NORTHERN CoBALT
ASX: N27, N27O

ASX RELEASE
19 October 2018

COBALT SYSTEM DEVELOPING AT RUNNING CREEK PROSPECT

- **Latest intercept from the Running Creek Prospect reports higher grade cobalt mineralisation in the western part of the prospect, highlights;**

  Best Co intersection includes (pXRF)

  - **8m @ 0.1% Co (18RAB106)**
    including 4m @ 0.15% Co
  - **1m @ 0.24% Co (18RAB108)**
  - **2m @ 0.12% Co (18RAB109)**

- **Cobalt mineralisation now intersected over a large area (400m x 500m)**
- **Induced Polarisation survey to commence this weekend to identify further copper and cobalt mineralisation**

Running Creek Prospect

Northern Cobalt Limited (**ASX: N27**) is pleased to announce it has confirmed cobalt mineralisation over a large area at the Running Creek Prospect, located approximately 1.8 km east of the Stanton Cobalt Deposit, Northern Territory (Figure 1). The Running Creek Prospect was originally identified by CRA in the 1990's as a group of small, individual copper and cobalt mineralised systems with limited extent. Reinterpretation of the main controls of mineralisation by Northern Cobalt along a series of north-east trending structures has linked the individual mineral systems and led to the identification of higher-grade cobalt mineralisation in the western part of the prospect and a significant copper intersection in drill hole:

55m @ 0.72% Cu from 0m (hole 18RAB102, pXRF), including

- 33m @ 1.0% Cu from 11m, and
- 7m @ 2.1% Cu from 18m

(ASX release 9 October 2018, Copper Intersection Confirms New Model at Running Creek)

"The development of a new geological model for controls on mineralisation at Running Creek continues to deliver results for both cobalt and copper. With an Induced Polarisation Survey underway at the Running Creek and GregJo Prospects we hope to add cobalt and copper resources in addition to those at the Stanton Deposit. The success at Running Creek and GregJo confirms the potential for the Wollogorang Project", Michael Schwarz (MD)

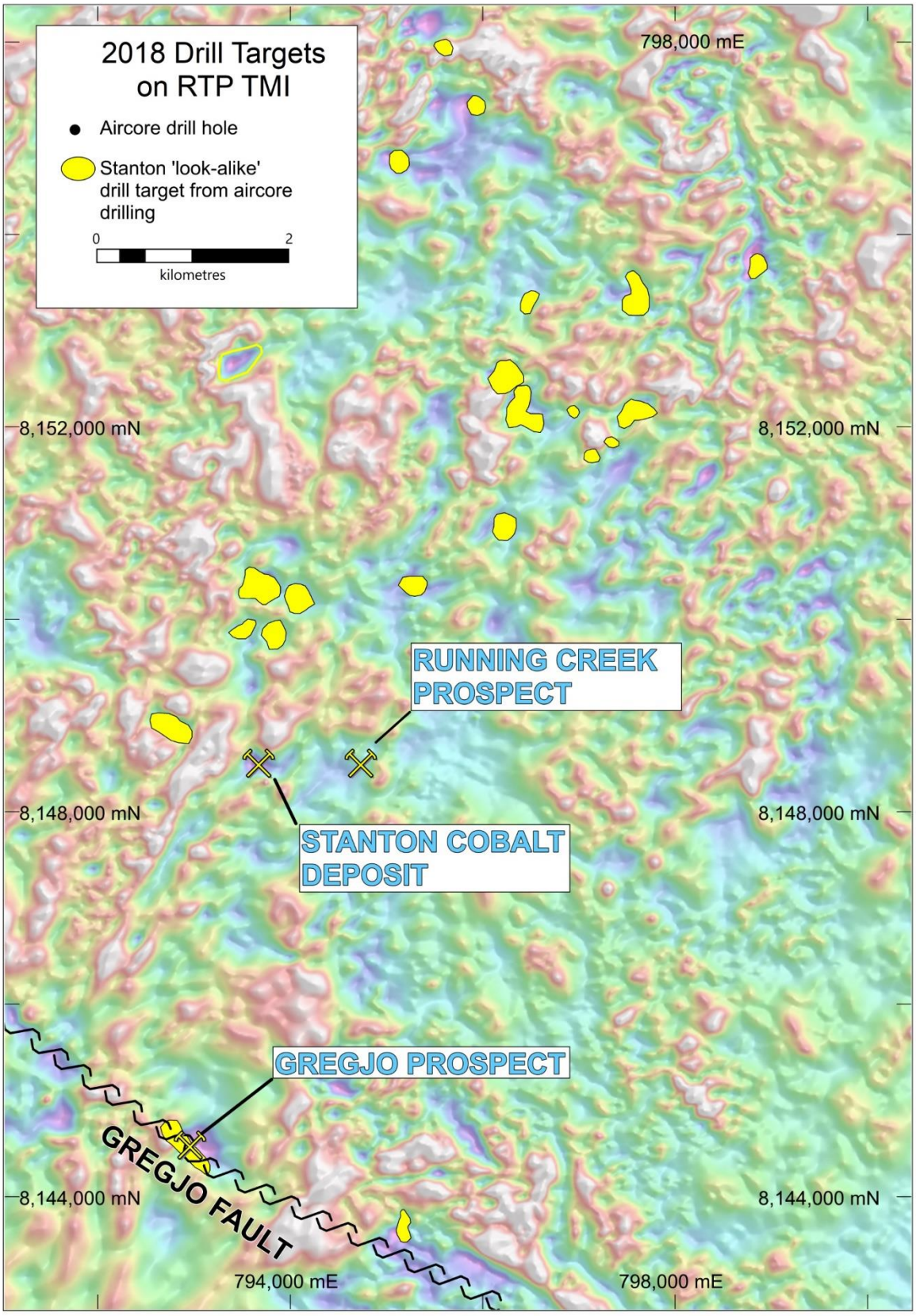


Figure 1. 2018 RTP magnetic image with high priority drill targets

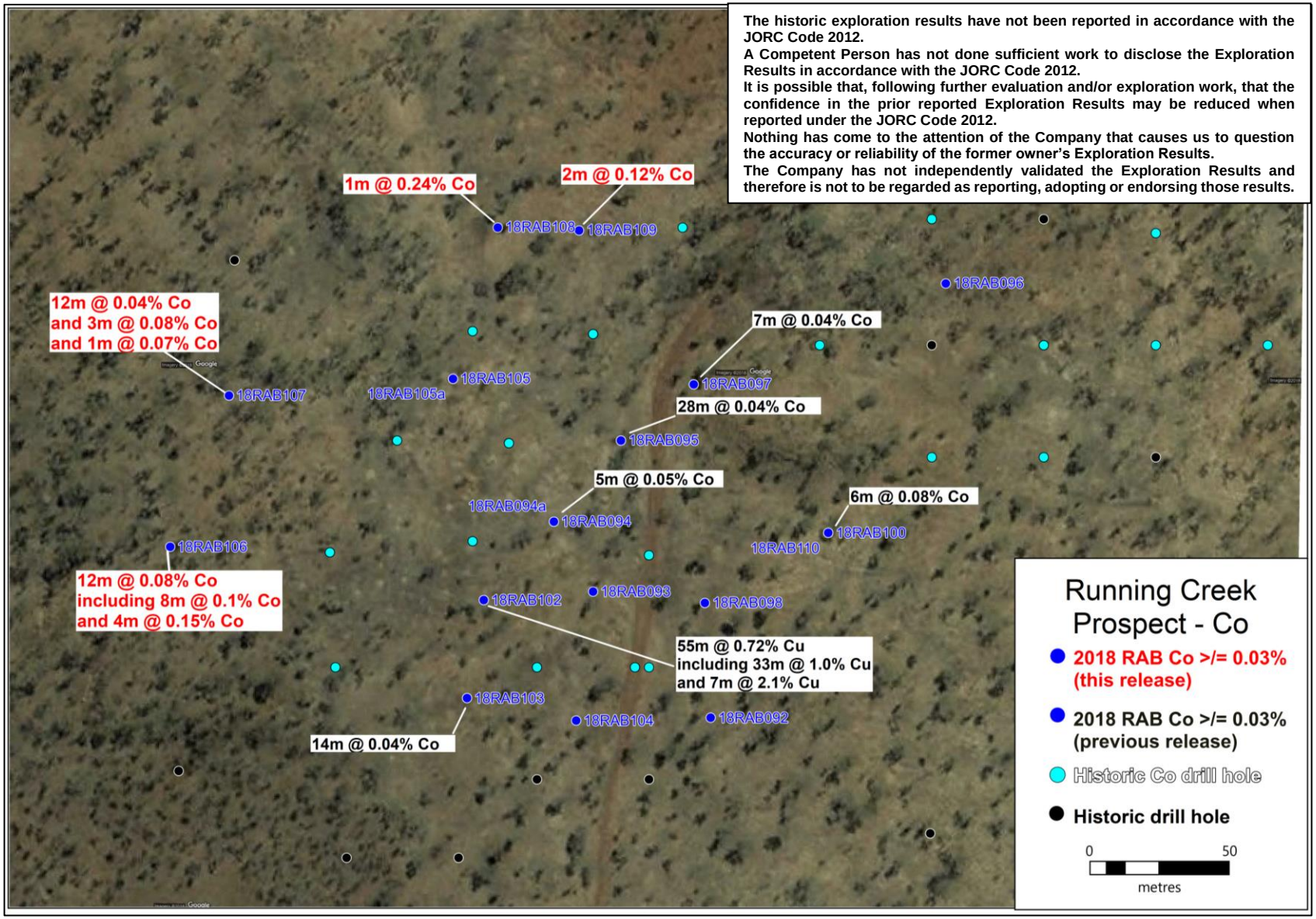


Figure 2. Google Earth image with RAB hole locations and cobalt results

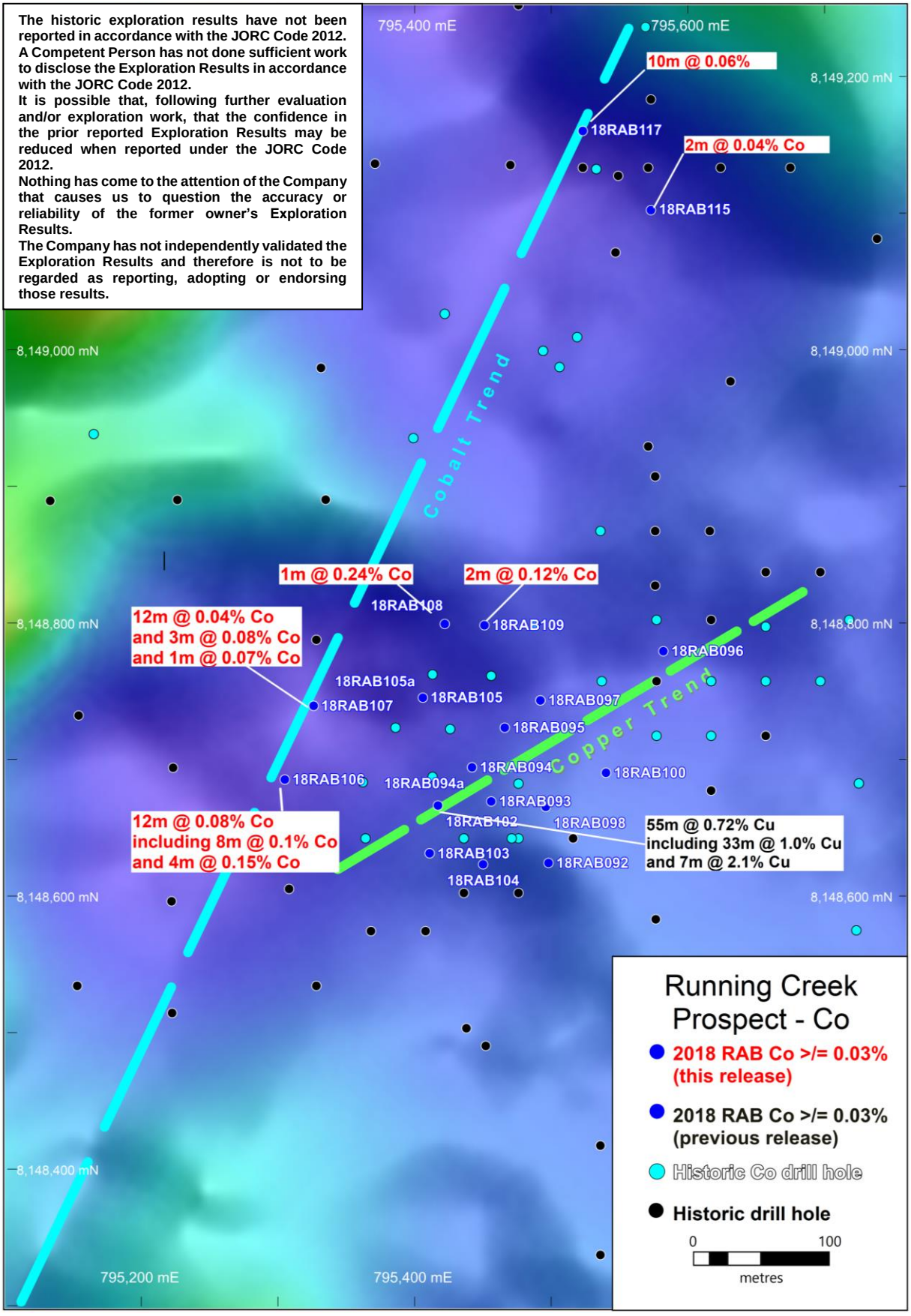


Figure 3. RTP TMI image with RAB hole locations and cobalt results

Cobalt mineralisation appears to be spatially associated with several north-east and north-north-east trending structures interpreted from detailed magnetics flown in 2017 and from surficial linear features evident in satellite imagery.

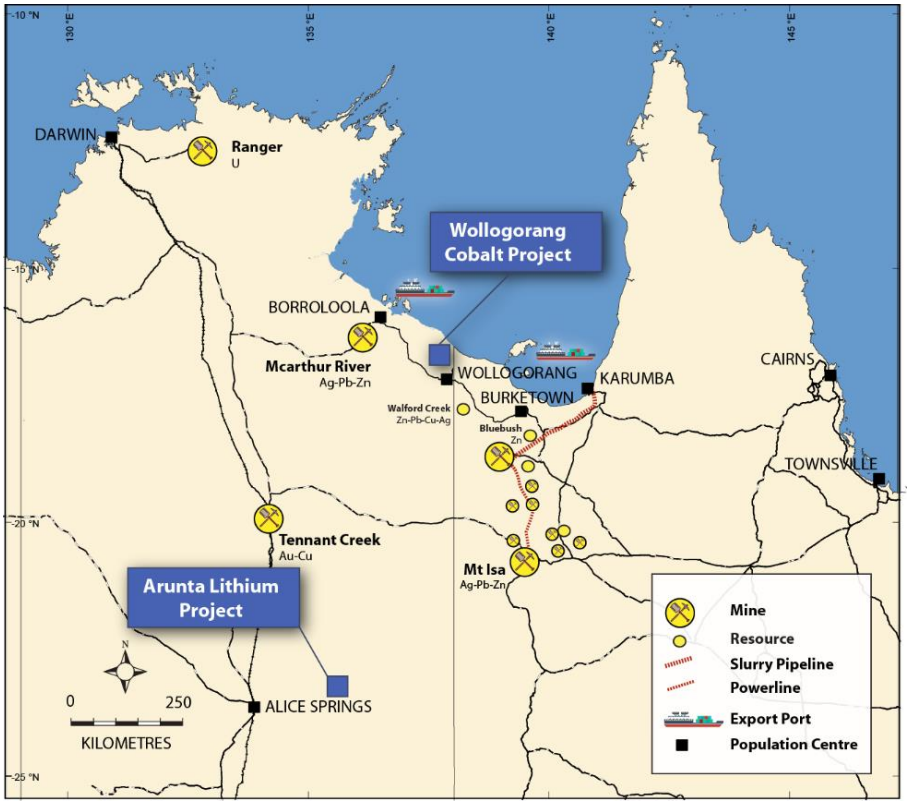
The new geological model has allowed Northern Cobalt to link a series of small copper-cobalt mineralised systems, with infill drilling, and extend the system to a cover large area of 500m x 400m. An induced polarisation survey is due to commence this weekend at the GregJo Prospect and will be expanded to the Running Creek Prospect to map the potential for further mineralisation at depth.

Table 1. Significant Co drill intersections (pXRF results only, samples have been sent for assay)

Hole_ID	Easting (m)	Northing (m)	Depth From (m)	Depth To (m)	Interval (m)	Co(%)
18RAB104	795450	8148624	47	48	1	0.037
18RAB105	795406	8148746	29	31	2	0.037
18RAB105a	795406	8148746	2	4	2	0.034
18RAB105a	795406	8148746	30	31	1	0.042
18RAB106	795305	8148686	14	26	12	0.079
18RAB106	795305	8148686	17	25	8	0.100
18RAB106	795305	8148686	20	24	4	0.150
18RAB107	795326	8148740	33	45	12	0.040
18RAB107	795326	8148740	56	59	3	0.075
18RAB107	795326	8148740	67	68	1	0.068
18RAB108	795422	8148800	5	6	1	0.237
18RAB109	795451	8148799	22	24	2	0.121
18RAB110	795540	8148691	29	31	2	0.031
18RAB115	795573	8149103	25	27	2	0.037
18RAB117	795523	8149161	38	48	10	0.061

Table 2. Significant Cu drill intersections (pXRF results only, samples have been sent for assay)

Hole_ID	Easting (m)	Northing (m)	Depth From (m)	Depth To (m)	Interval (m)	Cu (%)
18RAB105	795406	8148746	3	4	1	0.21
18RAB105a	795406	8148746	2	5	3	0.36
18RAB105a	795406	8148746	19	20	1	0.22
18RAB105a	795406	8148746	28	31	3	0.32
18RAB106	795305	8148686	3	13	10	0.52
18RAB107	795326	8148740	26	31	5	0.42
18RAB107	795326	8148740	63	70	7	0.23
18RAB109	795451	8148799	3	10	7	0.48
18RAB106	795305	8148686	6	7	1	0.85
18RAB109	795451	8148799	5	6	1	1.11



Project Location

The Wollogorang Cobalt Project is in the far north-eastern corner of the Northern Territory, a mining friendly authority. The Project area is 180 km to the south-east of the population centre of Borroloola. The capital city of Darwin is 870 km to the north-west and the McArthur River Mine is approximately 150 km to the west-northwest.

Competent Persons Statement

The information in this report that relates to exploration results is based on, and fairly represents, information and supporting documentation compiled by Mr Michael Schwarz who is a member of the Australian Institute of Geoscientists. Mr Michael Schwarz is a full-time employee of the company and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Michael Schwarz consents to the inclusion in the report of the matters based on his information in the form in which it is appears. The information in this announcement is an accurate representation of the available data and studies of the material mining project. This report includes results that have previously been released under JORC 2012 by the Company as "Copper Intersection Confirms New Model at Running Creek" on 9 October 2018. The Company is not aware of any new information or data that materially affects the information included in this announcement and all material assumptions and technical parameters underpinning the Mineral Resource continue to apply and have not materially changed.

Historical results have been obtained from open file company report CR2002-0102 lodged with the Department of Primary Industries and Resources, NT.
https://geoscience.nt.gov.au/gemis/ntgsjspui/handle/1/3

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Appendix 1. Drill hole table

Hole ID	Hole Type	Total Depth (m)	Easting (m)	Northing (m)	RL (m)	Azimuth	Dip
18RAB092	RAB	58	795498	8148625	38	0	-90
18RAB093	RAB	67	795456	8148670	38	0	-90
18RAB094	RAB	36.5	795442	8148695	59	0	-90
18RAB094a	RAB	70	795442	8148695	59	0	-90
18RAB095	RAB	67	795466	8148724	59	0	-90
18RAB096	RAB	73	795582	8148780	58	0	-90
18RAB097	RAB	61	795492	8148744	58	0	-90
18RAB098	RAB	67	795496	8148666	54	0	-90
18RAB099	RAB	16	795532	8148748	56	0	-90
18RAB100	RAB	61	795540	8148691	61	0	-90
18RAB101	RAB	49	795682	8148653	61	0	-90
18RAB102	RAB	55	795417	8148667	55	0	-90
18RAB103	RAB	64	795411	8148632	55	0	-90
18RAB104	RAB	61	795450	8148624	63	0	-90
18RAB105	RAB	40	795406	8148746	59	0	-90
18RAB105a	RAB	48	795406	8148746	61	0	-90
18RAB106	RAB	49	795305	8148686	61	0	-90
18RAB107	RAB	73	795326	8148740	45	0	-90
18RAB108	RAB	49	795422	8148800	58	0	-90
18RAB109	RAB	46	795451	8148799	59	0	-90
18RAB110	RAB	34	794596	8148212	65	0	-90
18RAB111	RAB	28	794655	8148262	65	0	-90
18RAB112	RAB	34	794594	8148313	58	0	-90
18RAB113	RAB	34	794536	8148259	60	0	-90
18RAB114	RAB	55	795709	8148985	59	0	-90
18RAB115	RAB	55	795573	8149103	68	0	-90
18RAB116	RAB	47	795572	8149160	68	0	-90
18RAB117	RAB	55	795523	8149161	68	0	-90

Appendix 2. Historical drill hole table – Running Creek

Hole_ID	Easting (m)	Northing (m)	RL (m)	Azimuth	Dip	Depth From (m)	Depth To (m)	Interval (m)	Cu (%)	Co (%)	Ni (%)
17RC070	795222	8148597	57	0	-90	32	36	4	0.42	0.01	0.00
17RC083	795833	8148880	59	0	-90	48	52	4	0.17	0.01	0.00
DD90RC001	795506	8148988	63	0	-90	0	17	17	0.58	0.01	0.00
DD90RC002	795494	8149000	63	0	-90	0	6.84	6.84	0.40	0.00	0.00
DD90RC002	795494	8149000	63	0	-90	10.33	10.64	0.31	0.21	0.00	0.00
DD90RC002	795494	8149000	63	0	-90	21	33	12	0.81	0.02	0.00
DD90RC002	795494	8149000	63	0	-90	23	24	1	1.70	0.04	0.01
DD90RC002	795494	8149000	63	0	-90	25.5	30	4.5	1.32	0.02	0.00
DD93RC035	795362	8148684	58	0	-90	4.75	6	1.25	0.20	0.01	0.01
DD93RC035	795362	8148684	58	0	-90	76	78	2	0.34	0.05	0.00

Hole_ID	Easting (m)	Northing (m)	RL (m)	Azimuth	Dip	Depth From (m)	Depth To (m)	Interval (m)	Cu (%)	Co (%)	Ni (%)
DD93RC035	795362	8148684	58	0	-90	78.8	80.3	1.5	0.19	0.01	0.00
DD94RC063	795571	8149134	64	0	-90	32	47	15	0.86	0.00	0.00
DD94RC063	795571	8149134	64	0	-90	33	39	6	1.34	0.00	0.00
DD94RC063	795571	8149134	64	0	-90	44	45	1	1.05	0.00	0.00
DD94RC063	795571	8149134	64	0	-90	59	61	2	0.42	0.00	0.00
DD94RC063	795571	8149134	64	0	-90	89.5	92.3	2.8	0.20	0.00	0.00
DD94RC077	795547	8149072	64	0	-90	0	1.4	1.4	0.84	0.02	0.17
DD94RC077	795547	8149072	64	0	-90	0	1.4	1.4	0.84	0.02	0.17
DD94RC125	795533	8149133	64	0	-90	25	29	4	0.67	0.00	0.00
DD94RC125	795533	8149133	64	0	-90	25	26.05	1.05	0.88	0.01	0.00
DD94RC125	795533	8149133	64	0	-90	27.85	29	1.15	0.80	0.01	0.00
DD94RC125	795533	8149133	64	0	-90	39	46	7	0.37	0.00	0.00
DD95RC127	795516	8148643	57	0	-90	20	21	1	0.18	0.00	0.00
DD95RC127	795516	8148643	57	0	-90	27	28	1	0.26	0.01	0.00
DD95RC129	795476	8148683	57	0	-90	51	52	1	0.15	0.07	0.00
DD95RC130	795436	8148643	57	0	-90	52.7	56.4	3.7	1.96	0.14	0.03
DD95RC130	795436	8148643	57	0	-90	52.7	56.4	3.7	1.96	0.14	0.03
DD95RC219	795471	8148643	57	320	-60	57	58	1	0.49	0.35	0.04
DD95RC219	795471	8148643	57	320	-60	59	60	1	0.45	0.04	0.01
DD95RC219	795471	8148643	57	320	-60	64.5	66.95	2.45	3.24	0.04	0.01
DD95RC219	795471	8148643	57	320	-60	64.5	65.5	1	7.66	0.07	0.02
DD95RC220	795426	8148723	58	140	-60	0	19	19	0.78	0.02	0.00
DD95RC220	795426	8148723	58	140	-60	0.8	3.7	2.9	2.45	0.00	0.00
DD95RC220	795426	8148723	58	140	-60	12	16.9	4.9	0.81	0.03	0.00
DD95RC220	795426	8148723	58	140	-60	20	21	1	0.27	0.05	0.00
DD95RC220	795426	8148723	58	140	-60	23.5	26	2.5	0.35	0.01	0.00
DD95RC220	795426	8148723	58	140	-60	27	31	4	0.62	0.03	0.00
DD95RC220	795426	8148723	58	140	-60	28	30	2	0.91	0.03	0.00
DD95RC220	795426	8148723	58	140	-60	33	36	3	0.30	0.01	0.00
DD95RC220	795426	8148723	58	140	-60	38	39	1	0.42	0.01	0.00
DD95RC220	795426	8148723	58	140	-60	84	85	1	1.40	0.02	0.01
DD95RC220	795426	8148723	58	140	-60	84	85	1	1.40	0.02	0.01
PD90RC003	795352	8149078	65	0	-90	2	4	2	0.20	0.01	0.00
PD90RC004	795549	8149128	64	0	-90	14	28	14	0.36	0.00	0.00
PD90RC004	795549	8149128	64	0	-90	30	44	14	0.62	0.00	0.00
PD90RC004	795549	8149128	64	0	-90	32	34	2	1.70	0.01	0.00
PD90RC005	795413	8148688	58	0	-90	0	24	24	0.35	0.02	0.01
PD90RC005	795413	8148688	58	0	-90	30	36	6	0.49	0.09	0.02
PD90RC005	795413	8148688	58	0	-90	30	32	2	1.11	0.11	0.03
PD90RC005	795413	8148688	58	0	-90	38	40	2	0.18	0.03	0.01
PD90RC017	795422	8149027	64	0	-90	2	14	12	0.66	0.00	0.00
PD90RC017	795422	8149027	64	0	-90	6	12	6	1.00	0.00	0.00
PD90RC017	795422	8149027	64	0	-90	48	50	2	0.27	0.01	0.00
PD94RC041	795617	8148718	58	0	-90	0	3	3	0.20	0.00	0.00

Hole_ID	Easting (m)	Northing (m)	RL (m)	Azimuth	Dip	Depth From (m)	Depth To (m)	Interval (m)	Cu (%)	Co (%)	Ni (%)
PD94RC041	795617	8148718	58	0	-90	47	52	5	0.23	0.00	0.00
PD94RC042	795571	8148930	62	0	-90	0	11	11	0.50	0.00	0.00
PD94RC042	795571	8148930	62	0	-90	6	11	5	0.80	0.00	0.00
PD94RC082	795573	8149184	64	0	-90	5	7	2	0.19	0.01	0.00
PD94RC082	795573	8149184	64	0	-90	68	70	2	0.19	0.02	0.00
PD94RC088	795624	8149134	63	0	-90	7	9	2	0.19	0.00	0.00
PD94RC092	795523	8149134	64	0	-90	0	10	10	0.19	0.01	0.00
PD94RC092	795523	8149134	64	0	-90	25	43	18	0.54	0.00	0.00
PD94RC092	795523	8149134	64	0	-90	26	27	1	0.76	0.01	0.00
PD94RC092	795523	8149134	64	0	-90	31	33	2	0.92	0.00	0.00
PD94RC092	795523	8149134	64	0	-90	37	38	1	0.91	0.00	0.00
PD94RC092	795523	8149134	64	0	-90	47	48	1	0.65	0.00	0.00
PD94RC092	795523	8149134	64	0	-90	51	53	2	0.18	0.00	0.00
PD94RC092	795523	8149134	64	0	-90	55	57	2	0.21	0.00	0.00
PD95RC131	795476	8148603	57	0	-90	10	15	5	0.20	0.00	0.00
PD95RC142	795576	8148828	60	0	-90	38	43	5	0.21	0.01	0.00
PD95RC173	795436	8148603	57	0	-90	0	2	2	0.19	0.02	0.00
PD95RC174	795408	8148575	56	0	-90	21	24	3	0.21	0.01	0.00
PD95RC174	795408	8148575	56	0	-90	26	27	1	0.49	0.01	0.00
PD95RC236	795456	8148762	59	140	-60	0	29	29	0.74	0.01	0.01
PD95RC236	795456	8148762	59	140	-60	22	29	7	1.77	0.02	0.01
PD95RC236	795456	8148762	59	140	-60	45	46	1	0.39	0.05	0.00
PD95RC237	795488	8148800	59	140	-60	8	25	17	0.62	0.05	0.01
PD95RC237	795488	8148800	59	140	-60	10	15	5	1.25	0.02	0.00
PD95RC238	795364	8148643	57	140	-60	0	1	1	0.16	0.04	0.00
PD95RC238	795364	8148643	57	140	-60	10	30	20	0.34	0.02	0.01
PD95RC243	795386	8148724	58	0	-90	5	10	5	0.25	0.00	0.00
PD95RC243	795386	8148724	58	0	-90	14	20	6	0.23	0.01	0.00
PD95RC243	795386	8148724	58	0	-90	30	35	5	0.20	0.02	0.00
PD95RC245	795617	8148758	59	0	-90	0	1	1	0.16	0.09	0.01
PD95RC245	795617	8148758	59	0	-90	31	34	3	0.16	0.00	0.00
PD95RC245	795617	8148758	59	0	-90	76	77	1	0.15	0.00	0.00
PD95RC246	795657	8148718	59	0	-90	0	16	16	0.22	0.01	0.00
PD95RC246	795657	8148718	59	0	-90	66	67	1	0.22	0.01	0.00
PD95RC247	795577	8148758	59	0	-90	0	5	5	0.23	0.01	0.00
PD95RC247	795577	8148758	59	0	-90	10	33	23	1.56	0.01	0.00
PD95RC247	795577	8148758	59	0	-90	14	20	6	3.92	0.01	0.00
PD95RC247	795577	8148758	59	0	-90	23	25	2	0.99	0.00	0.00
PD95RC247	795577	8148758	59	0	-90	26	29	3	2.22	0.00	0.00
PD95RC247	795577	8148758	59	0	-90	42	49	7	0.46	0.00	0.00
PD95RC247	795577	8148758	59	0	-90	60	66	6	0.19	0.01	0.00
PD95RC248	795537	8148758	59	0	-90	0	24	24	0.25	0.02	0.01
PD95RC250	795577	8148718	59	0	-90	19	20	1	0.69	0.02	0.00
PD95RC252	795697	8148758	59	0	-90	0	2	2	0.15	0.08	0.00

Hole_ID	Easting (m)	Northing (m)	RL (m)	Azimuth	Dip	Depth From (m)	Depth To (m)	Interval (m)	Cu (%)	Co (%)	Ni (%)
PD95RC253	795657	8148798	60	0	-90	14	17	3	0.60	0.00	0.00
PD95RC253	795657	8148798	60	0	-90	25	29	4	0.44	0.03	0.01
PD95RC253	795657	8148798	60	0	-90	32	33	1	0.17	0.01	0.00
PD95RC253	795657	8148798	60	0	-90	35	36	1	0.20	0.00	0.00
PD95RC253	795657	8148798	60	0	-90	57	59	2	0.56	0.01	0.00
PD95RC253	795657	8148798	60	0	-90	60	65	5	0.39	0.00	0.00
PD95RC254	795657	8148838	60	0	-90	11	15	4	0.44	0.01	0.00
PD95RC254	795657	8148838	60	0	-90	20	25	5	0.35	0.01	0.00
PD95RC254	795657	8148838	60	0	-90	28	33	5	0.39	0.01	0.00
PD95RC254	795657	8148838	60	0	-90	29	30	1	0.79	0.01	0.00
PD95RC255	795697	8148838	60	0	-90	53	54	1	0.16	0.00	0.00
PD95RC256	795577	8148803	60	0	-90	15	27	12	0.36	0.04	0.01
PD95RC256	795577	8148803	60	0	-90	23	24	1	1.68	0.20	0.04
PD95RC256	795577	8148803	60	0	-90	37	43	6	0.59	0.01	0.00
PD95RC256	795577	8148803	60	0	-90	38	40	2	0.78	0.01	0.00
PD95RC256	795577	8148803	60	0	-90	81	82	1	0.21	0.00	0.00
PD95RC256	795577	8148803	60	0	-90	98	99	1	0.19	0.01	0.00
PD95RC257	795617	8148678	58	0	-90	63	64	1	0.61	0.00	0.00

Appendix 3. The following tables are provided to ensure compliance with the JORC Code (2012) requirements for the reporting of the exploration results for the Wollogorang Cobalt Project

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *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.*	Current Program • Rotary Air Blast Hammer (RAB) drilling using standard equipment. • Sampling was undertaken at one metre intervals. • Samples were collected in rubber buckets from the drill rig cyclone and then subsampled for analyses into plastic zip-lock bags. • Drilling was designed to sample relatively fresh basement beneath surficial soil cover and wetherd and laterised basement.

Criteria	JORC Code explanation	Commentary
	• *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Samples were analysed using a Bruker Titan S1 loaded with an algorithmn to optimise the detection limits for cobalt in low iron systems. The company has worked with Bruker to develop a tailored algothithm based on pXRF analyses of conventially analysed drill samples from the Stanton Cobalt Deposit. The pXRF analyses have been directly compared to conventional laboratory four acid digest Inductively Coupled Plasma (ICP) Optical Emission Spectrometry and a calibration algorith generated. Historical Holes • Reverse Circulation (RC) drilling using standard equipment. • Diamond Drilling (DD) using standard equipment. • Sampling was undertaken at variable intervals depending on visual estimates of mineralisation. •
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Rotary Air Blast (RAB) with a 137mm diameter hammer. •
Drill sample recovery	• *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.*	• Recovery generally good, with poor recovery in a small number of samples due to groundwater.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource*	• Drilling logged in detail on a metre by metre basis. • Lithology, alteration and oxidation logged qualitatively.

Criteria	JORC Code explanation	Commentary
	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.*	
Sub-sampling techniques and sample preparation	• *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.*	RAB Drilling • Samples were collected in rubber buckets from the drill rig cyclone and then subsampled by sieving to a -2mm mesh size fraction and placed into plastic zip-lock bags. • Representative end-of-hole samples have been kept in plastic chip trays. • Sample duplicates collected, and standards used to confirm representivity of sampling. RC drilling • RC drill samples split using a rig mounted cone splitter. • Sample duplicates collected, and standards used to confirm representivity of sampling.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Sample Preparation - The samples have been sorted and dried. Primary preparation has been by crushing the whole sample. The samples have been split with a riffle splitter to obtain a sub-fraction which has then been pulverised in a vibrating pulveriser. • Analytical Methods - The samples have been analysed by Firing a 40 g (approx) portion of the sample. Lower sample weights may be employed for samples with very high sulphide and metal contents. This is the classical fire assay process and will give total separation of Gold Platinum and Palladium in the sample. • Au, Pt, Pd determined by Inductively Coupled Plasma (ICP) Optical Emission Spectrometry. • The sample(s) have been digested and refluxed with a mixture of acids, including Hydrofluoric, Nitric, Hydrochloric and Perchloric Acids.

Criteria	JORC Code explanation	Commentary
		This extended digest approaches a Total digest for many elements, however, some refractory minerals are not completely attacked. • Ca, Cr, Fe, K, Mg, Mn, Na, P, S, V, Co, Cu, Ni and Zn determined by Inductively Coupled Plasma (ICP) Optical Emission Spectrometry. The sample(s) have been digested and refluxed with a mixture of acids including Hydrofluoric, Nitric, Hydrochloric and Perchloric Acids. This extended digest approaches a Total digest for many elements however some refractory minerals are not completely attacked. • Ag, As, Ba, Bi, Cd, Li , Mo, Pb, U, Th • Standards (OREAS 181), blanks and duplicates have all been applied in the QAQC methodology. Sufficient accuracy and precision have been establish for the type of mineralisation encountered.
Verification of sampling and assaying	• *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.*	• An electronic database containing collars, geological logging and assays is maintained by the Company.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Holes have been surveyed using l GPS (GPS). • UTM grid MGA94 Zone 53 was used
Data spacing and distribution	• *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.*	• RAB drill hole locations have been placed to infill and extend known mineralisation. Holes are generally 25m-50m apart. • Where more than one traverse covers a target they are spaced 50-100m apart. • Spacing and distribution is considered to be appropriate.

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	• Sample relationship to mineralisation and structure is unknown at this stage.
Sample security	• *The measures taken to ensure sample security.*	• Samples are bagged and sealed in plastic tubs on site and transported to the analytical laboratories by commercial transport companies for traditional anlyses and to the field camp for pXRF analyses. • Samples are bagged and sealed on pallets on site and transported to the analytical laboratories by commercial transport companies.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits undertaken at this stage as the drilling program has only recently commenced.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *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.*	• Wollogorang Cobalt Project exploration area occurs on EL 31272 which is 100% owned by Mangrove Resources Pty Ltd a wholly owned subsidiary to Northern Cobalt Ltd. • The licence is currently in good standing with the relevant authorities.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The Stanton Cobalt Deposit, Running Creek Prospect and surrounding prospects were discovered by CRA Exploration Pty Ltd in the period 1990-1996 period under a farm in arrangement with W J (Joe) Fisher.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The local geology is dominated by the Gold Creek Volcanics of the Tawallah Group. This formation is a series of basaltic lavas and shallow intrusives, interlayered with thin oxidised sandstone, carbonate and siltstone units. It is conformably underlain by reduced sedimentary facies of the Wollogorang Formation, which includes dolostones, sandstones and carbonaceous shales. A regional dolerite sill, the Settlement Creek Dolerite, was emplaced synchronous with effusion of the Gold Creek Volcanics. The Wollogorang Formation and Settlement Creek Dolerite do not outcrop on the Stanton prospect area, but are however intersected in a number of drill holes on the tenement. Within the district, the Gold Creek Volcanics are disconformably overlain by a felsic volcanic package that includes a rhyolitic rheoignimbrite sheet (Hobblechain Rhyolite), proximal epiclastics (Pungalina Member) and distal reworked clastics (Echo Sandstone). • Mineralisation is interpreted to be largely controlled by stratigraphy

Criteria	JORC Code explanation	Commentary
		within the flat lying interbedded sediment and volcanic rock units of the Proterozoic Gold Creek Volcanics. Brecciation and faulting has a strong control on the intensity and limits of mineralisation. In fresh rock the cobalt-nickel is located in disseminated siegenite (cobalt-nickel sulphide). Chalcocite and pyrite are also noted. Weathering to a variable depth of approximately 30m has resulted in cobalt oxide secondary mineralisation in a large proportion of the deposit.

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:*
	  ○ *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.*
		• See Appendix 1

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *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.*	• Simple length weighted averages were used for reporting of significant drill intercepts with a cut-off grade of 0.2% (2000 ppm) Cu and a maximum internal dilution of 2m @ 1500ppm. • Samples reading in excess of 1000ppm Cu have undergone a repeat analysis with the pXRF on a new sample from the source bag and results have been averaged.

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	• *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 (eg 'down hole length, true width not known').*	• Any observations made are down hole length and true width is not known.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• See attached release.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• All significant drill intersections have been reported and it has been noted when no significant intersection has been encountered.
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.*	• No other relevant data to report.
Further work	• *The nature and scale of planned further work (eg 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.*	• Planned further work detailed in this, and previous releases, and in figures. This work includes comprises drill testing further drill targets and follow up drilling of mineralised prospects.