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#### ASX RELEASE

13 November 2018

## Thick High Grade Nickel-Copper Drill Results at Alotta

#### HIGHLIGHTS

The Company is pleased to announce that it has received all assay results for its nine-hole maiden drilling programme on the Alotta Prospect in Quebec, Canada. The best high-grade **massive sulphide** Nickel-Copper intersections returned include:

- ZA-18-08: 9.20m at 2.59% Ni, 2.79% Cu, 3.37g/t PGE and 0.11% Co from 85.20m;
- ZA-18-05: 11.28m at 2.17% Ni, 2.15% Cu, 2.94g/t PGE and 0.11% Co from 61.15m;
- ZA-18-04: 3.27m at 2.06% Ni, 3.77% Cu, 3.09g/t PGE and 0.12% Co from 53.10m

and

7.10m at 2.38% Ni, 1.87% Cu, 1.90g/t PGE and 0.11% Co from 70.17m;

• ZA-18-06: 8.13m at 1.74% Ni, 2.06%Cu, 1.59g/t PGE and 0.11% Co from 43.17m;

and

5.30m at 3.04% Ni, 0.84% Cu, 1.96g/t PGE and 0.13% Co from 63.30m.

#### Broad mixed style mineralisation intersects include:

- ZA-18-03: 20.80m at 1.18% Ni and 1.50% Cu from 40.70m; and,
- ZA-18-04: 24.17m at 1.23% Ni and 2.31% Cu from 53.10m.
- The Company is planning to undertake a down-hole electromagnetic (DHEM) survey at Alotta, energising the massive sulphide bodies in search for additional massive sulphide drill targets.
- The Company is pleased with the potential economic value of the mineral endowment (Ni-Cu-PGE-Co) at Alotta, giving confidence to the Company's goal of becoming a mining and low cost toll milling operation through identifying further similar shallow emplaced ore bodies amenable to open pit mining.
- The Company appreciates the mining friendly working environment it finds itself in, with the ~5 week turnaround from commencing the first drill hole on 4 October 2018 to assays being released today being testament to this.

**Class 1 Nickel-Copper Sulphide focused explorer TopTung Limited (ASX:TTW)** is pleased to update the market with assay results from its nine-hole maiden drill programme targeting the mineralisation at its high-grade nickel sulphide Alotta project, Quebec, Canada.

The drill programme comprised two verification holes plus four extensional and three infill holes to a 2001 drill programme by Aurora Platinum Corporation which had outlined the near surface Alotta Ni-Cu-PGE-Co mineralised lens.

The Company is encouraged by the fact that **each hole in the 9-hole programme** intersected Ni-Cu-PGE  $\pm$  Co  $\pm$  Ag mineralisation which included significant high-grade massive sulphide and semi-massive intercepts  $\pm$  net-textured and disseminated mineralised zones up to **3.04% Ni and 4.81% Cu**, listed in hole number order as follows:

- Hole ZA-18-01: 4.49m at 1.29% Ni, 3.73% Cu, 2.88g/t PGE, 0.14% Co + 17.57g/t Ag from 72.28m;
- Hole ZA-18-02: 33.17m at 0.56% Ni, 0.81% Cu, 0.91g/t PGE and 2.32g/t Ag from 25.83;
   inc. 9.47m at 1.18% Ni, 1.54% Cu, 1.66g/t PGE, 0.10% Co + 3.22/t Ag from 28.53m;
- Hole ZA-18-03: 20.80m at 1.18% Ni, 1.50% Cu, 1.35g/t PGE + 4.22g/t Ag from 40.70m;
   inc. 1.50m at 2.51% Ni, 0.47% Cu, 2.06g/t PGE, 0.10% Co + 1.84g/t Ag from 60.00m;
- Hole ZA-18-04: 24.17m at 1.23% Ni, 2.31% Cu, 1.75g/t PGE + 7.19g/t Ag from 53.10m; inc. 3.27m at 2.06% Ni, 3.77% Cu, 3.09g/t PGE, 0.12% Co + 23.03g/t Ag from 53.10m; inc. 3.54m at 4.81% Cu, 2.05g/t PGE + 11.24/t Ag from 65.57m;

inc. 7.10m at 2.38% Ni, 1.87% Cu, 1.90g/t PGE, 0.11% Co + 3.84g/t Ag from 70.17m;

- Hole ZA-18-05: 11.28m at 2.17% Ni, 2.15% Cu, 2.94g/t PGE, 0.11% Co and 9.83g/t Ag from 61.15m;
- Hole ZA-18-06: 8.13m at 1.74% Ni, 2.06% Cu, 1.59g/t PGE, 0.11% Co and 4.20g/t Ag from 43.17m;

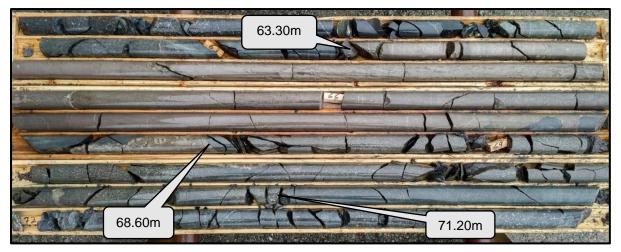
and;

7.90m at 2.22% Ni, 1.02% Cu, 1.84g/t PGE, 0.12% Co and 19.07g/t Ag from 63.30m;

inc. 5.30m at 3.04% Ni, 0.84% Cu, 1.96g/t PGE, 0.13% Co and 25.36g/t Ag from 63.30m;

- Hole ZA-18-07: 14.25m at 0.54% Ni, 0.58% Cu and 0.62g/t PGE from 40.00m;
- Hole ZA-18-08: 9.20m at 2.59% Ni, 2.79% Cu, 3.37g/t PGE, 0.11% Co and 24.13g/t Ag from 85.20m; and,
- Hole ZA-18-09: 3.68m at 0.59% Ni, 0.0.60% Cu and 1.04g/t PGE and 13.11g/t Ag from 81.00m.





**Figure 1:** ZA-18-06 - Upper massive pyrrhotite-pyrite-chalcopyrite zone from 43.17 to 51.30 (8.13m) at **1.74% Ni** (in tray above on page 1) and the lower massive pyrrhotite-pyrite zone from 63.3 to 68.60m (5.30m) at **3.04% Ni + 25.4g/t Ag**.

A listing of mineralised intercepts for all nine holes drilled is given in **Table 1** below. All assay intervals are downhole intersections. A drill hole collar plan (Figure 4) and collar coordinate information (Table 2) is given in Appendix 1. The statutory JORC Table 1 information is given in Appendix 2.

Hole			Interval				Pd		
Number	From	То	(m)	%Ni	%Cu	Pt g/t	g/t	%Co	Ag g/t
ZA-18-01	70.60	81.26	10.66	0.69	2.38	0.30	2.01	0.08	11.79
including	72.28	76.77	4.49	1.29	3.73	0.52	2.36	0.14	17.57
ZA-18-02	25.83	59.00	33.17	0.56	0.81	0.21	0.70	0.04	2.32
including	28.53	38.00	9.47	1.18	1.54	0.34	1.32	0.07	3.22
ZA-18-03	40.70	61.50	20.80	1.18	1.50	0.24	1.09	0.06	4.22
including	40.70	57.32	16.62	1.24	1.80	0.27	1.20	0.07	5.01
including	40.70	52.07	11.37	1.60	2.11	0.28	1.53	0.08	5.98
including	60.00	61.50	1.50	2.51	0.47	0.36	1.70	0.10	1.84
ZA-18-04	53.10	77.27	24.17	1.23	2.31	0.32	1.43	0.07	7.19
including	53.10	63.87	10.77	1.18	2.32	0.43	1.54	0.07	9.80
including	53.10	56.37	3.27	2.06	3.77	0.37	2.72	0.12	23.03
including	65.57	69.11	3.54	0.03	4.81	0.34	1.71	0.01	11.24
including	70.17	77.27	7.10	2.38	1.87	0.26	1.64	0.11	3.84
ZA-18-05	61.15	72.43	11.28	2.17	2.15	0.81	2.13	0.11	9.83
ZA-18-06	43.17	51.30	8.13	1.74	2.06	0.33	1.26	0.11	4.20
and	63.30	71.20	7.90	2.22	1.02	0.41	1.43	0.12	19.07
including	63.30	68.60	5.30	3.04	0.84	0.35	1.61	0.13	25.36
ZA-18-07	34.55	54.25	19.70	0.44	0.49	0.10	0.42	0.03	1.25
including	40.00	54.25	14.25	0.54	0.58	0.11	0.51	0.03	1.56
including	44.95	54.25	9.30	0.71	0.69	0.12	0.65	0.04	2.08
ZA-18-08	85.20	94.40	9.20	2.59	2.79	1.21	2.16	0.11	24.13
ZA-18-09	81.00	84.68	3.68	0.59	0.60	0.25	0.89	0.06	13.11

Table 1: Significant drill intercepts listing the potential economic elements only.

#### Assay Results

The nine-hole drill programme (801m) comprised two verification plus four extensional and three infill holes to a 2001 drill programme by Aurora Platinum Corporation which had outlined the near surface Alotta Ni-Cu-PGE mineralised lens.

All visually logged sulphide zones within the targeted drilling were split and half core submitted for assay as per the attached JORC Table 1. The intersection summaries were prepared by the Project Senior Geologist from the Company's consultants Orix Geoscience. The intercepts have been verified by the Competent Person and Dr Leon Pretorius.

A summary of the 2018 Alotta mineralised intercepts is as follows:

#### **Verification Holes**

Hole **ZA-18-04** was drilled as a twin of **BT-01-07** which had intersected 24.60m at 1.46% Ni and 1.57% Cu from 53.40m. The hole intersected **24.17m at 1.23% Ni, 2.31% Cu, 1.75g/t PGE + 7.19g/t Ag from 53.10m** including **3.27m at 2.06% Ni**, 3.77% Cu, 3.09g/t PGE, 0.12% Co + 23.03g/t Ag from 53.10m and **7.10m at 2.38% Ni**, 1.87% Cu, 1.90g/t PGE, 0.11% Co + 3.84g/t Ag from 70.17m (Figure 2).The mineralised zone also included an intercept of **3.54m at 4.81% Cu, 2.05g/t PGE + 11.24/t Ag from 65.57m.** 

ZA-18-04 verified the original intercept returning two zones of massive sulphide from 53.10m mirroring the intersection in BT-01-07. The massive sulphide zones, **3.27m at 2.06% Ni and 7.10m at 2.38% Ni and 1.87% Cu** were separated by 7.5m of 20-30% net-textured pyrrhotite-pyrite-chalcopyrite mineralisation in gabbro and 6.3m of unmineralised porphyry/ gabbro.

Hole **ZA-18-03** was planned as a twin of **BT-01-19** which had intersected 22.20m at 1.88% Ni and 2.04% Cu from 36.80m. The 2001 position of the BT-01-19 collar could not be fully recovered with site access issues resulting in ZA-18-03 being drilled at an 007°S off-set to the original hole.

The hole intersected **20.80m at 1.18% Ni, 1.50% Cu, 1.35g/t PGE + 4.22g/t Ag from 40.70m;** including 1.50m at 2.51% Ni, 0.47% Cu, 2.06g/t PGE, 0.10% Co + 1.84g/t Ag from 60.00m (Figure 2). ZA-18-03 whilst not 'twinning' BT-01-19 it did intersect massive sulphide and also provided information on net-textured sulphides (20-30% pyrrhotite-pyrite-chalcopyrite) assaying in the range 0.4 to 0.70% Ni in the gabbro host rock.

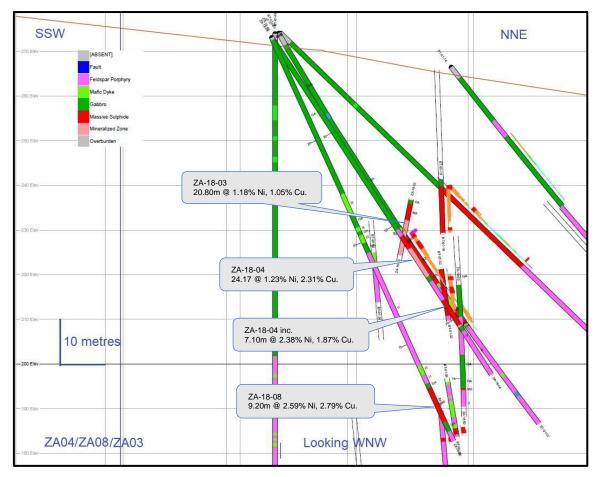


Figure 2: ZA04/ZA08/ZA03 Section. The hole trace of ZA03 oblique (~80°) to the section

#### **Extensional Drilling**

Hole **ZA-18-08** was drilled as an undercut to ZA-18-04/BT-01-07 and intersected massive sulphide assaying **9.20m at 2.59% Ni, 2.79% Cu, 3.37g/t PGE, 0.11% Co and 24.13g/t Ag** from 85.20m. The mineralisation is open down-plunge (Figure 2). The massive sulphide body has tectonized upper and lower contacts (with selvages of gabbro) with internal breccia and laminated textures indicating remobilisation of the massive sulphide. It is separated from the main hanging wall gabbro body by feldspar porphyry.

Hole ZA-18-05 drilled the untested up-plunge extension to the mineralisation and intersected massive sulphide assaying 11.28m at 2.17% Ni, 2.15% Cu, 2.94g/t PGE, 0.11% Co and 9.83g/t Ag from 61.15m (Figure 3). The mineralisation is open up-plunge. The massive sulphide body has tectonized upper and lower contacts with internal breccia textures and is separated from the upper gabbro body by feldspar porphyry. The massive sulphide has a selvage of net-textured sulphide in gabbro at the footwall contact with feldspar porphyry.

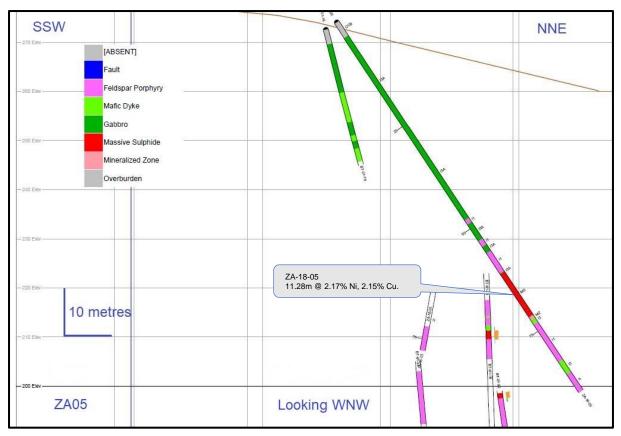


Figure 3: ZA05 Section

Hole **ZA-18-01** the first hole drilled at Alotta targeted the down-plunge extension to the mineralised lens and intersected disseminated to massive sulphide assaying 10.66m at 0.69% Ni, 2.38% Cu, 2.31g/t PGE 0.0.8% Co and 11.79g/t Ag from 70.60m, including 4.49m at 1.29% Ni and 3.73% Cu from 72.28m.

The mineralised zone from 70.6m to 76.77m comprises breccia and veins of fine-grained massive chalcopyrite and intermittent zones of massive fine grained pyrrhotite with pentlandite plus a zone of massive pyrrhotite containing coarse grained pentlandite. The gabbro host rock to 81.26m contains disseminated to wispy pyrrhotite with chalcopyrite.

The mineralisation is open along strike to the west and was undercut by hole ZA-18-09 (Figure 5 – Appendix 1). The massive sulphide body has tectonized upper and lower contacts with internal breccia textures and is separated from the upper gabbro body by feldspar porphyry. The massive sulphide has a selvage of net-textured sulphide in gabbro at the footwall contact with feldspar porphyry.

Hole **ZA-18-09** was drilled as an undercut of hole ZA-18-01(above) and intersected minor massive sulphide veins in feldspar porphyry assaying 3.68m at 0.59% Ni, 0.0.60% Cu and 1.04g/t PGE and 13.11g/t Ag from 81.00m. The mineralisation intersected in ZA-18-01 has been stoped out by the porphyry (Figure 5 – Appendix 1).

#### **Infill Drilling**

Hole **ZA-18-02** was originally planned to be drilled as a twin of 2001 hole BT-01-32 which intersected 13.10m at 1.59% Ni, 1.03% Cu, 0.22% Co from 54.25m; and 29.30m at 1.87% Ni, 2.16% Cu, 0.10% Co from 73.0m. The original collar position of BT-01-32 was not accessible resulting in the hole being moved ~30m east and drilled as a steep infill hole (Figure 6 – Appendix 1)

The hole intersected 33.17m at 0.56% Ni, 0.81% Cu, 0.91g/t PGE and 2.32g/t Ag from 25.83; including 9.47m at 1.18% Ni, 1.54% Cu, 1.66g/t PGE, 0.10% Co + 3.22/t Ag from 28.53m. Four narrow massive sulphide zones aggregating 3.06m occurred within the 33.17m of disseminated, net-textured and semi-massive (0.64m) sulphides. The hole drilled parallel to the strike of the Alotta lens and essentially testing the footwall of the lens.

Hole **ZA-18-06** was drilled as a 'scissor' hole on BT-01-33 and 35 which were drilled along strike of the Alotta lens and intersected 12.80m at 2.49% Ni from 59.90m and 10.60m at 2.2% Ni from 73.65m respectively (Figure 7 – Appendix 1). The hole intersected an upper zone of 8.13m at 1.74% Ni, 2.06% Cu, 1.59g/t PGE, 0.11% Co and 4.20g/t Ag from 43.17m and a lower zone of 7.90m at 2.22% Ni, 1.02% Cu, 1.84g/t PGE, 0.12% Co and 19.07g/t Ag from 63.30m.

The two zones of massive sulphide mineralisation were separated by a porphyry body and confirm the intercepts made in BT-01-33 and 35. The lower massive sulphide intercept in ZA-18-06 included **5.30m at 3.04% Ni,** 0.84% Cu, 1.96g/t PGE, 0.13% Co and 25.36g/t Ag from 63.30m which is the highest grade nickel intercept from the 2018 drill programme.

Hole **ZA-18-07** was drilled as an infill hole between ZA-18-06 and 2001hole BT-01-11 which intersected 19.65m at 0.49% Ni and 0.70% Cu from 15.30m to the north of the Alotta lens (Figure 5 – Appendix 1). The hole intersected 19.70m at 0.44% Ni, 0.49% Cu and 0.52g/t PGE from 34.55m including 14.25m at 0.54% Ni, 0.58% Cu and 0.62g/t PGE from 40.00m indicating continuity of low-grade mineralisation through to BT-01-11.



Drilling the First Hole - ZA-18-01 on 4<sup>th</sup> October 2018

#### Discussion

The results of the Company's first drill programme at the Alotta Project have been very encouraging with successful twin holes completed as well as new intersections to depth and along strike of the previously drilled (2001) mineralisation providing the Company with vital geological and mineralisation information plus fresh core to work with. This will assist in the major task of assessing the historic Ni-Cu-PGE mineralisation database for the project area.

All visually logged sulphide zones within the targeted drilling were split and half core submitted for assay as per the details in the attached JORC Table 1 (Appendix 2). The drill plans and sections presented below comprise the simplified summary geology/mineralisation plots. The Company's consultants Orix Geoscience are digitising the 2018 and 2001 drill sections and flitch plans to generate a 2D/3D wireframe model of the Alotta deposit. The Company will update the market with this information when finalised.

As previously stated, all nine of the holes drilled intersected Ni-Cu mineralisation. The massive sulphide comprised fine-grained pyrrhotite - pyrite  $\pm$  pentlandite  $\pm$  chalcopyrite with a strong tectonic overprint indicating at least local remobilisation (detachment) from the host gabbro body.

The assay results released in this announcement comprise those of potential economic value only. The full multi-element analysis results received have yet to be evaluated.

#### **Future Exploration Programme**

The Company is currently evaluating the extensive regional and prospect database acquired through the Zeus Minerals Ltd acquisition with a view generating drill targets. Prior to the next drill programme in the Alotta Project area the Company is planning to undertake a down-hole electromagnetic (DHEM) survey energising the massive sulphide bodies in the search for sub-surface conductors which could represent additional massive sulphide drill targets.

The Company wishes to acknowledge the professionalism of its various Canadian contractors involved in the timely execution of all facets of the Alotta diamond drilling programme.

For, and on behalf of, the Board of Directors of TopTung Limited,

Dr Leon Pretorius Executive Chairman TopTung Limited 13 November 2018

For any enquiries please contact:

Martin Kavanagh on 0419 429 974, or Marnus Bothma on 0408 198 749

#### **Competent Person Statement**

Information in this ASX announcement that relates to Exploration Results is based on information compiled by Mr Martin Kavanagh. Mr Kavanagh is a Non-Executive Director of TopTung Ltd and is a Fellow of the Australasian Institute of Mining and Metallurgy (FAusIMM), a Member of the Australian Institute of Geoscientists (MAIG) and a Member of the Canadian Institute of Mining, Metallurgy and Petroleum (CIM). Mr Kavanagh has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activities, which he is undertaking. This qualifies Mr Kavanagh as a "Competent Person" as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012). Mr Kavanagh consents to the inclusion of information in this announcement in the form and context in which it appears. Mr Kavanagh holds shares TopTung Ltd.

The data in this report that relates to Exploration Assay Results is based on information evaluated by Dr Leon Pretorius who is a Fellow of The Australasian Institute of Mining and Metallurgy (FAusIMM)(CP) and who has sufficient experience relevant to the activity which 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 Resources and Ore Reserves (the "JORC Code"). Dr Pretorius is the Executive Chairman of TopTung Ltd and he consents to the inclusion in the report of the Exploration Assay Results in the form and context in which they appear. Dr Pretorius holds shares in TopTung Ltd.

Drill hole	Easting	Northing	Elevation (m)	Azi°	Dip	Depth (m)
ZA-18-01	631604	5258585	278	10	-62	102
ZA-18-02	631620	5258623	275	103	-70	84
ZA-18-03	631613	5258624	275	110	-50	78
ZA-18-04	631628	5258578	278	22	-56.5	90
ZA-18-05	631649	5258578	278	22	-57	90
ZA-18-06	631617	5258632	275	168	-70	93
ZA-18-07	631617	5258632	275	145	-85	75
ZA-18-08	631628	5258578	278	22	-66	99
ZA-18-09	631604	5258585	278	10	-66	90

Appendix 1: Alotta Drill Programme – Collar Information, Plans and Sections

 Table 2: Drill hole information. Grid System UTM NAD 83 Zn 17.

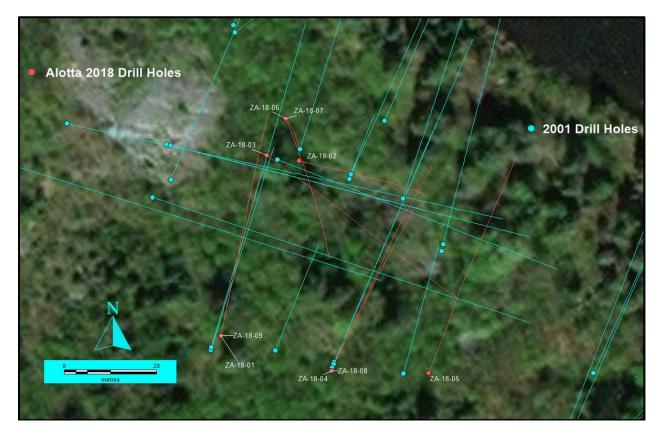
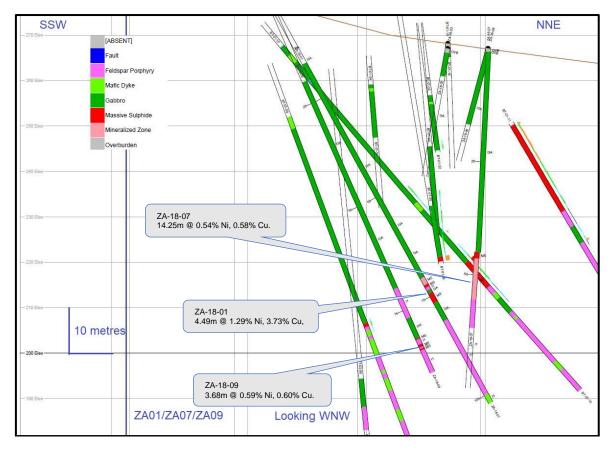
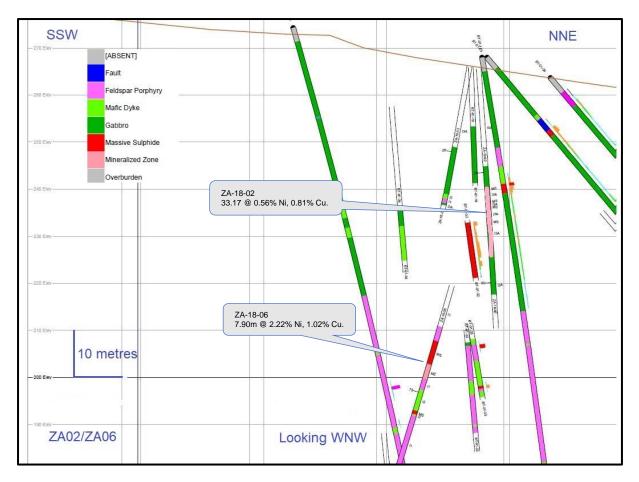


Figure 4: Alotta Project Area - Historic and 2018 Drill Collar Plan



**Figure 5:** ZA01/ZA07/ZA09 Section. The hole trace of ZA07 oblique (~45°) to the section. Hence the intercept length is foreshortened.



**Figure 6:** ZA02/ZA06 Section. The hole trace of ZA02 is ~90° to the section. Hence the intercept length is foreshortened.

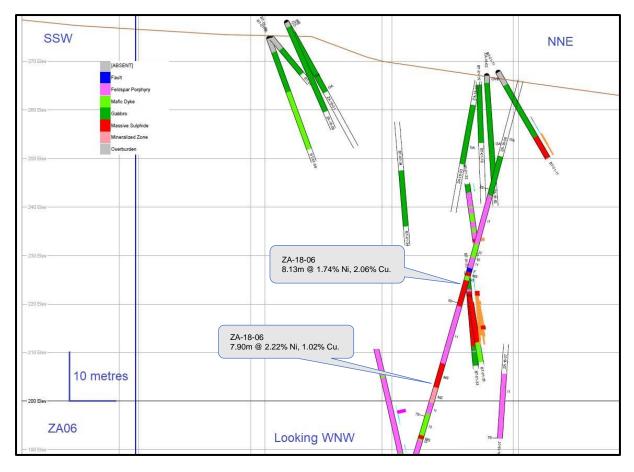


Figure 7: ZA06 Section. The hole trace of ZA07 oblique (~45°) to the section. Hence the intercept length is foreshortened.

## **APPENDIX 2**

### JORC Code, 2012 Edition – Table 1 report template

## Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 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> <li>All drill core was geologically logged by a suitably qualified Senior Geologist.</li> <li>Sampling of drill core was at a maximum of 1.5 metre intervals or as appropriate (minimum of 0.30m) to align with geological /mineralisation contacts ensuring that representative sample intervals were submitted for assay.</li> <li>Mineralised sections of drill core were cut with a diamond saw and half core samples submitted to ALS-Geochemistry, Sudbury, Canada (a fully accredited laboratory) for analysis.</li> <li>Half core been retained together with the full core (unsampled) sections of each hole for verification purposes.</li> <li>Assay methods comprised ICP-MS finish for Au, Pt and Pd (PGM- ICP23 Lab Code) and ME-MS61 for Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, Zr elements and NiCu-OG62 for over-limits of Ni-Cu in ME-MS61</li> </ul>
Drilling techniques	• Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	<ul> <li>The 2018 diamond drilling programme comprised nine angle holes varying in depth from 75 to 102m.</li> <li>All core drilling was NQ core size (47.6mm).</li> <li>The drilling contractor was Chibougamau Diamond Drilling Ltd using a Terramak track mounted rig.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	• The drill contractor measures core recoveries for every run completed using three metre core barrel. The core recovered is physically measured and the length recovered is recorded for every three metre "run". Core recovery can be calculated as a percentage recovery.

Criteria	JORC Code explanation	Commentary
	• 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.	<ul> <li>The recoveries are also confirmed by the project Senior Geologist and entered into the drill logs.</li> <li>There was a notable and consistent competency in the rocks drilled with no significant core recovery problems occurring in any of the holes drilled.</li> <li>Generally 100% recoveries were achieved through the massive sulphide mineralised zones.</li> <li>No sampling bias has been identified in the data at this stage.</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>An experienced Senior Geologist from the Company's consultants Orix Geoscience geologically logged the drill core, using an industry standard logging procedure.</li> <li>All holes were summary logged at the drill site and then logged (and sampled) in detail at a secure facility.</li> <li>All drill core has been fully logged.</li> <li>Logging of drill core is both qualitative i.e. logging of colour, grainsize, weathering, structural fabric, lithology and alteration type; and quantitative i.e. % of minerals present depending on the feature being logged.</li> <li>All core is photographed in the core trays, with individual photographs taken of each tray both dry, and wet. Photos are saved on a secure server.</li> <li>All data was entered into digital templates at the project office.</li> <li>All samples were geologically logged to the level of detail required to support a future Mineral Resource Estimation.</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> </ul>	<ul> <li>NQ core was cut with a diamond saw with the same half always sampled and the other half retained in the core tray. Half-core sampling is considered appropriate for the style of mineralisation intersected.</li> <li>Core cutting and sampling was carried out by experienced personnel supervised by the Senior Geologist</li> <li>Orix/TopTung's sampling procedures and QAQC was used to maximise representivity of samples.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <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>	Alotta drilling which has included the use of certified reference materials ( <b>CRMs</b> - standards) and unmineralised samples (blanks).
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>Samples from the drilling were submitted to ALS Geochemistry, Sudbury, Canada. Assay methods comprised ICP-MS finish for Au, Pt and Pd (PGM-ICP23 Lab Code) and ME-MS61 for Ag, Al, As, Ba Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th Ti, TI, U, V, W, Y Zn, Zr elements and NiCu-OG62 for over-limits of Ni-Cu in ME-MS61</li> <li>Sample preparation for homogeneity was carried by the laboratory as part of their internal procedures to ensure the grind size of 85% passing 75 microns was being attained. Laboratory QAQC involves the use of internal lab standards using CRM's, blanks, splits and replicates as part of the in-house procedures.</li> <li>Quarter core samples were also submitted for QAQC checks.</li> <li>The laboratory was also directed to take pulp (-75 micron) duplicates</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>at the pulverizing stage as part of the QAQC.</li> <li>Total QAQC samples make up approximately 11.5% of all samples.</li> <li>CRM's with a relevant range of values, were inserted and at a rate of every 20<sup>th</sup> sample. Results highlight that sample assay values are accurate and that contamination has been contained.</li> <li>Repeat or duplicate analysis for samples reveals that precision of samples is within acceptable limits.</li> <li>External quality assurance of the laboratory assays was monitored by the insertion of blanks, duplicates and certified reference materials (CRM).</li> <li>Two types of CRMs were alternated through the sample stream and where possible matched to the material being drilled.</li> <li>One type of blank was inserted into the sample sequence.</li> <li>Duplicate sub-samples were also generated by the laboratory</li> <li>No external laboratory checks have been carried out at this stage.</li> <li>Hand held (pXRF) devices have not been used.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>The Competent Person (CP) is TopTung's Non-Executive Director Martin Kavanagh who has reviewed the Orix Geoscience data relating to the Alotta drill programme.</li> <li>The CP and TopTung's Executive Chairman have reviewed the laboratory data and have confirmed the calculation of significant intersections.</li> <li>As sulphide mineralisation is highly visible it is unlikely that any significant zones of mineralisation were missed.</li> <li>Drill core or core photos are used to verify drill intersections in diamond core.</li> <li>The holes are logged in Microsoft Excel templates for database management and validation.</li> <li>The 2018 drilling was primarily a verification programme testing a mineralised body outlined in 2001.</li> </ul>

Criteria	JORC Code explanation	Commentary
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>All hole collars were surveyed in UTM NAD83 Zone 17 (Northern Hemisphere) using a handheld GPS.</li> <li>Elevation information utilized for the drilling was determined by GPS and previously recorded elevations from the historic drilling.</li> <li>The holes were surveyed using a single-shot reflex camera which can be affected by the massive pyrrhotite bodies intersected in the drill program.</li> <li>The drill hole collars will be re-surveyed by a qualified surveyor using a differential GPS which may result in minor adjustments to coordinate data.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Drill hole location was in part determined by access to the historic drill collars.</li> <li>The drill/data spacing is appropriate to establish both geological and grade continuity so as to undertake a Mineral Resource Estimation.</li> <li>No assay compositing has been applied.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>Angle holes were drilled along the strike of the previously outlined (2001) mineralisation as both twin, extensional and infill holes.</li> <li>Angle holes to test both the depth and strike extent of the previously drilled mineralisation was also undertaken.</li> <li>A scissor hole to verify true width of the mineralisation was also drilled.</li> <li>A list of the drillholes coordinates and orientation are provided in appended Table 2</li> <li>No orientation-based sampling bias has been identified in the data.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Orix Geoscience manages the chain of custody of drill core</li> <li>The drill core and samples were kept in a secure facility (CXS Ltd, Larder Lake, Ontario) fitted with CCTV and an alarm system during the logging, core splitting and sampling process.</li> <li>The drill core and half-core are securely stored at the CSX facility.</li> <li>The individual samples of split core were bagged and tagged and packed in wire tied and sealed polyweave bags for shipment to the laboratory.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>Tracking sheets were set up online to monitor the progress of the samples through the laboratory.</li> <li>Sample pulps and coarse rejects are stored at ALS Sudbury as an interim measure and will be collected for return to the CSX facility.</li> </ul>
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	<ul> <li>Sampling and assaying techniques are industry-standard. Orix / TopTung have specific SOP in relation the management of drill programmes and sample analysis.</li> <li>No specific audits or reviews have been undertaken at this stage in the programme.</li> </ul>

# Section 2 Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>The Company holds 100% of the Project tenements in the name of its wholly owned subsidiary Zeus Olympus Sub Corp.</li> <li>The Mining Claims are in good standing and no known impediments exist</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Information relating to the Projects exploration history was sourced from company reports lodged with the Quebec Mines Department (MERN -Ministère de l'Énergie et des Resources naturelles) and compiled by ORIX Geoscience the Company's consultant geologists.</li> <li>The bulk of the data comes from exploration carried out by Canadian companies between 1987 and 2005.</li> </ul>
Geology	• Deposit type, geological setting and style of mineralisation.	<ul> <li>The Company is focused on the exploration for Ni-Cu-Co-PGM mineralised gabbro bodies which intrude a sequence of mafic volcanic and felsic volcaniclastic sedimentary rocks in the Belleterre- Angliers Greenstone Belt.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>The mineralisation occurs as disseminated to massive sulphides near the base of the gabbro bodies and as remobilised massive sulphides along shears/fault zones.</li> </ul>
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>	<ul> <li>For collar information relating the Company's 2018 drilling (ZA-18 holes) refer to Table 2 in Appendix 1 of this ASX release.</li> <li>Information relating to historic drilling (the 'BT-01' holes) was sourced from company reports lodged with the Quebec Mines Department (MERN -Ministère de l'Énergie et des Resources naturelles)</li> </ul>
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <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 reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>No high-grade cuts have been applied to the assay data.</li> <li>Aggregate sample assays were calculated using length weighted average</li> <li>Intercepts presented may include up to 2m of internal dilution</li> <li>There are no metal equivalents used in the data.</li> </ul>
Relationship between mineralisation widths and intercept lengths Diagrams	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> <li>Appropriate maps and sections (with scales) and tabulations of</li> </ul>	<ul> <li>Mineralisation at Alotta is a steeply dipping SW and plunging WNW body of variably mineralised gabbroic rock. Mineralisation is intersected as down hole lengths.</li> <li>Refer to Figures 2, 3, 5, 6 and 7 in body of text.</li> <li>All intersections reported are down hole lengths</li> <li>A drill hole location plan and selected sections are shown as Figures 2</li> </ul>

Criteria	JORC Code explanation	Commentary
	reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	
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 holes drilled are reported.</li> <li>Significant intersections only are reported in Table 1 in the text at this report.</li> <li>A complete assaying listing for all 2018 drill core samples will be available when the data has been compiled and evaluated and visually correlated with the half core.</li> </ul>
Other substantive exploration data	<ul> <li>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.</li> </ul>	• The Company's website ( <u>www.toptung.com.au</u> ) details historical exploration, geology and mineralisation and geophysical survey data tabled in the form of ASX announcements for the Canadian projects.
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>The Company is in the process of reviewing and evaluating the extensive historic database for the Project Area acquired through the acquisition of Zeus Minerals Ltd (ASX 6 August 2018) Canadian assets.</li> <li>On completion of the database review the Company will be able update the market with a planned programme.</li> <li>It is envisaged that the next phase of drilling at Alotta will be determined by the results of a planned downhole EM survey.</li> </ul>