

17 May 2022

## **DOWNHOLE IP MODELLING DEFINES LARGE ANOMALIES AT TULLSTA NICKEL PROJECT**

### **HIGHLIGHTS**

- Modelling of the successful Down Hole Induced Polarisation & Resistivity (DHIP-R) survey at Ragnar's 100% owned Tullsta Nickel Project in Sweden recently completed.
- DHIP-R is designed to define geological bodies with low resistivity – high conductance and anomalous chargeability caused by sulphide mineralisation.
- **Key observations from the DHIP-R survey include:**
  - **Definition of a very large highly mineralised gabbroic body ~500m long x ~450m wide, extends to a vertical depth of ~550m and has a down-plunge strike of ~750m from the surface; and**
  - **Confirmation that the mineralisation is open, particularly at depth and has additional lobes/chambers off to the side of the main gabbroic body that are additional target zones for sulphide mineralisation**
- Importantly the model coincides with the gabbro host rock and significant Ni-Cu-Co intersections in recently drilled holes including diamond core hole 21DDTS007 which intersected **146.3m @ 0.56% Ni, 0.49% Cu & 0.05% Co (from 393.5m depth)**
- The geological and geophysical modelling provides the first complete 3D model of the gabbroic intrusion, which will greatly assist in future targeting and follow-up drilling.
- Review of airborne magnetics and VTEM geophysics data identified several additional target areas with potential for nearby discoveries.
- Planning is well advanced for follow up drilling at Tullsta, expected to commence in June 2022.

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Executive Director Eddie King commented, *"We are extremely excited by the results of this survey as the significantly large gabbroic body it has identified coincides with our recent, outstanding Ni-Cu-Co intersections and provides valuable inputs for our updated geological model. Importantly it has also confirmed the potential scale of mineralisation at Granmuren to be globally significant. With these results in hand and our enhanced understanding of the geology, it paves the way for an incredibly exciting follow-up drilling campaign."*

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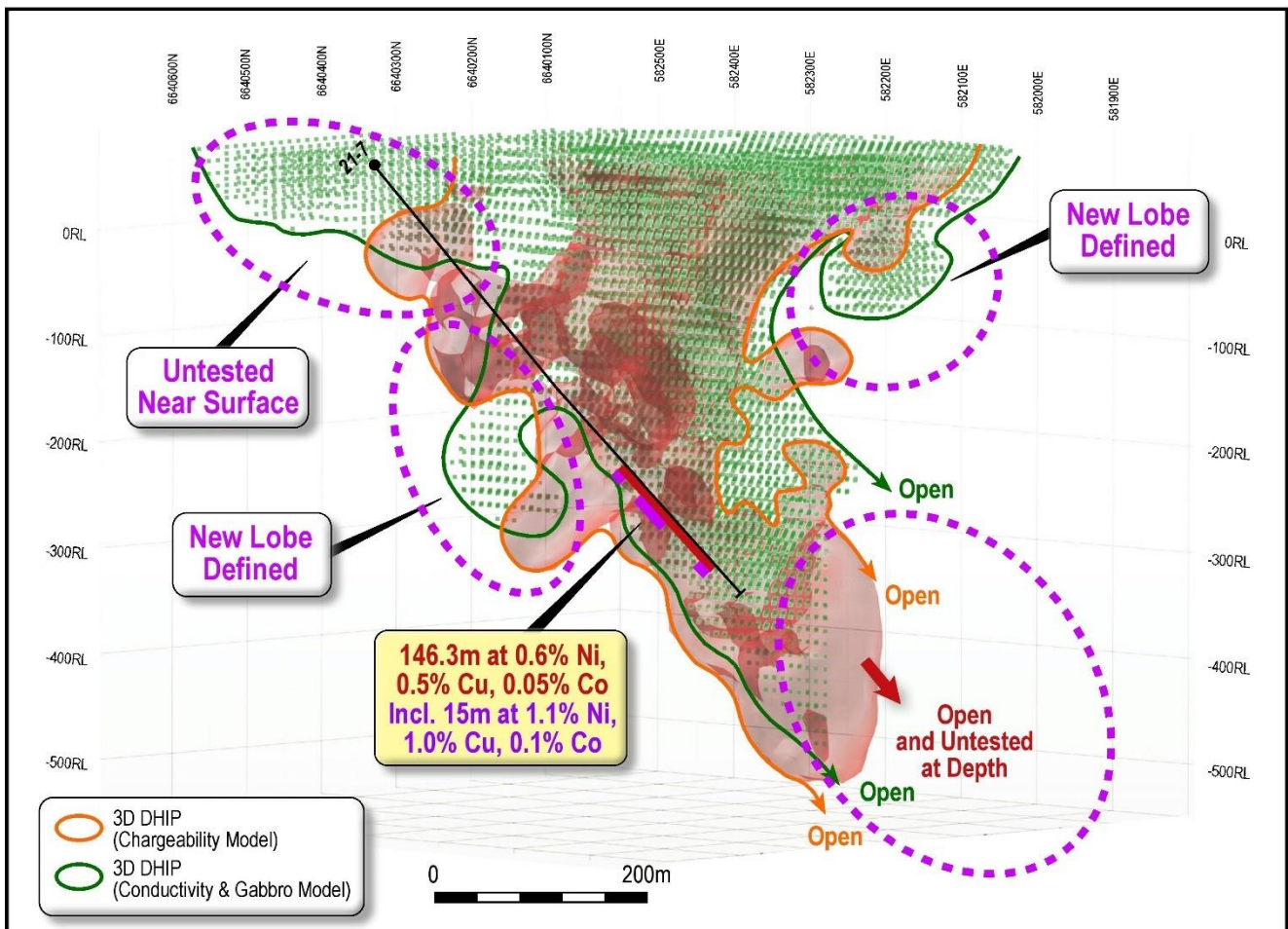
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Ragnar Metals Limited (“Ragnar” or “the Company”, ASX: RAG) advises that the Down Hole Induced Polarisation & Resistivity (DHIP-R) survey data has now been modelled at the Granmuren Deeps nickel-copper discovery. Granmuren is located within the Company’s 100%-owned Tullsta Nickel Project in Sweden, 110km NW of Stockholm (“Tullsta” or “the Project”).

Ragnar engaged its Swedish geological and geophysical consultants to conduct a novel DHIP-R survey, which was completed in March 2022. This followed the successful DHIP-R test survey completed in 2019 that provided targets that supported the Company’s conceptual magmatic intrusion model. Drilling of those modelled targets in 2021 discovered extensive magmatic Ni-Cu-Co mineralisation at depth within the modelled gabbroic intrusion, warranting the further use of the novel DHIP-R geophysical technique on the seven deep holes recently drilled by the Company.

Traditional Induced Polarisation (IP) surveys are completed on the surface but can be hampered by limited penetration at depth as well as other interference issues. Due to the potential depth of the magmatic mineralisation being targeted at Granmuren Deeps, the Company’s consultants (Geolithic and GeoVista) worked together to test a method of using IP receivers in a downhole probe (similar to downhole electromagnetic (DHEM) receiver probes) rather than positioning the receivers on the surface. The deep 2022 DHIP-R data was merged with the shallower 2019 data to provide a comprehensive dataset at Granmuren. This method has provided access to far greater depths than traditional IP surveys and delivered a true 3-dimensional (3D) dataset for the Company to utilise in further exploration campaigns.

Modelling the 3D data defined a low resistivity-high conductance body that coincides with the gabbroic intersections in the drill holes, confirming the effectiveness of the DHIP-R method. The IP modelling has also defined high chargeability anomalies, which are consistent with sulphide mineralisation within the gabbroic intrusion, with a defining halo surrounding the intrusion within the meta sediments (Figures 1, 4 & 5). This IP model supports the Ni-Cu-Co sulphides intersected in the drilling (Table 1) and highlights large untested areas for further drill targeting.



**Figure 1:** 3-Dimensional model (looking southeast) of DHIP-R Conductivity block model (green) intersected by IP Chargeability model (red with orange outline). The main body of the Conductivity model coincides closely with the gabbroic intrusion intersected in the drilling. The IP Chargeability model indicates the presence of extensive sulphide mineralisation within and surrounding the intrusion, whilst the Conductivity model shows the system is open near surface to the east, open at depth to the west, and defines new lobes to the north and south. External Chargeability anomalies appear to be associated with these northern and southern Chargeability lobes providing additional shallow targets.

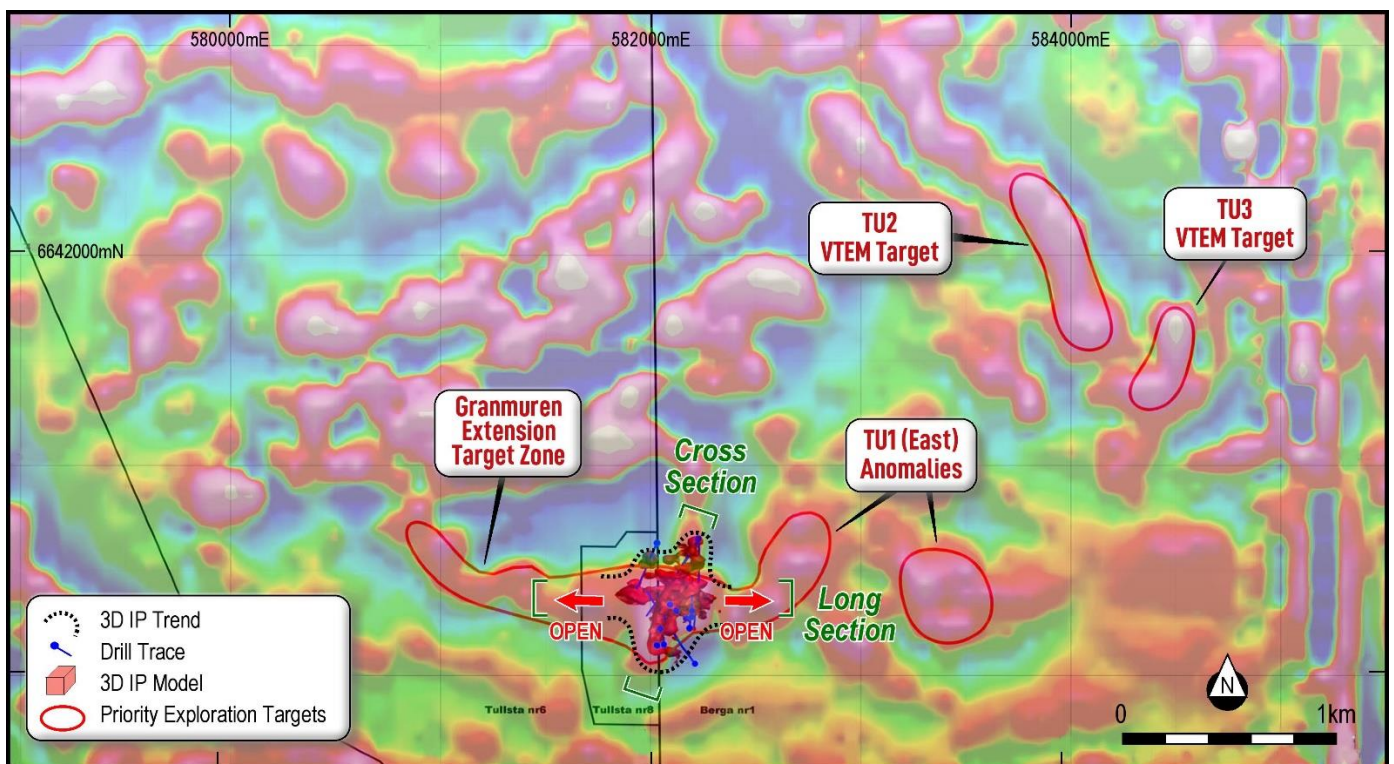
The generated conductivity model indicates the main gabbroic intrusion is at a minimum ~500m long x ~450m wide (Figure 3), extends to a vertical depth of ~550m below the surface and has a down-plunge strike of ~750m from the surface (Figure 1). GeoVista’s geophysicist notes that the modelling algorithm is conservative and does not extrapolate too far away from the down-hole electrodes indicating the mineralised system is potentially much larger than modelled since it is open away from the drill holes in several directions and in particular at depth (Figures 4 & 5).

The 2021 drilling also intersected narrow gabbroic zones outside and above the main intrusion and were initially thought to be minor gabbroic dykes. The conductivity model has now defined additional lobes or chambers off the side of the main gabbroic body to the north and south. These new lobes are up to ~100m x ~100m x ~150m in dimension with coincident IP chargeability anomalies suggesting the potential for additional sulphide mineralisation and providing new target zones away from the main intrusive chamber (Figures 1 & 5).

The geophysical data combined with geological interpretation of the drilling data provides the first complete 3D model of the Ni-Cu-Co mineralised Granmuren magmatic intrusion, which paves the way for the next phase of targeted drilling. Targets have been identified within the intrusion surrounding existing mineralisation including up-plunge to the east where the intrusion appears to come close to the surface, down-plunge at a depth where it is open and untested, as well as the new lobes to the north and south of the main intrusion (Figures 1, 4 & 5).

### VTEM Survey Review

In addition to these localised target zones, several regional targets have been defined from heliborne Versatile Time Domain Electromagnetics (VTEM) survey data completed by the Company in 2011 (Figures 2 & 3). High priority VTEM anomalies TU1, TU2 and TU3, were generated from the survey back in 2011. In 2012 TU1 was drilled, leading to the discovery of the Granmuren mineralisation. VTEM anomalies TU2 and TU3 are located 2.5km to the NE of the Granmuren discovery and remain untested (Figure 2). The Granmuren discovery is centred on a large ~E-W magnetic feature (Figure 2), which is interpreted to be related to the gabbroic intrusion. This 1,500m long anomaly and two new anomalies (TU1 East), centred 500m and 1,300m to the east of the intrusion, all have similar features to the Granmuren system and warrant further field investigation and drill targeting. Further analysis on these new areas will occur in June 2022 during a scheduled site trip.



**Figure 2:** Plan view with Ragnar tenure on 1<sup>st</sup> Vertical Derivative VTEM magnetic image. The drill holes (blue) are shown intersecting the Granmuren IP chargeability model (red body), which straddles the tenement boundary between Berga nr1 & Tullsta nr8. The Granmuren discovery is centred on a large ~E-W magnetic feature that is related to the gabbroic intrusion. Untested VTEM anomalies TU2 & TU3 are located in the NE, and a new anomaly with a similar signature to Granmuren is situated to the east.



## Upcoming Program

Following review of the DHIP-R results and updated 3D model, the Company is finalising plans for the next phase of exploration at Granmuren as well as at other untested anomalies at the Project. In June, Company Executives will be with its consulting geologists on site to inspect the mineralisation intersected in the drill core and investigate these untested anomalies as well as other recorded gabbroic occurrences within the tenement package. This visit will coincide with the commencement of the next drilling program at Granmuren with the objectives of improving and expanding the recently discovered mineralisation at Granmuren Deeps, testing and extending mineralisation closer to the surface as well as testing the newly defined local and regional geophysical targets.

## Competent Person Statement

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

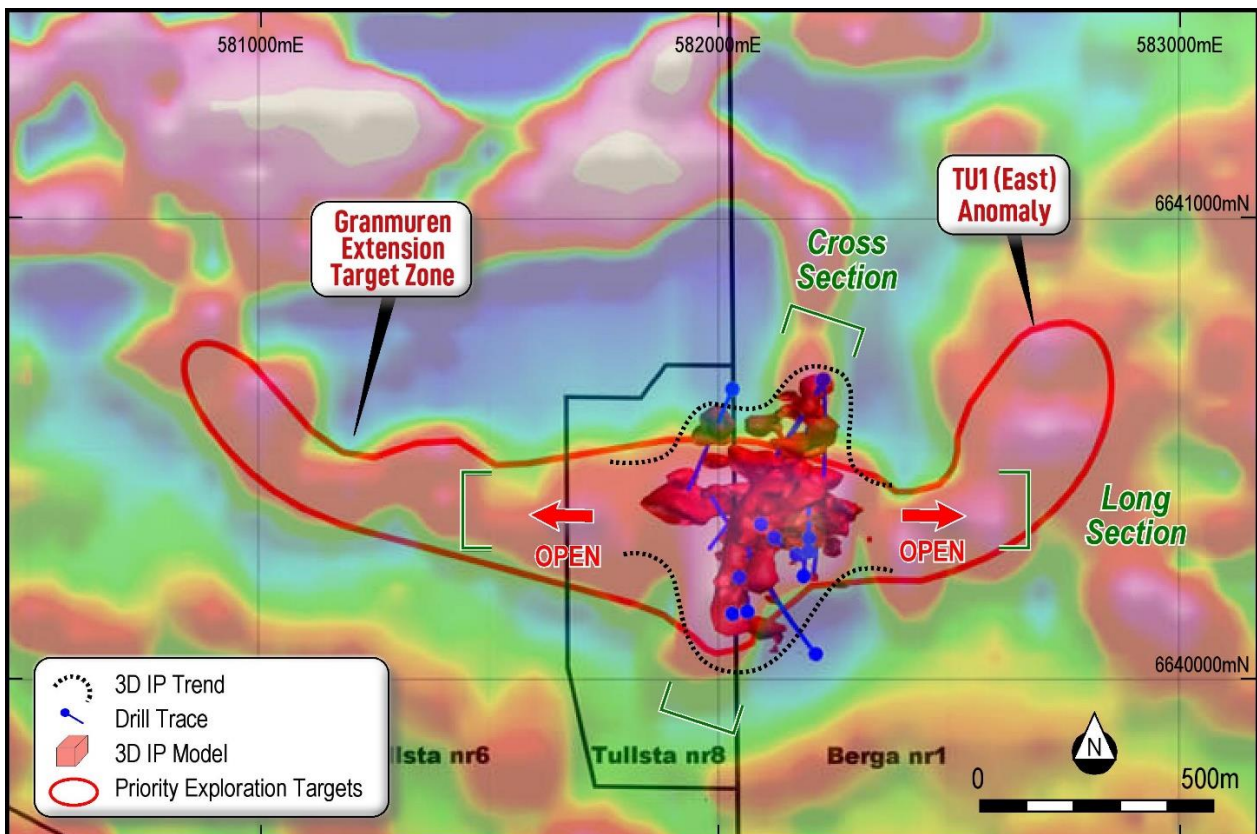
For the purpose of ASX Listing Rule 15.5, the Board has authorised for this announcement to be released.

For further enquiries contact:

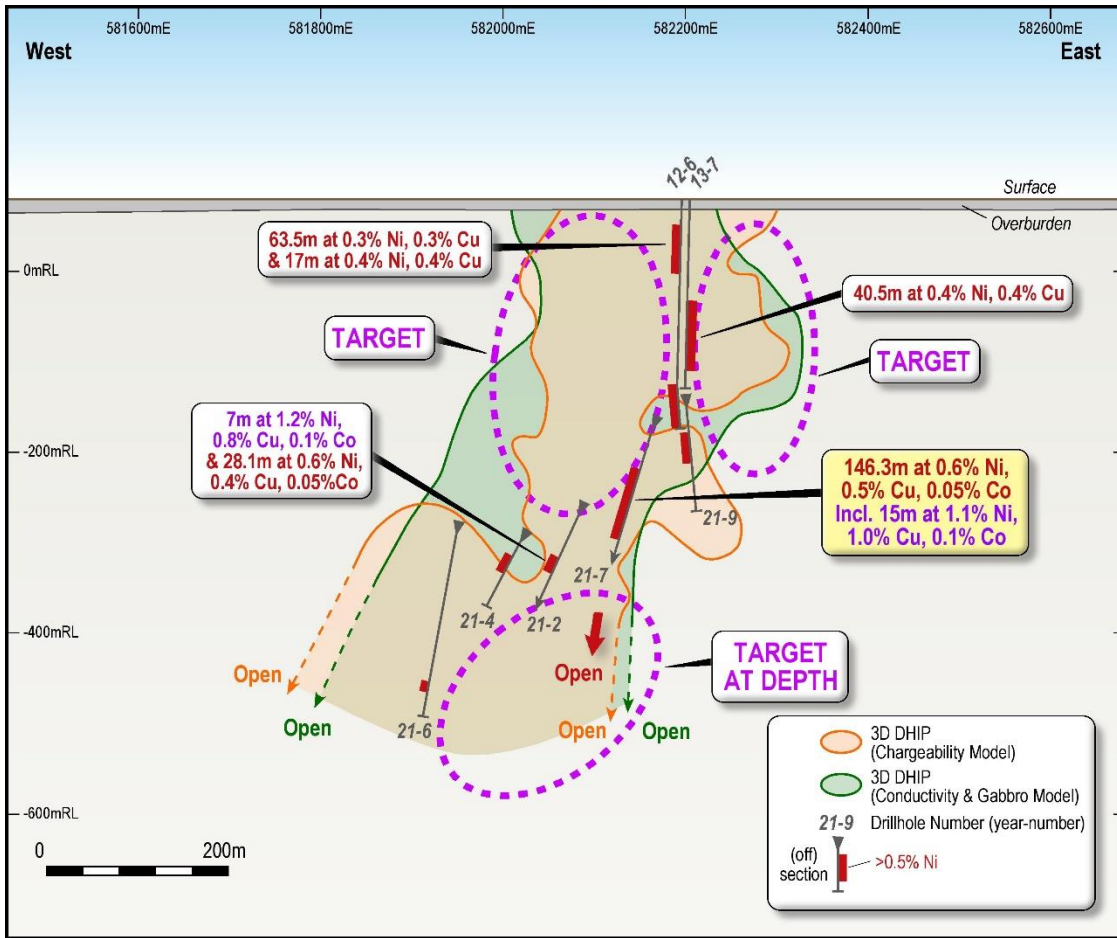
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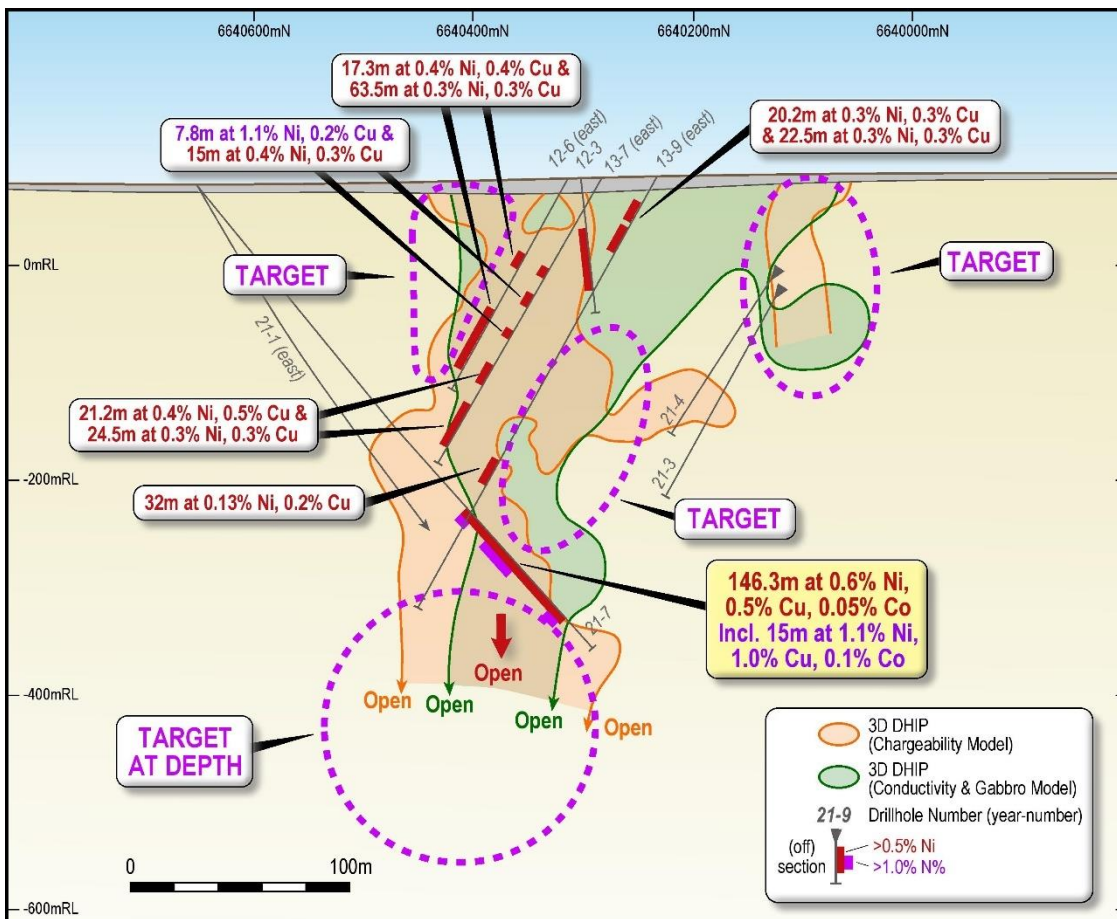
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**Figure 3:** Zoomed in plan view of the Granmuren IP chargeability model (red body) and drill hole traces (blue) showing the Long-Section and Cross-Section positions (green) shown over.



**Figure 4:** Long-Section (looking north) with DHIP-R Conductivity model (green) supporting the shape of the gabbro intersected in the drilling. The IP Chargeability model (orange) supports extensive mineralisation within the intrusions and lobes and a halo outside of the intrusion. The system is open up and down plunge providing significant potential and scale to the project.



**Figure 5:** Cross Section view (looking east) with DHIP-R Conductivity model (green) supporting the shape of the gabbro intersected in the drilling. The IP Chargeability model (orange) supports extensive mineralisation within the intrusion. Mineralisation is continuous from surface to greater than 400m depth, with the grade and thickness of the system increasing with depth.

**Table 1: Significant Assays Intersection Table.**

Hole_Id	From (m)	To (m)	Length (m)	Ni %	Cu %	Co %	3PGE ppm	Zone	Ni:Cu Ratio
21DDTS001	<i>Not assayed: No significant Mineralisation</i>								
21DDTS002	498.8	505.8	7.0	1.22	0.81	0.11	0.09	Upper Mineralised Zone	1.5
And	530.3	558.4	28.1	0.56	0.36	0.05	0.04	Lower Mineralised Zone	1.5
<b>21DDTS002: Total Sulphide Mineralised Zones Above Comprises the Following Zones:</b>									
	498.8	504.6	5.8	1.41	0.54	0.12	0.07	Upper Zone	2.6
And	504.6	505.8	1.2	0.31	2.11	0.06	0.23	Base of Upper Zone	0.1
And	533.1	539.2	6.1	1.19	0.48	0.11	0.08	Central Zone	2.5
<i>incl</i>	536.4	537.4	1.0	2.29	0.16	0.17	0.02	Higher Grade Core	14.3
And	546.4	550.2	3.8	0.50	0.33	0.04	0.02	Lower Central Zone	1.5
And	557.1	558.4	1.3	1.67	0.78	0.12	0.02	Base of Intrusion	2.1
21DDTS003	517.6	521.5	3.9	0.71	0.36	0.05	0.01	Base of Intrusion	2.0
<i>incl</i>	520.5	521.5	1.0	1.69	0.46	0.11	0.01		3.7
21DDTS004	541.4	545.4	4.0	1.03	0.43	0.09	0.03	Central Zone	2.4
And	557.7	563.35	5.65	0.50	0.41	0.04	0.18	Base of Intrusion	1.2
21DDTS005	571.4	572.4	1.0	0.63	0.17	0.13	0.00	Base of Intrusion	3.6
And	575.4	576.4	1.0	0.54	0.17	0.03	0.01	Base of Intrusion	3.2
21DDTS006	601.0	604.0	3.0	0.50	0.32	0.04	0.03	Base of Intrusion	1.6
21DDTS007	393.5	539.8	146.3	0.56	0.49	0.05	0.05	Total Sulphide Mineralised Zone	1.2
<b>21DDTS007: Total Sulphide Mineralised Zone Above Comprises Three Main Zones:</b>									
	393.5	393.95	0.45	2.51	0.21	0.19	0.05	Hanging Wall Vein Zone	11.9
And	410.8	526	115.2	0.64	0.57	0.06	0.04	Gabbroic Intrusion Zone	1.1
<i>incl</i>	447.0	481.0	34.0	0.90	0.80	0.08	0.05	Higher Grade Core	1.1
And	537.8	538.8	1.0	2.25	0.22	0.12	0.02	Footwall Breccia Vein Zone	10.5
<b>21DDTS007: Mineralised Gabbroic Intrusion Comprises the Following Higher Grade Zones:</b>									
	410.8	413.4	2.6	1.44	0.42	0.12	0.08	Upper Zone 1	3.4
And	422.2	424.65	2.45	1.02	1.30	0.08	0.10	Upper Zone 2	0.8
And	447.0	462.0	15.0	1.14	1.00	0.09	0.06	Central Zone	1.1
<i>incl</i>	454.0	461.0	7.0	1.57	0.52	0.13	0.06	Higher Grade Core	3.0
And	472.0	481.0	9.0	0.79	0.66	0.07	0.05	Lower Central Zone	1.2
<i>incl</i>	472.0	474.0	2.0	1.55	0.22	0.13	0.11	Higher Grade Lens	7.0
And	524.0	526.0	2.0	0.81	0.25	0.05	0.02	Base of Intrusion	3.2

Widths are reported as downhole widths, true widths are not yet available.

**Table 2: Tullsta Project-Collar Details**

Hole ID	Type	Easting	Northing	RL	Coords	Azi	Dip	Depth
21DDTS001	DD	582220	6640654	78.5	SWEREF99	180	-59.2	707m
21DDTS002	DD	582220	6640654	78.5	SWEREF99	225	-47.8	584.35m
21DDTS003	DD	582210	6640055	78.5	SWEREF99	325	-55.0	562m
21DDTS004	DD	582210	6640055	78.5	SWEREF99	325	-50.0	613m
21DDTS005	DD	582225	6640650	78.5	SWEREF99	212	-48.0	629m
21DDTS006	DD	582030	6640630	78.7	SWEREF99	204	-61.0	630m
21DDTS007	DD	582225	6640650	78.5	SWEREF99	198	-53.0	570m

**Table 3: Ragnar Metals Tullsta Project Tenement Details.**

Name	License ID	RAG Ownership	Area Ha	Valid From	Valid To
Berga nr 1	2018 48	100%	2181.52	28/03/2018	28/03/2025
Tullsta nr 6	2017 158	100%	2695.03	06/11/2017	06/11/2024
Tullsta nr 7	2019 5	100%	4452.74	25/01/2019	25/01/2023
Tullsta nr 8	2020 45	100%	31.41	07/05/2020	07/05/2024
Tullsta nr 9	2021 75	100%	1599	27/10/2021	27/10/2024
<b>Total Area</b>			<b>10959.70</b>		



**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</i>	<p>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</p> <p>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</p> <p>Aspects of the determination of mineralisation that are Material to the Public Report. 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 30 g charge for fire assay’). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</p>	<p>Resistivity and Induced Polarization (IP) measurements were completed during a geophysical survey at the Tullsta -Granmuren Project.</p> <p>The measurements were made with current injected at a number of stations (total 94) in boreholes 21DDTS007, 21DDTS006, 21DDTS003, 13DDTS009, and at surface west of existing electrode locations.</p> <p>The electric potential was measured at positions along the boreholes 21DDTS007, 21DDTS002, 21DDTS004, 21DDTS001, and 21DDTS005. Two potential electrodes were located on the surface.</p> <p>A remote current electrode was used for the return current and a remote potential electrode served as a reference for all measurements. The measurements were made in pole-pole mode. Pole-dipole data was calculated from the raw pole-pole data.</p> <p>The data was inverted to 3D models with the program DCIP3d (UBC GIF).</p> <p>NA</p>
<i>Drilling Techniques</i>	<p>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).</p>	<p>The geophysical survey was carried out down NQ sized diamond drill holes.</p>
<i>Drill Sample Recovery</i>	<p>Method of recording and assessing core and chip sample recoveries and results assessed.</p> <p>Measures taken to maximise sample recovery and ensure representative nature of the samples.</p>	<p>The transmitter current varied between different current electrode positions. The weakest current was 0.095 A and the strongest current was 3.69 A with an average of 0.93 A.</p> <p>The time base was selected to two seconds and the duty cycle was 50% resulting in a base frequency of 0.125 Hz. The number of stacks for individual readings varied between 4 and 8.</p>
	<p>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.</p>	
<i>Logging</i>	<p>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource</p>	<p>The geophysical survey was carried out by GeoVista AB using a GDD GRx8-32 receiver and a GDD 3.6 kW/2400 V transmitter. The receiver can measured 32 poles simultaneously.</p>

Criteria	JORC Code Explanation	Commentary
	<p>estimation, mining studies and metallurgical studies.</p> <p>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</p> <p>The total length and percentage of the relevant intersections logged.</p>	
<p><i>Sub-sampling techniques and sample preparation</i></p>	<p>If core, whether cut or sawn and whether quarter, half or all core taken.</p> <p>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</p> <p>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</p> <p>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</p> <p>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.</p> <p>Whether sample sizes are appropriate to the grain size of the material being sampled.</p>	<p>N/A</p> <p>NA</p> <p>NA</p>
<p><i>Quality of assay data and laboratory tests</i></p>	<p>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</p> <p>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.</p> <p>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.</p>	<p>Repeated readings were taken at most stations to check repeatability of the results. The repeatability was very good and standard deviations for stacked signals was in general low (except for readings with very low signal strength with borehole electrodes). The decaying IP signal was measured at 20 time gates. The first time gate starts at 40 ms.</p> <p>The survey was carried out with a GDD GRx8-32 receiver and a GDD 3.6 kW/2400 V transmitter. The receiver can measured 32 poles simultaneously</p>
<p><i>Verification of sampling and assaying</i></p>	<p>The verification of significant intersections by either independent or alternative company personnel.</p> <p>The use of twinned holes</p> <p>Discuss any adjustment to assay data</p>	<p>NA</p> <p>Processing of the data included the following steps:</p> <ul style="list-style-type: none"> <li>• Removal of obviously erroneous or disturbed data (hardly any)</li> <li>• Removal of duplicates (readings with low standard deviation were kept)</li> <li>• Normalization of measured on-time potential difference by output current magnitude</li> <li>• Correction of polarity of recorded signal</li> <li>• Calculation of pole-pole data</li> </ul>



Criteria	JORC Code Explanation	Commentary
		<ul style="list-style-type: none"> <li>• Assignment of coordinates</li> <li>• Calculation of off-time potential difference</li> <li>• Formatting of data in UBC format for inverse modelling.</li> </ul>
<i>Location of data points</i>	<p>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.</p> <p>Specification of the grid system used</p> <p>Quality and adequacy of topographic control</p>	<p>Hand-held GPS units with an estimated horizontal accuracy of around 1 to 3 m were used for navigation and for determining electrode positions.</p>
<i>Data spacing and distribution</i>	<p>Data spacing for reporting of Exploration Results</p> <p>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.</p> <p>Whether sample compositing has been applied</p>	<p>Measurements were made with a loop to the south of the targeted. Receiver electrodes were also placed in boreholes 21DDTS007, 21DDTS002, 21DDTS004, 21DDTS001, and 21DDTS005. An electrode string with seven dipoles, each being 10 m long, was used in the borehole. The signal was also measured between the uppermost borehole electrode and two surface electrode.</p> <p>The return current electrode was included in subsequent numerical modelling.</p> <p>The signal was measured for all surface dipoles and the boreholes for each surface current electrode position. The survey setup provided 3D information about the electric resistivity and chargeability distribution along an around the receiver-dipole loop line. The use of borehole electrodes provided good resolution at depth.</p>
<i>Orientation of data in relation to geological structure</i>	<p>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</p> <p>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.</p>	<p>Mineralization of Ni and Cu occurs in the Granmuren area, Tullsta. IP and resistivity measurements have previously been carried out in the area in 2019. The survey data were inverted to 3D voxel models for resistivity and chargeability. The new 2022 measurements are designed to make use of new deep boreholes that have intersected additional mineralization.</p> <p>The IP measurements were carried out with the aim to identify geological bodies with low resistivity and/or anomalous chargeability that is caused by sulphide mineralization.</p> <p>The mineralization is characterized by a gabbroic intrusion up to 500 m wide and 550m deep, with a steeply south dipping and west plunging zone of low resistivity. Within this zone there are multiple lenses of very low resistivity (&lt;100Ωm). The most conductive parts, the mineralized zone also exhibits anomalous chargeability (IP effect). The anomalous volume appears to open and continuous down plunge to the west.</p> <p>Survey was optimised to factor in the mineralisation's orientation.</p>

Criteria	JORC Code Explanation	Commentary
<i>Sample security</i>	The measures taken to ensure sample security	Planning, setup, data collection, data processing and final reporting where all completed by mining consultants GeoVista AB in Sweden on behalf of Ragnar Metals. Geophysical data security has been ensured by using a professional Swedish consulting company.

## 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) and Tullsta nr8 (2020:45) is owned 100% by Ragnar Metals. The tenure is located in Bergslagen District within the Municipality of Sala on Map page 11G. The Permit is valid until 28/03/2025 & 07/05/2024 respectively.  All regulatory, environmental and landowner approvals have been met and there are no known impediments to operate in the area.
<i>Exploration done by other parties</i>	Acknowledgment and appraisal of exploration by other parties.	Granmuren is Ragnar's 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. Granmuren Deeps mineralisation was discovered in 2021 following drilling of a deep anomaly generated from a DHIP-R survey down the historical 2012-2013 drill holes
<i>Geology</i>	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
		<p>deposit in southern Bergslagen as well as the Ekedal and Gaddbo 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.</p> <p>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 21<sup>st</sup> century technologies such as electrical geophysics to historic mining belts and warrants further evaluation and exploration.</p>
<i>Drill hole information</i>	<p>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:</p> <p>easting and northing of the drill hole collar  elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar  dip and azimuth of the hole  down hole length and interception depth  hole length.</p>	<p>NA. All drilling has been previously reported. Summary tables are included in the announcement.</p>
	<p>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.</p>	
<i>Data aggregation methods</i>	<p>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.</p> <p>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.</p>	<p>NA</p>



<i>Criteria</i>	<i>JORC Code Explanation</i>	<i>Commentary</i>
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	
<i>Relationship between mineralisation widths and intercept lengths</i>	<p>These relationships are particularly important in the reporting of Exploration Results</p> <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p> <p>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').</p>	The two combined models from the geophysical survey form a continuous body that extends from surface to 750m down plunge (550m below surface). It is open to the east and west and to the south. Magnetic and gravity modelling display a westerly plunge to body which is supported by the results of this recent geophysical survey. The gabbroic body and associated mineralisation is interpreted to follow this trend.
<i>Diagrams</i>	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.	Appropriate maps, sections and diagrams are included in the report.
<i>Balanced reporting</i>	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 results are reported and displayed in the diagrams
<i>Other substantive exploration data</i>	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.	Everything meaningful and material is disclosed in the body of the report and in previous ASX announcements. Geological observations have been factored into the report.
<i>Further work</i>	<p>The nature and scale of planned further work (e.g. tests for lateral extensions or large scale step out drilling.</p> <p>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</p>	<ul style="list-style-type: none"> <li>• Finalise drill targeting using the generated 3D models</li> <li>• Lock in drilling contract for 2022</li> <li>• Site visit to Tullsta and work with local Swedish geologists in June 2022</li> <li>• Field investigation, boulder hunting of glacial till, mapping of local and regional target zones</li> <li>• Commence core drilling</li> </ul>

**END**