

4 November 2020

**ASX ANNOUNCEMENT**

## **Assays Confirm Significant High-Grade Magmatic Nickel Sulphide Discovery**

### **HIGHLIGHTS**

- Assays results from CBDD030 confirm the high-grade nature of the magmatic nickel sulphides intersected at the T5 Prospect located 1.1km from the Carr Boyd Mine
- Results include:
  - 2.5m @ 3.66% Ni, 0.46% Cu, 0.16% Co, 2.09g/t Ag & 0.78g/t Au+Pt+Pd, with 2.98% MgO; within a zone grading
  - 3.7m @ 2.85% Ni, 0.65% Cu, 0.13% Co, 2.58g/t Ag & 0.75g/t Au+Pt+Pd, with 5.65% MgO;
  - Overall grade of sulphide zone grades 13.9m @ 1.07% Ni, 0.39% Cu, 0.05% Co, 1.56g/t Ag & 0.48g/t Au+Pt+Pd, with 10.84% MgO;
- The results support the potential for mineralisation to be high-grade and low in deleterious elements, which is a typical feature of magmatic nickel deposits compared to many komatiite nickel deposits
- Following up diamond core drilling utilising 2 drill rigs is scheduled to commence imminently
- The DHTeM plates and mineralisation are unconstrained; open up down dip, along strike to the north and south as well as to the east of the hole (see Figure 3)



Figure 1. High grade nickel sulphides showing magmatic sulphide textures within the main massive-matrix sulphide zone. The mineralisation comprises breccia rip up clasts within the massive sulphide, interstitial sulphide/crystal intergrowth at the margin, and chalcopyrite segregation within the crystallised host gabbro. Coarse blebs of matrix sulphide are observed between the crystallising host rock (436.7m-441.1m shown).

Estrella Resources Limited (ASX: ESR) (Estrella or the Company) is pleased to report to the market that laboratory assay results from the anticipated diamond drill core CBDD030 have been returned (Table 1). Core hole CBDD030 was drilled into a blind target zone located 300m south of the original T5 discovery zone at the Company's flagship Carr Boyd Project. The T5 Prospect is located 1.1km NE of the historic Carr Boyd mine and is the most significant mineralisation intersected outside of the known mine area.

Results returned comprise the high-grade massive sulphide zone which returned;

**2.5m @ 3.66% Ni, 0.46% Cu, 0.16% Co, 2.09g/t Ag & 0.78g/t Au+Pt+Pd,**

The combined massive and matrix sulphide zone returned grades of;

**3.7m @ 2.85% Ni, 0.65% Cu, 0.13% Co, 2.58g/t Ag & 0.75g/t Au+Pt+Pd,**

These are located within the much broader mineralised zone returning an overall grade of;

**13.9m @ 1.07% Ni, 0.39% Cu, 0.05% Co, 1.56g/t Ag & 0.48g/t Au+Pt+Pd,**

**Table 1: Sulphide Intersection Summary**

Hole ID	From	To	Width	Ni %	Cu %	Co %	Ag ppm	Au+Pt+Pd ppm	As ppm	MgO %
CBDD030	431.6	445.5	13.9	1.07	0.39	0.05	1.56	0.48	<5	10.84
<i>Incl</i>	<i>436.3</i>	<i>440.0</i>	<i>3.7</i>	<i>2.85</i>	<i>0.65</i>	<i>0.13</i>	<i>2.58</i>	<i>0.75</i>	<5	5.65
<i>Incl</i>	<i>436.3</i>	<i>438.8</i>	<i>2.5</i>	<i>3.66</i>	<i>0.46</i>	<i>0.16</i>	<i>2.09</i>	<i>0.78</i>	<5	2.98

Hole ID	mFrom	mTo	Width	Ni %	Cu %	Co %	Ag g/t	Au+Pt+Pd g/t	Comment
CBDD030	431.60	436.30	4.70	0.49	0.33	0.02	1.55	0.45	Disseminated, Blebby & Remobilised Veins
	436.30	438.80	2.50	3.66	0.46	0.16	2.09	0.78	Massive Sulphide Zone
	438.80	440.00	1.20	1.16	1.04	0.05	3.58	0.69	Matrix Sulphide & Crystal Intergrowth Margin
	440.00	445.00	5.00	0.33	0.29	0.02	0.91	0.31	Disseminated to Blebby
	445.00	445.50	0.50	0.72	0.18	0.03	0.70	0.37	Breccia Vein
	445.00	495.70	50.70	TBA	TBA	TBA	TBA	-	Disseminated Sulphides (Assays awaiting)

Chris Daws, CEO comments *“Grade is King and with assays returning +3.5% Nickel, this is an absolutely fantastic result. It’s going to get interesting from here on in as we drill out this high-grade nickel discovery and test the surrounding area for further mineralisation. Well done to the entire team and I look forward to seeing what the future holds for us as we unlock the true potential of the T5 mineralisation.”*

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**Figure 2. Ni-Cu bearing massive sulphide zone in diamond drill hole CBDD030 drilled 300m south of the T5 Ni-Cu discovery zone (438.3m-438.5 shown).**

Diamond core hole CBDD030 was collared 300m south of the T5 zone (Figure 4 & Table 2), testing the Carr Boyd Layered Intrusions contact at depth, below and south of the previously identified mineralisation. The hole successfully intersected the basal contact of the layered mafic/ultramafic intrusion, returning a significant 13.9m wide zone of sulphide mineralisation (Table 1 & Table 3) starting from 431.6m downhole, which contains a 3.7m thick core zone of high-grade massive and matrix Ni-Cu sulphide mineralisation from 436.3m depth (Figure 3). Disseminated sulphide mineralisation continues down to bottom of hole (EOH at 495.7m) within the serpentinised ultramafic unit and is currently in the laboratory being assayed.

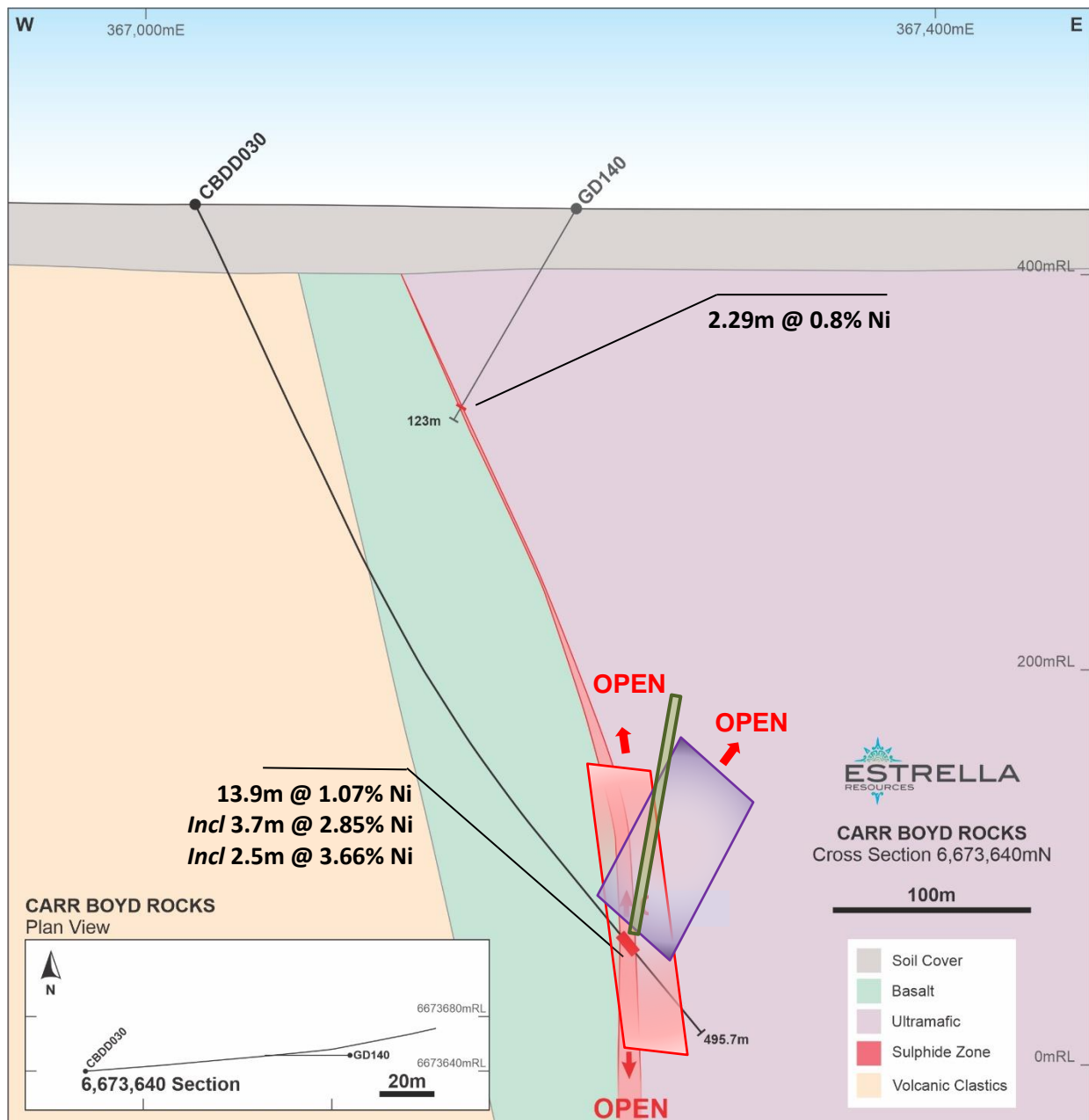
The sulphide zone forms unique magmatic nickel sulphide textures comprising pyrrhotite, pentlandite and chalcopyrite (Figures 1 & 2) which have intruded up the contact zone as a pulse within a gabbro-norite host. The gabbro-norite and sulphide mineralisation has intruded between the outer mafic and the contact zone ultramafic units of the Carr Boyd Layered Intrusion and geological modelling supports a nearby source of primary sulphides from which this remobilised sulphides have been sourced.

Assays from the main sulphide zones returned low MgO grades and below detection limit arsenic grades (Table 3). This supports the potential for the T5 mineralisation to be high-grade and low in deleterious elements, which is deemed to have favorable metallurgical properties for ore processing and is a typical feature of magmatic nickel deposits compared to many komatiite hosted nickel deposits.

**CBDD030 intersected the contact which was completely blind and is open in all directions (Figure 3). This provides massive opportunity to drill out and expand this zone of high-grade nickel mineralisation.**

**Table 2: Drill hole collar details**

Hole ID	Final Depth	Easting	Northing	Dip	Azimuth	Status
CBDD0028	251.0m	367045	6673940	-60	090	Completed
CBDD0029	603.8m	367000	6673940	-70	090	Completed
CBDD0030	495.7m	367025	6673640	-65	090	Completed
CBDD0031	591.8m	366925	6674240	-65	090	Completed



**Figure 3. Cross Section 6673640mN showing high-grade nickel sulphide intersection zone in CBDD030 and shallow historical hole with interpreted geology and mineralised basal contact. Modelled DHEM plates are shown surrounding the mineralisation. The DHEM is unconstrained; with both being open up and down dip, along strike to the north and south as well as to the east of the hole.**

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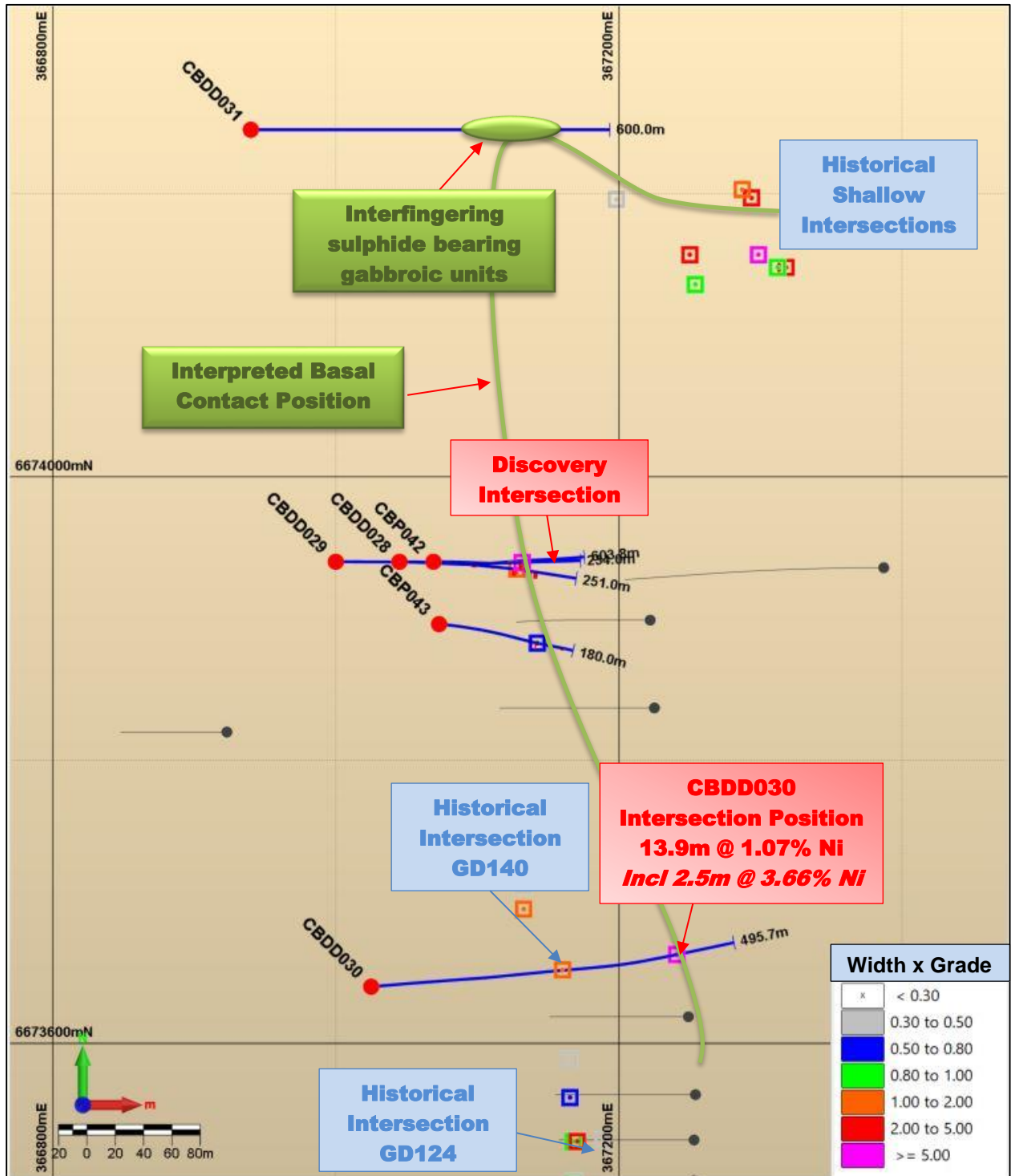


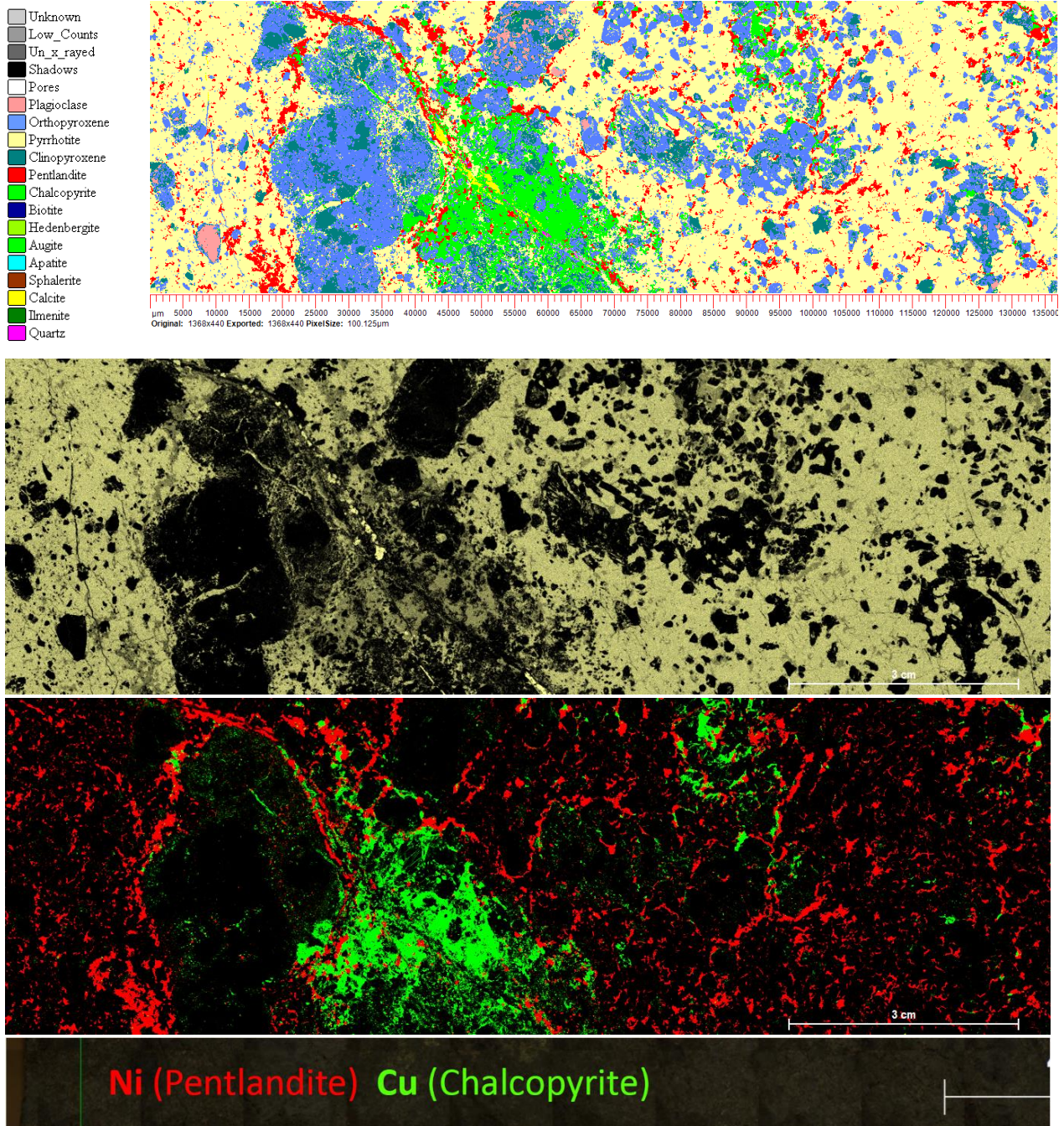
Figure 4. Drill hole plan showing ESR's recent RC and DD drill holes (blue trace) and historical holes >150m depth (grey trace). Nickel intersections are shown by the squares which are coloured by Width x Grade calculation. The interpreted basal contact position of the Carr Boyd Layered Intrusion is shown by the olive green line.

In order to understand the nature and style of the sulphide mineralisation intersected in CBDD030, Estrella engaged Portable Spectral Services to complete MicroXRF analyses of selected core samples through zones of different sulphide styles within CBDD030 using a Bruker M4 TORNADO scanning machine. The MicroXRF provides a full suite of rock forming elements and minerals, as well as providing a detailed view of the nature and distribution of these element, particularly the sulphides. The analysis provides an estimate of grade which is to be used only as a volumetric comparison and is not to replace laboratory assay grades.

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The mineralogy and grade estimation of the sample is generated by importing data from the Bruker M4 into Advanced Mineral Identification Software (AMIS). AMIS semi-automatically identifies the mineralogy of the sample and a grade estimation is calculated based on mineral stoichiometry.

MicroXRF scanning of another 4 samples is currently underway through the blebby and matrix sulphide zones, whilst images of the first two samples through the massive sulphide zone are shown below as Figures 5 and Figures 6.

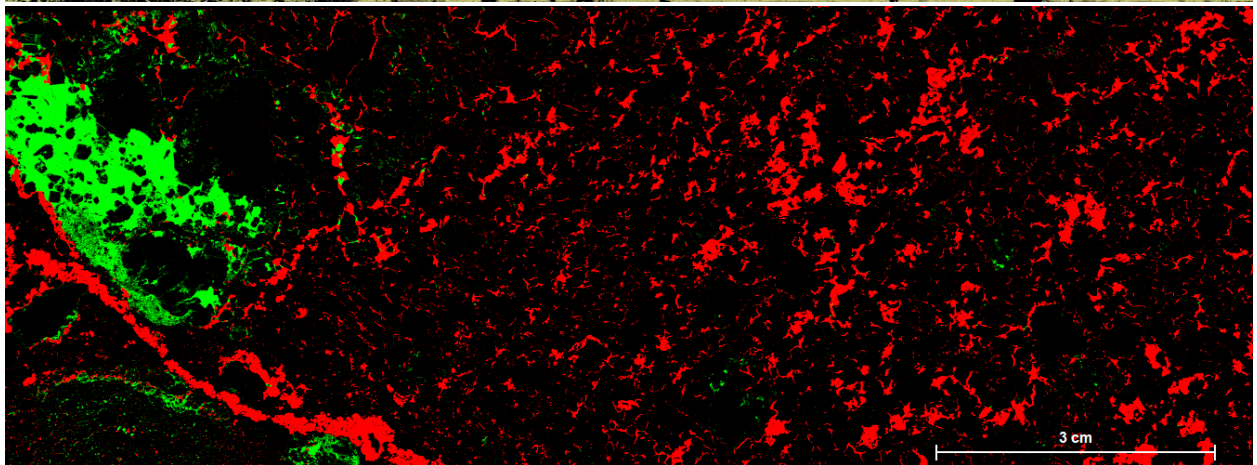
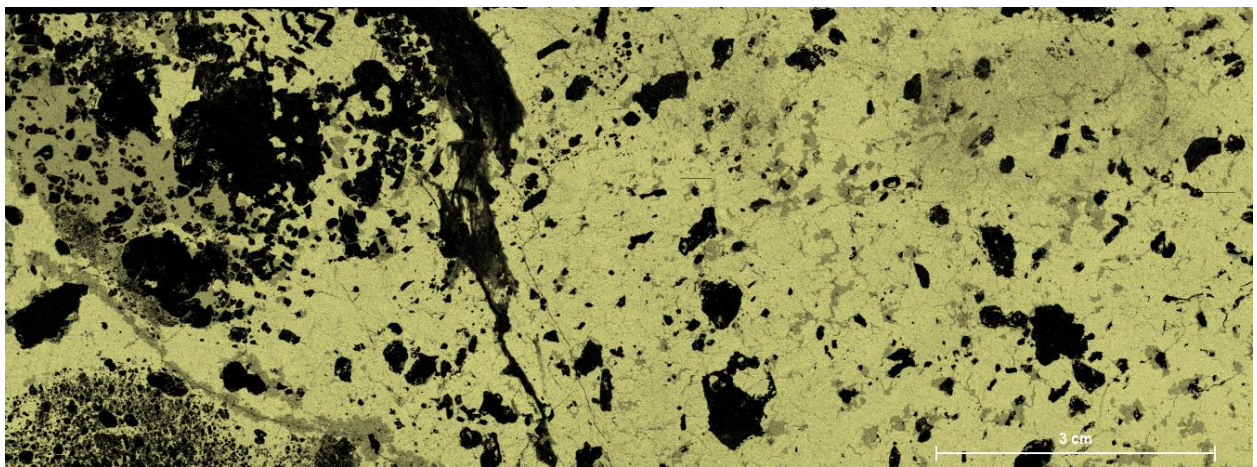
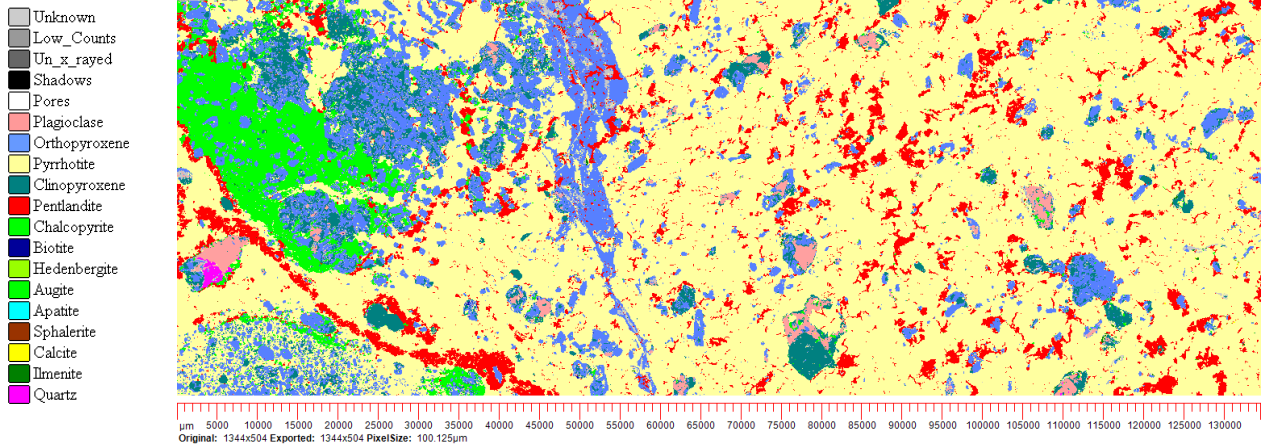


Estimate Grade from scanned region  
(From mineralogy)

**Ni: ~ 2.82 Wt%**  
**Cu: ~ 2.97 Wt%**

Figure 5. CBDD030: 437.0-437.2m-Bruker M4 MicroXRF scans. Top Image=Mineral distribution, Middle Image=Sulphur distribution, Lower Image= Nickel-Copper Sulphide distribution and estimated localised grades.

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**Ni (Pentlandite) Cu (Chalcopyrite)**

**Estimate Grade from  
scanned region  
(From mineralogy)**

**Ni: ~ 3.24 Wt%**  
**Cu: ~ 1.8 Wt%**

Figure 6. CBDD030: 437.2-437.4m-Bruker M4 MicroXRF scans. Top Image=Mineral ditribution, Middle Image=Sulphur ditribution, Lower Image= Nickel-Copper Sulphide ditribution and estimated localised grades.

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The final hole of the Stage 1 drilling was recently completed and is currently being cut and sampled ready for laboratory assay submission. Diamond core hole CBDD031 was collared 300m north of CBP042 & CBDD028, and is located 600m north of discovery hole CBDD030 (Figure 4) in the northern end of the Carr Boyd Layered Intrusion. The stratigraphic hole was drilled to geologically test the position of the interpreted basal contact at depth as well as providing a DHTEM platform to enable testing for sulphide mineralisation. The hole intersected a number of interfingering intrusive gabbroic rocks within the basal sedimentary/mafic sequence, however no significant massive/matrix sulphide mineralisation was intersected.

A Down-Hole Transient Electromagnetics (DHTEM) survey was completed on the hole (Figure 7) which highlighted weak localised inhole/offhole anomalism with centers at ~230-250m (minor), ~340-360m, ~400-440m and ~525-545m downhole depths. The main local anomalism is at ~340-360m depth with the primarily anomalism occurring at ~400-440m downhole depths. Geological logging identified up to 20% volume of localised pyrite/quartz veining in these zones, associated with the gabbroic intrusions.

This lowermost anomaly is far better defined in this loop dataset indicating the source is sub-parallel to hole and coupled well with the eastern loop. Initial modelling for the lowermost anomaly (~400-440m zone) defines the size of the anomaly having a minimum size of at least ~20m depth extent x ~50m strike extent and with moderate conductance of ~750-1500S, dip of ~40-50deg E approx. The source is immediately west of hole within the footwall zone and may be within the gabbroic dykes below the hole or a remobilised sulphide body off the basal contact (Figure 7-lower image).

CBDD031 is now interpreted to have intersected the corner of the intrusion where contact parallel gabbroic dyke intrusions extend off the basal contact into the country rock. Figure 4 shows the interpreted basal contact position which is now interpreted to wrap around the northern end of the T5 area and head eastwards. Further drilling is required to resolve the northern contact zone and test the DHTEM anomalism defined by CBDD031.

Scheduling is well underway to rapidly expand the exploration program at Carr Boyd with immediate priority being the areas surrounding the significant discovery hole CBDD030 which will be tested on a 40m x 40m pierce point pattern surrounding the sulphide intersection. The second rig will be used to test the contact zone below CBP042 & CBDD028 (Figure 4) and the untested contact near CBDD029 to fully understand the nature of the mineralisation and the basal contact 300m to the north of discovery hole CBDD030.

An initial 8-10 hole diamond drilling program utilizing 2 core rigs has been scheduled to commence this week with the Company retaining the Topdrive Drillers (TDA) diamond drill rig as well as securing another rig from Westcore Drilling which has arrived on site and is ready to commence drilling. The Company has been employing the local station owner and his work crew to assist in upgrading site support infrastructure as all efforts are focused towards defining the high-grade mineralisation intersected in hole CBDD030.



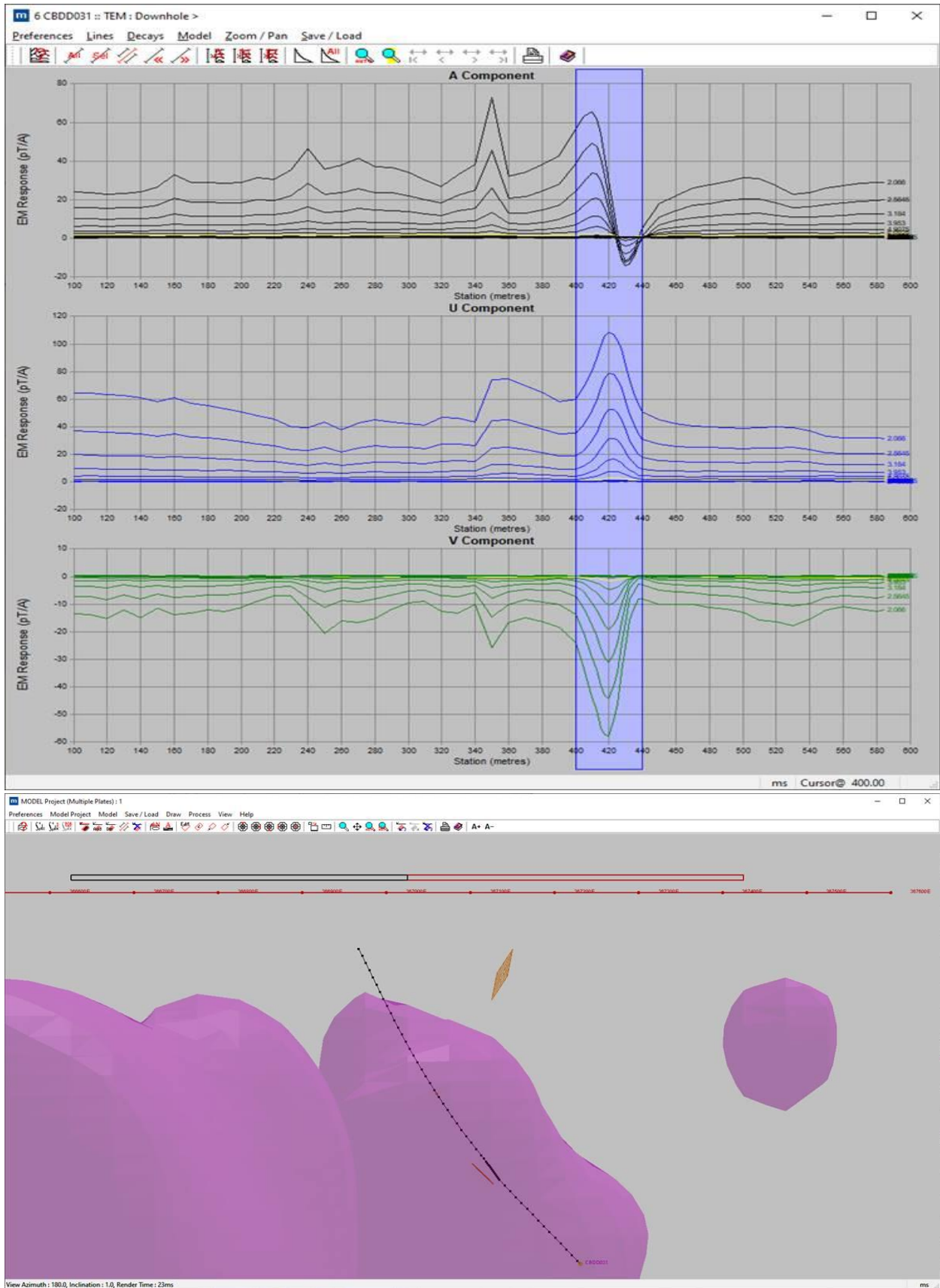


Figure 7. DHTM survey model of core hole CBDD031. The upper image shows the main anomaly between 400-440m depth with the minor anomalies higher up the hole. The lower image shows the DHTM plate (red) below and west of the hole. The 3D Inversion Model of the CB Layered Intrusion is shown in purple.

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### **Competent Person Statement**

The information in this announcement relating to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Neil Hutchison, who is a consultant to Estrella Resources, and a member of The Australasian Institute of Geoscientists. Mr. Hutchison has sufficient experience relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resource and Ore Reserves". Mr. Hutchison consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

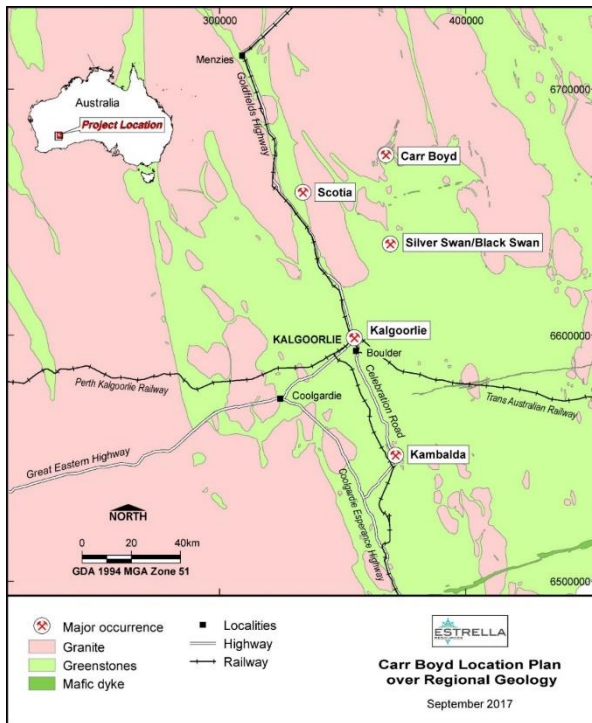
The Board has authorised for this announcement to be released to the ASX.

### **FURTHER INFORMATION CONTACT**

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## ABOUT THE PROJECT AND THE CBLC



**Location of Carr Boyd Project**

The Carr Boyd Nickel Project (CBNP) is a magmatic hosted sulphide system which comprises the Carr Boyd Layered Complex (CBLC or the Complex). The CBLC is in a Tier 1 jurisdiction approximately 80km north north-east of Kalgoorlie Western Australia. An all-weather haul road accessible by Estrella under a granted miscellaneous license connects the Project to the Goldfields Highway via Scotia. Estrella holds 259km<sup>2</sup> of contiguous tenure over the entire magmatic mafic-ultramafic layered complex

The CBLC hosts the historic Carr Boyd Rocks nickel mine which was the first magmatic hosted style of nickel deposit discovered and mined in WA. It was discovered in the late 1960's and produced 202,110t of ore at an average grade of 1.43% Ni and 0.46% Cu between 1973-1977.

Komatiites flows have been the main source of developed nickel sulphide mines in WA and have been explored extensively since the late 1960's. Due to their well understood geochemistry, formation, and high-grade sulphide enrichment process within defined channels, most of the studies and exploration programs in WA have focused on discovering this style of mineralisation. The Kambalda-Kalgoorlie-Leinster-Laverton Goldfields Region has been the main focus for komatiite exploration, with limited potential existing outside this region. Greenfields discoveries of komatiite nickel have all but dried up in the Goldfields Region and its only deep brownfields exploration that is delivering new nickel deposits.

Elsewhere around the world, large scale magmatic nickel deposits are the norm, producing world-class deposits with long productive mine lives. In WA, magmatic nickel deposits occur scattered throughout the state, however, they have had a long and slow history of discovery, development and understanding. Its only in recent years, since the discovery of the Nova-Bollinger deposit (2012) in the Fraser Range (which had been historically explored for over 40yrs), that a string of magmatic nickel deposit have suddenly been discovered. As komatiite sources dry up, focus and understanding around magmatic nickel deposits is starting to gain momentum, resulting in exploration companies looking at various mafic-ultramafic bodies which have had limited to no exploration completed over them to date. This is resulting in a new level of understanding in WA on the formation/deposition of nickel-copper sulphides within magmatic rocks, leading to a wave of new discoveries.

Interest in magmatic nickel-copper deposits have had a resurgence with the recent discoveries of magmatic hosted sulphide mineralisation at Legend Mining's (ASX:LEG) Rockford Project and Chalice Gold Mines (ASX:CHN) Julimar Projects. A "Voisey Bay" magmatic style model has not been adequately explored within the CBLC. This represents a compelling exploration target opportunity which the Company will continue to aggressively pursue.

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**Table 3. List of assay results from CBDD030 with selected relevant elements**

Hole_ID	Sample No	m_From	m_To	m_Interval	Comment	Ni_%	Cu_%	Co_%	Au+Pt+Pd	Au_ppm	Pt_ppm	Pd_ppm	Ag_ppm	S_%	MgO_%	As_ppm
CBDD030	ECB10205	422.90	423.85	0.95	Barren Mgn	0.01	0.019	0.005	0.042	0.01	0.017	0.015	0.025	0.12	7.43	<5
CBDD030	ECB10206	423.85	424.50	0.65	Barren Mgn	0.01	0.01	0.005	0.029	0.006	0.012	0.011	0.025	0.05	8.01	<5
CBDD030	ECB10207	424.50	425.00	0.50	Barren Mgn	0.01	0.008	0.005	0.027	0.004	0.012	0.011	0.025	0.02	8.47	<5
CBDD030	ECB10208	425.00	425.70	0.70	Barren Mgn	0.02	0.019	0.004	0.050	0.016	0.017	0.017	0.025	0.07	7.36	<5
CBDD030	ECB10209	425.70	426.60	0.90	Barren Mgn	0.01	0.01	0.005	0.037	0.009	0.013	0.015	0.025	0.04	8.37	<5
CBDD030	ECB10210	426.60	427.00	0.40	Mgn minor \$	0.03	0.078	0.005	0.125	0.086	0.017	0.022	1	0.27	7.41	<5
CBDD030	ECB10211	427.00	428.00	1.00	Vein & Blebby \$	0.04	0.142	0.006	0.178	0.117	0.021	0.04	2	0.42	7.61	<5
CBDD030	ECB10212	428.00	429.00	1.00	Vein & Blebby \$	0.05	0.095	0.007	0.325	0.246	0.04	0.039	1.7	0.52	8.54	<5
CBDD030	ECB10213	429.00	430.00	1.00	Vein & Blebby \$	0.07	0.099	0.007	0.152	0.073	0.037	0.042	1.1	0.56	7.73	<5
CBDD030	ECB10214	430.00	431.00	1.00	Vein & Blebby \$	0.10	0.093	0.008	0.105	0.022	0.034	0.049	0.8	0.73	7.58	<5
CBDD030	ECB10215	431.00	431.60	0.60	Vein & Blebby \$	0.10	0.08	0.009	0.147	0.036	0.056	0.055	0.8	0.78	8.47	<5
CBDD030	ECB10216	431.60	432.40	0.80	Coarse \$ Veins	1.02	0.286	0.046	0.481	0.087	0.016	0.378	1.7	5.99	4.83	<5
CBDD030	ECB10217	432.40	433.20	0.80	Disem \$	0.12	0.172	0.009	0.089	0.012	0.026	0.051	1	0.95	9.95	<5
CBDD030	ECB10218	433.20	434.00	0.80	Disem & Blebby \$	0.47	0.659	0.024	1.100	0.052	0.932	0.116	2.7	4.37	11.09	<5
CBDD030	ECB10219	434.00	435.00	1.00	Disem \$	0.24	0.22	0.014	0.184	0.012	0.032	0.14	0.9	1.96	14.62	<5
CBDD030	ECB10220	435.00	435.90	0.90	Disem \$	0.45	0.24	0.023	0.514	0.107	0.163	0.244	1.2	3.42	13.05	<5
CBDD030	ECB10221	435.90	436.30	0.40	Bx\$	0.89	0.571	0.043	0.298	0.024	0.077	0.197	2.5	7.09	12.87	<5
CBDD030	ECB10222	436.30	437.00	0.70	Massive \$	3.76	0.133	0.171	0.857	0.006	0.072	0.779	1	>10.0	2.92	<5
CBDD030	ECB10223	437.00	437.50	0.50	Massive \$	3.47	0.782	0.147	0.774	0.084	0.027	0.663	3.8	>10.0	3.47	<5
CBDD030	ECB10224	437.50	438.00	0.50	Massive \$	3.51	1.105	0.152	0.683	0.024	0.011	0.648	4.7	>10.0	3.53	<5
CBDD030	ECB10225	438.00	438.50	0.50	Massive \$	3.60	0.095	0.158	0.733	0.027	0.022	0.684	0.025	>10.0	3.08	<5
CBDD030	ECB10226	438.50	438.80	0.30	Massive \$	4.11	0.184	0.179	0.826	0.015	0.006	0.805	0.9	>10.0	1.21	<5
CBDD030	ECB10227	438.80	439.50	0.70	Coarse Matrix \$	1.27	1.47	0.057	0.637	0.057	0.139	0.441	4.5	>10.0	11.64	<5
CBDD030	ECB10228	439.50	440.00	0.50	Mixed coarse \$	1.01	0.438	0.046	0.754	0.039	0.404	0.311	2.3	8	10.65	<5
CBDD030	ECB10229	440.00	440.50	0.50	Mixed coarse \$	0.65	0.087	0.031	0.237	0.067	0.033	0.137	0.8	4.86	12.04	<5
CBDD030	ECB10230	440.50	441.00	0.50	Mixed coarse \$	0.11	0.1	0.009	0.094	0.063	0.009	0.022	0.6	0.66	15.74	<5

Hole_ID	Sample No	m_From	m_To	m_Interval	Comment	Ni_%	Cu_%	Co_%	Au+Pt+Pd	Au_ppm	Pt_ppm	Pd_ppm	Ag_ppm	S_%	MgO_%	As_ppm
CBDD030	ECB10231	441.00	441.50	0.50	Mixed coarse \$	0.32	0.182	0.016	0.258	0.025	0.111	0.122	0.7	2.51	13.53	<5
CBDD030	ECB10232	441.50	442.00	0.50	Mixed coarse \$	0.25	0.221	0.013	0.305	0.028	0.135	0.142	0.7	1.79	14.13	<5
CBDD030	ECB10233	442.00	442.80	0.80	Mixed coarse \$	0.24	0.226	0.013	0.237	0.027	0.103	0.107	0.9	1.76	15.34	<5
CBDD030	ECB10234	442.80	443.40	0.60	Mixed coarse \$	0.56	0.322	0.026	0.905	0.028	0.665	0.212	1.2	4.64	7.61	<5
CBDD030	ECB10235	443.40	444.00	0.60	Mixed coarse \$	0.23	0.245	0.012	0.224	0.026	0.13	0.068	0.025	1.75	15.79	<5
CBDD030	ECB10236	444.00	444.50	0.50	Dissem \$	0.15	0.086	0.009	0.115	0.012	0.061	0.042	0.025	1.00	16.56	<5
CBDD030	ECB10237	444.50	445.00	0.50	Dissem \$	0.46	1.155	0.022	0.399	0.054	0.181	0.164	3.4	4.69	16.25	<5
CBDD030	ECB10238	445.00	445.50	0.50	Bx\$	0.72	0.179	0.033	0.369	0.015	0.156	0.198	0.7	5.76	14.34	<5
CBDD030	ECB10239	445.50	446.00	0.50	USP	0.08	0.017	0.007	0.038	0.003	0.021	0.014	0.025	0.27	18.57	<5

\$ = sulphide

Bx = breccia

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**APPENDIX 1 JORC TABLE 1 - JORC CODE, 2012 EDITION – TABLE 1**
**Section 1 Sampling Techniques and Data**

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

Criteria	JORC Code explanation	Commentary
<i>Sampling techniques</i>	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>DD core samples have been half cut with automatic core saw</li> <li>0.3m-1.1m samples are collected from the core trays as marked out by the supervising geologist</li> <li>A handheld XRF tool was used to verify the mineralisation with samples reporting &gt;0.3% Ni in disseminated zones and &gt;1% Ni in the matrix sulphide zones.</li> <li>Bruker M4 MicroXRF results have been reported in addition to laboratory assay results as they are only used as mineralogy verification tool only.</li> <li>No other measurement tools other than directional survey tools have been used in the holes.</li> </ul>
	<ul style="list-style-type: none"> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	<ul style="list-style-type: none"> <li>Core is continuously cut on the same side of the orientation line and the same side is sampled to ensure the sample is representative and no bias is introduced.</li> </ul>
	<ul style="list-style-type: none"> <li>Aspects of the determination of mineralisation that are material to the Public Report.</li> </ul>	<ul style="list-style-type: none"> <li>Determination of mineralisation has been based on geological logging and confirmation using a pXRF machine. Samples were dispatched for laboratory multi-element analysis.</li> </ul>
	<ul style="list-style-type: none"> <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 30g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information</li> </ul>	<ul style="list-style-type: none"> <li>Diamond Core drilling was used to obtain 3-6m length samples from the barrel which are then marked in one meter intervals based on the drillers core block measurement.</li> <li>Assay samples are selected based on geological logging boundaries or on the nominal meter marks.</li> <li>Collect samples weigh a nominal 2-3 kg (depending on sample recovery) was sent to lab and pulverised.</li> <li>Samples have been dispatched to a commercial laboratory in Perth for analysis</li> <li>Samples are being analysed using a 4 acid digest for ME-ICP for 33 elements and ore zone samples are also being tested for PGM-ICP testing for Au &amp; PGE elements</li> </ul>
<i>Drilling techniques</i>	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>Drilling was undertaken using NQ2 sized drill core.</li> <li>Hole was collar with mud rotary from surface, HQ rough cored to top of fresh rock then NQ2 cored to EOH.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Core recovery was recorded by the drill crew and verified by the geologist.</li> <li>RQD measurements were digitally recorded to ensure recovery details were captured.</li> <li>Sample recovery in both holes was high with negligible loss of recovery observed.</li> <li>Diamond core drilling is the highest standard and no relationship has been established between sample recovery and reported grade as the core is in very good condition.</li> </ul>
<i>Logging</i>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Detailed industry standard of collecting core in core trays, marking meter intervals &amp; drawing core orientation lines was undertaken</li> <li>Core trays were photographed wet and dry prior to sampling.</li> <li>Drill hole logs are recorded in Excel spread sheets and validated in Micromine Software as the drilling progressed.</li> <li>The entire length of both holes was logged.</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Core is half cut using an automatic core saw to achieve a nominal 2-3kg split sample for laboratory submission</li> <li>Ore zone core will quarter cut to maintain sufficient material for further test works.</li> <li>The sample preparation technique is considered industry best standard practice</li> <li>No field duplicates have been collected in this program. Field duplicates will be collected once initial results are return and resampling of the mineralised zones is warranted.</li> <li>Sample sizes are appropriate to the grain size of the mineralisation.</li> </ul>
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>No handheld XRF results are reported however the tool was used to verify the mineralisation with reporting &gt;0.3% Ni in disseminated zones and &gt;1% Ni in the matrix sulphide zones.</li> <li>DHTEM parameters are as follows; <ul style="list-style-type: none"> <li>Tx Loop size: 500 x 800 m</li> <li>Transmitter: GAP HPTX-70</li> <li>Receiver: EMIT SMARTem24</li> <li>Sensor: EMIT DigiAtlantis</li> <li>Station spacing: 2m to 10 m</li> <li>Tx Freq: 0.5 Hz</li> <li>Duty cycle: 50%</li> <li>Current: ~130 Amp</li> <li>Stacks: 32-64</li> <li>Readings: 2-3 repeatable readings per station</li> </ul> </li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>• Bruker M4 parameters are as follow:               <ul style="list-style-type: none"> <li>• Pixel size: 100 microns</li> <li>• Voltage: 45 kV</li> <li>• Current: 600 micro Amps</li> <li>• Filter: Empty</li> <li>• Spot Size: 25 microns</li> </ul> </li> </ul>
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <li>• The verification of significant intersections by either independent or alternative company personnel.</li> </ul>	<ul style="list-style-type: none"> <li>• Results verified by Company CEO</li> </ul>
	<ul style="list-style-type: none"> <li>• The use of twinned holes.</li> </ul>	<ul style="list-style-type: none"> <li>• Hole CBDD0028 is twinning hole CBP042</li> </ul>
	<ul style="list-style-type: none"> <li>• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	<ul style="list-style-type: none"> <li>• The data was collected and logged using Excel spreadsheets and validated using Micromine Software. The data will be loaded into an externally hosted and managed database and loaded by an independent consultant, before being validated and checked, then exported and send back to ESR for analysis.</li> </ul>
	<ul style="list-style-type: none"> <li>• Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>• No adjustments have been made to the assay data other than length weighted averaging.</li> </ul>
<i>Location of data points</i>	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>• The holes were pegged by Geolithic Geological Services using a handheld GPS <math>\pm 3m</math></li> <li>• The rig was setup over the nominated hole position and final GPS pickup occurred at the completion of the hole.</li> </ul>
	<ul style="list-style-type: none"> <li>• Specification of the grid system used.</li> </ul>	<ul style="list-style-type: none"> <li>• MGA94_51</li> </ul>
	<ul style="list-style-type: none"> <li>• Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>• Topography is relatively flat and is more than adequate given the early stage of the project. A drone ortho-photographic survey is planned to create a DTM of the project area.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>• Refer to Cross Sections and Plans included</li> </ul>
	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>• Not applicable, no Mineral Resource is being stated.</li> </ul>
	<ul style="list-style-type: none"> <li>• Whether sample compositing has been applied</li> </ul>	<ul style="list-style-type: none"> <li>• No compositing has been applied. Intercepts are quoted as length weighted intervals.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• The drill line and drill hole orientation are oriented as close as possible to normal the interpreted MLEM target.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>• Samples are in the possession of Geolithic personnel from field collection to laboratory submission.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>• No audits or reviews have been conducted for this release given the very small size of the dataset.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Carr Boyd Nickel Pty Ltd (a wholly owned subsidiary of ESR) holds a 100% interest in the nickel and base metal rights to the project.</li> <li>There are no known impediments to operate in the area.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>The Carr Boyd Rocks deposit was discovered by Great Boulder Mines, in a joint venture with North Kalgurli Ltd in 1968. The deposit was mined between 1972 and 1975, during which time they explored for additional breccia pipe occurrences near the mine.</li> <li>WMC acquired Great Boulder Mines Ltd in 1975, briefly reopening the mine in 1977 before closing it permanently shortly thereafter due to a collapse in the nickel price. The mine had produced 210,000t at 1.44% Ni and 0.46% Cu before its closure.</li> <li>From 1968 Pacminex Pty Ltd held most of the ground over the CBLC outside of the immediate mine area. Between 1968 and 1971 they conducted extensive exploration programs searching for large basal contact and/or stratabound Ni-Cu deposits. It was during this time that most of the disseminated and cloud sulphide occurrences such as those at Tregurtha, West Tregurtha and Gossan Hill were discovered.</li> <li>Defiance Mining acquired the regional tenements from Pacminex in 1987 and focused on exploration for PGE deposits between 1987 and 1990. In 1990 Defiance purchased the Carr Boyd Rocks mine from WMC and switched focus to the mine area between 1990 and 2001, leaving many PGE targets untested.</li> <li>From 1990 Defiance dewatered the mine to conduct testwork and feasibility studies on the remnant mineralisation. Metallurgical testwork, Mineral Resource estimations, and scoping studies were completed. Around 1996 the focus shifted again to regional exploration for large tonnage basal contact deposits.</li> <li>In 2001 Titan Resources Ltd (Titan) acquired the project and recommenced economic evaluations of the remnant material at Carr Boyd Rocks before embarking on another regional exploration program focusing on the basal contact. An aeromagnetic survey, airborne EM reprocessing, and several programs of RAB and RC drilling were completed.</li> <li>From 2005 Yilgarn Mining entered a JV with Titan and continued with some regional exploration, but focused most attention in and around the Carr Boyd Rocks mine.</li> <li>In 2007 Titan was acquired by Consolidated Minerals Ltd (Consmin). Consmin conducted IP surveys and detailed gravity surveys, but did not drill any targets before selling the project to Salt Lake Mining (SLM) in 2013. SLM completed limited drilling to meet expenditure</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Geology</i>	<ul style="list-style-type: none"> <li>• Deposit type, geological setting and style of mineralisation.</li> </ul>	<p>commitments, before selling the project to Apollo Phoenix Resources in 2016.</p> <ul style="list-style-type: none"> <li>• Apollo sold the project to ESR in 2018.</li> </ul> <ul style="list-style-type: none"> <li>• The Carr Boyd project lies within the Achaean Yilgarn Craton in a 700km belt of elongate deformed and folded mafic, ultramafic rocks and volcanic sediments intruded by granitoids which is referred to as the Norseman-Wiluna Belt. The belt has been divided into several geological distinct terranes, with the project area lying at the northern end of the Gindalbie terrane (Swager, 1996).</li> <li>• The geology of the Carr Boyd area is dominated by the Carr Boyd layered mafic-ultramafic intrusive complex (CBLC). This layered intrusive covers an area of 17 km by 7km and has intruded into an Achaean Greenstone/Granite succession. The CBLC is comprised of a basal sequence of dunites, which are overlain by peridotites / pyroxenites and above that by gabbros. The intrusion has been interpreted to have been tilted to the east with the geometry of the intrusive further complicated by regional deformation and folding. The sequence has been metamorphosed to upper greenschist to lower amphibolite facies.</li> <li>• Several distinctive styles of Ni and Ni-Cu mineralisation have been identified within the CBLC. At the Carr Boyd Rocks Nickel Mine Ni-Cu mineralisation is hosted within several 20 - 60m diameter brecciated pipe-like bodies that appear to be discordant to the magmatic stratigraphy. Mineralisation is hosted by a matrix of sulphides (pyrrhotite, pentlandite, pyrite and chalcopyrite) within brecciated Bronzite and altered country rock clasts.</li> <li>• Stratiform Ni-Cu-PGE mineralisation has been identified at several different stratigraphic levels within the layered magmatic complex. Low grade stratiform disseminated Ni-Cu-PGE sulphides have been identified at several locations within the basal parts of the complex and at shallower stratigraphic levels of the complex. The presence of Ni-Cu-PGE mineralisation within multiple stratigraphic positions and of several unique styles of mineralisation highlights the potential of the CBLC for hosting a substantial Ni-Cu deposit.</li> <li>• The Company is not aware of any significant cobalt exploration being completed in the area.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• All relevant drillhole information can be found in Table 2 of the announcement.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>○ hole length.</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>	<ul style="list-style-type: none"> <li>• No information is excluded.</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <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> <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> </ul>	<ul style="list-style-type: none"> <li>• Intersections are reported on a nominal 0.3% Ni or 0.1% Cu cut-off with length weighted intervals.</li> <li>• All intercepted are reported using length weighted intervals to balance with short higher grade lengths.</li> </ul>
	<ul style="list-style-type: none"> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>• No metal equivalents are used in this announcement.</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• The drill line and drill hole orientation in relation to mineralisation orientation is perpendicular to the MLEM plate and the geological contact targeted.</li> <li>• True width cannot be fully determined at this stage as the dip of the contact is not planar or fully controlled due to lack of drilling. The intersection in CBDD030 is close to true width as the contacts are near perpendicular to the core axis.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• Appropriate maps, sections and tables are included in the body of the Report.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• All new drillholes within this announcement are reported in Table 2</li> <li>• Sulphide percentage estimates and type are reported in Table 1.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results;</li> </ul>	<ul style="list-style-type: none"> <li>• Everything meaningful and material is disclosed in the body of the report.</li> <li>• Geological observations are included in the report.</li> <li>• No bulk samples, metallurgical, bulk density, groundwater, geotechnical and/or rock characteristics test were carried</li> </ul>

Criteria	JORC Code explanation	Commentary
	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.	out. <ul style="list-style-type: none"> <li>• There are no known potential deleterious or contaminating substances.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• Surface HPEM to the NE of the project is currently underway.</li> <li>• Further RC/DD drilling is schedule to commence, comprising ~8-10 holes for 5000m utilising 2 core rigs</li> <li>• A drone ortho-photographic survey has been completed to create a DTM of the project area.</li> </ul>

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