22 June 2021



MASSIVE SULPHIDE MINERALISATION INTERSECTED AT TULLSTA

HIGHLIGHTS

- Ragnar Metals intersects 70.9m wide zone of potential Ni-Cu bearing magmatic sulphide mineralisation within the Granmuren Gabbroic Intrusive Complex in maiden drill program at Tullsta Project, Sweden
- Visual observations confirm a 3.1m wide zone, comprising 1.6m of massive sulphides below a 1.5m wide zone of semi-massive sulphides (from 534.9m to 538.0m), and 5.8m of semi-massive to network sulphides from 498.8m to 504.6m
- The sulphide zone contains abundant pyrrhotite, chalcopyrite (Cu) and potential Ni-bearing pentlandite mineralisation within the pyroxenitic-gabbroic intrusive host rocks, defining a broad 70.9m envelope of visual sulphide mineralisation (>1% visual) from 489.6m to 560.5m
- This substantial intersection includes 61.2m wide zone with >5% visual sulphide mineralisation from 497.1m to 558.3m, containing:
 - 8.5m wide Upper Zone with semi-massive, network, stringer & blebby sulphides (5%-70% visual) from 497.1m to 505.6m; and
 - 35.0m wide Central & Lower Zone of continuously mineralised sulphide zones, including massive (1.6m wide) and several semi-massive intervals, from 523.3m to 558.3m.
- Diamond core hole 21DDTS002 targeted the projected down-plunge position of a modelled IP anomaly generated by Ragnar's consulting geoscientists from GeoVista AB in Sweden and consulting geologist from Geolithic Geological Services in Australia
- Geological and geophysical model is similar to the Sakatti Ni-Cu-PGE deposit in Finland¹
- Diamond cores dispatched to Minalyse² in Sweden for core analysis and assay, results expected in the September quarter

Ragnar Metals Limited ("Ragnar" or "the Company", ASX: RAG) is pleased to advise maiden drilling at its 100%-owned Tullsta Nickel Project in Sweden has intersected **significant magmatic sulphide mineralisation** in the second drill hole of the program.

Visual inspection of core from diamond drill hole 21DDTS002 by supervising Swedish geologists GeoVista AB in Sweden and a review of the core photos/logs by the Company's Australian geologist from Geolithic Geological Services in Australia confirms the collective opinion that the mineralisation contains primary Ni-Cu bearing sulphides of magmatic origin (Figures 1-3, Figures 6-8 & Table 1).

² https://minalyze.com/ Directors Steve Formica

Eddie King David Wheeler Level 3, 35 Outram St West Perth WA 6005 Australia ragnarmetals.com.au T. +61 8 6245 2050 F. +61 8 6245 2055 E. info@ragnarmetals.com.au

¹ https://finland.angloamerican.com/en/about-sakatti



Ragnar has dispatched the core for assaying to confirm the presence and grade of nickel-copper-PGE mineralisation and expects results during the September quarter.



Figure 1: Blebby, network, semi-massive and massive in Central Sulphide Zone: 21DDTS002 (529.2-539.0m).

Ragnar's consulting geologist Neil Hutchison said: "The visual inspection of the sulphide mineralisation and the intrusive host rocks at Granmuren, remarkably have a very similar rock type, mineral composition, intrusive textures, sulphide style and metal abundance as the Carr Boyd (ASX:ESR³) and Andover (ASX:AZS⁴) magmatic nickel-copper sulphide discoveries that Geolithic was involved in during 2020-2021. These Projects are still successfully drilling and continuing to expand the known mineralisation.

"Even without the confirmation of assay or pXRF data at this early stage, it is obvious that these sulphides contain copper as evident by the chalcopyrite mineralisation, and the core photos display abundant silver/brassy metallic sulphide crystals within the pyrrhotite, which are consistent with Ni-bearing pentlandite mineralisation (Figures 2 & 3). It would be reasonable to expect that Granmuren would also deliver more sulphide mineralisation and similar Ni-Cu grades, given they are all the same style of mineralisation from magmatic intrusive origin, even though Granmuren is on the other side of the globe."

³ https://www.estrellaresources.com.au/

⁴ https://azureminerals.com.au/





Figure 2: Close up of drill core showing Chalcopyrite (Cu), Pyrrhotite (Fe) and Pentlandite (Ni) sulphides.



Figure 3: Closeup of the Upper Zone mineralisation showing the dominant primary sulphide assemblages within the semimassive and network sulphide zones.

The Company first discovered near surface Ni-Cu-Co mineralisation at Tullsta from heliborne VTEM survey data in 2012. In 2018, Geolithic and GeoVista commenced re-evaluation and field work on the Granmuren mineralisation, recognising the sulphides had been remobilised from a distal source.

Ragnar commissioned GeoVista to complete an IP-Resistivity survey over the area in late 2019, and 3D modelling of the data defined a large NW plunging anomaly below the Granmuren mineralisation. The geological and geophysical model was similar to the Sakatti Ni-Cu-PGE deposit to the NE across the border in Finland, which was discovered in 2009. The 3D IP model defined a continuous body that extends from below the level of historical drilling and open to the northwest. Magnetic and gravity modelling also indicated a western to north-western plunging body trending towards the Tullsta Nr8 permit area, which abuts the Berga Nr1 permit. Ragnar planned four drill holes to target this modelled body, and has completed two to date, with the third hole underway.



Ragnar's Chairman Steve Formica said: "I am extremely pleased with hitting significant broad sulphide mineralisation zones in only our second drill hole of our maiden program at Tullsta. These drill targets were generated in 2018 but we have had to exercise patience whilst waiting for Ragnar to be financially able to explore a potentially game-changing target.

"The delay may be a blessing in disguise as I feel that timing is now on our side. The impending electric vehicle demand gives Ragnar the opportunity to be in the right commodity in the right place in the heart of European battery manufacturers. I look forward to working with our technical experts at GeoVista and Geolithic in progressing our discovery at Tullsta."

Ragnar's first hole (21DDTS001) was drilled southwards towards the northern end of the IP model and intersected metasediments which contained widespread finely disseminated pyrite, locally containing up to 5% blebby pyrite over individual meters. No intrusive gabbroic rocks or any notable Ni-Cu bearing sulphides were intersected in the drill hole, although the barren sulphides may help to explain the geophysical anomaly outside of the intrusion. It is well understood that barren sulphide bearing sediments are required for the assimilation and deposition of primary sulphides by the gabbro during intrusion. It is reasonable to interpret that the sulphides in 21DDTS001 may be an important contributing factor to triggering the formation of the Ni-Cu mineralisation within the Granmuren Intrusive Complex.

The second hole (21DDTS002) was drilled from the same drill site towards the SW, testing the deeper projected plunge of the IP model. See Figures 4 & 5 and Table 2 for drill hole details.

Hole 21DDTS002 deviated to the NW of the planned target position (Figure 4 & 5), encountering intrusive dark green gabbroic rocks at a depth of ~428m. A few blebs of pyrrhotite and disseminated pyrite grains were noted, with a network of pyrrhotite stringers veins emerging around 497m and leading into the Upper Zone mineralisation. Mineralisation continues to the base of the gabbroic-pyroxenitic intrusion displaying repetitions of the mineralised zones as the sulphide pulses developed in the cooling magma. The deviation of the hole resulted in the hole intersecting the modelled plunge direction just outside the target position and slightly deeper, however this adds more scale to the mineralised zones both up and down plunge from this intersection.

The third hole of the program has commenced to the south and is drilling northwards testing the south dipping trend of the known Granmuren mineralisation at depth. A fourth hole has been planned from the same drill site, testing the dipping mineralisation and underneath the plunging model at depth, testing all possible open directions and providing geophysical platform holes (Green traces on Figures 4 & 5). Down Hole Electro-Magnet (DHEM) surveying of the holes is being planned and should work extremely well given the volume and density of the sulphide mineralisation intersected in 21DDTS002. This will allow vectoring towards the core zone of the mineralised magmatic intrusive system which will provide targets to be tested in the next round of drilling.





Figure 4: Plan view showing historical drill holes (blue), recent drill holes (red) and planned drill holes (green). The 3D IP models are displayed with the known near surface Granmuren mineralisation shown by the purple model and the new deeper plunging model in green. Hole 21DDTS002 deviated to the NW and still intersected the modelled plunge direction just outside the target position.



Figure 5: Cross section view (looking east) showing Ni mineralisation (>0.5% Ni) in the historical near surface drill holes (blue) and the Granmuren 3D IP model (purple). The deeper 3D IP model (green) can be seen extending at depth and plunging to the NW with 21DDTS002 intersecting sulphide mineralisation on the lower corner of the model. Planned holes 3 & 4 are testing the south dipping trend of the near surface mineralisation and gabbroic rocks, as well as testing deeper below the model and the current sulphide bearing intersection.



Core from hole 21DDTS002 will undergo detailed logging, sampling and analytical testing and the Company will provide an update once results are received during the September quarter. It's not clear at this stage of the laboratory wait times in Sweden, however its anticipated that they will be shorter than current wait times in Australia.

Ragnar is preparing additional plans and work permits in Sweden to be submitted to the Inspectorate of Mines to prepare for the next stage of follow-up works at the Tullsta Project in order to rapidly advance this exciting new discovery at Granmuren Deeps.

Competent Person Statement

The information in this announcement relating to Exploration Results is based on information compiled by Neil Hutchison of Geolithic Geological Services, who is a consultant to Ragnar Metals, 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.

For the purpose of ASX Listing Rule 15.5, the Board has authorised for this announcement to be released.

For further enquiries contact:

Steve Formica Chairman RAGNAR METALS LIMITED

Tel: +61 418 920 474 Email: <u>steve@ragnarmetals.com.au</u>



Hole ID	From (m)	To (m)	Width (m)	Rocktype	Sulphide type	Sulphide Minerals	Visual Sulphide Estimation (%)	Sulphide Zone	
	459.7	489.6	29.9	Gabbro	Trace cloud	Ру	~<0.5		
	489.6	497.1	7.5	Pyroxenite	Stringer	Ру, Ро	~1		
	497.1	497.2	0.1	Pyroxenite	Network	Ро	~40		
	497.2	497.4	0.2	Pyroxenite	Disseminated	Ро	~1		
	497.4	498.8	1.4	Gabbro	Disseminated/Blebby	Ро	~5		
	498.8	499.6	0.8	Pyroxenite	Semi-massive	Ро, Сру, Ре	~40	one	
	499.6	501.5	1.9	Pyroxenite	Semi-massive	Ро, Сру, Ре	~70	er Z.	
	501.5	501.7	0.2	Pyroxenite	Network	Сру, Ро, Ре	~25	9 8	
	501.7	504.6	2.9	Pyroxenite	Semi-massive	Ро, Сру, Ре	~60	_	
	504.6	505.2	0.6	Pyroxenite	Stringer	Ро, Сру	~5		
	505.2	505.6	0.4	Pyroxenite	Stringer	Сру, Ро	~5		
	505.6	523.3	17.7	Gabbro	Disseminated	Ро	~1		
	523.3	531.0	7.7	Gabbro	Highly Disseminated	Ро	~10		
2	531.0	532.4	1.4	Gabbro	Blebby	Ро	~15		
00	532.4	533.5	1.1	Gabbro	Blebby	Ро	~20	ЭС	
Ĕ	533.5	534.9	1.4	Gabbro	Network	Ро, Сру	~30	n Zol	
21DI	534.9	535.5	0.6	Gabbro	Semi-massive	Ро, Сру, Ре	~50	ntra 14.9	
	535.5	536.4	0.9	Gabbro	Semi-massive	Po, Pe	~60	Cel	
	536.4	538.0	1.6	Gabbro	Massive	Ро, Сру, Ре	~90		
	538.0	538.2	0.2	Gabbro	Network	Ро	~20		
	538.2	547.0	8.8	Leucogabbro	Disseminated-Blebby	Ро	~5	8.8m	
	547.0	547.4	0.4	Gabbro	Semi-massive	Po, Pe	~70		
	547.4	549.4	2.0	Gabbro	Disseminated-Stringer	Ро, Сру	~5		
	549.4	550.0	0.6	Gabbro	Semi-massive	Ро, Сру, Ре	~30	one 1	
	550.0	551.8	1.8	Gabbro	Disseminated-Blebby	Ро, Сру	~10	er Z(1.3m	
	551.8	555.5	3.7	Leucogabbro	Blebby	Ро	~20	1: 1:	
	555.5	557.4	1.9	Leucogabbro	Blebby	Ро, Сру	~25		
	557.4	558.3	0.9	Gabbro	Semi-massive	Po, Pe	~60		
	558.2	560.5	2.3	Diorite	Disseminated	Ро	~1		
	560.5	584.4	23.9	Metasediment			0		

Table 1: Major Sulphide Zones (Highlighted) and Visual Estimate of Sulphide Percentages

In relation to the disclosure of visual mineralisation, the Company cautions that visual estimates of sulphide abundance should never be considered a proxy or substitute for laboratory analysis. Laboratory assay results are required to determine the widths and grade of mineralisation. The Company will update the market when laboratory analytical results become available. Widths are reported as downhole widths, true widths have not yet been determined due to the early stage nature of the project.



Table 2: Drill Hole Collar Details

Hole ID	Easting	Northing	Dip	Azimuth	Depth (m)
21DDT001	582220	6640654	-59.17	180.00	515.00
21DDT002	582220	6640654	-47.78	225.00	584.35



Figure 6: Upper Mineralised Sulphide Zone (Trays from 494.5m-509.3m)





Figure 7: Central Mineralised Sulphide Zone (Trays from 509.3m-539.0m)





Figure 8: Lower Mineralised Sulphide Zone (Trays from 539.0m-564.0)



ABOUT THE PROJECT

Ragnar Metals owns 100% of the Tullsta and Gaddebo Projects which are located near Sala within the Bergslagen District of Sweden, 110km NW of the capital Stockholm (Figure 9). The Tullsta nickel project comprises of 4 contiguous granted permits covering an area of 93.61km² (Figure 10 & Table 3) and cover the extent of the gabbroic mafic intrusion which hosts the Granmuren nickel mineralisation.

Ragnar also owns the Gaddebo Project (Figure 9) to the SSE of Tullsta.



Figure 9: Tullsta Nickel Project is located near Sala, 110km NW of the Swedish capital, Stockholm.

The Tullsta Project contains the Granmuren Nickel Deposit which is located within Berga Nr1 tenement (Figures 10) and was discovered in 2012 by drilling of a VTEM survey anomaly. Mineralisation at Granmuren comprises two thick fingers of highly sulphidic pyroxenitic-gabbroic intrusions which predominantly comprise of disseminated-blebby sulphide mineralisation containing high tenure remobilised Ni-Cu-Co mineralisation. In 2018 GeoVista completed geophysical IP-Resistivity testwork on several drill core samples collected from the deposit during the 2018 field trip completed by Geolithic and GeoVista geologists. In late 2019, Ragnar completed an Induced Polarization & Resistivity/ Chargeability Survey (IP-R) over the Granmuren mineralised zone within the Berga nr1 permit and subsequently defined down plunge drill targets at depth, potentially extending the mineralisation at Granmuren as well as defining new untested drill targets.

Current drilling in 2021 has now discovered significant primary magmatic sulphide mineralisation at depth within the Granmuren Intrusive Complex which will be further drill tested.



Table 3: Ragnar Metals Tullsta Project Tenement Details.

Name	License Id	Owner	Area Ha	Valid From	Valid To
Berga nr 1	2018 48	Ragnar Metals Limited (100.00%)	2181.52	28/03/2018	22/03/2022
Tullsta nr 6	2017 158	Ragnar Metals Limited (100.00%)	2695.03	6/11/2017	6/11/2023
Tullsta nr 7	2019 5	Ragnar Metals Limited (100.00%)	4452.74	25/01/2019	25/01/2022
Tullsta nr 8	2020 45	Ragnar Metals Limited (100.00%)	31.41	7/05/2020	7/05/2023
Total Area			9360.70		



Figure 10: Ragnar Metals 100% owned tenure at the Tullsta Nickel Project to the west of the historic mining town of Sala. The Granmuren Nickel Deposit is situated within the Berga nr1 permit which adjoins the additional Tullsta tenure.



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
Sampling techniques	 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. 	 No sampling completed at this stage No other measurement tools other than directional survey tools have been used in the holes at this stage.
	 Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	 No sampling completed at this stage
	 Aspects of the determination of mineralisation that are material to the Public Report. 	• Determination of mineralisation has been based on geological logging in Sweden and photo analysis in Australia. Visual sulphide estimates have been tabulated in the report body.
	 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 	 Diamond Core drilling was used to obtain 3m length samples from the barrel which are then marked in one meter intervals based on the drillers core block measurement. Assay samples will be selected based on geological logging boundaries or on the nominal meter marks. Samples are yet to be collected and will be dispatched to an accredited laboratory in Sweden for sample preparation and shipment to analysis
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). 	 Drilling was undertaken by Allroc AB using NQ2 sized drill core. Hole was collared with mud rotary from surface (~4m) and cored with NQ2 sized cored to EOH.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	 Core recovery was recorded by the drill crew and verified by the geologist. RQD measurements will be digitally recorded to ensure recovery details are captured. Sample recovery in both holes was high with negligible loss of recovery observed. 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.



Criteria	JORC Code explanation	Commentary
Criteria Logging Sub- sampling techniques and sample preparation	 JORC Code explanation 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to 	 Commentary Detailed industry standard of collecting core in wooden core trays, marking meter intervals and logging will be undertaken Core trays were photographed prior to logging. Drill hole logs are to be recorded in Excel spread sheets and validated in Micromine Software as the drilling progress. The entire length of both holes was summary logged with detailed logging to commence. No sampling completed at this stage
	 maximise representivity of samples. Measures taken to ensure that the sampling is representative of the insitu material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	
Quality of assay data and laboratory tests	 For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable 	 No results from geophysical or pXRF tools are being reported.
	levels of accuracy (i.e. lack of bias)	
Verification of sampling and	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes 	No sampling completed at this stage No twinning completed at this stage
assaying	 Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. 	 The data was collected and logged using Excel spreadsheets and validated using Micromine Software. The data will be loaded into a Dropbox hosted database by Geolithic geological consultant. No assay completed at this stage.
	data.	
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down- hole surveys), trenches, mine workings and other locations used in 	 The holes were pegged by GeoVista consultants using a hand held GPS <u>+</u> 3m. The collar positions and initial azimuths will later be surveyed with RTK GPS The rig was setup over the nominated hole position and



Criteria	JORC Code explanation	Commentary
	Mineral Resource estimation.	final GPS pickup occurred at the completion of the hole.
	• Specification of the grid system used.	SWEREF99TM
	• Quality and adequacy of topographic	More than adequate given the early stage of the project
	control.	& relatively flat nature of the terrain.
Data	Data spacing for reporting of	 Refer to Cross Section and Plans in report body
spacing	Exploration Results.	
and	• Whether the data spacing and	 No Mineral Resource is being stated.
aistribution	distribution is sufficient to establish	
	the degree of geological and grade	
	Continuity appropriate for the Mineral	
	estimation procedure(s) and	
	classifications applied	
	Whether sample compositing has	No sampling at this stage
	been applied	
Orientation	Whether the orientation of sampling	• The drill line and drill hole orientation are oriented
of data in	achieves unbiased sampling of	normal to the contact of the targeted model
relation to	possible structures and the extent to	
geological	which this is known, considering the	
structure	deposit type.	
	• If the relationship between the drilling	
	orientation and the orientation of key	
	mineralised structures is considered	
	this should be assessed and reported	
	if material	
Sample	The measures taken to ensure	Samples are in the possession of GeoVista personnel
security	sample security.	from field collection to laboratory submission.
Audits or	• The results of any audits or reviews of	No audits or reviews have been conducted for this
reviews	sampling techniques and data.	release given the very small size of the dataset.



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>	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 Exploration Permit Berga nr1 (2018:48:00) is owned 100% by Ragnar Metals (formerly Drake Resources). The tenure is located in Bergslagen District within the Municipality of Sala on Map page 11G. The Permit is valid until 28/03/2022. All regulatory and heritage approvals have been met and work permits approved. There are no known impediments to operate in the area.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Granmuren is Ragnars (formerly Drake Resources) greenfield nickel, copper, cobalt discovery in the Bergslagen district of Sweden which has a very long and significant mining history dating back more than 1,000 years and contains over 6,000 known mineral deposits and prospects. Bergslagen was more recently recognized as a prospective region resulting in interest from mining and exploration companies over the last 10 years. The Tullsta Project contains the Granmuren Nickel Deposit which was discovered in 2012 by drilling of a VTEM survey anomaly. In 2018, Geolithic and GeoVista commenced re-evaluation and field work on the Granmuren mineralisation, recognising the sulphides had been remobilised from a distal source. Ragnar commissioned GeoVista to complete an IP-Resistivity survey over the area in late 2019, and 3D modelling of the data defined a large NW plunging anomaly below the Granmuren mineralisation. The geological and geophysical model was similar to that of the Sakatti Ni-Cu-PGE deposit to the NE across the border in Finland, which was discovered in 2009. The 3D IP model defined a continuous body that extends from below the level of historical drilling and open to the northwest. Magnetic and gravity modelling also indicated a western to north-western plunging body trending towards the Tullsta Nr8 permit area, which abuts the Berga Nr1 permit.
Geology	Deposit type, geological setting and style of mineralisation.	Scandinavia and the adjoining Karelia Province in north-west Russia is one of the major nickel-copper provinces of the world. It includes the giant Pechenga deposit in Karelia, as well as recent discoveries at the Sakatti and Kevitsa Projects, both in Finland. Granmuren is an extension of the Svecofennian province which has played a long significant part of Finland's smelting and refining success. Scandinavian operations are both open pit and underground with typical grades of 0.25% to 1.0% nickel. Cobalt is locally present and has only been mined as an economic by-product from nickel-copper-rich sulphide deposits in the Bergslagen region. Nickel-copper sulphides hosted have been mined historically in the Bergslagen region from gabbroic rocks since the middle of the 18th Century. The small but significant Slättberg and Kuså deposits in the northern part of the Bergslagen region were important producers in the context of their time. Other deposits of this type are the Frustuna



Criteria	JORC Code explanation	Commentary
Criteria Data aggregation methods	 JORC Code explanation JORC Code explanation 	Commentary deposit in southern Bergslagen as well as the Ekedal and Gaddebo deposits in the central part of the region. Initially exploited for Cu alone, their Ni component was obtained as a smelter product in the 1850-1880 period, before a drop in the Ni price caused by production from New Caledonia (where export of Ni began in 1875) effectively made them uneconomic. World production of Ni metal at this time was on the order of 1000 tpa. The Bergslagen Ni-Cu deposits received renewed interest during the two World Wars, owing to the strategic value of Ni and Cu in arms and ammunition production. Total production is estimated to be approximately 700-800 tonnes of Ni metal, which to put into context, amounts to approximately one week's production at BHPs Mount Keith Ni mine in Western Australia. In contrast to other base-metal deposit styles, sulphidic Ni- Cu had not been a focus for modern exploration companies in the region, possibly because the known deposits have been small in comparison with other Ni camps around the World. The blind, greenfields discovery of sulphidic Ni-Cu sulphides at Granmuren by Drake in 2012 stands a modern milestone in Bergslagen exploration history. The discovery validates the modern strategy of applying 21st century technologies such as electrical geophysics to historic mining belts and warrants further evaluation and exploration.
	 be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any 	No metal equivalent quoted
	reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisation	 These relationships are particularly important in the reporting of Exploration Results. 	 The two combined models from the geophysical survey form a continuous body that extends from surface to below the boreholes and open to the west and to the
widths and intercept lengths	 If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 	north. Magnetic and gravity modelling also indicates a western to north-westerly plunging body which is supported by the results of this recent geophysical survey. Mineralisation is interpreted to follow this trend.
	 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'). 	 Sulphide mineralisation contacts appear to be perpendicular to the core however, True width cannot be determined at this stage as the dip of the mineralised contact is yet to be accurately determined.
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for 	 Appropriate maps, sections and tables are included in the body of the Report.



Criteria	JORC Code explanation	Commentary
Balanced reporting	 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. Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	 All new drillholes within this announcement are detailed in the body of this report. Assay results have not yet been determined and will be reported once received.
Other substantive exploration data	 Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	 Everything meaningful and material is disclosed in the body of the report. Geological observations are included in the report. No bulk samples, metallurgical, bulk density, groundwater, geotechnical and/or rock characteristics test were carried out. There are no known potential deleterious or contaminating substances.
Further work	 The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 Continued deep diamond drilling is underway and DHEM geophysical testing of the drill holes will commence soon. Further targeting, drill hole planning and submission of environment and work permits will be undertaken.