

# ASX RELEASE 7 August 2018

# DRILLING RESULTS - WOLLOGORANG COBALT PROJECT, NT

- Assays received for 623 of 919 reconnaissance shallow air core drill holes completed this season
- Positively 128 of 623 (~21%) of the holes have anomalous cobalt in excess of 100 ppm Co. This compares favourably with the signature of 147ppm Co over the existing Stanton Cobalt Deposit.
- Drilling is expected to continue till the commencement of the wet season in November
- Deeper follow up drilling to commence next week

#### **Wollogorang Cobalt Drilling Program**

Northern Cobalt Limited (ASX: N27) is pleased to announce further results from ongoing drilling at the Wollogorang Cobalt Project. The company has continued drill testing targets consisting of magnetic lows similar to that underlying the Stanton Cobalt Deposit. This exploration method continues to be very encouraging, approximately 21%, or 128 of the 623 drill holes analysed so far intersecting cobalt mineralisation in excess of 100ppm (up from 17% in the previous announcement on 25 July 2018). Samples analysed from this style of shallow drilling are comparable to similar samples taken over the Stanton Cobalt Deposit, which peaked at 147ppm Co, which provide an indication of significant cobalt mineralisation at depth. Deeper follow up drilling to test these targets will commence next week



#### **CAPITAL STRUCTURE**

Ordinary Shares Issued 50.8 M

Options Listed 6.3 M @ 20c Unlisted 12.3 M @ 25c **Performance Shares** Class A 9.6 M Class B 3.6 M

Last Capital Raise 24 April 2018 - SPP \$0.6M @ 35c

#### **BOARD**

Len Dean - Chair Michael Schwarz - MD Duncan Chessell - Exec Dir Andrew Shearer - NED Jarek Kopias - Co Sec



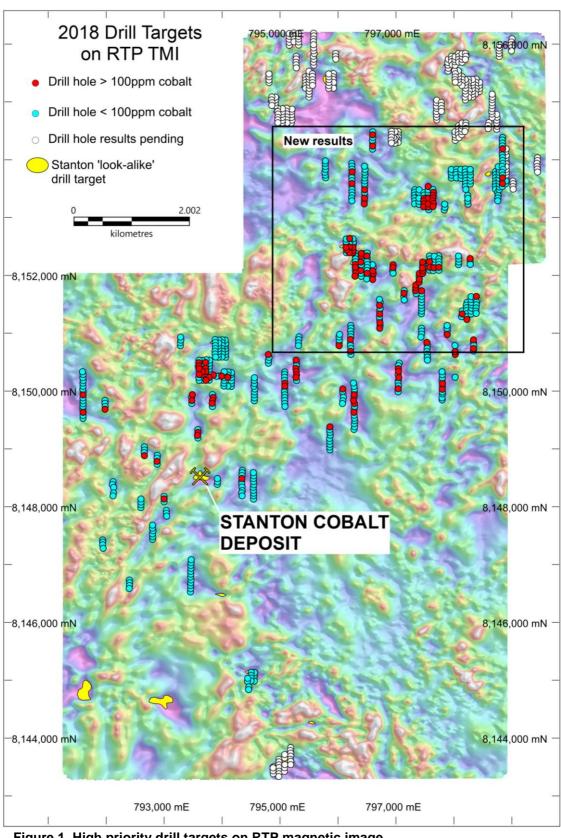


Figure 1. High priority drill targets on RTP magnetic image



#### **Shallow Drilling Results Defining Further Deeper Drilling Targets**

The highly mobile, 6-wheel drive mounted drill rig is proving very effective at rapidly testing the cobalt potential of our multiple drill targets. The rig is, on average, drilling to a depth of 5 metres, allowing us to see beneath the overlying sands and clays which mask the underlying mineralisation.

To give context to the results we have compared the surface sampling undertaken over the Stanton Cobalt Deposit to get an idea of anomalous values expected in the material over the top of the cobalt mineralisation at depth. The average cobalt of all lag samples taken within the resource boundary is 147 ppm Co with a peak value of 358 ppm Co. Given the shallow nature of drilling on our regional targets we would expect that assay results of 100 ppm and above are anomalous are a good indicator of cobalt mineralisation at depth.

It will take approximately one more week to complete the first pass drilling of targets within the immediate vicinity of the Stanton Deposit.

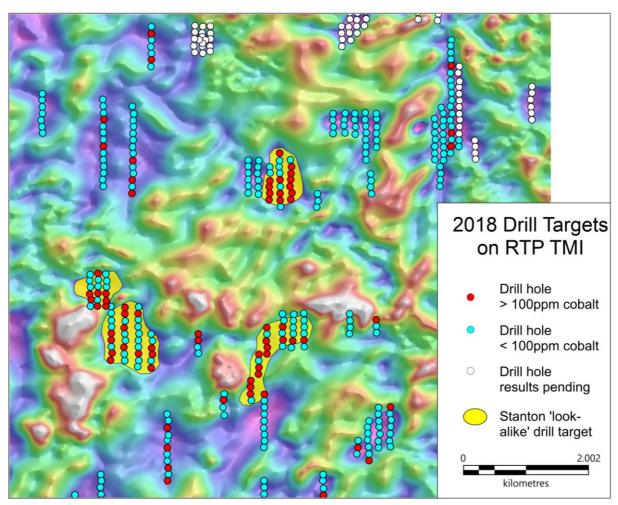


Figure 2. Detailed diagram of new results area



#### Follow-up Drilling

Northern Cobalt is now refining drill targets that indicate good potential for hosting mineralisation similar to that at the Stanton Cobalt Deposit.

Once the first-pass drilling is complete the drill rig will return to prospects that have demonstrated good cobalt mineralisation. These prospects will be drilled out on a 20m-25m grid, to depths of 30m-40m, to map the dimensions of potential mineralisation.

Those prospects that demonstrate the potential to host an economic resource will be drilled out with a large percussion reverse-circulation (RC) rig on 40m centres to a depth of 80m-100m.

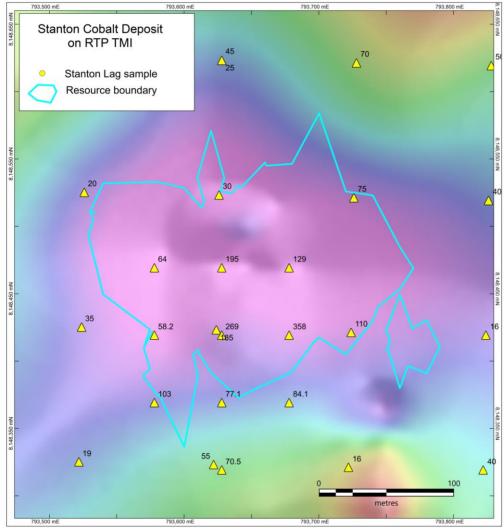
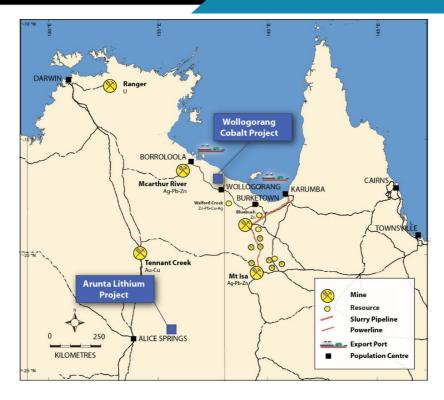


Figure 3. Surface lag sampling over the Stanton Cobalt Deposit





#### **Project Location**

The Wollogorang Cobalt Project is located 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 recently been released under JORC 2012 by the Company as "Stanton Resource Upgrade Increases Contained Cobalt" on 9 April 2018 and "Drilling Results – Wollogorang Cobalt Project" on 25 July 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.

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# Appendix 1. Summary table of drill hole details

Note: All analyses in this table have been determined by X-Ray Fluorescence Spectrometry – undertaken by the Bureau Veritas laboratory in Perth. All drill holes not shown in this table have reported cobalt analyses of less than 100 ppm and were not considered significant for exploration purposes. In the interests of readability these have not been reported in this table. All drill holes are vertical – therefore azimuth is 0. End of hole data is not relevant for the program due to shallow nature of holes - drill holes are a proxy for surface sampling.

Sample No	DH NAME	Easting	Northing	RL	Depth From	Depth To	As (ppm)	Bi (ppm)	Co (ppm)	Cu (ppm)	Ni (ppm)	Mo XRF1 (ppm)
30037	18AC0009	794099	8150254	67	2	3	10	0.9	101	128	40	1
30038	18AC0009	794099	8150254	67	3	4	-1	0.4	166	88	26	-0.5
30039	18AC0009	794099	8150254	67	4	5	3	1	216	116	40	1
30145	18AC0047	793994	8150274	74	8	9	30	-10	110	160	40	-10
30146	18AC0047	793994	8150274	74	9	10	60	-10	120	230	50	-10
30165	18AC0050	793850	8150291	76	8	8.5	10	-10	270	220	70	-10
30169	18AC0052	793775	8150249	76	0	1	-10	-10	100	60	40	-10
30170	18AC0052	793775	8150249	76	1	2	20	-10	120	40	40	-10
30172	18AC0052	793775	8150249	76	3	4	10	-10	100	80	40	-10
30200	18AC0060	793715	8150509	86	0	1	50	-10	100	30	50	-10
30205	18AC0062	793716	8150405	85	0	1	40	-10	140	60	10	-10
30209	18AC0063	793721	8150352	87	1	2	60	-10	160	60	50	-10
30228	18AC0066	793722	8150200	92	2	3	30	-10	120	30	20	-10
30229	18AC0066	793722	8150200	92	3	4	70	-10	110	30	-10	-10
30244	18AC0069	793658	8150296	95	1	2	10	-10	200	60	30	10
30249	18AC0070	793657	8150348	95	1	2	20	-10	150	60	60	10
30280	18AC0076	793598	8150503	100	1	2	50	-10	150	50	70	-10
30286	18AC0077	793602	8150449	99	1	2	20	-10	100	40	30	-10
30289	18AC0078	793603	8150403	99	1	2	30	-10	140	50	30	-10
30306	18AC0081	793604	8150300	92	1	2	40	-10	150	60	-10	-10

Sample No	DH NAME	Easting	Northing	RL	Depth From	Depth To	As (ppm)	Bi (ppm)	Co (ppm)	Cu (ppm)	Ni (ppm)	Mo XRF1 (ppm)
30333	18AC0087	793486	8149952	75	1	2	60	-10	150	70	10	-10
30352	18AC0089	793477	8149853	78	7	8	50	-10	120	90	50	-10
30353	18AC0089	793477	8149853	78	8	9	50	-10	120	100	50	-10
30354	18AC0089	793477	8149853	78	9	10	60	-10	110	70	40	-10
30357	18AC0089	793477	8149853	78	12	13	30	-10	140	90	40	-10
30374	18AC0092	793845	8149904	86	1	2	60	-10	180	50	10	-10
30381	18AC0093	793833	8149854	89	1	2	50	-10	100	60	30	-10
30390	18AC0094	793830	8149804	91	1	2	40	-10	130	50	10	-10
30411	18AC0097	793583	8149300	99	1	2	50	-10	170	40	30	-10
30423	18AC0098	793575	8149248	101	1	2	50	-10	170	50	10	-10
30424	18AC0098	793575	8149248	101	2	3	30	-10	100	60	-10	-10
30465	18AC0106	794342	8148503	102	1	2	60	-10	110	110	10	10
30498	18AC0115	791601	8149648	75	1	2	30	-10	100	40	40	-10
30524	18AC0121	791602	8149949	72	1	2	40	-10	130	20	60	-10
30578	18AC0133	791980	8149701	80	1	2	50	-10	100	30	50	-10
30592	18AC0137	792660	8148899	92	0	1	60	-10	200	30	20	-10
30603	18AC0140	792878	8148800	94	1	2	40	-10	100	110	50	10
30798	18AC0202	795859	8149396	48	1	2	40	-10	100	60	50	10
30832	18AC0209	796276	8149647	43	1	2	40	-10	140	30	20	-10
30855	18AC0212	796284	8149800	48	1	2	10	-10	120	20	30	-10
30858	18AC0213	796269	8149850	48	1	2	10	-10	140	20	40	-10
30875	18AC0215	796280	8149951	48	1	2	10	-10	120	40	30	-10
30876	18AC0215	796280	8149951	48	2	3	20	-10	100	40	10	-10
30894	18AC0220	796082	8150052	48	1	2	40	-10	100	50	30	10
30937	18AC0226	797534	8150856	38	1	2	10	-10	140	60	50	-10
30993	18AC0234	798143	8151349	42	1	2	10	-10	110	30	30	-10
31027	18AC0242	798225	8151252	45	1	2	-10	-10	100	30	40	-10

Sample No	DH NAME	Easting	Northing	RL	Depth From	Depth To	As (ppm)	Bi (ppm)	Co (ppm)	Cu (ppm)	Ni (ppm)	Mo XRF1 (ppm)
31071	18AC0250	798386	8151653	48	1	2	20	-10	280	60	80	-10
31159	18AC0261	797799	8150046	52	1	2	20	-10	120	30	60	-10
31179	18AC0263	797801	8150146	52	1	2	20	-10	100	30	60	-10
31180	18AC0263	797801	8150146	52	2	3	20	-10	100	40	110	-10
31211	18AC0268	798024	8150648	52	1	2	50	-10	100	60	50	-10
31222	18AC0269	798020	8150696	52	1	2	60	-10	100	50	80	-10
31242	18AC0272	798338	8150901	62	1	2	40	-10	100	50	50	-10
31276	18AC0275	798340	8150750	62	1	2	60	-10	120	60	30	-10
31294	18AC0277	797884	8150993	62	1	2	60	-10	100	50	50	-10
31371	18AC0287	797042	8150402	37	1	2	50	-10	100	60	90	-10
31372	18AC0287	797042	8150402	37	2	3	40	-10	100	50	40	-10
31379	18AC0288	797043	8150354	37	1	2	40	-10	110	60	70	-10
31408	18AC0290	797049	8150249	37	1	2	60	-10	150	110	90	-10
31431	18AC0294	797037	8150056	47	1	2	30	-10	130	30	50	-10
31442	18AC0296	796020	8150801	73	0	1	40	-10	130	120	30	-10
31518	18AC0306	796215	8150907	51	1	2	40	-10	180	110	50	10
31540	18AC0310	796216	8150702	60	1	2	30	-10	140	70	70	-10
31551	18AC0312	796719	8151101	56	0	1	30	-10	120	20	60	-10
31552	18AC0312	796719	8151101	56	1	2	50	-10	150	40	50	-10
31564	18AC0314	796724	8151197	53	1	2	50	-10	110	140	70	10
31586	18AC0317	796717	8151347	60	1	2	40	-10	120	100	50	-10
31605	18AC0320	796717	8151497	58	1	2	30	-10	170	90	50	-10
31618	18AC0323	796597	8151944	57	2	3	40	-10	160	140	30	10
31622	18AC0323	796597	8151944	57	6	7	30	-10	110	60	40	-10
31640	18AC0325	796606	8152046	54	1	2	40	-10	140	60	50	-10
31658	18AC0326	796600	8152093	54	14	15	20	-10	120	-10	40	-10
31677	18AC0330	796499	8152351	59	0	1	30	-10	110	60	50	-10

Sample No	DH NAME	Easting	Northing	RL	Depth From	Depth To	As (ppm)	Bi (ppm)	Co (ppm)	Cu (ppm)	Ni (ppm)	Mo XRF1 (ppm)
31706	18AC0336	796502	8152052	59	1	2	40	-10	150	80	70	10
31760	18AC0341	796393	8152099	59	1	2	40	-10	180	140	40	-10
31781	18AC0344	796395	8152245	59	6	7	50	-10	100	150	50	-10
31788	18AC0346	796400	8152349	59	1	2	30	-10	130	120	80	-10
31792	18AC0347	796401	8152397	59	1	2	50	-10	140	140	60	10
31796	18AC0347	796401	8152397	59	5	6	40	-10	130	50	50	-10
31816	18AC0352	796299	8152204	59	1	2	-10	-10	230	20	50	-10
31822	18AC0353	796298	8152153	59	5	6	40	-10	150	170	30	-10
31823	18AC0353	796298	8152153	59	6	7	20	-10	160	340	10	10
31824	18AC0353	796298	8152153	59	7	8	30	-10	190	210	20	-10
31825	18AC0353	796298	8152153	59	8	9	20	-10	120	60	20	-10
31833	18AC0355	796305	8152056	60	1	2	20	-10	140	110	30	-10
31845	18AC0356	796293	8152002	60	1	2	30	-10	180	80	40	-10
31854	18AC0357	796259	8152407	58	0	1	10	-10	100	40	20	-10
31855	18AC0357	796259	8152407	58	1	2	20	-10	160	80	50	-10
31856	18AC0357	796259	8152407	58	2	3	10	-10	150	100	50	-10
31865	18AC0358	796261	8152447	58	1	2	30	-10	120	70	30	-10
31869	18AC0359	796259	8152500	58	1	2	30	-10	170	100	50	-10
31908	18AC0363	796200	8152652	58	6	7	20	-10	100	150	50	-10
31909	18AC0363	796200	8152652	58	7	8	20	-10	120	90	50	-10
31910	18AC0363	796200	8152652	58	8	9	-10	-10	160	150	50	-10
31911	18AC0363	796200	8152652	58	9	10	10	-10	100	270	70	10
31927	18AC0366	796199	8152504	58	2	3	10	-10	140	60	50	-10
31930	18AC0366	796199	8152504	58	5	6	20	-10	110	80	30	-10
31931	18AC0366	796199	8152504	58	6	7	-10	-10	170	300	40	10
31939	18AC0368	796195	8152407	58	1	2	20	-10	100	50	40	-10
31940	18AC0368	796195	8152407	58	2	3	30	-10	170	60	40	-10

Sample No	DH NAME	Easting	Northing	RL	Depth From	Depth To	As (ppm)	Bi (ppm)	Co (ppm)	Cu (ppm)	Ni (ppm)	Mo XRF1 (ppm)
31954	18AC0370	796149	8152455	61	1	2	10	-10	170	90	30	-10
31958	18AC0370	796149	8152455	61	5	6	30	-10	120	40	40	-10
31960	18AC0371	796137	8152497	61	1	2	10	-10	100	80	40	-10
31961	18AC0371	796137	8152497	61	2	3	10	-10	110	100	40	-10
31981	18AC0375	796949	8152199	52	4	5	20	-10	110	110	30	-10
31983	18AC0375	796949	8152199	52	6	7	10	-10	130	100	30	-10
31996	18AC0376	796948	8152150	52	5	6	20	-10	140	30	40	-10
32017	18AC0380	797137	8151705	52	1	2	20	-10	120	60	20	-10
32019	18AC0380	797137	8151705	52	3	4	30	-10	220	110	60	-10
32020	18AC0380	797137	8151705	52	4	4.5	30	-10	100	130	40	-10
32078	18AC0391	797443	8151747	56	1	2	20	-10	100	60	40	-10
32101	18AC0393	797339	8151750	57	0	1	30	-10	110	30	-10	-10
32102	18AC0393	797339	8151750	57	1	2	50	-10	110	70	20	-10
32114	18AC0394	797340	8151802	55	1	2	60	-10	150	70	40	-10
32120	18AC0395	797342	8151850	56	1	2	40	-10	150	60	50	-10
32127	18AC0396	797398	8151898	53	0	1	40	-10	110	50	30	-10
32128	18AC0396	797398	8151898	53	1	2	70	-10	210	100	70	-10
32129	18AC0396	797398	8151898	53	2	3	40	-10	130	70	30	-10
32140	18AC0397	797402	8151948	49	1	2	70	-10	160	100	40	-10
32141	18AC0397	797402	8151948	49	2	3	40	-10	110	70	40	-10
32153	18AC0399	797402	8152046	50	1	2	40	-10	140	60	20	-10
32165	18AC0400	797462	8152049	53	4	5	30	-10	110	110	50	-10
32170	18AC0401	797465	8152098	56	1	2	60	-10	130	50	20	-10
32174	18AC0402	797457	8152146	58	1	2	30	-10	100	30	-10	-10
32203	18AC0407	797580	8152252	55	3	4	30	-10	110	100	40	-10
32204	18AC0407	797580	8152252	55	4	5	40	-10	110	80	40	-10
32214	18AC0409	797583	8152154	55	1	2	70	-10	200	50	-10	-10

Sample No	DH NAME	Easting	Northing	RL	Depth From	Depth To	As (ppm)	Bi (ppm)	Co (ppm)	Cu (ppm)	Ni (ppm)	Mo XRF1 (ppm)
32227	18AC0412	797655	8152147	55	1	2	40	-10	100	40	-10	-10
32260	18AC0421	797739	8152153	59	2	3	40	-10	110	-10	40	-10
32298	18AC0427	798279	8152305	59	0	1	40	-10	110	20	20	-10
32350	18AC0440	796244	8153805	64	1	2	40	-10	100	220	-10	10
32351	18AC0440	796244	8153805	64	2	3	70	-10	210	380	-10	20
32352	18AC0440	796244	8153805	64	3	3.5	70	-10	130	500	60	20
32366	18AC0444	796239	8153603	59	1	2	60	-10	100	20	20	-10
32396	18AC0451	796453	8153250	57	1	2	40	-10	110	60	-10	-10
32397	18AC0451	796453	8153250	57	2	3	40	-10	130	100	30	-10
32408	18AC0453	796456	8153350	57	1	2	-10	-10	110	60	40	-10
32430	18AC0456	796460	8153496	64	1	2	30	-10	120	40	40	-10
32482	18AC0466	796598	8154251	62	0	1	30	-10	100	60	40	-10
32502	18AC0470	796597	8154445	69	1	2	40	-10	140	100	30	-10
32611	18AC0494	794799	8150647	69	1	2	30	-10	120	50	50	-10
32629	18AC0499	795278	8150550	75	1	2	30	-10	160	60	30	-10
32642	18AC0502	795273	8150406	63	1	2	30	-10	130	70	70	-10
32643	18AC0502	795273	8150406	63	2	3	20	-10	110	90	50	-10
32649	18AC0503	795281	8150352	63	2	3	20	-10	120	100	40	-10
32653	18AC0504	795284	8150297	63	1	2	30	-10	150	220	30	10
32657	18AC0505	795277	8150249	63	1	2	20	-10	120	40	30	-10
32684	18AC0511	795085	8150151	54	1	2	30	-10	110	30	40	-10
32690	18AC0512	795083	8150101	54	1	2	30	-10	120	40	30	-10
32828	18AC0534	797484	8153344	64	0	1	40	-10	110	60	40	-10
32842	18AC0535	797479	8153299	64	7	8	60	-10	110	90	60	-10
32843	18AC0535	797479	8153299	64	8	9	60	-10	160	30	70	-10
32845	18AC0536	797483	8153251	64	1	2	50	-10	150	100	60	-10
32854	18AC0537	797478	8153202	64	1	2	40	-10	160	100	60	-10

Sample No	DH NAME	Easting	Northing	RL	Depth From	Depth To	As (ppm)	Bi (ppm)	Co (ppm)	Cu (ppm)	Ni (ppm)	Mo XRF1 (ppm)
32873	18AC0539	797561	8153198	59	0	1	30	-10	140	110	70	-10
32885	18AC0540	797560	8153250	59	1	2	40	-10	130	60	60	-10
32903	18AC0542	797560	8153352	59	1	2	70	-10	120	120	50	-10
32954	18AC0546	797557	8153551	63	12	13	30	-10	110	220	30	-10
32990	18AC0548	797646	8153450	63	8	9	40	-10	130	140	50	-10
33004	18AC0549	797642	8153399	63	7	8	30	-10	110	240	40	10
33005	18AC0549	797642	8153399	63	8	9	-10	-10	180	170	40	-10
33020	18AC0550	797640	8153353	63	1	2	30	-10	100	120	40	-10
33036	18AC0551	797634	8153302	63	1	2	50	-10	140	80	60	-10
33046	18AC0551	797634	8153302	63	11	12	30	-10	120	20	120	-10
33050	18AC0552	797649	8153254	63	0	1	60	-10	100	50	40	-10
33057	18AC0553	797640	8153205	63	1	2	50	-10	120	60	70	-10
33058	18AC0553	797640	8153205	63	2	3	20	-10	110	100	70	-10
33315	18AC0611	798841	8154205	88	0	1	60	-10	100	30	50	-10
33371	18AC0621	798841	8153702	74	14	14.5	120	-10	150	140	30	-10
33383	18AC0623	798838	8153602	74	1	2	60	-10	160	50	70	-10

# Appendix 2. 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	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc).         These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Air core (AC) drilling using standard equipment.</li> <li>Sampling was undertaken at one metre intervals.</li> <li>Samples were collected in rubber buckets from the drill rig cyclone and then subsampled for analyses into plastic zip-lock bags.</li> <li>Drilling was designed to sample relatively fresh basement beneath surficial soil cover and wetherd and laterised basement.</li> </ul>
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, facesampling bit or other type, whether core is oriented and if so, by what method, etc).	Reverse circulation air core (AC) with a 75 mm diameter drill bit.
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> </ul>	<ul> <li>Recovery generally good, with poor recovery in a small number of samples due to groundwater.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <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>	
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>Drilling logged in detail on a metre by metre basis.</li> <li>Lithology, alteration and oxidation logged qualitatively.</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 insitu 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>Samples were collected in rubber buckets from the drill rig cyclone and then subsampled by sieving to a &lt;1.6mm size fraction and placed into plastic zip-lock bags.</li> <li>Representative end-of-hole samples have been kept in plastic chip trays.</li> <li>Sample duplicates collected, and standards used to confirm representivity of sampling.</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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision</li> </ul>	<ul> <li>Analytical Laboratory Analyses</li> <li>Sample Preparation - The samples have been sorted &amp; dried. The whole sample has been pulverised in a vibrating disc pulveriser.</li> <li>Analytical Methods - As, Bi, Co, Cu, NiO, Mo XRF determined by X-Ray Fluorescence Spectrometry on oven dry (85 'C) sample unless otherwise stated.</li> <li>The samples have been cast using a 12:22 flux to form a glass bead which has been analysed by XRF.</li> </ul>

Criteria	JORC Code explanation	Commentary
	have been established.	
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>	An electronic database containing collars, geological logging and assays is maintained by the Company.
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and downhole 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>Holes have been surveyed using Differential GPS (DGPS).</li> <li>UTM grid MGA94 Zone 53 was used</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>RC drill hole spacing approximately every 50m on a traverse across the drill target.</li> <li>Where more than one traverse covers a target they are spaced 50m apart.</li> <li>Spacing and distribution is considered to be appropriate.</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>	Sample relationship to mineralisation and structure is unknown at this stage.
Sample security	The measures taken to ensure sample security.	<ul> <li>Samples are bagged and sealed in plastic tubs on site and transported to the analytical laboratories by commercial transport companies for analyses</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul> <li>No audits undertaken at this stage as the drilling program has only recently commenced.</li> </ul>

# Section 2 Reporting of Exploration Results

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

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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>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.</li> <li>The licence is currently in good standing with the relevant authorities.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>The Stanton Cobalt Deposit 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.</li> </ul>
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).

Criteria	JORC Code explanation	Commentary
		Mineralisation is interpreted to be largely controlled by stratigraphy 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	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	See Appendix 1
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any</li> </ul>	No data aggregation methods were used

Criteria	JORC Code explanation	Commentary
	reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisatio n 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 (eg 'down hole length, true width not known').</li> </ul>	Any observations made are down hole length and true width is not known.
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>	See attached release.
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>	<ul> <li>All significant drill intersections have been reported and it has been noted when no significant intersection has been encountered.</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.	No other relevant data to report.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>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.</li> </ul>