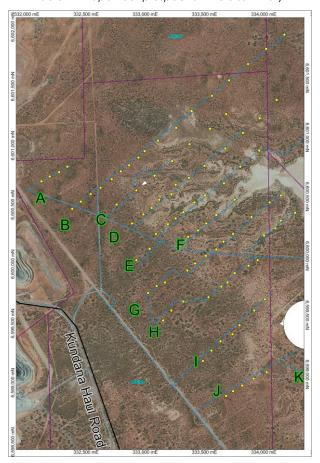


Figure 2 - Papa Bear Prospect AC drill hole collar locations



# 3 EXPLORATION RESULTS

# 3.1 Raleigh South

All 28 diamond holes drilled during the quarter successfully intercepted the mineralised Raleigh Main Vein structure with the majority returning typical RMV assay results. Five drill holes remain to be processed at the end of the quarter.

Initial assay results received recorded a best result of 0.91m grading 70.8g/t gold in RRDD17038 which was screen fire assayed given the elevated content of visible gold.

Hole ID	East (MGA)	North (MGA)	RL (MGA)	Di p	Azi (MGA)	Depth (m)	From (m)	To (m)	DTH Width (m)	True Width (m)	Grade (g/t)
RRCD16004	331975	6598677	345	-68	56	249.3					NSI
RRCD16006	331924	6598642	343	-69	74	303.4	277.41	277.8 7	0.46	0.3	21.1
RRCD16007	331921	6598645	345	-58	62	110.0					NSI
RRCD16008	331945	6598606	345	-69	74	290.4	255.0	255.3	0.3	0.2	11.5
RRCD16009	331946	6598606	345	-68	68	108.0			Awaiting	sampling	
RRCD16010	331982	6598545	343	-56	65	231.5	187.65	187.8 5	0.2	0.1	3.8
RRCD16011	331992	6598476	343	-69	63	291.5	270.07	270.6 3	0.56	0.4	66.7
RRCD16012	331992	6598476	343	-59	67	246.4	222.21	222.5	0.29	0.2	6.9
RRCD16013	331965	6598408	343	-64	68	321.7	307.7	309	1.3	0.9	6.0
RRCD16013	331965	6598408	343	-64	68	321.7	308.0	308.5	0.5	0.4	11.2
RRCD16014	332056	6598484	343	-67	73	198.6	172.2	173	0.8	0.6	0.5
RRCD16015	332029	6598427	343	-57	79	231.8	202.0	202.7	0.7	0.3	0.3
RRCD16016	332026	6598427	345	-66	74	291.8	262.12	263.0 4	0.92	0.8	41.9
RRCD16017	331972	6598318	343	-59	77	340.1	316.1	316.4	0.3	0.2	164
RRCD16018	332061	6598347	343	-65	70	261.9	209.4	209.6	0.2	0.1	3.7
RRDD16002	331900	6598805	346	-55	60	193.9			Awaiting	sampling	
RRDD16005	331924	6598642	343	-65	61	270.6	251.35	251.5 8	0.23	0.2	43.9
RRDD16005	331924	6598642	343	-65	61	270.6	251.35	252.0	0.65	0.5	18.9
RRDD16007	331952	6598606	343	-60	61	240.0	218.5	219.0	0.5	0.4	1.67
RRDD16009	331982	6598545	343	-69	70	267.5	245.16	246.2 9	1.13	0.8	21
RRDD16009	331982	6598545	343	-69	70	267.5	245.58	246.0	0.42	0.3	44.4
RRDD17019	331944	6598603	345	-50	67	210.9					NSI
RRDD17020	331950	6598600	345	-64	70	264.9	249.2	250.3	1.1	1.0	6.5
RRDD17022	331955	6598566	345	-55	64	165.1			Awaiting	sampling	
RRDD17023	331956	6598566	345	-61	64	234.6			Awaiting	sampling	
RRDD17024	331957	6598566	345	-66	65	258.9			Awaiting	sampling	
RRDD17026	331986	6598546	344	-51	63	213.5					NSI
RRDD17027	331990	6598550	346	-63	64	252.5	209.61	210.0 6	0.45	0.45	13.7
RRDD17028	331983	6598546	344	-72	60	304.4	252.12	253.0 3	0.91	0.55	70.6
RRDD17037	331962	6598406	344	-54	74	58.2	2 Abandoned				
RRDD17039	332015	6598389	345	-70	71	300.5	271.4	272	0.6	0.4	2.3

Table 5 – Raleigh South drill hole summary and significant assay results



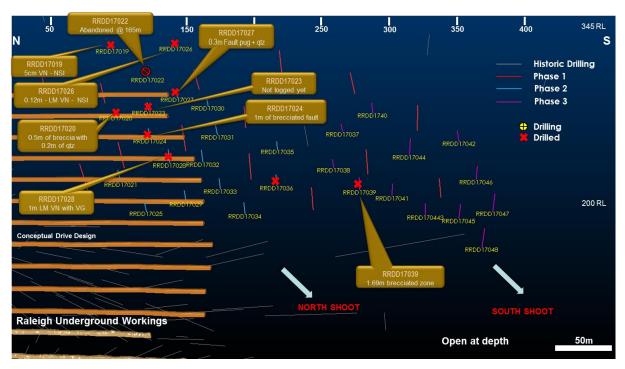


Figure 3 - Raleigh South long section showing drilling in March 2017 quarter

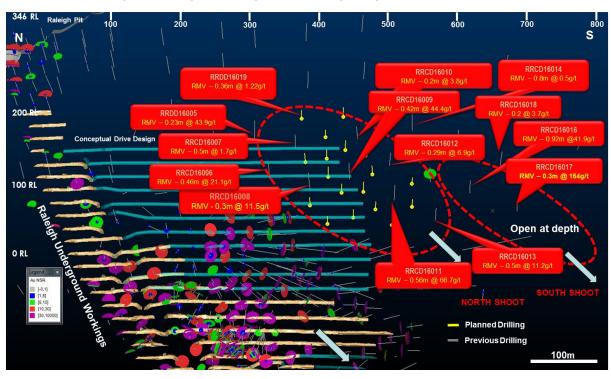


Figure 4 - Raleigh South long section with significant intersections for 2016 drill holes



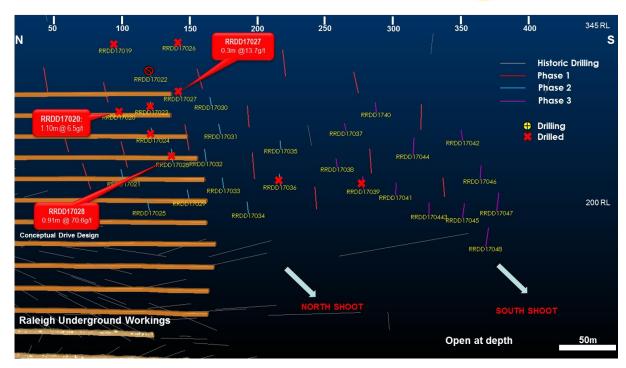


Figure 5 - Raleigh South long section with significant intercepts for 2017 drill holes

#### 3.2 Far Kundana West

Preliminary analysis of the bottom-of-hole lithologies allowed previously undifferentiated volcanogenic rocks of the Black Flag Formation to be separated into five distinct geological units.

Multielement results highlighted a compositional gradation across the area which is coincidental with one of the SAM lineation trends, mapped faults and anomalous gold results recorded along this lithological trend.

Hole ID	East (MGA)	North (MGA)	RL (MGA)	Dip	Azi (MGA)	Hole Depth	From	То	Width	Grade g/t Au
KWRB16029	326239	6598547	343	-90	0	39	28	32	4	0.38
KWRB16089	326263	6597518	343	-90	0	33	12	16	4	0.15
KWRB16098	326574	6597772	343	-90	0	33	24	28	4	0.22
KWRB16099	326603	6597795	343	-90	0	40	4	8	4	0.22
KWRB16103	326731	6597906	343	-90	0	57	12	16	4	0.11
KWRB16127	326175	6596929	343	-90	0	40	16	20	4	0.07
KWRB16161	326475	6596655	343	-90	0	34	0	4	4	0.35
KWRB16166	326719	6596857	343	-90	0	40	28	32	4	0.19
KWRB16196	326544	6596191	343	-90	0	42	8	12	4	0.12
KWRB16218	327428	6596934	343	-90	0	15	8	12	4	0.08

Table 6: Far Kundana West significant assay results <0.1g/t

# 3.3 Papa Bear

Assay results for the four metre composite samples revealed a range of anomalies associated with the target lithological contact interpreted from earlier mapping.

Multielement assay results were still pending at the end of the quarter.

Hole ID	East (MGA)	North (MGA)	RL (MGA)	Dip	Azi (MGA)	Hole Depth	From	То	Width	Grade g/t Au
PBAC17005	332366	6600427	343	-60	45	96	48	52	4	0.12
PBAC17006	332436	6600499	343	-60	45	89	64	68	4	0.34
PBAC17008	332633	6600604	343	-60	45	58	56	58	2	0.28
PBAC17022	332739	6600461	343	-60	45	33	24	28	4	0.14
PBAC17025	333201	6600844	343	-60	45	59	12	16	4	0.12
PBAC17035	333327	6600695	343	-60	45	26	8	12	4	0.25



Hole ID	East (MGA)	North (MGA)	RL (MGA)	Dip	Azi (MGA)	Hole Depth	From	То	Width	Grade g/t Au
PBAC17035	333327	6600695	343	-60	45	26	12	16	4	0.10
PBAC17035	333327	6600695	343	-60	45	26	16	20	4	0.29
PBAC17043	332915	6600000	343	-60	45	57	52	56	4	0.20
PBAC17044	333010	6600093	343	-60	45	44	40	44	4	0.70
PBAC17048	333300	6600417	343	-60	45	23	8	12	4	0.12
PBAC17060	334347	6601033	343	-60	45	65	4	8	4	0.11
PBAC17063	333010	6599716	343	-60	45	90	56	60	4	0.25
PBAC17064	333073	6599772	343	-60	45	63	28	32	4	0.15
PBAC17064	333073	6599772	343	-60	45	63	48	52	4	0.42
PBAC17065	333140	6599827	343	-60	45	54	12	16	4	0.20
PBAC17065	333140	6599827	343	-60	45	54	24	28	4	0.18
PBAC17068	333490	6600023	343	-60	45	48	36	44	8	0.14
PBAC17072	333858	6600362	343	-60	45	30	24	28	4	0.10
PBAC17074A	334093	6600550	343	-60	45	39	20	24	4	0.24
PBAC17075	333132	6599479	343	-60	45	54	32	36	4	0.17
PBAC17075	333132	6599479	343	-60	45	54	36	40	4	0.24
PBAC17083	333897	6600010	343	-60	45	47	44	47	3	0.13
PBAC17089	333529	6599235	343	-60	45	58	36	40	4	0.11
PBAC17089	333529	6599235	343	-60	45	58	52	56	4	0.14
PBAC17091	333704	6599375	343	-60	45	46	40	46	6	0.32
PBAC17097	333789	6598958	343	-60	45	24	12	16	4	0.28
PBAC17101	334167	6599187	343	-60	45	63	44	52	8	0.26
PBAC17101	334167	6599187	343	-60	45	63	56	60	4	0.25
PBAC17102	334238	6599249	343	-60	45	75	56	64	8	0.12
PBAC17105	334330	6598953	343	-60	45	44	40	44	4	0.29
PBAC17106	334406	6599016	343	-60	45	72	48	52	4	0.11

Table 7 – Papa Bear prospect summary of significant assay results >0.01 g/t

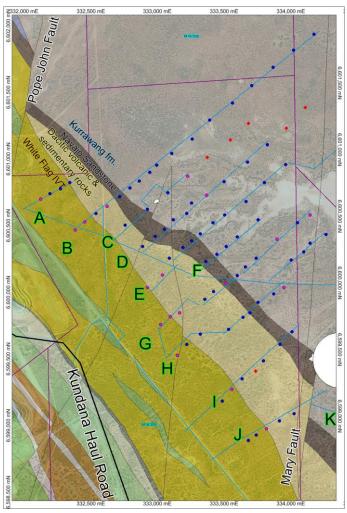


Figure 6 - Papa Bear Prospect – Drill hole collar locations and assay results (>0.1g/t pink circles). Red circles denote planned drillholes not drilled due to adverse ground conditions



#### 4 FUTURE WORK

# 4.1 Raleigh South

Resource definition diamond drilling of the upper zones at Raleigh South will resume early in the next quarter with up to four diamond drill rigs.

#### 4.2 Far Kundana West

Assay results from the RAB/aircore drilling revealed the area is depleted in pathfinder elements with limited gold anomalism. No further work is planned at this stage.

### 4.3 Papa Bear

Multi-element results were still pending at the end of the quarter and will be reported next quarter together with an interpretation of the results and geology.

#### **Competency statement**

The information in this report relating to Exploration Results is based on information compiled by Dr Rick Gordon who is a Member of the Australian Institute of Geoscientists 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'. Dr Gordon 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 Far Kundana West Section 1 Sampling Techniques and Data

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

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul> <li>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.</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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Sampling was completed using Diamond (DD) and Aircore (AC) drilling.</li> <li>Diamond core was transferred to core trays for logging and sampling. Full core samples were nominated by the geologist from HQ diamond core, with a minimum sample width of either 20cm.</li> <li>AC samples were produced as 1m samples directly from the cyclone on the AC rig and deposited on the ground in rows. 4m composite scoop samples were collected for the entire length of each hole for gold analysis. 1m scoop samples were collected from the last sample of each hole for multi-element analysis.</li> <li>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.</li> <li>Samples were transported various analysis laboratories in Kalgoorlie for preparation by drying, crushing to &lt;3mm, and pulverizing the entire sample to &lt;75µm.</li> <li>300g Pulp splits were analysed in laboratories in both Kalgoorlie and Perth for 50g Fire assay charge and AAS analysis for gold.</li> </ul>
Drilling techniques	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> <li>Diamond drilling was used from surface. HQ (63.5mm) diameter core was drilled for all diamond holes. Triple tubing was complete from 20m above the target zone.</li> <li>Core was orientated using the Reflex ACT Core orientation system.</li> <li>AC holes were drilled from surface. The Shire AC holes were vertical whilst the Papa Bear AC holes were drilled at a 60° incline.</li> </ul>
Drill sample recovery	<ul> <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> <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.</li> <li>For Raleigh Corridor, the drilling intersecting the Strzelecki Shear was drilled HQ3, to retain any possible fault gauge that is commonly present on this structure and can contain significant amounts of gold mineralisation. Normal HQ2 drilling has the possibility of poor recovery of the fault gauge.</li> <li>AC drilling contractors adjust their drilling approach to specific conditions to maximize sample recovery. Moisture content and sample recovery is recorded for each AC sample. Recovery was often poor for the first 4m of each hole, as is normal for this type of drilling in overburden.</li> </ul>

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Criteria	JORC Code Explanation	Commentary
Logging	<ul> <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, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <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. All logging is quantities where possible and qualitative elsewhere. A photograph is taken of every core tray.</li> <li>All AC samples are logged in 1m intervals for regolith and veining, and for lithology, mineralisation, and alteration where visible. A photograph is taken of each hole, displaying every sample for each hole.</li> <li>All data for diamond and AC holes are recorded digitally.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>All Diamond core was full core sampled. HQ3 sized diamond core is the most appropriate sample for the nature of the mineralisation. All AC samples are placed on the ground in 1m intervals, with 4m scoop composites made for the entire length of each hole, with each sample weighing 1-2 kg.</li> <li>A 1m scoop sample weighing between 200-500g was taken from the last sample of each AC hole.</li> <li>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.</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 to ensure consistent sample preparation.</li> <li>Screen Fire Assay (SFA) analysis was completed on selected samples where coarse visible gold was observed in the core.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>A 50g fire assay charge is used with a lead flux, dissolved in the furnace. The prill is totally digested in HCI and HNO<sub>3</sub> acids before Atomic Absorption Spectroscopy (AAS) determination for gold analysis. This method ensures total gold is reported appropriately.</li> <li>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.</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 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.</li> <li>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.</li> <li>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.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>All significant intersections are verified by the project geologist and senior geologist during the drill hole validation process.</li> <li>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.</li> </ul>



Criteria	JORC Code Explanation	Commentary
Location of data points	<ul> <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> <li>A planned hole is pegged using a GPS by the field assistants For AC holes and a differential GPS for diamond holes.</li> <li>No downhole surveys are taken for AC holes.</li> <li>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 ABIMS or Gyro Australia, taking readings every 5m for improved accuracy. This is done in true north.</li> <li>The final hole collar for each diamond hole is picked up after drillhole completion by DGPS in the MGA 94_51 grid.</li> <li>Good quality topographic control has been achieved through regional topographic maps (±2.5m) based on photogrammetry data.</li> </ul>
Data spacing and distribution	<ul> <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> <li>Diamond holes were drilled between 30m and 80m apart allowing for the resource to be graded as an inferred resource, once modelling is complete.</li> <li>AC drillholes were drilled in lines spaced 400m apart, with drillholes spaced either 40m or 80m apart in the individual lines at the Shire.</li> <li>AC drillholes were drilled in lines spaced 200m or 400m apart, with drillholes spaced either 100m or 200m apart in the individual lines at Papa Bear.</li> <li>This AC spacing is appropriate for early stage geological targeting programmes and the drill holes will not be used for any resource or reserve estimations.</li> </ul>
Orientation of data in relation to geological structure	<ul> <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> <li>The Strzelecki structure is typical of the majority of the structures in the Kundana camp and dips steeply (80°) to the WSW. To target this orientation the drill hole dips of 60-70° to achieve high angle intersections on all structures.</li> <li>The drilling was conducted in an area with very sparse previous drilling, as such, no known structures have been positively identified.</li> <li>Recent Sub Audio Magnetics (SAM) surveys of the area suggest that several structures oriented northwest-southeast are present.</li> <li>The vertical drilling and drillhole spacing is considered sufficient to identify any major structures present in the area regardless of the structures' orientation.</li> <li>No sampling bias is considered to have been introduced by the drilling orientation.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>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</li> </ul>
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, however lab audits are conducted generally every three months.

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# **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> <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> <li>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%).</li> <li>All AC holes mentioned in this report are located either within M16/421 for The Shire project, or within M16/309 for the Papa Bear project, both tenements are Mining leases which are held by The East Kundana Joint Venture Management Pty Ltd (EKJV).</li> <li>The M16/421 tenement has no third-party royalties' payable.</li> <li>The tenement on which the Papa Bear and Raleigh South 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</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Previous work on the Far Kundana West area consists only of very sparse and patchy RAB drilling by previous owners prior to the mid-1990s. The area has received very limited attention since that time.</li> <li>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.</li> <li>The Raleigh south target is the Strzelecki Structure, which juxtaposes volcanogenic wacke against intermediate volcaniclastic rocks or the sub-parallel gabbro-wacke intrusive contact. The target is directly south of the &gt;1,000,000 Oz gold mine Raleigh, which began production in from open pit in 2001. The Raleigh Main Vein (RMV) was thought to pinch out to the south, however only limited drilling defined this. During definition of the parallel Skinners Vein lode from underground diamond drilling, holes were extended to test the RMV with good results returned indicating the continuity of the mineralised structure. To date further drilling further drilling from both underground and surface have continued to test this continuity.</li> </ul>



Criteria	JORC Code Explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <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. 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.</li> <li>Information contained in this report specific to the Kundana West project relates to a package of</li> </ul>
		yet undifferentiated volcanogenic sedimentary rocks in the core of a ten-kilometre scale antiform west of the Zuleika Shear apparent due to the folding of the Powder Sill Gabbro, a large differentiated mafic sill intruding the Black Flag Group stratigraphy.
		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.
		Information contained in this report specific to the Raleigh South project relates to 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.
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:	
	<ul> <li>easting and northing of the drill hole collar</li> </ul>	
	<ul> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> </ul>	
	<ul> <li>dip and azimuth of the hole</li> </ul>	
	<ul> <li>down hole length and interception depth</li> <li>hole length</li> </ul>	
	<ul><li>hole length.</li><li>If the exclusion of this information is justified on the basis that the</li></ul>	
	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.	
Data aggregation methods	<ul> <li>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.</li> </ul>	
	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.	



Criteria	JORC Code Explanation	Commentary
Relationship between mineralisation widths and intercept lengths	<ul> <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 (e.g. 'down hole length, true width not known').</li> </ul>	<ul> <li>True widths have been calculated for intersections of the known ore zones in the Raleigh south project, based on existing knowledge of the nature of the structure.</li> <li>Both the downhole width and true width have been clearly specified when used.</li> <li>Results for AC holes are reported as downhole width. Location and orientation of structures/mineralisation is not known, therefore the true width of intercepts is not known.</li> </ul>
Diagrams	<ul> <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> <li>Refer to the figures the body of this report for the spatial context of all holes planned and drilled to date.</li> </ul>
Balanced reporting	<ul> <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>	
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. Table 5	in August 2016.  Geochemical results for The Shire project were returned in early 2017, showing no anomalous
Further work	<ul> <li>The nature and scale of planned further work (e.g. 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> <li>No further work will be conducted at the Shire project.</li> <li>A follow up RC programme targeting the areas of anomalous mineralisation at the Papa Bear project will be conducted in the second half of 2017. A small diamond drill programme, consisting of two or three holes will also be conducted to gain a better understanding of the stratigraphy and structure in the Papa Bear project area.</li> <li>Infill drilling of Raleigh South is planned to upgrade existing resources in the second half of 2017. In addition, further drilling is planned from underground along with ore drive development to the south. Raleigh South remains open to the south and further wide spaced drilling will be designed to test this extension.</li> </ul>