

## QUARTERLY ACTIVITIES REPORT

### MARCH 2018

#### Opuwo Cobalt Project, Namibia (CLA 95%)

##### **Resource Drilling Program Completed**

During the Quarter, the Company received final assays from a drilling program designed to allow a maiden JORC compliant Mineral Resource to be declared. The program consisted of 99 holes, for a total of 17,266 metres. This drilling comprised 76 Reverse Circulation (RC) holes (11,785.5 m) and 23 Diamond Core (DC) holes (5,840.5 m).

A maiden JORC compliant Indicated and Inferred Mineral Resource of 112.4 million tonnes, grading 0.11% cobalt, 0.41% copper and 0.43% zinc, was reported on April 16, 2018, subsequent to the end of the Quarter. Please refer to Table 1 and to the ASX release of that date for further details.

**Table 1: JORC Compliant Indicated and Inferred Mineral Resources**

Category	Ore Type	Cobalt Cut-off (ppm)	Tonnage (Mt)	Cobalt (%)	Copper (%)	Zinc (%)	Contained Cobalt (t)
Indicated	Oxide	600	3.8	0.10	0.39	0.36	3,800
	Transition - Sulphide	600	1.6	0.10	0.42	0.38	1,600
	Fresh - Sulphide	600	66.5	0.11	0.42	0.41	73,150
<b>TOTAL INDICATED</b>		<b>600</b>	<b>72.0</b>	<b>0.11</b>	<b>0.42</b>	<b>0.41</b>	<b>79,200</b>
Inferred	Fresh - Sulphide	600	40.5	0.12	0.41	0.46	48,600
<b>TOTAL</b>		<b>600</b>	<b>112.4</b>	<b>0.11</b>	<b>0.41</b>	<b>0.43</b>	<b>123,640</b>

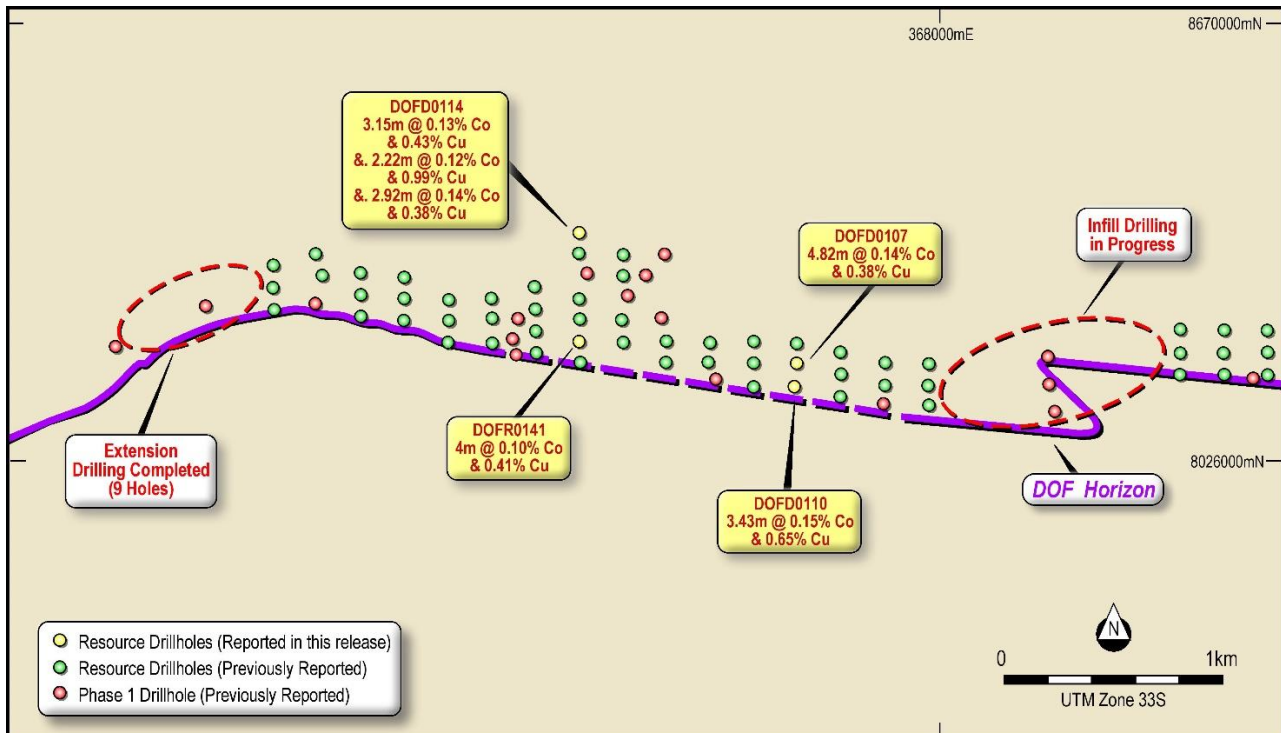
\* Note that minor rounding errors occur in this table.

Significant intercepts from assays received from this drilling program during the Quarter were:

- 17 m @ 0.14% Co and 0.42% Cu, from 11 m (DOFR0145)
- 10 m @ 0.13% Co and 0.45% Cu, from 108 m (DOFR0158)
- 10 m @ 0.12% Co and 0.59% Cu, from 17 m AND  
4 m @ 0.13% Co and 0.55% Cu, from 32 m (DOFR0149)
- 7.49 m @ 0.14% Co and 0.79% Cu, from 139 m, including  
5 m @ 0.15% Co and 1.01% Cu, from 139 m (DOFD0143)
- 6.66 m @ 0.12% Co and 0.50% Cu, from 19.34 m AND  
2.13 m @ 0.15% Co, from 32.00 m (DOFD0159)

- 7.7 m @ 0.11% Co and 0.52% Cu, from 44 m (DOFD0100)
- 5 m @ 0.16% Co and 0.48% Cu, from 204 m (DOFR0111)
- 4 m @ 0.18% Co and 0.50% Cu, from 202 m (DOFD0117)
- 6.30 m @ 0.12% Co and 0.57% Cu, from 155.00 m (DOFD0130)
- 6 m @ 0.12% Co and 0.60% Cu, from 91 m (DOFR0154)
- 5 m @ 0.14% Co and 0.54% Cu, from 125 m (DOFR0132)
- 5 m @ 0.14% Co and 0.81% Cu, from 41 m (DOFD0128)
- 5 m @ 0.14% Co and 0.56% Cu, from 125 m (DOFR0124)
- 5 m @ 0.13% Co and 0.72% Cu, from 42 m (DOFR0126)
- 6.08 m @ 0.10% Co and 0.58% Cu, from 193.00 m (DOFD0153)
- 4 m @ 0.17% Co and 0.41% Cu, from 218 m (DOFD0113)
- 4.82 m @ 0.14% Co and 0.38% Cu, from 154 m (DOFD0107)
- 4 m @ 0.15% Co and 0.59% Cu, from 115 m (DOFR0137)
- 5.4 m @ 0.12% Co and 0.43% Cu, from 222 m (DOFD0102)
- 4 m @ 0.15% Co and 0.67% Cu, from 138 m (DOFR0147)
- 4 m @ 0.15% Co and 0.36% Cu, from 113 m (DOFR0116)
- 3 m @ 0.19% Co and 0.59% Cu, from 125 m (DOFR0106)
- 4 m @ 0.14% Co and 0.41% Cu, from 106 m (DOFR0133)
- 5 m @ 0.11% Co and 0.40% Cu, from 209 m (DOFR0152)
- 5 m @ 0.11% Co and 0.39% Cu, from 138 m (DOFR0155)
- 5.64 m @ 0.10% Co and 0.37% Cu, from 209.36 m (DOFD0144)
- 5 m @ 0.10% Co and 0.57% Cu, from 175 m (DOFR0129)
- 3.96 m @ 0.13% Co and 0.45% Cu, from 450.50 m (DOFD0103)
- 3.90 m @ 0.13% Co and 0.47% Cu, from 185.00 m (DOFD0134)
- 3.43 m @ 0.15% Co and 0.65% Cu, from 108 m (DOFD0110)
- 3.82m @ 0.13% Co and 0.44% Cu, from 218.18 m (DOFD0094)
- 3 m @ 0.17% Co and 0.61% Cu, from 45 m (DOFR0151)
- 4 m @ 0.12% Co and 0.46% Cu, from 195 m (DOFR0156)
- 4 m @ 0.12% Co and 0.38% Cu, from 249 m (DOFR0108)
- 3 m @ 0.15% Co and 0.76% Cu, from 213 m (DOFR0127)
- 4 m @ 0.11% Co and 0.64% Cu, from 45 m (DOFR0138)
- 4 m @ 0.11% Co and 0.41% Cu, from 125 m (DOFR0122)
- 3.27 m @ 0.13% Co and 0.51% Cu, from 136.54 m (DOFD0097)
- 4 m @ 0.11% Co and 0.35% Cu, from 182 m (DOFR0112)
- 5 m @ 0.09% Co and 0.50% Cu, from 114 m (DOFR0157)
- 3.15 m @ 0.13% Co and 0.43% Cu, from 352.88 m,  
 AND 2.22 m @ 0.12% Co and 0.99% Cu, from 434.38 m,  
 AND 2.92 m @ 0.14% Co and 0.38% Cu from 456.14 m (DOFD0114)
- 4 m @ 0.10% Co and 0.41% Cu, from 108 m (DOFR0141)
- 3 m @ 0.14% Co and 0.68% Cu, from 179 m (DOFR0150)
- 3 m @ 0.13% Co and 0.43% Cu, from 208 m (DOFR0118)
- 3 m @ 0.12% Co and 0.54% Cu, from 52 m (DOFR0146)
- 3 m @ 0.12% Co and 0.50% Cu, from 208 m (DOFR0109)
- 4 m @ 0.09% Co and 0.64% Cu, from 56 m (DOFR0142)

Figure 1: Final Assays Reported During the Quarter



### Current Drilling

One diamond drill rig is continuing operations at the Project, with drilling at the western extension and central infill areas (Figure 1) now complete. Assays from holes in these areas are expected during the June Quarter. The focus of drilling has now shifted to a new area adjacent to the northwest of the current Mineral Resource, aimed at identifying further near surface Dolomite Ore Formation (DOF) mineralisation under shallow cover. After testing this area, the drill rig will move to the Northern DOF Prospect (Figure 2), which will be drilled for the first time. Recent surface sampling at this prospect confirmed copper in surface samples up to 16.9% Cu.

### Scoping Study

Key components of the Scoping Study are progressing well, with the processing flowsheet now nearing completion. Mining engineering studies and pit optimisation studies have commenced, using the recently completed Mineral Resource block model. The Scoping Study is expected to be completed late in the June Quarter.

## ***Metallurgical Testwork Update***

### **Flotation**

The latest results with optimised floatation parameters now show recoveries of up to 62.7% at 1.84% Cobalt grade with open circuit tests. This compares to previous results reported on 30 November 2017 of 64.2% recovery at 1.11% Cobalt grade.

Using common modeling to predict closed circuit performance, indications are that 80% Cobalt recovery at 1.5% can be achieved. Further work will be required to establish economical optimised floatation parameters, which will consider grinding costs and downstream leach processing requirements.

### **Leaching Testwork**

Employing an approximately 1.0% Cobalt grade floatation concentrate, 8 different leach regimes were explored, ranging from 95°C (atmospheric leach) to 200°C (pressure leach).

**Cobalt extractions** in all autoclave oxidative leaches were typically **greater than 95%** at autoclave temperatures of 115, 135 and 155°C, and **800 kPa** oxygen pressure. These consistent leach results indicate that high extractions could be achieved at an autoclave temperature lower than 115°C (to be demonstrated with further testing).

**Copper extractions** in these leaches were simultaneously high, and typically **greater than 94%**. Leach extraction for an oxidative leach test at 95°C indicated that long leach times (+24 hours) achieved a yield extraction in the 70-75% range, whereas an autoclave oxidative process had significantly shorter leach retention with much higher recoveries.

Sulfuric acid consumption was modest. Further optimisation of leach reagents parameters will be carried out, and requirements calculated for integrated closed circuit conditions.

Celsius is extremely satisfied with the excellent floatation recoveries and leach extractions achieved thus far for both cobalt and copper. The data confirms that the mineralisation is amenable to very good extractions of the two major value metals.

Demonstrated high leach extraction of both cobalt and copper in a sulfuric acid medium suggests that the classical processes of **copper SX-EW (Solvent extraction, electrowinning)** and **cobalt sulfate crystallisation** can be employed to produce saleable products.

This metallurgical test work will form the basis for the Process and Engineering design required to complete an initial Scoping Study during Q2 of 2018, supported by the maiden JORC Mineral Resource.

### ***Geophysical Surveys***

The Company's geophysical contractor completed downhole electromagnetic (EM) surveys and a ground audio magnetotelluric (AMT) survey during the Quarter. The data from these surveys is being used to assist in targeting future drilling programs. A broad based airborne electromagnetic (EM) survey is currently being planned, with the survey expected to be completed in June, 2018. The survey will cover all of EPLs 4346, 4351 and 4540 (Figure 2).

Figure 2: Regional Exploration Targets

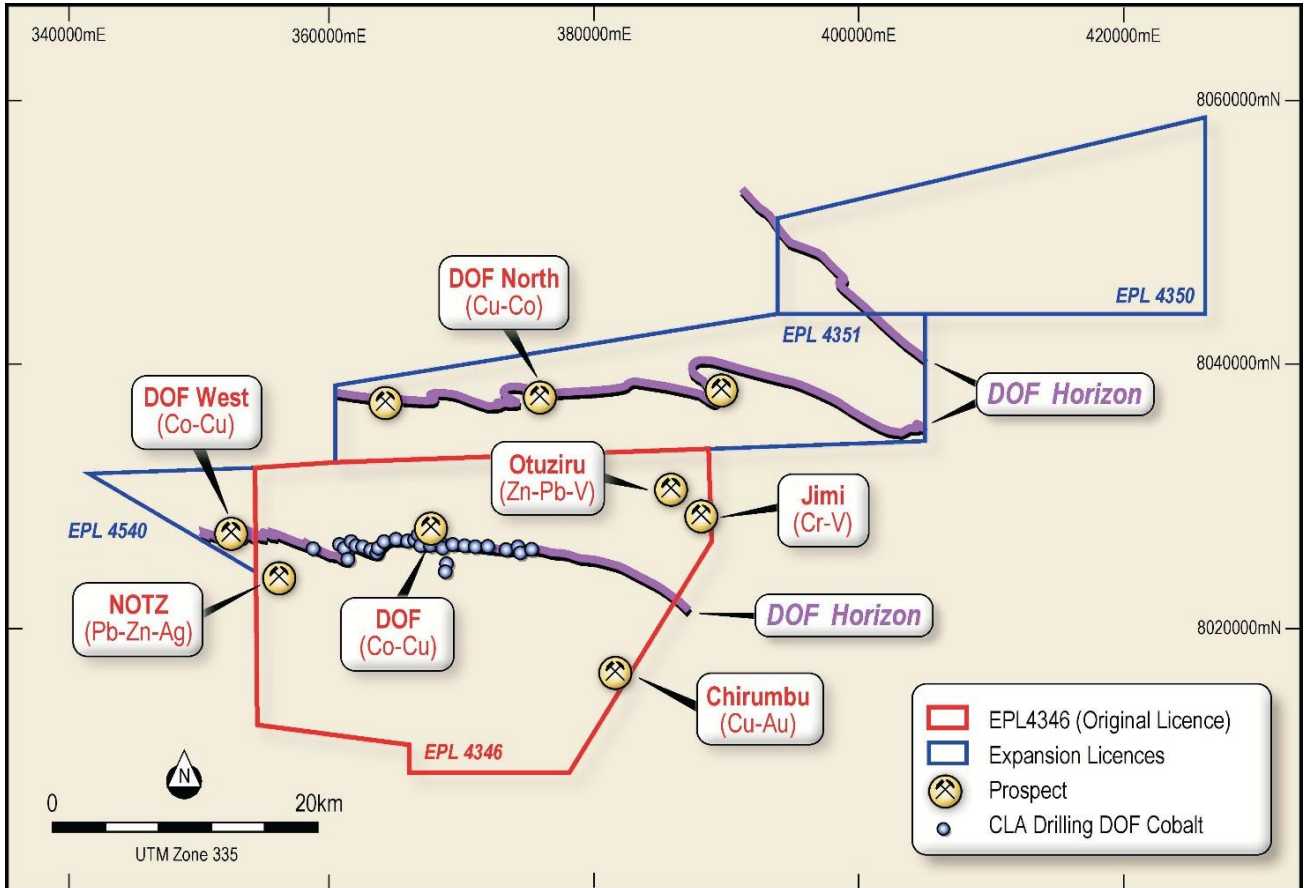


Table 1: Drilling Results, Opuwo Cobalt Project Resource Drilling (end of Quarter Status)

Hole ID	Easting (UTM Zone 33S)	Northing (UTM Zone 33S)	Planned Dip (deg)	Planned Azimuth (grid)	Final Depth (m)	Intercept from (m)	Intercept to (m)	Interval (m)	Cobalt (%)	Copper (%)	Zinc (%)
DOFD0085	370499	8026499	-55	180	251.18	241.20	244.38	3.18	0.15	0.52	0.74
DOFR0086	370299	8026297	-55	180	90.00	77	81	4	0.13	0.43	0.42
DOFR0087	371101	8026448	-55	180	282.00	265	269	4	0.14	0.39	0.48
DOFR0088	370102	8026348	-55	180	93.00	83	87	4	0.14	0.60	0.38
DOFR0089	369901	8026347	-55	180	62.00	50	53	3	0.11	0.43	0.37
DOFR0090	369701	8026353	-55	180	57.00	32	36	4	0.12	0.36	0.40
DOFR0091	369303	8026400	-55	180	66.00	39	43	4	0.13	0.60	0.46
DOFR0092	370699	8026400	-55	180	184.00	169	173	4	0.13	0.35	0.45
DOFR0093	369100	8026401	-55	180	69.00	21	28	7	0.07	0.60	0.40
DOFD0094	369502	8026602	-55	180	278.42	218.18	222	3.82	0.13	0.44	0.48
DOFR0095	370702	8026502	-55	180	279.00	269	271	2	0.11	0.42	0.48
DOFR0096	370304	8026398	-55	180	144.00	132	138	6	0.15	0.51	0.40
including						133	135	2	0.25	0.52	0.50
DOFD0097	369502	8026503	-55	180	146.36	136.54	139.8	3.27	0.13	0.51	0.56
DOFR0098	370902	8026450	-55	180	372.00	<i>Hole Abandoned</i>					
DOFR0099	370898	8026348	-55	180	215.00	211	212	1	0.08	0.59	0.24
DOFD0100	369500	8026400	-55	180	59.18	44	51.7	7.7	0.11	0.52	0.50
DOFR0101	370101	8026447	-55	180	156.00	146	149	3	0.18	0.53	0.59
DOFD0102	367350	8026548	-55	180	236.40	222	227.4	5.4	0.12	0.43	0.58
DOFD0103	366551	8026947	-55	180	464.36	450.5	454.46	3.96	0.13	0.45	0.56
DOFR0104	369903	8026447	-55	180	129.00	118	123	5	0.12	0.37	0.47
DOFR0105	369699	8026450	-55	180	126.00	110	113	3	0.21	0.41	0.37
including						111	112	1	0.35	0.39	0.39
DOFR0106	369302	8026499	-55	180	137.00	125	128	3	0.19	0.59	0.56
DOFD0107	367349	8026451	-55	180	167.30	154.00	158.42	4.82	0.14	0.38	0.65
DOFR0108	370102	8026551	-55	180	261.00	249	253	4	0.12	0.38	0.29
DOFR0109	370302	8026498	-55	180	221.00	205	206	1	0.06	0.15	0.77
DOFD0110	367349	8026352	-55	180	86.11	77.7	81.13	3.43	0.15	0.65	0.74
DOFR0111	369902	8026550	-55	180	219.00	204	209	5	0.16	0.48	0.63
DOFR0112	369700	8026549	-55	180	198.00	182	186	4	0.11	0.35	0.52
DOFR0113	369301	8026602	-55	180	231.00	218	222	4	0.17	0.41	0.52
DOFD0114	366350	8027048	-55	180	602.38	352.88	329.03	3.15	0.13	0.43	0.80
and						434.38	436.6	2.22	0.12	0.99	0.57
and						456.14	459.06	2.92	0.14	0.38	0.63
DOFD0115	370907	8026450	-55	180	428.50	<i>No Significant Intercept</i>					
DOFR0116	369100	8026499	-55	180	126.00	113	117	4	0.15	0.36	0.36
DOFR0117	369100	8026601	-55	180	213.00	202	206	4	0.18	0.5	0.53
DOFR0118	367751	8026450	-55	180	216.00	205	206	1	0.06	0.54	0.93
and						208	211	3	0.13	0.43	0.46
DOFR0119	367950	8026448	-55	180	209.00	<i>Hole failed to reach target depth</i>					
DOFR0121	367751	8026352	-55	180	138.00	122	127	5	0.13	0.66	0.55
including						122	124	2	0.15	1.11	0.96
DOFR0122	367954	8026251	-55	180	147.00	125	129	4	0.11	0.41	0.45

Table 1: Drilling Results, Opuwo Cobalt Resource Drilling (end of Quarter status) – Continued

Hole ID	Easting (UTM Zone 33S)	Northing (UTM Zone 33S)	Planned Dip (deg)	Planned Azimuth (grid)	Final Depth (m)	Intercept from (m)	Intercept to (m)	Interval (m)	Cobalt (%)	Copper (%)	Zinc (%)
DOFR0124	367548	8026403	-55	180	138.00	125	130	5	0.14	0.56	0.53
DOFD0125	366548	8026650	-55	180	254.49	221.02	221.49	0.47	0.16	0.50	0.35
DOFR0126	367548	8026299	-55	180	57.00	39	40	1	0.07	0.25	0.57
and						42	47	5	0.13	0.72	0.59
DOFR0127	367150	8026550	-55	180	226.00	213	216	3	0.15	0.76	0.68
DOFR0128	367151	8026343	-55	180	54.00	38	39	1	0.09	0.22	0.44
						41	46	5	0.14	0.81	0.53
DOFR0129	366950	8026543	-55	180	189.00	175	180	5	0.10	0.57	0.61
DOFD0130	366148	8026799	-55	180	392.80	155.00	161.30	6.30	0.12	0.57	0.59
DOFR0131	366750	8026453	-55	180	220.00	No Significant Intercept					
DOFR0132	367150	8026451	-55	180	133.00	125	130	5	0.14	0.54	0.64
DOFR0133	366943	8026451	-55	180	117.00	106	110	4	0.14	0.41	0.50
DOFD0134	366351	8026950	-55	180	200.38	185.00	188.90	3.90	0.13	0.47	0.65
DOFR0135	366552	8026850	-55	180	290.50	No Significant Intercept					
DOFR0136	366553	8026545	-55	180	225.00	No Significant Intercept					
DOFR0137	366154	8026600	-55	180	130.00	115	119	4	0.15	0.59	0.52
DOFR0138	366153	8026504	-55	180	60.00	45	49	4	0.11	0.64	0.43
DOFR0139	366351	8026453	-55	180	99.00	No Significant Intercept					
DOFR0140	366751	8026549	-55	180	261.00	No Significant Intercept					
DOFR0141	366353	8026552	-55	180	157.00	4	8	4	0.10	0.41	0.66
DOFR0142	365949	8026549	-55	180	75.00	56	60	4	0.09	0.64	0.67
DOFD0143	366150	8026699	-55	180	176.48	139.00	146.49	7.49	0.14	0.79	0.50
including						139.00	144.00	5	0.15	1.01	0.49
DOFD0144	365948	8026749	-55	180	227.36	209.36	215.00	5.64	0.10	0.37	0.78
DOFR0145	366354	8026650	-55	180	184.00	11	28	17	0.14	0.42	0.53
DOFR0146	365749	8026551	-55	180	69.00	52	55	3	0.12	0.54	0.45
DOFR0147	365945	8026661	-55	180	147.00	138	142	4	0.15	0.67	0.70
DOFR0148	365550	8026650	-55	180	36.00	10	12	2	0.05	0.24	0.24
DOFR0149	365349	8026667	-55	180	45.00	17	27	10	0.12	0.59	0.52
and						32	36	4	0.13	0.55	0.43
DOFR0150	365750	8026747	-55	180	191.00	179	182	3	0.14	0.68	0.55
DOFR0151	364953	8026701	-55	180	54.00	41	42	1	0.07	0.15	0.40
and						45	48	3	0.17	0.61	0.69
DOFR0152	365550	8026850	-55	180	219.00	209	214	5	0.11	0.4	0.63
DOFD0153	365347	8026871	-55	180	206.36	193.00	199.08	6.08	0.1	0.58	0.58
DOFR0154	365751	8026650	-55	180	109.00	91	97	6	0.12	0.60	0.43
DOFR0155	365548	8026751	-55	180	150.00	138	143	5	0.11	0.39	0.47
DOFR0156	364952	8026898	-55	180	206.00	195	199	4	0.12	0.46	0.64
DOFR0157	365350	8026770	-55	180	129.00	114	119	5	0.09	0.50	0.53
DOFR0158	364951	8026798	-55	180	126.00	108	118	10	0.13	0.45	0.58
and						120	121	1	0.09	0.29	0.30
DOFD0159	366351	8026746	-55	180	101.33	19.34	26.00	6.66	0.12	0.50	0.41
and						32.00	34.13	2.13	0.15	0.05	0.32
including						33.56	34.13	0.57	0.46	0.11	0.50
DOFR0160	365149	8026949	-55	180	274.00	259	265	6	0.1	0.54	0.63

Results reported at 0.05% (500ppm) Co cutoff.

Note: Please refer to ASX releases dated January 16, 2018, February 1, 2018, February 19, 2018, and March 13, 2018 for further detail regarding the assay results in Table 1.

### **Abednegno Hill Project, WA (CLA 100%)**

The Abednegno Hill Nickel Project is located to the south and west of Minara Resources' Murrin Murrin nickel mine.

As reported in the December Quarterly Activities Report Celsius completed a ground EM survey over its Leonora tenements during October – November 2017 which detected two bedrock anomalies. Follow up work programs to test these anomalies were designed during the Quarter.

### **Carnilya Hill Project, WA (CLA 30%)**

Celsius (through View Nickel Pty Ltd) owns a 30% joint venture interest in the Carnilya Hill Joint Venture in Western Australia with Mincor Resources NL. Mincor Resources NL (ASX:MCR) is the operator of the Carnilya Hill JV. No activity was reported by Mincor during the quarter.

### **Hann River Project, WA (E80/5117 CLA 100%, base metal rights on E80/5027)**

Celsius has an Exploration Licence Application pending (E80/5117) over an area located in the Kimberley region of Western Australia, approximately 300 km east of Derby. The application area is considered prospective for copper and cobalt mineralisation, hosted in the Mt Carson Volcanics geological unit. An agreement is in place with Jindalee Resources Limited (ASX:JRL) regarding their adjacent granted Exploration Licence (E80/5027), whereby the diamond rights on CLA's licence application area have been exchanged for the base metal rights on E80/5027. The Company plans to provide further information on this Project as the application process progresses.

### **Corporate**

Mr. Edward Legg was appointed as Project Development Manager for the Opuwo Project during the Quarter.

At the end of the Quarter, the Company held approximately \$2.7 million in cash reserves.

- ENDS -



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**Competent Persons Statement**

*Information in this report relating to Exploration Results is based on information reviewed by Mr. Brendan Borg, who is a Member of the Australasian Institute of Mining and Metallurgy and Managing Director of Celsius Resources. Mr. Borg has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined by the 2012 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Borg consents to the inclusion of the data in the form and context in which it appears. The Exploration Results are based on standard industry practices for drilling, logging, sampling and assay methods, including quality assurance and quality control measures, as reported in various ASX announcements during April to September, 2017.*