

21 July 2021

## HIGH GRADE NICKEL-COPPER DISCOVERY CONFIRMED AT TULLSTA

### HIGHLIGHTS

- Assay results have confirmed high-grade Ni-Cu mineralisation within the sulphides intersected in discovery hole 21DDTS002 at the Tullsta Project in Sweden
- Two subsequent drill holes 21DDTS003 & 21DDTS004 have both intersected significant sulphide mineralisation on the basal contact 140m and 70m respectively away from the discovery hole
- Minalyzer XRF scanning returned an overall mineralised zone of 60.2m @ 0.75% Ni & 0.47% Cu from 498.2m to 558.4m (>0.5% Ni) which includes the following broad high-grade zones;
  - Upper Zone: 7.6m @ 2.08% Ni & 1.57% Cu from 498.2m to 505.8m, including
    - 1.6m @ 4.54% Ni & 0.72% Cu from 499.6m
    - 0.7m @ 1.27% Ni & 4.30% Cu from 501.2m
    - 0.6m @ 0.42% Ni & 8.42% Cu from 505.2m
  - Central Zone: 5.3m @ 2.64% Ni & 0.77% Cu from 533.1m to 538.4m, including
    - 1.7m @ 4.99% Ni & 0.73% Cu from
  - Blebby Zone: 8.5m @ 0.33% Ni & 0.41% Cu from 538.4m to 546.9m, including
    - 1.3m @ 0.42% Ni & 1.11% Cu from 538.7m
  - Lower Zone: 3.3m @ 0.84% Ni & 0.45% Cu from 546.9m to 550.2m, including
    - 0.4m @ 2.83% Ni & 0.29% Cu from 547.0m
    - 0.4m @ 2.34% Ni & 1.88% Cu from 549.8m
  - Basal Contact Zone: 1.3m @ 2.99% Ni & 1.88% Cu from 557.1m to 558.4m, including
    - 1.0m @ 3.71% Ni & 2.34% Cu from 557.3m
- Phase 1 drilling is now complete with laboratory assaying, DHEM and DH-IP planned to drive the next Phase of drilling at the Granmuren Deeps Ni-Cu Discovery zone
- Laboratory assay results are required to determine the widths and grade of mineralisation and the Company will update the market when laboratory analytical results become available

Ragnar Metals Limited ("Ragnar" or "the Company", ASX: RAG) is pleased to announce that Minalyzer<sup>1</sup> XRF scanning assay results have confirmed the **high-grade tenor** of the **significant magmatic Ni-Cu sulphide mineralisation** intersected during the recent drilling program at its 100%-owned Tullsta Nickel Project in Sweden. In addition, the two subsequent holes which were completed to the southeast of the discovery hole, have both **successfully intersected more significant sulphide mineralisation** (Figures 1, 9, 11 & 12) at the base of the Granmuren gabbro-pyroxenite magmatic intrusion.

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<sup>1</sup> <https://minalyze.com/>

### Directors

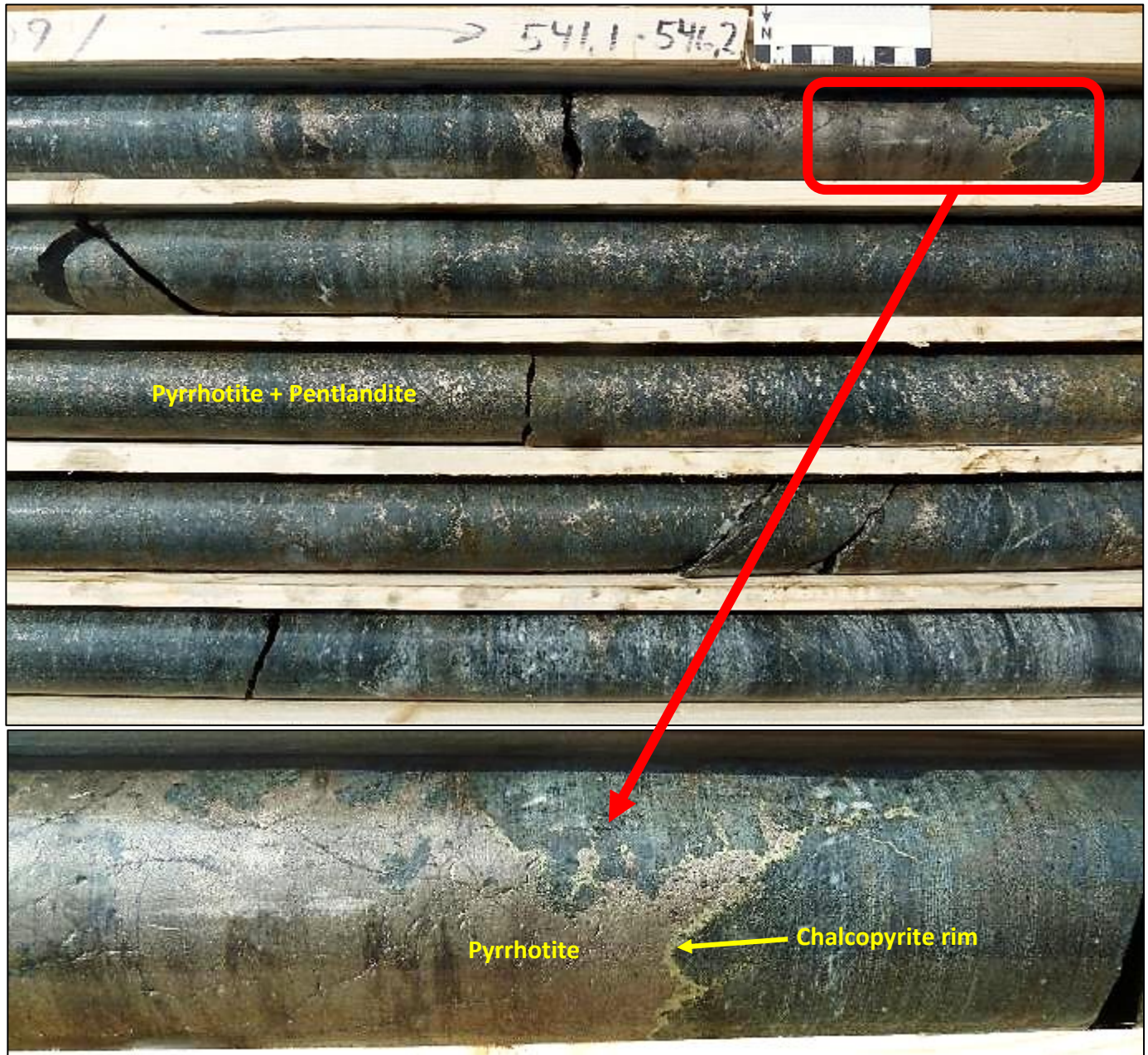
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The XRF scanner assay results (Appendix 1) have confirmed previously reported visual observations of Ni and Cu bearing sulphides (pentlandite and chalcopyrite) in the core, giving certainty that the visual observation of holes 21DDTS003 (~51.2m of visual sulphides) & 21DDTS004 (95.0m of visual sulphides) also contain Ni-Cu bearing sulphide mineralisation (Figures 1 & 5) as presented in the Visual Estimate of Sulphide Percentages table at the back of the report (Table 1).



**Figure 1: Upper Sulphide Zone in hole 21DDTS004 (541.1-546.2m) showing chalcopyrite rim on massive pyrrhotite at 542 m.**

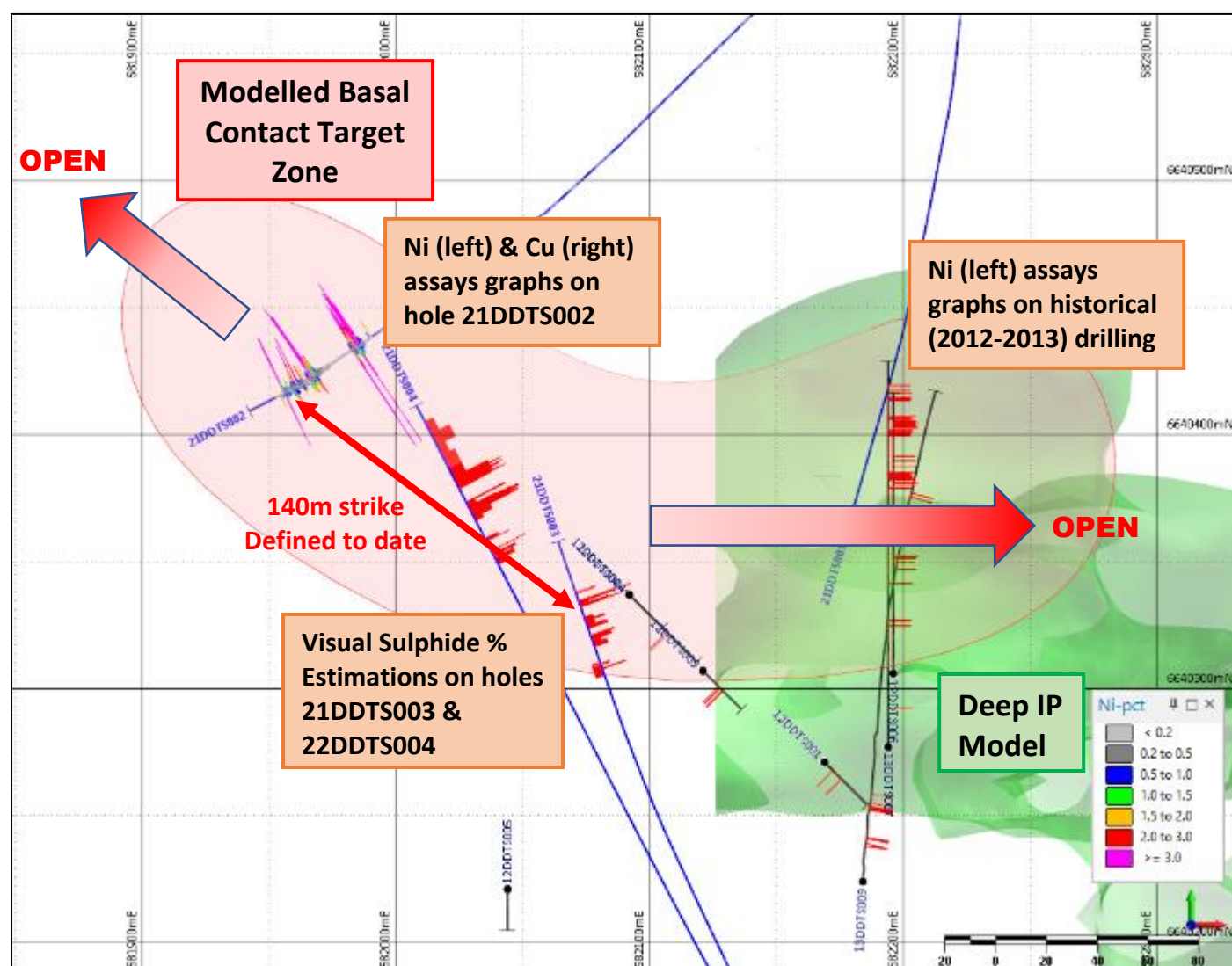
Drilling was completed in late June with 4 diamond core holes being drilled for a total of 2,238.35m at the Tullsta Project (Table 2). The Company has been awaiting the assay confirmation to ensure the visual observations were verified as being Ni-Cu bearing before releasing further subsequent visuals of sulphide intersections. Ragnar is now extremely excited to report that the additional drill holes of the Phase 1 drilling program have extended the mineralisation over a strike length of 140m along the base of the intrusion and is open in all directions (Figure 2).



Ragnar's Chairman Steve Formica said: "This diamond drill program was based on targets that showed Tullsta could be of similar geological nature to Anglo-American's Sakatti deposit in Finland, which is being developed on the back of a significant JORC Resource with high grades of Nickel and Copper of 0.83% and 1.77%, respectively. I am extremely pleased that XRF assays for 21DDTS002 have returned Nickel and Copper grades in line or better than Sakatti and these results validate the exploration approach of Ragnar's technical team.

In addition, the returns of visual sulphides in further holes suggest that Tullsta could be a much larger system which we will explore further with the same techniques that generated the discovery hole.

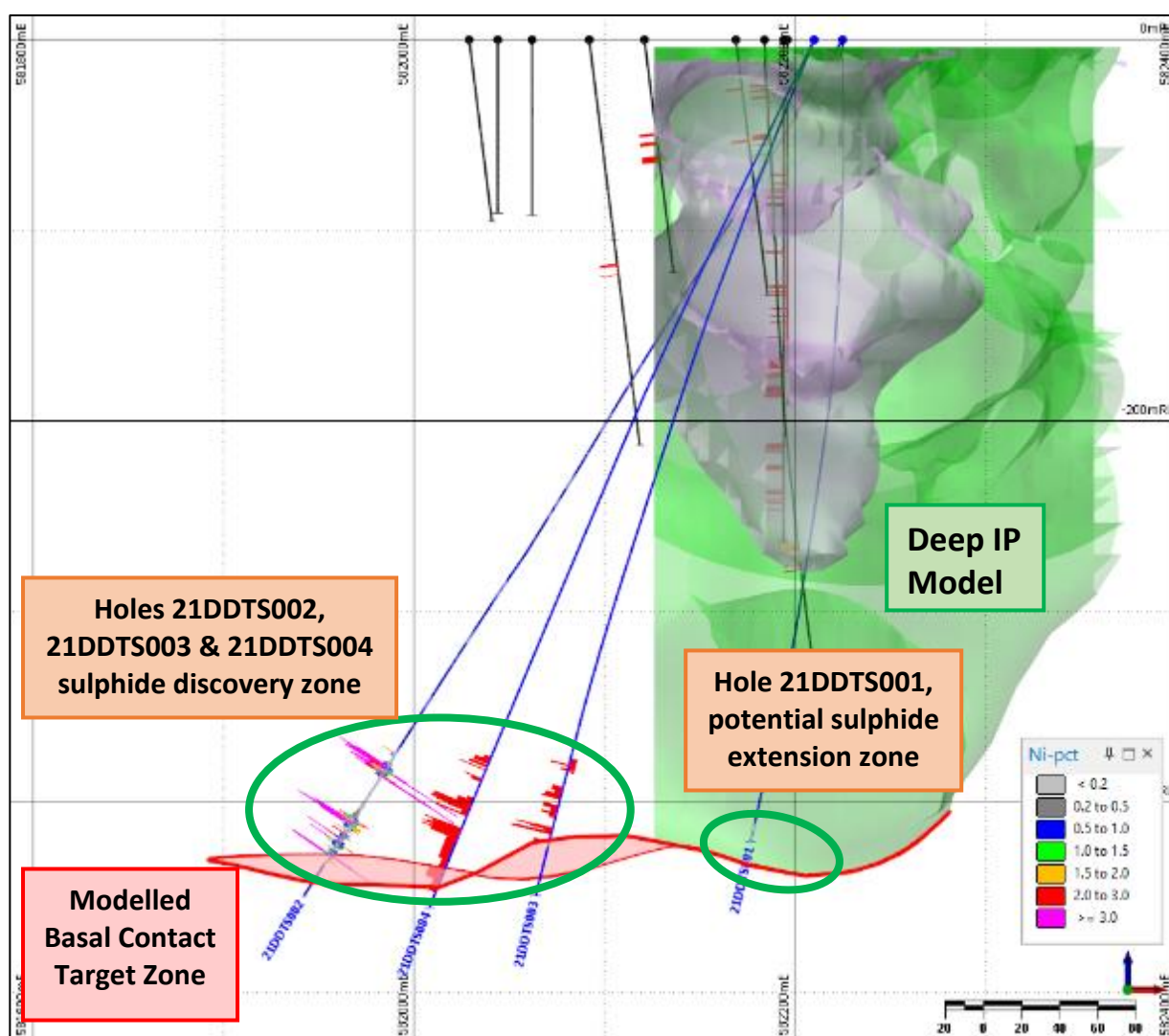
I am excited for the Company and all our shareholders as Tullsta presents as a unique opportunity to be explored, which is exhibiting high grades and potential for significant tonnages."



**Figure 2: Plan view showing historical drill holes (black) and recent drill holes (blue). 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. Mineralisation percentage is graphed on the drill holes to show locations of the sulphide mineralisation.**

Ragnar's consulting geologist Neil Hutchison comments: "Three of the four completed holes have intersected significant widths and tenor of Ni-Cu sulphide mineralisation in our maiden drilling program of the Granmuren Deeps target zone. This is a remarkable strike rate that has delivered outstanding quality and grades of high tenor magmatic Ni-Cu bearing sulphide mineralisation. The sulphides are primary in nature with little evidence of structural deformation or remobilisation. The Granmuren mineralisation is in a remarkably pristine condition compared to Australian systems, which have largely undergone large scale deformation and can be structurally complicated."

"Modelling of the Granmuren Intrusions basal contact has provided a broad initial undulating target zone which is ready for drill testing (Figures 2 & 3). It is now also evident that we need to extend the first hole 21DDTS001, which remained in wallrock sediments the entire hole, so was terminated. Modelling now suggest it's close to the northern edge and base of the intrusion (Figure 3), and more sulphide mineralisation is likely to extend eastwards, under the historical drilling which intersected the "smoke" that has now led us "into the fire". I am excited to see what the upcoming DHEM and DHIP geophysical data delivers as this will assist us in expanding our knowledge and drilling the core of the system."



**Figure 3: Long-section view (looking north) showing the IP model (green & purple), historical shallow Ni bearing intersections within the upper intrusion, and the current deep drilling which has intersected Ni-Cu sulphide mineralisation at the base of the intrusion. The basal contact target zone is shown by the undulating red zone, demonstrating that the first hole 21DDTS001 needs to be extended deeper to pass through the basal contact position.**

## Granmuren Historical Drilling

Ragnar made a greenfields Ni-Cu-Co discovery in 2011/2012 at Tullsta which is located in the Bergslagen district of Sweden, to the NW of Stockholm (Figure 13). The Bergslagen district has a long, significant mining history and has excellent infrastructure with rail, road and power nearby. Scandinavia and the adjoining Karelia Province in north-west Russia is one of the major nickel-copper provinces of the world. Granmuren is an extension of the Svecofennian Province which has played a long and significant part of Finland's nickel smelting and refining success. There had not been any systematic exploration in the Bergslagen Province for nickel until Ragnar's efforts in 2011 to 2013. However, the Granmuren Ni-Cu-Co discovery has shown that deposits similar to economic mines in Finland exist within the province and warranted continued exploration efforts within the region.

Ragnar completed a heliborne VTEM survey at Tullsta in 2011 defining a strong target zone. Follow-up geophysical works led to Ragnar completing nine diamond core holes discovering Ni-Cu-Co mineralisation at the Granmuren prospect during 2012-2013. All intersections occurred from between 10m below surface to a depth of 350m, defining low grade mineralisation over a strike length of 330m and remaining open at depth. Considerable geophysical survey work and data modelling was completed over the Tullsta Project area during this period, in particular over the Granmuren deposit, however the management at the time determined the mineralisation was too small and low grade, resulting in exploration efforts being focussed elsewhere.

The historical mineralised zones<sup>2</sup> tend to occur as zones of lower grade material (Figure 4) including;

- **63.5m @ 0.31% Ni & 0.26% Cu**
- **24.5m @ 0.41% Ni & 0.39% Cu**

which also contained higher grade mineralized zones such as;

- **7.8m @ 1.14% Ni & 0.20% Cu**
- **4.5m @ 0.80% Ni & 0.70% Cu**
- **5.0m @ 0.61% Ni & 0.94% Cu**

In 2018 Geolithic Geological Services completed a review of the project for Ragnar. Geolithic reviewed all of the historical data including the 3D gravity model and the magnetics data, determining that the information indicated the presence of a substantial body of dense, magnetic material below the depth of the historical drilling that had the potential for additional magmatic nickel-copper mineralisation at depth (Figure 5). In comparison Anglo Americas Sakatti Project<sup>3</sup> in Finland exhibits similar lower grades up plunge (0.15-0.23% Ni) and increasing grades (>1% Ni) with depth and down plunge, demonstrating the potential for Granmuren to develop into a significant magmatic Ni-Cu-Co resource.

In late 2018 Geolithic completed a site visit with the assistance of Swedish geoscientific company GeoVista AB. The historical drill core was investigated and subsequent electrical testwork of the core by GeoVista determined it was suitable for surface and downhole Induced Polarisation (IP), Resistivity and Chargeability geophysical survey methods.

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<sup>2</sup> ASX:RAG 28/05/2013- Granmuren final results adds deeper nickel/copper mineralisation

<sup>3</sup> <https://finland.angloamerican.com/en/about-sakatti>



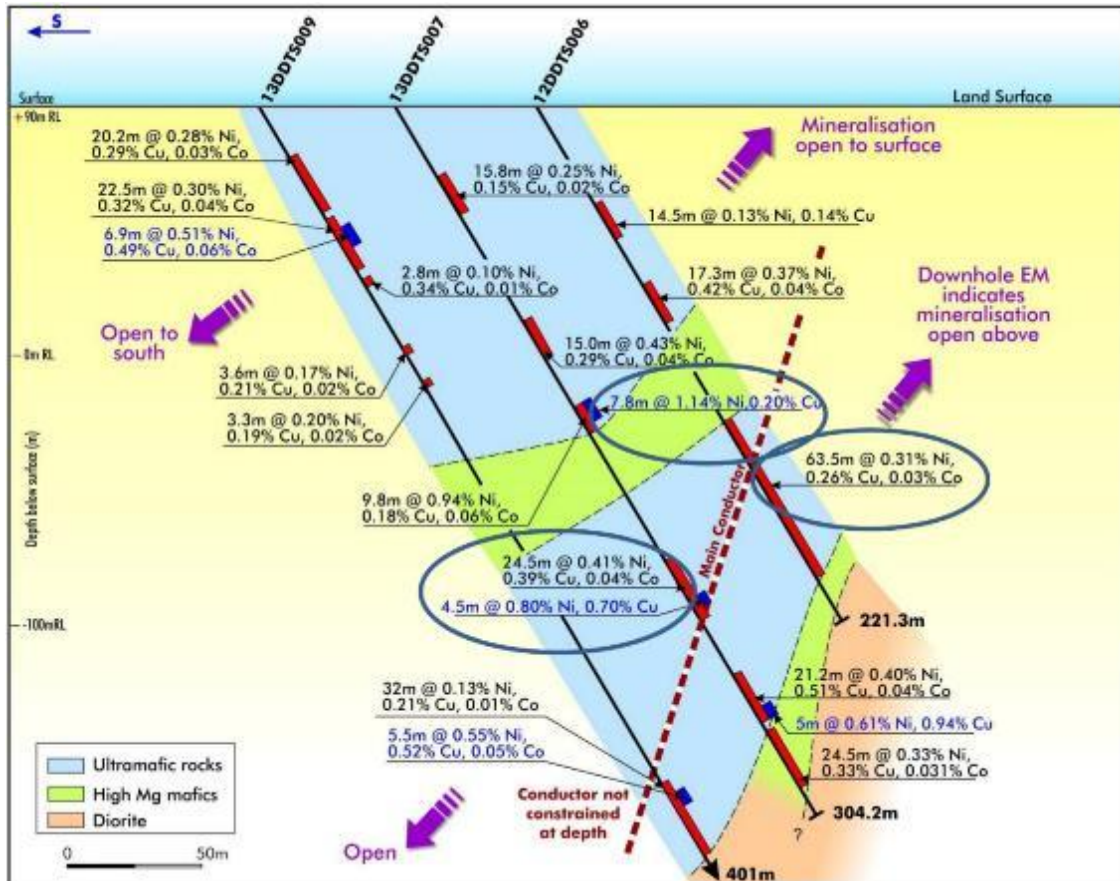


Figure 4: Granmuren historical cross-section with down hole intercepts and logged geology.

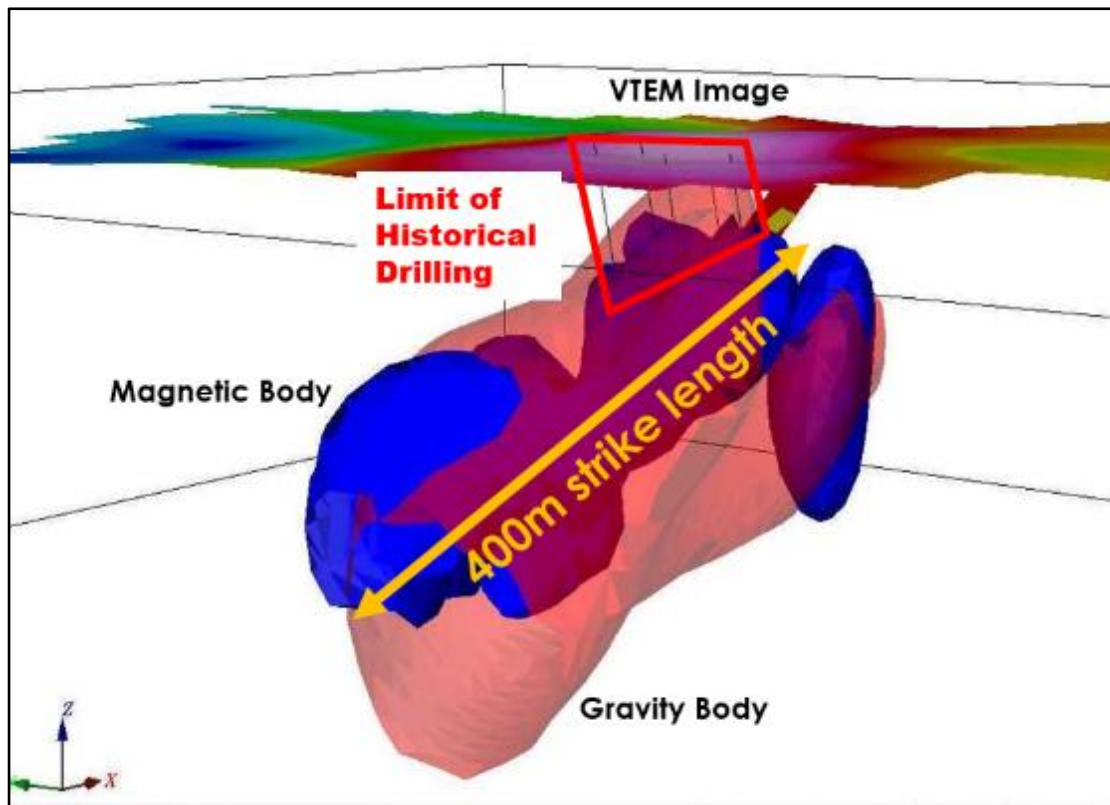
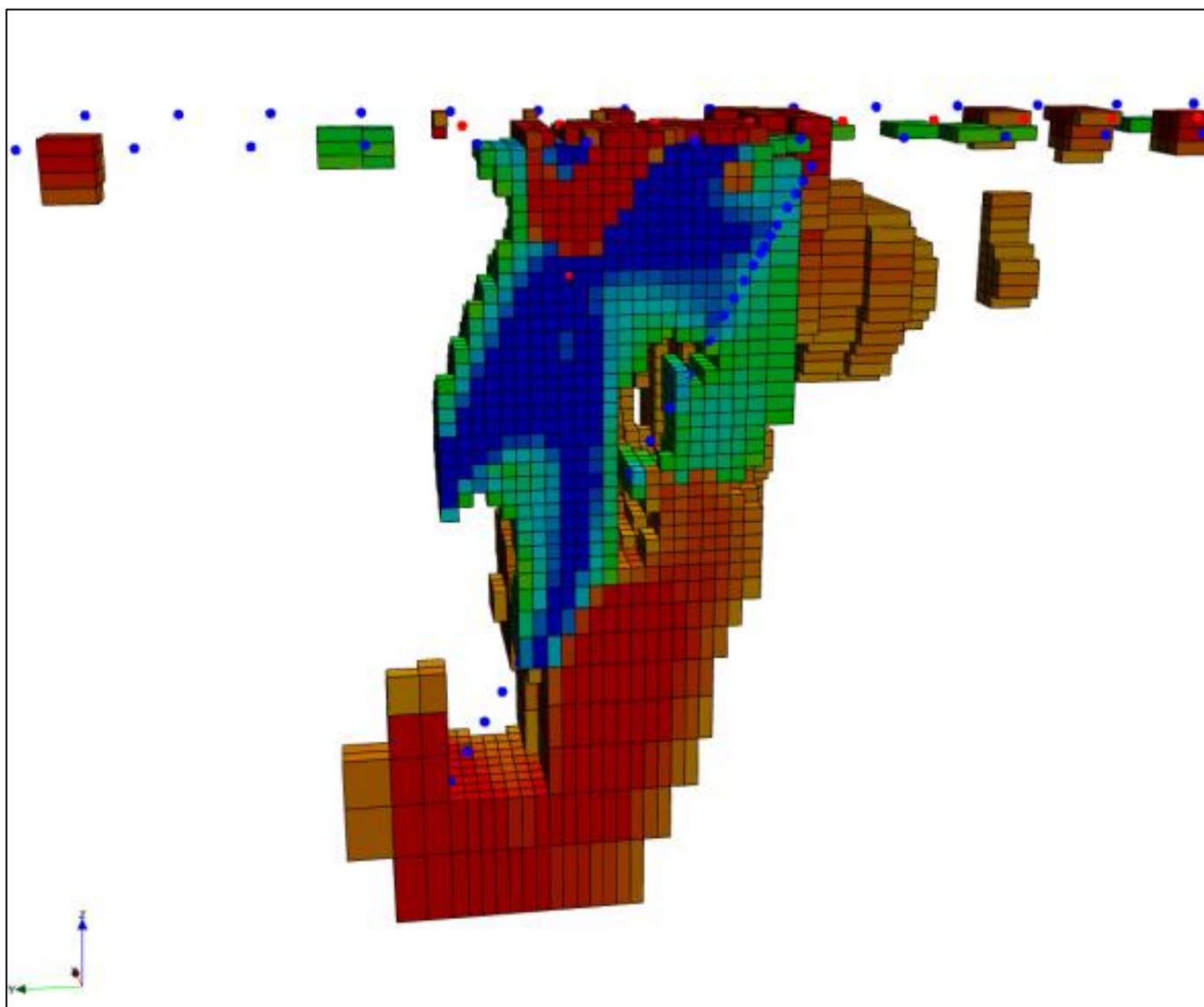


Figure 5: Granmuren magnetic and gravity models showing the limit of historical drilling and the depth potential of the magmatic intrusive system. IP Surveying was used to test for sulphide mineralisation within this modelled body.

In late 2019 GeoVista completed an Induced Polarization & Resistivity/Chargeability Survey (IP-R) over the Granmuren mineralisation as well as down the 2 deepest drill holes (12DDTS006 & 13DDTS009)<sup>4</sup> to test the system at depth. This geophysical survey successfully highlighted the known mineralisation at Granmuren (Figures 3, 6 & 10), which is characterized by a steeply dipping zone forming an anomaly of up to 150m wide. Within this zone there are multiple lenses with the two combined models forming a continuous body that extends from surface to below the boreholes and open to the north and west (Figures 2, 6 & 10). The geological and geophysical model was analogous to the Sakatti Ni-Cu-PGE deposit to the NE across the border in Finland, which was discovered in 2009. This provided the required supporting evidence to the modelling shown at Figure 5, warranting deep diamond drill testing of the modelled basal contact of the Granmuren Intrusions, leading to the discovery of significant Ni-Cu sulphide mineralisation along the basal contact of the gabbroic-pyroxenitic intrusion in June 2021<sup>5</sup>.



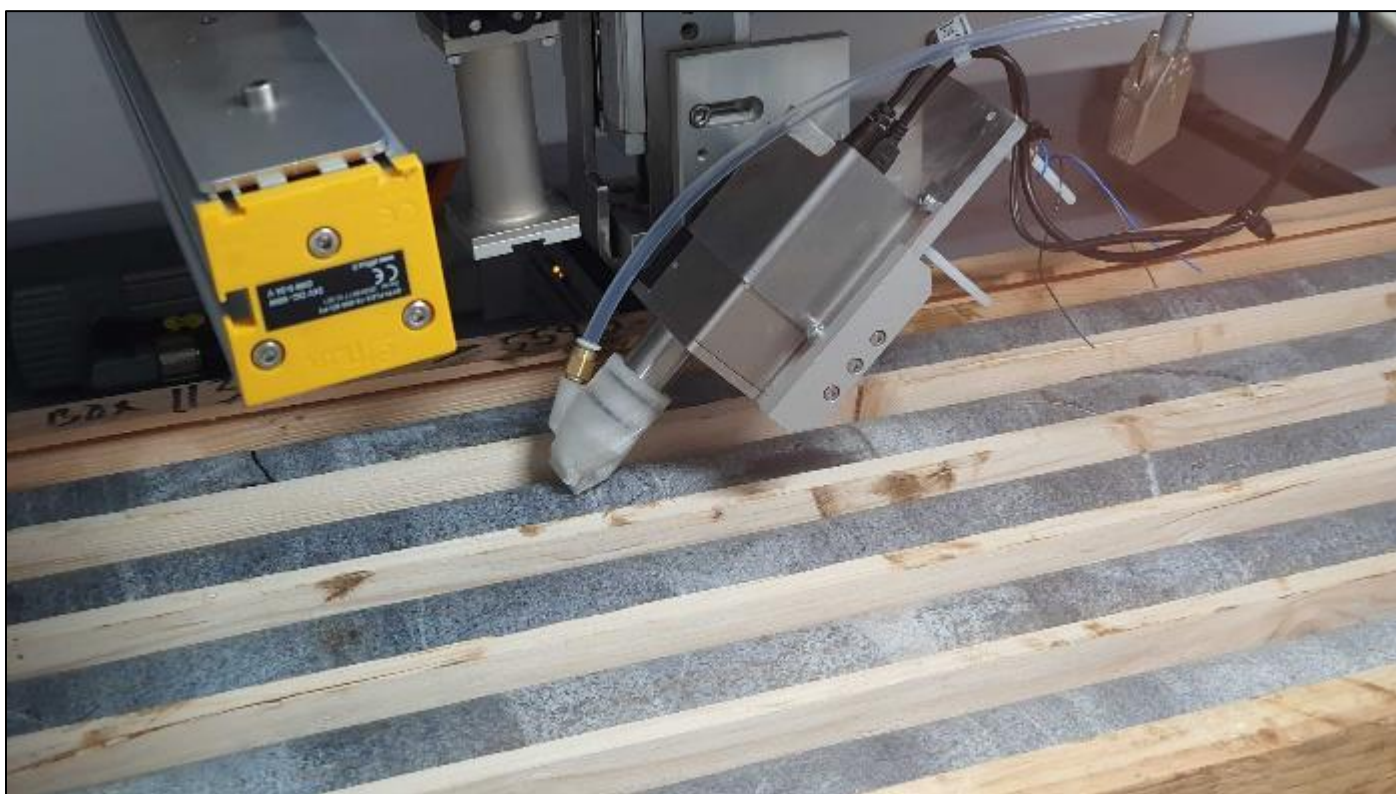
**Figure 6: 3D-view from west (north to the left). Cut through inverted resistivity (blue-green) and chargeability (red-orange) model. Current electrode positions are shown with blue symbols and potential electrode positions with red symbol**

<sup>4</sup> ASX:RAG 2/01/2020-Geophysical Survey Extends Mineralisation At Swedish Nickel Projects

<sup>5</sup> ASX:RAG 22/06/2021- Massive Sulphide Mineralisation Intersected At Tullsta

## About Minalyze XRF Core Scanning

Minalyze AB was founded in 2009 in Gothenburg, Sweden. Minalyze is the world leader in XRF core scanning instruments and software for visualization of geological data<sup>6</sup>. What the industry saw as revolutionary but impossible was challenged and conquered by the entrepreneurial and innovative Minalyze team. The Minalyzer CS was launched in 2014 and is capable of continuous XRF scanning of drill cores in its existing core trays (Figure 7). More than 100,000 meters of core has since been scanned with the Minalyzer unit; generating timely, valuable and useful data for clients.



**Figure 7: Minalyze XRF scanner in Sweden collecting assay data in continuous 10cm intervals along drill core in box 113 of hole 21DDTS002 (559.0-564.0m).**

Minimum preparation is needed to scan core trays with the Minalyzer. The Minalyzer scans cores directly in the core trays and is in-different about the type of trays (e.g wooden, plastic, metal etc) or size of drill core used (BQ-PQ sizes). High-resolution photography of core is consistently acquired during the process and automatically managed in the Minalyzer, saving time on routine core photography and data management tasks. The Minalyzer completes a topography scan which generates several valuable datasets including a 3D model of the core and tray which constitutes the foundation for the following XRF scan. Artificial intelligence is applied on the topography model which automatically generates the optimal scanning paths for fast and accurate assay data acquisition. Minalyze undertakes non-destructive, fast and continuous XRF scanning which generates high resolution analysis in 10cm intervals along the full core length, producing more assay data while reducing sample preparation and logistics timing, without increasing the assay budget.

Ragnar elected to verify to presence of Ni-Cu in the sulphides by commissioning the Minalyzer CS XRF scanner to speed up the confirmation process. This was a locally available technique which is a more timely and cost efficient initial assaying method due to the time taken to cut, sample and analyse the samples through traditional laboratory analysis which are experiencing delays globally.

<sup>6</sup> <https://minalyze.com/>

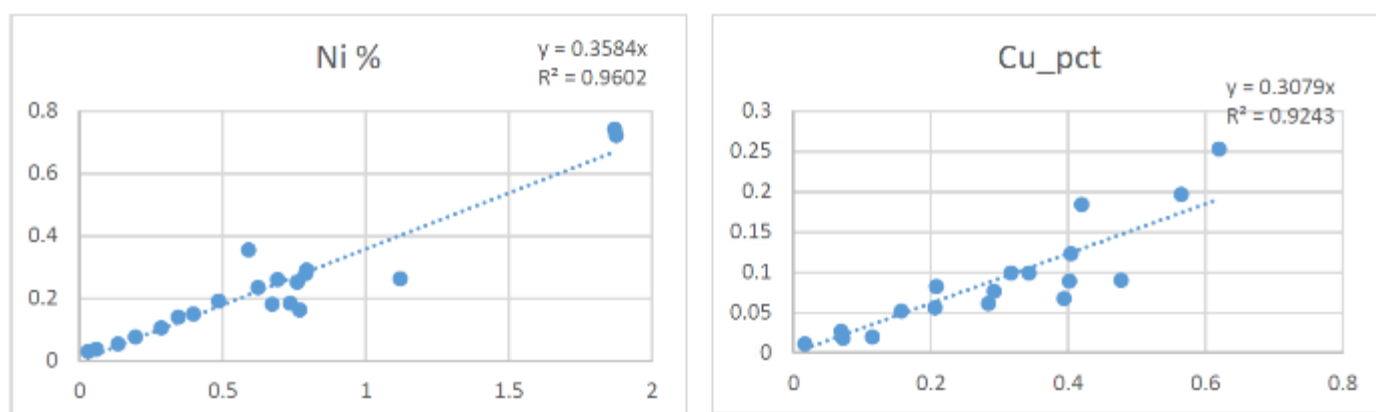


To ensure sample accuracy, Ragnar supplied cut-half core in the original core trays from historical hole 12DDTS006 for calibration of the Minalyzer XRF machine against the known laboratory assay grades. Ragnar provided Minalyze with multi-element laboratory geochemistry assay data for the historical Granmuren hole which contained assays intervals ranging from 10-65cm in length.

Drill core was scanned with an Ag anode X-ray tube at 30 kV and 24 mA. The results were initially quantified by Fundamental Parameters (FP), which were calibrated on two different types of pressed pellets, lacking a binding agent. These were OREAS 24b (granodiorite) and OREAS 624 (mixed silicate and sulphide ore). The FP includes a "matrix correction". FP results were correlated against the supplied lab assay geochemical data from the drillhole 12DDTS006. From these correlations, statistical outliers were removed before deriving a set of calibration factors to refine the accuracy of the FP calibrated data.

Three columns were generated per element. One containing concentration (in percent or ppm), one containing the 2-sigma error and one containing the method detection limits, deduced by counting statistics of the spectral data. Concentrations lying below this method detection limit are filtered out and flagged with "BDL". Peaks with zero intensity are filtered out and flagged with not detected "ND".

A full set of the elemental calibration graphs were produced for Ni, Cu, S, Mg, Al, K, Ca, Ti, V, Cr, Mn, Fe, Zn & Sr. Only the calibration graphs for the economic elements Ni & Cu are shown below at Figure 8.



**Figure 8: Minalyzer XRF calibration graphs for Ni and Cu in hole 12DDTS006. Minalyzer data is represented on the Y axis, while lab data is shown on the X axis.**

Using realistic values, the calibration factors produced clear overall correlation trends that can be seen in the elements Al, S, K, Ca, Ti, V and Mn which allowed the scanning of hole 21DDTS002 (Figure 7) to be calibrated with the traditional laboratory assay data with a high level of confidence. The supplied calibration material from hole 12DDTS006 was limited to top grades for Ni and Cu of 0.8% and 0.6% respectively. Hole 21DDTS002 provided a calibration challenge for Minalyze to overcome due to the much higher tenor of Ni (+4%) and Cu (+3%) grades returned by the XRF in hole 21DDTS002. The results delivered for Ni and Cu have been calibrated at the lower grades, however the higher grades could be less accurate (reporting lower) due to extrapolating the calibration factors out past the known ranges as Minalyze didn't have any values at higher concentrations in the calibration material to ensure accuracy.

This is a positive outcome as the Minalyzer XRF scanner has the potential to be under-reporting the actual higher Ni and Cu grades which will be confirmed once check assayed with traditional laboratory analysis.

## Next Steps

- Complete detailed logging of the drill core.
- Send core to MSA analytical<sup>7</sup> in Sweden for core cutting, sampling and crushing.
- Crushed samples will be sent to MSA analytical in Vancouver for multi-element analysis including validation of high tenor Ni-Cu grades as well as analysis for Co, PGE & Au values of the core.
- Apply for further Works Permits through the Swedish Inspectorate of Mines.
- Complete Down Hole Electro-Magnet (DHEM) and Down Hole Induced Polarization & Resistivity/Chargeability (DHIP-R) surveying of the 4 completed drill holes.
- 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.

## 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.*

## Cautionary Statement

*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.*

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**

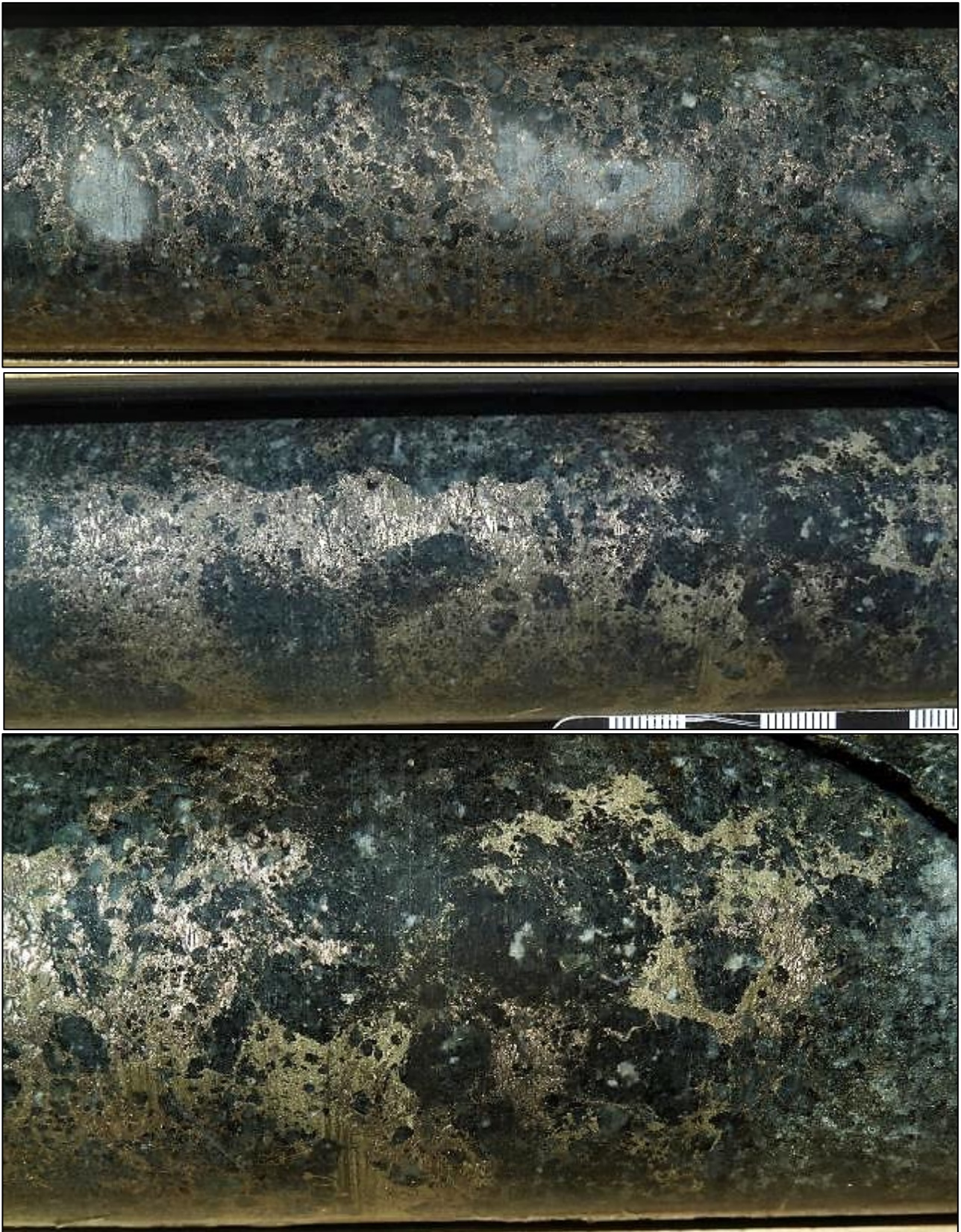
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<sup>7</sup> <https://msalabs.com/>





**Figure 9: Various sulphide textures containing pyrrhotite, pentlandite and chalcopyrite from the Lower Sulphide Zone of 21DDTS004. Images show network and semi-massive textured sulphides from the Lower Sulphide Zone: 21DDTS004 (558.4m-560.4m).**

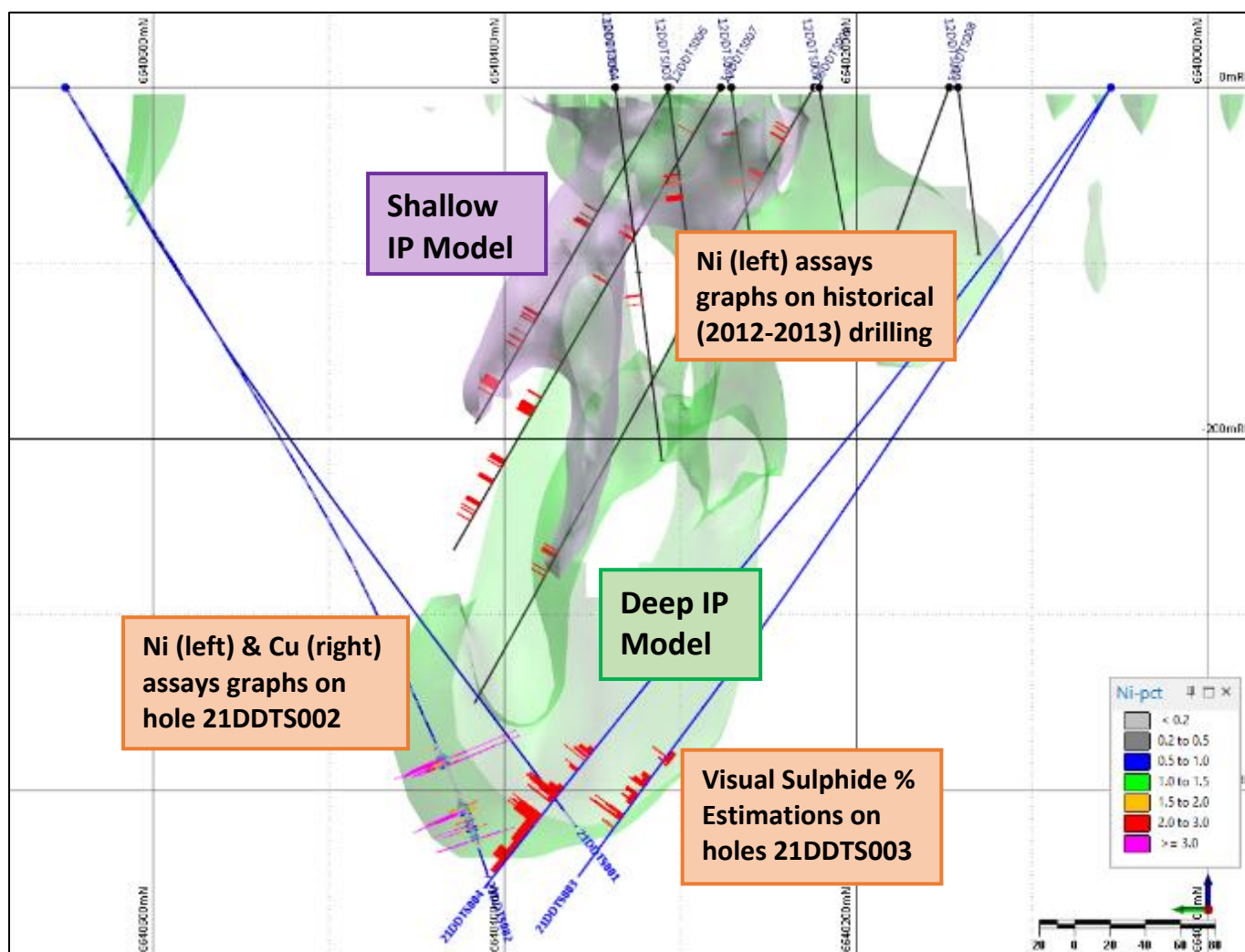


**Table 1: Major Sulphide Zones (Highlighted) and Visual Estimate of Sulphide Percentages**

Hole ID	From (m)	To (m)	Width (m)	Rocktype	Sulphide type	Sulphide Minerals	Visual Sulphide Estimation (%)	Sulphide Zone
<b>21DDT003</b>	471.0	475.3	4.3	Gabbro	Disseminated	Po	<1%	Upper Zone
	475.3	475.9	0.6	Pyroxenite	Blebby	Po	~7%	
	475.9	495.1	19.2	Pyroxenite & Gabbro	Disseminated	Po	~1-3%	
	495.1	498.1	3.0	Gabbro	Blebby	Po	~5-7%	
	498.1	502.5	4.4	Pyroxenite	Blebby	Po	<2%	Central Zone
	502.5	510.4	7.9	Gabbro & Pyroxenite	Blebby	Po, Cpy	~2-5%	
	510.4	517.2	6.8	Quartz-gabbro	Blebby	Po	<2%	
	517.2	517.6	0.4	Gabbro	Blebby	Po	~7%	Lower Zone
	517.6	518.0	0.4	Gabbro	Semi-massive	Po, Pe	~50%	
	518.0	518.8	0.8	Gabbro	Blebby, Stringer	Po, Pe, Cp	~15-20%	
	518.8	520.1	1.3	Gabbro	Disseminated	Po	~2%	
	520.1	520.4	0.3	Gabbro	Blebby	Po	~5%	
	520.4	520.9	0.5	Gabbro	Blebby, matrix	Po, Pe, Cp	~40-45%	
	520.9	521.5	0.6	Gabbro	Semi-massive	Po, Pe, Cp	~70%	
	521.5	526.3	4.8	Gabbro	Disseminated	Po	~1%	
	526.3	526.5	0.2	Gabbro, Mylonite	Stringer	Py, Po	~5%	
	526.5	527.3	0.8	Mylonite, Metasediment	Disseminated	Py	~1%	
	527.3	527.4	0.1	Metasediment	Disseminated	Py	~5%	
<b>21DDT004</b>	506.0	507.2	1.2	Pyroxenite			<1%	Upper Zone
	507.2	516.1	8.9	Pyroxenite	Disseminated-Blebby	Po, Py	~1-7%	
	516.1	516.3	0.2	Pyroxenite	Blebby	Po	~20%	
	516.3	540.8	24.5	Pyroxenite	Dissem-Blebby	Po	~1-7%	
	540.8	541.4	0.6	Gabbro	Blebby	Po	~2%	Central Zone
	541.4	542.3	0.9	Gabbro	Semi-massive	Po, Pe, Cp	~60%	
	542.3	543.1	0.8	Gabbro	Matrix	Po, Pe, Cp	~30%	
	543.1	544.4	1.3	Gabbro	Semi-massive, Matrix	Po, Pe, Cp	~70%	
	544.4	545.0	0.6	Gabbro	Matrix	Po, Pe, Cp	~40%	
	545.0	545.7	0.7	Gabbro	Blebby	Po, Cp, Py	~10%	
	545.7	548.0	2.3	Gabbro	Dissem-Blebby	Po, Cp	~2%	
	548.0	548.7	0.7	Gabbro	Semi-massive	Po, Cp	~30%	
	548.7	557.4	8.7	Gabbro (Norite)	Disseminated	Po, Cp	~1%	Lower Zone
	557.4	557.7	0.3	Gabbro	Blebby, stringer	Po, Cp	~5%	
	557.7	558.0	0.3	Gabbro	Stringer	Po, Cp	~15%	
	558.0	558.8	0.8	Gabbro	Semi-massive	Po, Pe, Cp	~40-60%	
	558.8	559.7	0.9	Gabbro	Stringer	Po, Pe, Cp	~2-20%	
	559.7	560.3	0.6	Gabbro	Blebby	Po, Cp	~2%	
	560.3	560.5	0.2	Gabbro	Semi-massive	Po, Pe, Cp	~40%	
	560.5	560.7	0.2	Gabbro	Blebby	Po, Cp	~5%	
	560.7	561.1	0.4	Gabbro	Stringer	Po, Cp	~20%	
	561.1	561.4	0.3	Gabbro	Veins	Po	~60%	
	561.4	561.6	0.3	Gabbro	Stringer	Po	~2%	
	561.6	562.9	1.3	Gabbro	Blebby	Po, Cp	~7-20%	
	562.9	563.2	0.4	Gabbro	Semi-massive	Po, Pe, Cp, Py	~60%	
	563.2	563.6	0.4	Gabbro	Stringer	Po, Cp, Py	~10%	
	563.6	564.9	1.3	Gabbro	Blebby	Po, Py	~20%	
	564.9	594.0	29.1	Gabbro	Dissem-Blebby	Py, Po	~2-5%	
	594.0	600.8	6.8	Gabbro	Blebby	Po, Cp, Py	~2%	
	600.8	602.2	1.4	Gabbro	Disseminated	Po, Py	~2%	
	506.0	507.2	1.2	Pyroxenite				

**Table 2: Drill Hole Collar Details**

Hole ID	Easting	Northing	Dip	Azimuth	Depth (m)
21DDTS001	582220	6640654	-59.17	180.00	515.00
21DDTS002	582220	6640654	-47.78	225.00	584.35
21DDTS003	582210	6640055	-55.00	325.00	562.00
21DDTS004	582210	6640055	-50.00	325.00	613.00



**Figure 10: Cross section view (looking east) showing Ni mineralisation (>0.5% Ni) in the historical near surface drill holes (black) 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 drill holes 21DDTS002, 21DDTS003 & 21DDTS004 intersecting sulphide mineralisation on the basal contact of the model. Hole 21DDTS003 intersected closer to the southern edge of the intrusion however holes 21DDTS002 & 21DDTS004 successfully intersected the deeper central position at the base of the gabbroic intrusion.**

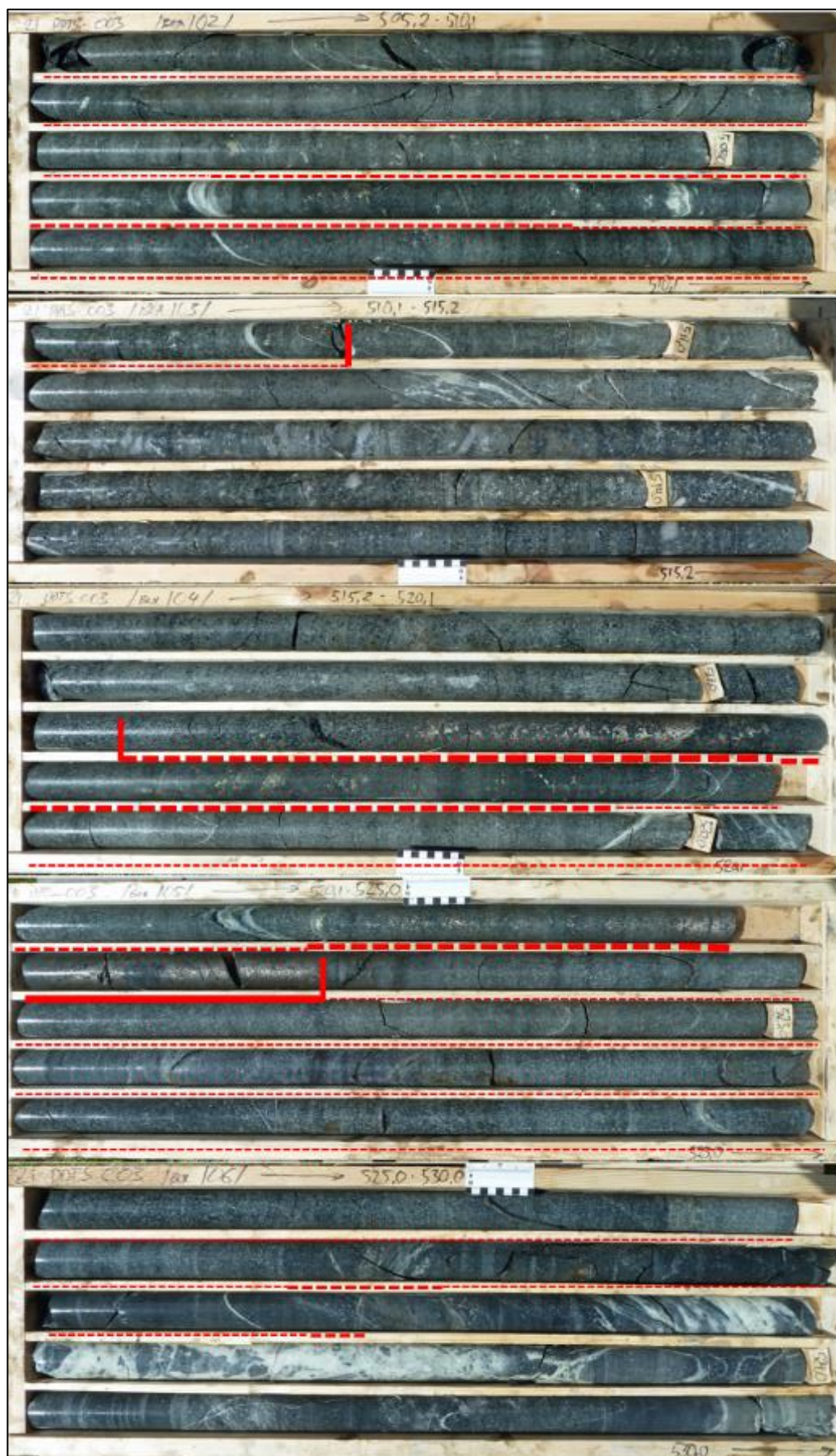


Figure 11: 21DDTS003 Central & Lower Mineralised Sulphide Zone (Trays from 505.2mm-530.0m)





**Figure 12: 21DDTS004 Central & Lower Mineralised Sulphide Zone (Trays from 541.1m-566.1m)**



## 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 13). The Tullsta nickel project comprises of 4 contiguous granted permits covering an area of 93.61km<sup>2</sup> (Figure 14 & Table 3) and cover the extent of the gabbroic mafic intrusion which hosts the Granmuren nickel mineralisation.

Ragnar also owns the Gaddebo Project (Figure 13) to the SSE of Tullsta.



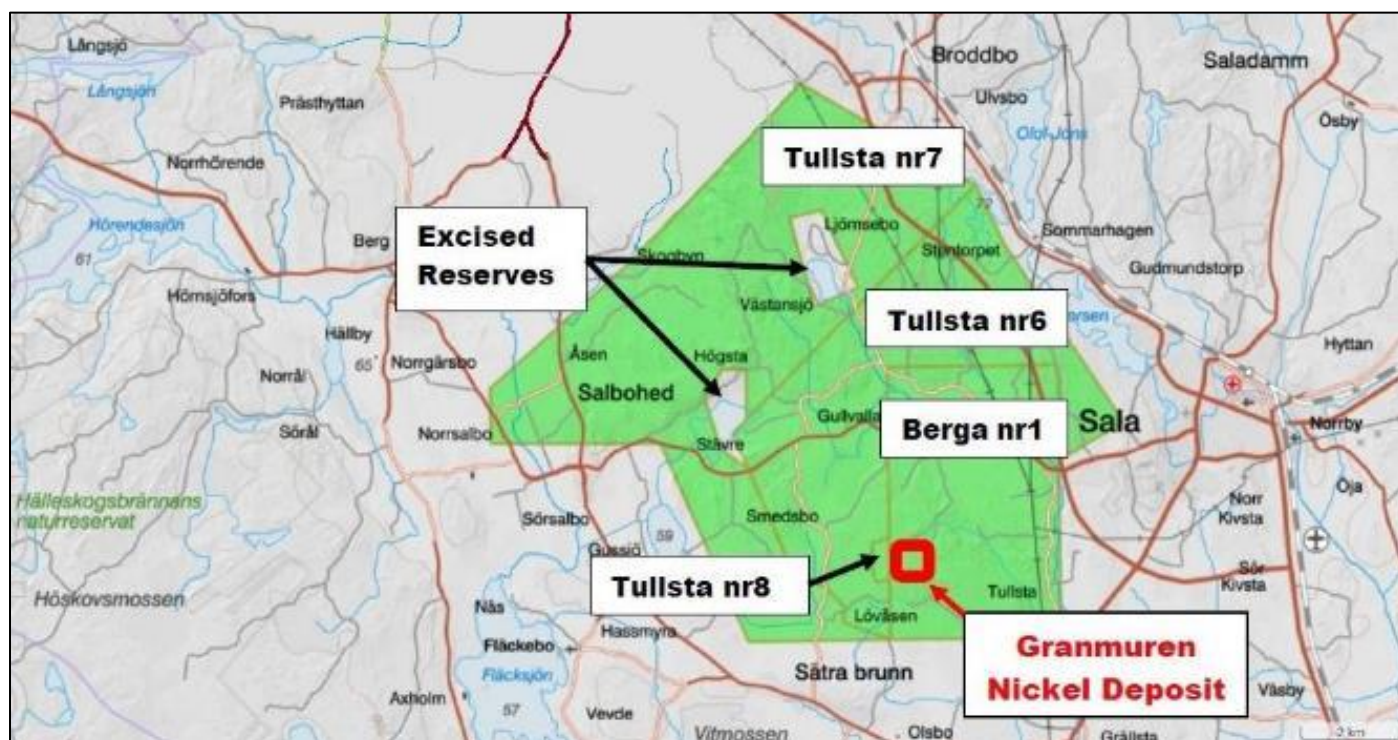
**Figure 13: Tullsta Nickel Project is located near Sala, 110km NW of the Swedish capital, Stockholm.**

The Tullsta Project contains the Granmuren Nickel Deposit which is located within Berga Nr1 tenement (Figures 14) 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 along the basal contact of Granmuren Intrusive Complex which will be further geophysical analysed and 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
<b>Total Area</b>			<b>9360.70</b>		



**Figure 14: 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 MINALYZER CS XRF ASSAY RESULTS; 21DDTS002 - 10CM READINGS

Tray_name	DDH_name	From_m	To_m	Sample_length_m	Ni_pct	Cu_pct	S_pct	Fe_pct	V_ppm	Cr_ppm	MgO_pct	Al2O3_pct	SiO2_pct	K2O_pct	CaO_pct	Ti_pct	Mn_pct	Zn_ppm	As_ppm	Sr_ppm	Ba_ppm
B100	DDTS002	495.2	495.3	0.1	0.07	0.02	0	9.36	311	674	16.41	8.1	41.08	0.24	16.21	0.24	0.15	59	0	84	BDL
B100	DDTS002	495.3	495.4	0.1	0.07	0.03	0	9.09	319	644	16.86	6.85	39.36	0.17	15.94	0.24	0.14	54	0	109	179
B100	DDTS002	495.4	495.5	0.1	0.05	0.01	0	3.34	198	346	12.08	2.99	23.54	0.32	8.58	0.13	0.1	44	0	BDL	198
B100	DDTS002	495.5	495.6	0.1	0.1	0.03	0	12.62	271	489	14.82	8.1	39.39	0.32	13.93	0.24	0.15	57	0	109	251
B100	DDTS002	495.6	495.7	0.1	0.09	0.03	0	11.34	247	311	14.6	7.42	34.28	1.04	11.35	0.22	0.15	60	0	116	237
B100	DDTS002	495.7	495.8	0.1	0.09	0.02	0	12.76	288	407	14.71	6.77	40.6	0.59	13.87	0.23	0.17	81	0	52	279
B100	DDTS002	495.8	495.9	0.1	0.07	0.02	0	11.44	287	439	12.9	6.4	38.93	0.31	14.77	0.24	0.16	83	0	70	BDL
B100	DDTS002	495.9	496.0	0.1	0.08	0.03	0	10.64	276	386	11.14	7.77	40.35	0.4	12.72	0.21	0.16	65	0	39	232
B100	DDTS002	496.0	496.1	0.1	0.07	0.02	0	10.26	277	491	15.23	8.17	38.02	0.44	14.75	0.23	0.15	70	0	68	209
B100	DDTS002	496.1	496.2	0.1	0.05	0.01	0	8.61	267	352	14.84	9.16	40.73	0.19	14.39	0.2	0.14	64	0	45	165
B100	DDTS002	496.2	496.3	0.1	0.06	0.01	0	9.58	271	324	11.48	10.1	41.4	0.22	14.74	0.19	0.16	63	0	BDL	BDL
B100	DDTS002	496.3	496.4	0.1	0.05	0.01	0	0	111	0	7.42	7.54	57.09	0.16	11.99	0.08	0.07	46	0	BDL	BDL
B100	DDTS002	496.4	496.5	0.1	0.03	0.01	0	0	157	131	0	9.02	31.72	0.06	13.77	0.12	0.07	51	0	BDL	BDL
B100	DDTS002	496.5	496.6	0.1	0.04	0.02	0	5.22	109	133	10.72	18.22	32.38	0.21	15.61	0.09	0.1	52	0	77	BDL
B100	DDTS002	496.6	496.7	0.1	0.06	0.05	0	3.41	172	157	7.37	13.02	43.89	0.15	16.62	0.11	0.09	65	0	55	BDL
B100	DDTS002	496.7	496.8	0.1	0.07	0.11	0	8.37	211	264	10.45	11.99	34.78	0.64	14.84	0.15	0.12	182	0	157	161
B100	DDTS002	496.8	496.9	0.1	0.21	0.32	0.83	12.23	133	232	9.88	17.24	33.54	1.72	11.67	0.1	0.11	69	0	368	383
B100	DDTS002	496.9	497.0	0.1	0.21	0.23	0.53	10.97	113	221	9.92	19.49	35.28	0.94	12.21	0.12	0.11	57	0	273	174
B100	DDTS002	497.0	497.1	0.1	0.09	0.04	0	9.65	130	258	7.84	19.63	34.38	1.07	14.45	0.13	0.1	62	0	244	240
B100	DDTS002	497.1	497.2	0.1	0.58	0.57	2.7	22.53	90	352	5.85	16.15	29.4	0.08	11.44	0.11	0.11	65	0	348	ND
B100	DDTS002	497.2	497.3	0.1	0.43	0.49	11.38	25.2	175	915	16.62	7.81	34.3	0.17	10.2	0.15	0.11	55	71	59	BDL
B100	DDTS002	497.3	497.4	0.1	0.32	0.34	0.41	14.18	198	1109	17.23	8.76	37.38	0.15	11.36	0.17	0.11	59	0	81	BDL
B100	DDTS002	497.4	497.5	0.1	0.17	0.06	0.43	12.72	262	1296	16.53	6.8	39.57	0.14	12.74	0.2	0.13	56	0	60	BDL
B100	DDTS002	497.5	497.6	0.1	0.23	0.12	1.23	15.76	250	876	17.5	7.92	39.98	0.15	12.79	0.21	0.14	64	0	50	168
B100	DDTS002	497.6	497.7	0.1	0.1	0.14	0.29	9.62	240	692	12.51	10.16	41.41	0.15	15.37	0.22	0.13	62	0	BDL	150
B100	DDTS002	497.7	497.8	0.1	0.22	0.27	1.26	12.97	223	618	10.79	10.93	40.01	0.15	15.36	0.22	0.13	72	0	BDL	194

B100	DDTS002	497.8	497.9	0.1	0.08	0.01	0	6.76	232	703	10.18	11.78	44.09	0.15	16.23	0.25	0.12	56	0	BDL	187
B100	DDTS002	497.9	498.0	0.1	0.15	0.04	0.34	9.94	207	744	7.95	10.34	39.96	0.18	15.15	0.19	0.13	53	0	BDL	BDL
B100	DDTS002	498.0	498.1	0.1	0.13	0.06	0.66	9.87	245	758	15.07	8.31	41.94	0.15	13.43	0.23	0.13	59	0	BDL	BDL
B100	DDTS002	498.1	498.2	0.1	0.13	0.02	0.43	11.34	269	736	7.11	8.94	42.23	0.17	15.02	0.23	0.14	52	0	59	174
B100	DDTS002	498.2	498.3	0.1	0.79	0.26	3.08	21.09	206	619	10.8	11.67	37.65	0.14	13.02	0.22	0.14	59	0	BDL	BDL
B100	DDTS002	498.3	498.4	0.1	0.26	0.1	0.71	18.98	239	764	8.74	7.51	40.3	0.16	10.96	0.23	0.15	73	0	BDL	186
B100	DDTS002	498.4	498.5	0.1	0.6	0.11	4.27	21.75	217	773	6.67	4.92	43.31	0.14	12.35	0.22	0.15	0	0	BDL	274
B100	DDTS002	498.5	498.6	0.1	0.16	0.08	0.58	12.79	239	851	13	8.03	46.59	0.13	12.81	0.21	0.12	62	0	BDL	BDL
B100	DDTS002	498.6	498.7	0.1	0.32	0.21	2.4	18.77	227	793	10.73	9.39	42.78	0.12	11.15	0.26	0.14	67	0	BDL	171
B100	DDTS002	498.7	498.8	0.1	0.57	0.59	9.52	37.88	237	1027	8.67	6.36	30.94	0.11	8.28	0.19	0.15	81	69	75	BDL
B100	DDTS002	498.8	498.9	0.1	0.57	0.47	26.93	>45	121	879	6.6	4.29	22.25	0.08	6.77	0.14	0.11	49	278	BDL	BDL
B100	DDTS002	498.9	499.0	0.1	4.84	0.68	29.67	>45	59	591	7.51	4.75	17.64	0.14	5.29	0.1	0.09	0	120	BDL	ND
B100	DDTS002	499.0	499.1	0.1	4.85	0.24	22.63	>45	87	728	7.83	5.66	21.4	0.12	6.42	0.12	0.1	50	0	BDL	BDL
B100	DDTS002	499.1	499.2	0.1	0.71	0.76	8.52	38.89	181	1006	13.15	5.93	31	0.18	9.33	0.2	0.19	112	59	BDL	BDL
B100	DDTS002	499.2	499.3	0.1	0.82	0.44	2.78	40.55	173	729	10.88	9.58	27.33	0.08	6.03	0.16	0.17	970	0	BDL	BDL
B100	DDTS002	499.3	499.4	0.1	0.91	1.05	24.24	>45	78	813	5.34	6.57	20.94	0.12	5.48	0.11	0.16	188	259	BDL	ND
B100	DDTS002	499.4	499.5	0.1	0.9	0.21	37.23	>45	91	910	5.32	0	18.29	0.21	4.96	0.11	0.13	0	383	BDL	BDL
B101	DDTS002	499.5	499.6	0.1	1.18	0.99	27.84	>45	114	1079	9.15	4.12	21.86	0.24	6.84	0.17	0.15	47	77	BDL	BDL
B101	DDTS002	499.6	499.7	0.1	7.34	0.16	35.57	>45	0	633	0	0	10.49	0.12	3.25	0.06	0.06	0	0	BDL	ND
B101	DDTS002	499.7	499.8	0.1	4.7	0.38	30	>45	94	854	8.1	0	17.46	0.17	6.04	0.12	0.1	56	0	BDL	ND
B101	DDTS002	499.8	499.9	0.1	4.98	0.93	33.01	>45	0	720	7.8	0	13.63	0.13	4.55	0.1	0.07	74	0	BDL	ND
B101	DDTS002	499.9	500.0	0.1	2.6	0.47	20.44	>45	164	964	8.54	4.05	26.41	0.15	7.6	0.16	0.11	48	0	BDL	BDL
B101	DDTS002	500.0	500.1	0.1	4.9	1.46	26.9	>45	115	749	4.76	0	17.73	0.14	6.08	0.11	0.1	64	0	BDL	BDL
B101	DDTS002	500.1	500.2	0.1	2.35	0.99	15.96	>45	157	1030	6.82	3.82	27.53	0.15	9.53	0.16	0.14	99	0	BDL	BDL
B101	DDTS002	500.2	500.3	0.1	5.05	0.91	28.11	>45	54	763	4.08	0	15.05	0.12	6.01	0.11	0.08	0	0	BDL	ND
B101	DDTS002	500.3	500.4	0.1	5.59	0.99	34.89	>45	0	682	6.05	2.96	14.1	0.12	5.62	0.09	0.06	0	0	BDL	ND
B101	DDTS002	500.4	500.5	0.1	3.36	0.58	21.41	>45	129	1290	7.81	3.72	22.92	0.16	10.32	0.16	0.11	93	0	BDL	BDL
B101	DDTS002	500.5	500.6	0.1	2.51	0.49	24.79	>45	140	810	9.53	3.61	21.56	0.12	7.84	0.13	0.1	45	0	BDL	ND
B101	DDTS002	500.6	500.7	0.1	6.16	0.49	36.02	>45	63	593	0	0	11.78	0.12	5.16	0.08	0.06	0	0	BDL	ND
B101	DDTS002	500.7	500.8	0.1	5.1	1.41	32.91	>45	84	733	5.44	2.84	14.91	0.09	5.44	0.09	0.08	0	0	BDL	BDL

B101	DDTS002	500.8	500.9	0.1	3.7	0.63	30.15	>45	62	674	11.49	3.32	17.39	0.09	6.22	0.1	0.07	0	0	BDL	ND
B101	DDTS002	500.9	501.0	0.1	5.21	0.58	34.61	>45	0	521	0	0	12.87	0.09	4.94	0.08	0.07	0	0	BDL	BDL
B101	DDTS002	501.0	501.1	0.1	2.82	0.5	22.65	>45	105	733	8.01	3.52	22.82	0.21	7.84	0.18	0.14	66	0	BDL	BDL
B101	DDTS002	501.1	501.2	0.1	6.23	0.53	34.83	>45	90	655	5.95	0	13.22	0.09	4.96	0.08	0.07	0	0	BDL	ND
B101	DDTS002	501.2	501.3	0.1	2.69	4.63	21.53	>45	111	639	7.99	0	27.74	0.12	8.77	0.12	0.14	314	0	BDL	ND
B101	DDTS002	501.3	501.4	0.1	0.6	1.05	6.47	26.8	209	914	11.76	4.25	33.42	0.16	10.83	0.19	0.16	77	0	BDL	214
B101	DDTS002	501.4	501.5	0.1	0.48	2.15	3.24	20.06	189	852	10.34	5.84	37.74	0.15	11.29	0.21	0.15	102	0	BDL	BDL
B101	DDTS002	501.5	501.6	0.1	0.53	0.47	5.93	25.65	214	956	11.16	5.48	38.45	0.14	11.28	0.22	0.15	58	0	BDL	BDL
B101	DDTS002	501.6	501.7	0.1	2.34	0.88	19.1	>45	128	786	7.79	4.35	25.03	0.15	9.76	0.17	0.12	57	0	BDL	ND
B101	DDTS002	501.7	501.8	0.1	0.49	4.76	10.16	15.84	66	147	0	0	60.9	0.1	4.42	0.05	0.06	154	0	BDL	BDL
B101	DDTS002	501.8	501.9	0.1	1.74	16.16	19.78	>45	91	257	4.48	0	29.5	0.07	6.9	0.12	0.14	438	0	BDL	ND
B101	DDTS002	501.9	502.0	0.1	1.05	1.84	11.02	34.73	103	677	8.83	5.62	33.24	0.14	9.8	0.15	0.12	91	0	BDL	BDL
B101	DDTS002	502.0	502.1	0.1	1.35	0.25	13.03	34.82	187	922	12.72	4.49	30.33	0.13	9.94	0.17	0.11	58	0	87	BDL
B101	DDTS002	502.1	502.2	0.1	1.9	0.88	16.28	>45	137	753	12.15	4.65	25.54	0.14	9.85	0.17	0.12	78	0	BDL	BDL
B101	DDTS002	502.2	502.3	0.1	2.13	1.5	17.79	>45	164	666	4.95	5.82	24.41	0.13	9.59	0.14	0.12	89	0	BDL	BDL
B101	DDTS002	502.3	502.4	0.1	2.84	1.24	24.08	>45	81	726	5.93	0	21.37	0.12	7.4	0.12	0.1	55	0	BDL	BDL
B101	DDTS002	502.4	502.5	0.1	3.79	0.54	28.42	>45	107	647	9.47	0	18.26	0.11	7.37	0.1	0.06	0	0	BDL	ND
B101	DDTS002	502.5	502.6	0.1	4.63	0.21	30.69	>45	58	583	6.67	0	15.97	0.11	5.74	0.09	0.06	0	0	BDL	BDL
B101	DDTS002	502.6	502.7	0.1	1.89	0.97	16.51	>45	173	865	14.97	3.99	26.78	0.18	9.62	0.23	0.12	73	0	BDL	BDL
B101	DDTS002	502.7	502.8	0.1	1.98	1.11	19.59	44.85	109	926	9.69	3.85	25.52	0.14	9.49	0.17	0.08	0	0	BDL	ND
B101	DDTS002	502.8	502.9	0.1	0.78	0.1	9.27	23.81	173	726	14.32	4.67	32.82	0.31	13.35	0.19	0.1	41	0	96	BDL
B101	DDTS002	502.9	503.0	0.1	0.13	0.39	1.47	12.87	212	911	11.68	6.83	38.47	0.16	14.57	0.24	0.13	46	0	49	BDL
B101	DDTS002	503.0	503.1	0.1	1.61	0.29	16.19	42.14	139	880	7.94	3.39	27.48	0.16	12.12	0.17	0.11	55	0	BDL	BDL
B101	DDTS002	503.1	503.2	0.1	5.07	0.13	31.72	>45	0	551	6.92	0	14.86	0.13	6.98	0.1	0.06	0	0	BDL	ND
B101	DDTS002	503.2	503.3	0.1	3.04	0.23	23.98	>45	81	613	5.26	0	17.87	0.12	7.66	0.1	0.06	0	0	BDL	ND
B101	DDTS002	503.3	503.4	0.1	1.29	0.2	13.16	36.1	143	856	12.11	5.24	31.15	0.14	10.75	0.16	0.12	39	0	BDL	BDL
B101	DDTS002	503.4	503.5	0.1	0.86	0.38	10.16	29.43	223	1615	13.71	5.15	33.54	0.14	14.43	0.19	0.12	59	0	BDL	BDL
B101	DDTS002	503.5	503.6	0.1	2.26	0.29	19.68	>45	169	764	13.69	3.72	26.03	0.2	10.58	0.16	0.1	47	0	75	BDL
B101	DDTS002	503.6	503.7	0.1	0.31	0.13	3.47	16.27	272	961	17.34	6.06	35.77	0.34	15.07	0.26	0.13	49	0	88	198
B101	DDTS002	503.7	503.8	0.1	2.28	0.87	21.51	>45	109	688	10.14	4.45	24.06	0.14	9.46	0.15	0.08	49	0	76	BDL



B101	DDTS002	503.8	503.9	0.1	1.5	0.7	15.69	37.07	149	928	11.99	4.49	28.35	0.17	9.96	0.17	0.11	39	0	BDL	BDL
B101	DDTS002	503.9	504.0	0.1	2.7	0.52	20.54	>45	149	770	12.58	4.8	23.94	0.17	10.05	0.13	0.09	0	0	BDL	BDL
B101	DDTS002	504.0	504.1	0.1	0.31	0.04	5.07	18.7	216	913	14.27	7.35	38.89	0.16	11.93	0.18	0.13	30	0	49	BDL
B101	DDTS002	504.1	504.2	0.1	2.04	0.23	19.25	>45	127	732	12.16	5.21	26.83	0.14	9.8	0.14	0.09	0	0	67	BDL
B101	DDTS002	504.2	504.3	0.1	0.36	0.07	4.87	15.59	208	911	16.05	6.04	38.31	0.17	12.95	0.24	0.11	35	0	75	BDL
B101	DDTS002	504.3	504.4	0.1	4.07	0.26	28.75	>45	121	694	6.88	2.9	17.44	0.18	7.74	0.15	0.08	0	0	BDL	BDL
B101	DDTS002	504.4	504.5	0.1	2.71	0.35	23.56	>45	84	661	10.36	3.93	22.92	0.19	8.84	0.15	0.1	56	0	BDL	ND
B102	DDTS002	504.5	504.6	0.1	1.36	0.34	12.4	37.25	175	822	11.44	5	30.2	0.21	10.78	0.19	0.13	60	0	BDL	BDL
B102	DDTS002	504.6	504.7	0.1	0.64	1.34	5.55	27.82	220	794	12.74	4.76	33.41	0.2	10.98	0.23	0.17	116	0	BDL	BDL
B102	DDTS002	504.7	504.8	0.1	0.42	1.21	2.82	23.92	225	1053	16.06	4.43	34.54	0.2	12.07	0.24	0.18	109	86	56	BDL
B102	DDTS002	504.8	504.9	0.1	0.75	2.8	6.74	30.57	221	838	12.14	6.14	32.29	0.17	11.27	0.2	0.17	122	109	BDL	BDL
B102	DDTS002	504.9	505.0	0.1	0.17	0.89	0.94	16.87	219	987	12.54	4.4	37.15	0.22	11.32	0.2	0.18	91	229	51	156
B102	DDTS002	505.0	505.1	0.1	0.46	0.84	0.87	17.31	186	791	10.69	4.69	37.8	0.19	11.47	0.22	0.18	87	1475	68	BDL
B102	DDTS002	505.1	505.2	0.1	0.1	0.21	0.35	9.29	184	868	19.83	6.99	41.74	0.16	11.68	0.2	0.13	55	0	52	166
B102	DDTS002	505.2	505.3	0.1	0.16	1.78	1.41	21.42	300	726	16.04	6.93	37.77	0.18	11.57	0.26	0.18	88	59	114	249
B102	DDTS002	505.3	505.4	0.1	0.56	10.19	8.19	29.07	139	225	7.89	9.32	28.04	0.1	10.37	0.18	0.14	211	0	341	ND
B102	DDTS002	505.4	505.5	0.1	0.2	2.36	1.96	24.84	262	367	13.44	10.38	37.02	0.15	12.66	0.21	0.19	146	0	418	BDL
B102	DDTS002	505.5	505.6	0.1	0.17	2.29	1.68	26	254	717	11.7	6.47	35.6	0.15	12	0.21	0.22	139	0	192	BDL
B102	DDTS002	505.6	505.7	0.1	0.55	17.66	13.56	44.1	146	410	9.2	5.66	26.36	0.1	9.25	0.18	0.16	377	0	102	BDL
B102	DDTS002	505.7	505.8	0.1	0.86	16.22	10.47	38.14	193	607	13.19	3.64	28.17	0.13	12.32	0.17	0.16	326	0	209	BDL
B102	DDTS002	505.8	505.9	0.1	0.16	0.26	0.28	8.11	228	800	17.06	7.94	39.84	0.15	14.99	0.19	0.13	48	0	274	195
B102	DDTS002	505.9	506.0	0.1	0.09	0.04	0.69	9.47	177	698	18.87	7.66	41.46	0.14	11.98	0.16	0.12	48	0	82	144
B102	DDTS002	506.0	506.1	0.1	0.09	0.04	0.74	8.98	187	824	19.33	7.28	38.91	0.13	13.13	0.17	0.12	43	0	89	139
B102	DDTS002	506.1	506.2	0.1	0.09	0.03	1.29	9.46	130	654	16.29	6.3	37.06	0.16	12.12	0.14	0.1	39	0	105	BDL
B102	DDTS002	506.2	506.3	0.1	0.14	0.15	0.27	13.21	190	543	16.26	6.8	36.1	0.14	13.34	0.15	0.15	47	0	64	161
B102	DDTS002	506.3	506.4	0.1	0.12	0.03	0.56	10.46	223	831	20.42	6.22	39.6	0.17	13.19	0.21	0.13	48	0	96	186
B102	DDTS002	506.4	506.5	0.1	0.29	0.22	0.58	11.64	174	745	20.69	7.88	39.77	0.18	12.72	0.18	0.13	43	0	86	182
B102	DDTS002	506.5	506.6	0.1	0.09	0.02	0	12.25	142	758	19.16	9.16	38.71	0.15	11.52	0.16	0.15	42	0	56	BDL
B102	DDTS002	506.6	506.7	0.1	0.1	0.08	0	10.85	172	766	15.09	8.88	38.78	0.15	11.96	0.14	0.14	45	0	61	BDL
B102	DDTS002	506.7	506.8	0.1	0.12	0.03	0	12.05	173	770	16.96	8.58	37.74	0.15	11.67	0.15	0.15	39	0	60	BDL

B102	DDTS002	506.8	506.9	0.1	0.11	0.02	0	11.75	152	713	18.9	8.39	38.01	0.12	11.2	0.13	0.15	39	0	67	BDL
B102	DDTS002	506.9	507.0	0.1	0.1	0.04	0.15	10.21	203	822	18.19	8.01	41.15	0.21	11.94	0.22	0.16	38	0	68	170
B102	DDTS002	507.0	507.1	0.1	0.1	0.03	0	10.6	169	562	13.8	10.06	40.29	0.14	13.27	0.17	0.17	62	0	BDL	BDL
B102	DDTS002	507.1	507.2	0.1	0.11	0.03	0	12.52	170	789	13.86	10.25	38.6	0.15	11.52	0.2	0.17	61	0	60	176
B102	DDTS002	507.2	507.3	0.1	0.12	0.03	0	12.13	196	726	16.97	8.22	38.97	0.12	10.94	0.19	0.18	60	0	88	160
B102	DDTS002	507.3	507.4	0.1	0.17	0.04	0	11.83	204	563	10.08	15.55	37.17	0.13	13.39	0.2	0.16	56	0	358	195
B102	DDTS002	507.4	507.5	0.1	0.1	0.03	0	11.26	138	560	14.54	14.69	38.59	0.14	12.71	0.19	0.16	55	0	346	182
B102	DDTS002	507.5	507.6	0.1	0.16	0.04	0.15	10.56	209	770	15.12	8.91	40.86	0.16	12.32	0.21	0.16	60	0	97	156
B102	DDTS002	507.6	507.7	0.1	0.08	0.01	0	10.2	199	786	13.51	9.01	42.26	0.16	11.4	0.23	0.15	44	0	56	197
B102	DDTS002	507.7	507.8	0.1	0.09	0.02	0	9.49	125	693	15.36	11.63	38.89	0.15	13.33	0.14	0.14	50	0	BDL	BDL
B102	DDTS002	507.8	507.9	0.1	0.08	0.02	0	11.56	136	538	13.03	12.61	39.14	0.12	12.01	0.19	0.17	59	0	185	193
B102	DDTS002	507.9	508.0	0.1	0.08	0.02	0	8.79	159	639	15.46	10.94	40.55	0.18	13.91	0.22	0.15	59	0	246	BDL
B102	DDTS002	508.0	508.1	0.1	0.1	0.03	0	10.54	132	621	15.71	10	39.52	0.16	12.68	0.18	0.16	59	0	149	186
B102	DDTS002	508.1	508.2	0.1	0.09	0.02	0	8.29	181	778	16.89	8.29	41.07	0.14	12.03	0.21	0.14	53	0	46	233
B102	DDTS002	508.2	508.3	0.1	0.09	0.03	0.15	9.84	155	744	14.31	10.1	39.26	0.15	12.46	0.2	0.15	52	0	80	BDL
B102	DDTS002	508.3	508.4	0.1	0.08	0.02	0	8.18	149	527	18.93	15.78	40.01	0.15	15.19	0.2	0.14	54	0	269	261
B102	DDTS002	508.4	508.5	0.1	0.08	0.02	0	8.47	125	614	16.23	12.73	39.83	0.17	14.02	0.18	0.14	51	0	95	BDL
B102	DDTS002	508.5	508.6	0.1	0.1	0.04	0	10.56	154	742	14.45	6.92	36.34	0.18	11.02	0.16	0.16	81	0	BDL	156
B102	DDTS002	508.6	508.7	0.1	0.09	0.02	0	10.54	150	628	10.3	12.63	37.13	0.16	14.01	0.27	0.16	72	0	385	162
B102	DDTS002	508.7	508.8	0.1	0.1	0.01	0	11.32	139	592	18.07	13.18	36.38	0.19	12.62	0.24	0.16	56	0	404	184
B102	DDTS002	508.8	508.9	0.1	0.1	0.04	0	9.38	209	948	21.08	4.96	40.16	0.18	11.61	0.2	0.14	50	0	76	BDL
B102	DDTS002	508.9	509.0	0.1	0.11	0.04	0.82	9.78	185	828	17.97	6.27	39.76	0.16	11.17	0.19	0.13	53	0	54	203
B102	DDTS002	509.0	509.1	0.1	0.1	0.01	0.13	11.46	219	801	14.56	6.03	42.18	0.18	13.41	0.23	0.16	64	0	67	149
B102	DDTS002	509.1	509.2	0.1	0.1	0.02	0	11.06	203	570	17.6	7.81	40.17	0.23	11.56	0.18	0.15	62	0	73	BDL
B102	DDTS002	509.2	509.3	0.1	0.08	0.03	0.31	9.49	171	670	15.57	10.37	41.28	0.25	12.09	0.21	0.13	49	0	89	BDL
B102	DDTS002	509.3	509.4	0.1	0.08	0.03	0.15	9.06	195	817	24.77	7.32	41.43	0.21	12.44	0.18	0.13	55	0	59	143
	DDTS002	509.4	532.5	23.1	<0.5	<0.5															
B107	DDTS002	532.5	532.6	0.1	0.34	0.38	4.79	13.5	196	786	20.27	7.08	36.41	0.23	12.49	0.19	0.14	85	0	135	163
B107	DDTS002	532.6	532.7	0.1	0.31	0.17	4.04	12.47	150	770	19.98	6.08	36.85	0.24	12.01	0.17	0.14	83	0	145	BDL
B107	DDTS002	532.7	532.8	0.1	0.34	0.16	4.95	15.7	181	771	14.95	5.55	36.43	0.25	11.69	0.16	0.15	101	0	175	BDL

B107	DDTS002	532.8	532.9	0.1	0.31	0.1	4.6	14.05	123	635	22.89	8.69	35.36	0.28	11.19	0.14	0.14	107	0	183	BDL
B107	DDTS002	532.9	533.0	0.1	0.41	0.15	5.65	13.86	157	645	17.14	5.93	32.64	0.23	10.07	0.14	0.13	103	0	136	141
B107	DDTS002	533.0	533.1	0.1	0.36	0.22	4.69	12.75	129	610	12.74	5.69	33.41	0.26	9.2	0.14	0.12	103	0	108	BDL
B107	DDTS002	533.1	533.2	0.1	0.67	0.11	6.62	20.61	164	774	23.25	3.89	32.99	0.25	12.95	0.19	0.15	80	0	107	BDL
B107	DDTS002	533.2	533.3	0.1	0.91	0.33	9.29	21.43	108	624	16.46	4.52	30.58	0.18	12.08	0.16	0.13	64	0	91	BDL
B107	DDTS002	533.3	533.4	0.1	0.81	0.32	9.56	20.17	136	789	19.71	5.69	34.27	0.17	11.5	0.16	0.12	53	0	70	BDL
B107	DDTS002	533.4	533.5	0.1	0.84	0.29	9.72	19.39	151	788	20.79	5.3	32.87	0.17	10.08	0.16	0.11	47	0	88	BDL
B107	DDTS002	533.5	533.6	0.1	1.14	0.42	12.35	26.78	193	907	20.5	2.81	31.49	0.16	9.84	0.19	0.11	74	0	93	BDL
B107	DDTS002	533.6	533.7	0.1	1.32	0.25	14.62	27.31	137	760	18.57	0	30.59	0.13	8.8	0.14	0.08	39	0	58	BDL
B107	DDTS002	533.7	533.8	0.1	2.25	0.8	14.27	33.2	116	825	17.02	0	26.5	0.12	8.21	0.14	0.09	62	0	BDL	ND
B107	DDTS002	533.8	533.9	0.1	1.08	0.73	11.96	25.43	151	907	17.23	3.99	33.78	0.11	9.15	0.16	0.1	54	0	54	BDL
B107	DDTS002	533.9	534.0	0.1	1.31	0.72	14.15	28.67	142	811	15.7	3.11	31.96	0.12	9.28	0.16	0.09	52	0	BDL	ND
B107	DDTS002	534.0	534.1	0.1	1.29	0.64	14.87	29.74	145	905	17.26	3.46	32.13	0.11	8.97	0.14	0.09	65	0	50	BDL
B107	DDTS002	534.1	534.2	0.1	0.9	0.94	11.36	24.96	140	889	18.83	0	33.14	0.13	9.63	0.13	0.1	82	0	BDL	BDL
B108	DDTS002	534.2	534.3	0.1	1.18	0.57	13.49	30.14	113	824	11.98	3.58	31.85	0.13	9.01	0.17	0.09	78	0	BDL	BDL
B108	DDTS002	534.3	534.4	0.1	0.94	2.87	11.53	31.24	192	923	18.46	3.3	30.33	0.17	9.46	0.21	0.12	170	0	59	BDL
B108	DDTS002	534.4	534.5	0.1	1.38	0.73	14.59	31.78	151	882	11.75	3.02	30.56	0.11	8.63	0.13	0.09	73	0	BDL	BDL
B108	DDTS002	534.5	534.6	0.1	1.27	0.84	13.47	31.38	111	921	15.13	0	31.1	0.12	8.93	0.13	0.08	90	0	BDL	BDL
B108	DDTS002	534.6	534.7	0.1	1.28	0.68	11.84	28.95	143	816	12.09	3.21	29.12	0.11	8.53	0.15	0.09	110	0	59	BDL
B108	DDTS002	534.7	534.8	0.1	0.93	1.14	9.3	26.89	106	855	17.2	8.65	32.81	0.07	9.6	0.13	0.1	69	1472	143	BDL
B108	DDTS002	534.8	534.9	0.1	1.5	1.77	5.7	>45	110	688	9.97	13.97	26.48	0.05	8.12	0.12	0.12	89	6815	292	ND
B108	DDTS002	534.9	535.0	0.1	1.32	0.65	13.51	31.73	201	1114	17.93	3.3	30.53	0.17	10.2	0.15	0.1	86	0	70	BDL
B108	DDTS002	535.0	535.1	0.1	1.19	1.05	12.98	28.8	163	1122	16.71	3.97	32.81	0.15	9.76	0.16	0.1	69	0	52	BDL
B108	DDTS002	535.1	535.2	0.1	1.63	1.16	16.07	37.19	143	1096	14.79	3.68	30.04	0.16	9.45	0.15	0.1	89	0	BDL	ND
B108	DDTS002	535.2	535.3	0.1	1.63	2.17	16.1	38.99	113	925	15.05	3.08	28.64	0.15	9.59	0.12	0.09	162	0	BDL	BDL
B108	DDTS002	535.3	535.4	0.1	1.98	0.96	17.21	43.24	127	961	11.03	0	28.09	0.14	9.15	0.12	0.09	65	0	BDL	BDL
B108	DDTS002	535.4	535.5	0.1	2.15	1.62	18.64	>45	112	1014	12.14	3.2	24.6	0.16	9.13	0.13	0.12	92	268	BDL	ND
B108	DDTS002	535.5	535.6	0.1	2.29	0.61	20.3	>45	127	903	12.74	0	25.27	0.12	9.04	0.11	0.11	63	0	BDL	ND
B108	DDTS002	535.6	535.7	0.1	5.87	0.31	33.94	>45	0	522	5.99	0	14.81	0.08	4.34	0.05	0.07	0	0	BDL	ND
B108	DDTS002	535.7	535.8	0.1	4.8	0.18	34.4	>45	47	408	5.2	0	12.38	0.06	3.34	0.05	0.06	0	0	BDL	ND



B108	DDTS002	535.8	535.9	0.1	1.7	0.99	17.6	40.44	122	1080	14.11	0	27.1	0.14	8.7	0.13	0.11	80	0	89	ND
B108	DDTS002	535.9	536.0	0.1	2	0.15	20.27	43.44	109	953	9.33	3.56	25.22	0.14	7.8	0.12	0.07	44	0	67	ND
B108	DDTS002	536.0	536.1	0.1	1.07	0.29	9.72	23.01	154	965	12.11	4.33	28.03	0.21	8.9	0.17	0.11	71	0	100	BDL
B108	DDTS002	536.1	536.2	0.1	1.02	0.33	12.17	26.87	145	1064	17.32	4.41	32.15	0.19	9.76	0.16	0.11	55	0	82	BDL
B108	DDTS002	536.2	536.3	0.1	1.82	0.18	20.05	40.81	135	1023	17.16	3.39	27.63	0.12	7.97	0.13	0.08	0	0	60	BDL
B108	DDTS002	536.3	536.4	0.1	1.52	0.38	15.75	33.93	133	996	14.42	0	27.09	0.12	8.53	0.13	0.09	64	0	69	BDL
B108	DDTS002	536.4	536.5	0.1	4.91	0.35	31.61	>45	0	790	3.72	0	13.62	0.13	5.06	0.09	0.07	75	0	BDL	ND
B108	DDTS002	536.5	536.6	0.1	7.28	0.21	36.65	>45	0	453	0	0	5.38	0.08	1.33	0.04	0.06	0	0	BDL	ND
B108	DDTS002	536.6	536.7	0.1	6.92	0.28	38.96	>45	0	1139	0	0	8.01	0.07	2.73	0.05	0.1	0	0	BDL	BDL
B108	DDTS002	536.7	536.8	0.1	8.16	0.31	40.99	>45	0	606	0	0	5.16	0.12	1.73	0.05	0.06	0	0	BDL	ND
B108	DDTS002	536.8	536.9	0.1	6.54	0.68	33.39	>45	0	763	13.03	0	6.95	0.07	2.25	0.05	0.11	0	0	BDL	BDL
B108	DDTS002	536.9	537.0	0.1	3.82	1.13	26.89	>45	102	1103	3.16	0	19.73	0.08	6	0.1	0.21	79	0	BDL	ND
B108	DDTS002	537.0	537.1	0.1	7.19	0.32	39.87	>45	53	455	3.03	0	6.53	0.06	1.89	0.04	0.12	0	0	BDL	ND
B108	DDTS002	537.1	537.2	0.1	5.82	0.41	36.05	>45	0	543	3.45	0	12.64	0.09	4.8	0.06	0.08	0	0	BDL	BDL
B108	DDTS002	537.2	537.3	0.1	5.77	0.56	34.06	>45	48	484	0	4.4	10.24	0.18	4.87	0.05	0.08	0	0	BDL	ND
B108	DDTS002	537.3	537.4	0.1	5.02	0.36	31.19	>45	0	535	0	5.09	15.87	0.34	7.04	0.07	0.09	0	0	122	ND
B108	DDTS002	537.4	537.5	0.1	4.6	1.03	29.16	>45	65	479	5.5	4.06	13.21	0.15	6.11	0.07	0.08	0	0	BDL	BDL
B108	DDTS002	537.5	537.6	0.1	3.34	1.04	22.57	>45	124	1000	0	3.02	21	0.13	8.24	0.13	0.14	73	0	BDL	BDL
B108	DDTS002	537.6	537.7	0.1	0.9	0.23	8.85	22.94	81	267	3.06	8.39	37.87	0.18	22.04	0.2	0.34	72	0	315	BDL
B108	DDTS002	537.7	537.8	0.1	1.2	1.88	10.33	29.04	93	473	0	11.17	31.48	0.15	21.41	0.2	0.26	93	0	236	BDL
B108	DDTS002	537.8	537.9	0.1	4.61	0.93	29.56	>45	49	645	0	3.95	18.92	0.15	7.31	0.08	0.09	0	0	BDL	ND
B108	DDTS002	537.9	538.0	0.1	4.38	0.55	27.96	>45	76	776	9.15	0	16.91	0.12	6.15	0.08	0.08	59	1258	BDL	ND
B108	DDTS002	538.0	538.1	0.1	4.32	2.08	17.21	>45	164	1123	9.94	4.85	27.62	0.19	10.47	0.17	0.15	100	11277	BDL	BDL
B108	DDTS002	538.1	538.2	0.1	1.01	0.75	8.07	32.99	250	1184	13.87	5.97	31.87	0.18	12.76	0.21	0.18	117	0	BDL	BDL
B108	DDTS002	538.2	538.3	0.1	0.74	0.85	7.17	24.93	237	710	6.94	11.22	31.27	0.19	15.58	0.17	0.15	83	0	68	BDL
B108	DDTS002	538.3	538.4	0.1	0.45	1.94	4.25	18.33	178	320	10.73	16.22	30.41	0.44	19.04	0.17	0.16	101	0	273	BDL
B108	DDTS002	538.4	538.5	0.1	0.16	0.18	1.16	8.78	276	811	9.76	14.01	36.78	1.26	15.02	0.18	0.13	61	0	296	217
B108	DDTS002	538.5	538.6	0.1	0.15	0.54	1.32	9.91	284	709	10.48	15.38	36.24	1.22	13.19	0.19	0.14	71	0	315	319
B108	DDTS002	538.6	538.7	0.1	0.11	0.19	0.71	7.28	302	829	12.37	14.27	38.69	0.32	18.09	0.2	0.12	48	0	122	BDL
B108	DDTS002	538.7	538.8	0.1	0.37	1.03	3.9	17.83	238	535	16.48	11.1	35.11	0.15	12.75	0.17	0.13	81	0	107	BDL

B108	DDTS002	538.8	538.9	0.1	0.39	1.05	3.89	18.74	199	750	12.33	9.39	33.04	0.13	11.57	0.16	0.13	93	0	106	BDL
B108	DDTS002	538.9	539.0	0.1	0.42	0.89	6.14	21.02	216	494	8.26	8	35.83	0.17	13.87	0.18	0.15	90	42	58	BDL
B108	DDTS002	539.0	539.1	0.1	0.75	1.62	5.81	23.32	159	163	9.35	12.98	27.11	0.17	13.74	0.12	0.14	94	971	88	BDL
B109	DDTS002	539.1	539.2	0.1	0.4	1.32	4.05	16.56	232	214	7.04	19.82	33.3	0.96	14.28	0.13	0.12	77	0	299	174
B109	DDTS002	539.2	539.3	0.1	0.41	1.04	2.79	14.97	240	222	5.57	15.3	29.15	1.79	11.06	0.14	0.12	72	0	441	319
B109	DDTS002	539.3	539.4	0.1	0.99	1.1	3.51	16.74	214	505	11.96	10.24	30.75	0.3	10.39	0.14	0.13	76	0	136	BDL
B109	DDTS002	539.4	539.5	0.1	0.2	1.59	3.33	12.26	254	766	14.52	10.91	35.94	0.15	13.76	0.16	0.11	74	0	80	BDL
B109	DDTS002	539.5	539.6	0.1	0.29	1.05	2.99	12.12	244	762	12.19	10.84	34.26	0.2	13.58	0.16	0.11	74	0	190	BDL
B109	DDTS002	539.6	539.7	0.1	0.19	0.39	1.94	9.01	201	584	11.29	15	32.29	0.43	11.94	0.14	0.1	75	0	330	217
B109	DDTS002	539.7	539.8	0.1	0.19	0.41	1.55	8.88	284	898	16.51	9.77	36.8	0.22	14.25	0.16	0.11	76	0	230	159
B109	DDTS002	539.8	539.9	0.1	0.26	1.11	2.73	8.57	205	768	11.96	13.26	34.72	0.22	13.31	0.14	0.09	65	92	159	BDL
B109	DDTS002	539.9	540.0	0.1	0.65	1.89	7.05	21.42	247	888	16.39	7.62	32.55	0.22	14.44	0.19	0.11	98	0	122	ND
B109	DDTS002	540.0	540.1	0.1	0.33	0.86	3.37	9.77	254	898	16.39	10.85	37.11	0.2	14.55	0.15	0.1	72	0	209	BDL
B109	DDTS002	540.1	540.2	0.1	0.19	0.19	1.7	6.98	191	795	15.02	13.87	36.25	0.19	15.35	0.14	0.11	56	0	277	BDL
B109	DDTS002	540.2	540.3	0.1	0.1	0.11	1.11	7.97	247	726	15.47	14.51	37.56	0.56	13.91	0.15	0.12	57	0	228	166
B109	DDTS002	540.3	540.4	0.1	0.09	0.09	1.33	5.79	220	500	8.3	19.23	37.24	0.8	15.62	0.14	0.1	40	0	363	178
B109	DDTS002	540.4	540.5	0.1	0.17	0.11	3.86	12.47	187	719	15.75	15.39	34.78	0.71	13.25	0.15	0.11	41	0	315	149
B109	DDTS002	540.5	540.6	0.1	0.13	0.07	2.19	10.76	223	748	14.3	14.45	36.82	0.53	13.5	0.15	0.11	52	0	302	BDL
B109	DDTS002	540.6	540.7	0.1	0.08	0.04	0.59	8.24	238	781	12.74	11.89	37.51	0.28	13.95	0.15	0.12	52	0	221	209
B109	DDTS002	540.7	540.8	0.1	0.07	0.03	0.29	7.87	238	819	14.82	13.8	37.97	0.23	14.08	0.19	0.12	48	0	319	BDL
B109	DDTS002	540.8	540.9	0.1	0.06	0.02	0.3	6.98	208	761	9.94	15.9	39	0.59	13.82	0.17	0.11	47	0	400	226
B109	DDTS002	540.9	541.0	0.1	0.07	0.04	0.4	7.07	267	671	12.93	14.28	40.85	1.01	12.41	0.19	0.12	64	0	228	216
B109	DDTS002	541.0	541.1	0.1	0.13	0.1	0.96	11.73	366	688	13.29	11.29	40.43	0.87	10.9	0.21	0.15	87	0	118	166
B109	DDTS002	541.1	541.2	0.1	0.21	0.13	1.38	9.43	296	624	13.39	11.27	33.44	0.26	11.55	0.17	0.11	60	0	44	152
B109	DDTS002	541.2	541.3	0.1	0.19	0.14	0.67	11.08	276	644	10	13.27	35.4	0.44	11.32	0.16	0.13	68	0	80	BDL
B109	DDTS002	541.3	541.4	0.1	0.16	0.11	0.49	12.19	244	663	12.93	14.08	37.21	0.64	10.95	0.17	0.13	69	0	125	238
B109	DDTS002	541.4	541.5	0.1	0.18	0.14	1.52	13.7	228	710	10.85	14.57	37.58	0.19	13.52	0.16	0.14	71	0	BDL	BDL
B109	DDTS002	541.5	541.6	0.1	1.79	0.53	14.27	43.85	176	530	6.12	9.18	27.68	0.18	12.36	0.12	0.12	76	0	BDL	BDL
B109	DDTS002	541.6	541.7	0.1	0.42	0.15	4.02	19.05	345	699	9.02	10.25	36.09	0.2	12.41	0.17	0.14	71	0	BDL	BDL
B109	DDTS002	541.7	541.8	0.1	0.16	0.21	1.73	10.91	348	595	8.96	16.04	39.88	0.26	15.21	0.17	0.13	60	0	49	BDL

B109	DDTS002	541.8	541.9	0.1	0.13	0.08	1.05	12.38	304	1030	12.8	13.23	40.49	0.25	13.24	0.19	0.14	60	0	BDL	BDL
B109	DDTS002	541.9	542.0	0.1	0.32	0.18	3.46	17.63	254	761	14.1	12.13	35.04	0.29	13.03	0.17	0.15	81	0	BDL	BDL
B109	DDTS002	542.0	542.1	0.1	0.28	0.28	1.95	17.97	322	682	10.97	10.26	37.65	0.32	12.78	0.21	0.17	89	0	79	BDL
B109	DDTS002	542.1	542.2	0.1	0.15	0.19	1.04	9.91	250	550	7.58	13.83	41.1	0.39	15.34	0.16	0.13	67	0	48	BDL
B109	DDTS002	542.2	542.3	0.1	0.13	0.09	0.78	9.92	268	809	12.65	14.57	40.82	0.36	12.65	0.17	0.13	57	0	94	BDL
B109	DDTS002	542.3	542.4	0.1	0.17	0.11	1.06	10.82	319	939	11.14	11.6	38.39	0.36	14.29	0.19	0.14	59	31	92	BDL
B109	DDTS002	542.4	542.5	0.1	0.07	0.06	0.24	7.8	258	381	10.96	15.73	36.51	0.57	15.9	0.17	0.13	55	0	109	BDL
B109	DDTS002	542.5	542.6	0.1	0.13	0.2	1.02	9.62	264	764	8.86	13.56	38.08	0.36	16.08	0.19	0.13	75	0	78	BDL
B109	DDTS002	542.6	542.7	0.1	0.13	0.09	0.85	9.72	221	630	11.85	14.01	42.45	0.23	14.87	0.18	0.14	62	0	BDL	148
B109	DDTS002	542.7	542.8	0.1	0.13	0.06	0.39	9.66	226	824	10.2	12.07	39.71	0.22	14.05	0.2	0.14	62	0	46	BDL
B109	DDTS002	542.8	542.9	0.1	0.16	0.11	1.22	13.1	238	694	9.55	10.42	37.74	0.21	12.73	0.19	0.15	74	0	BDL	BDL
B109	DDTS002	542.9	543.0	0.1	0.28	0.22	3.57	15.85	218	751	14.21	11.84	38.25	0.3	12.19	0.21	0.14	69	0	69	BDL
B109	DDTS002	543.0	543.1	0.1	0.15	0.09	1.61	11.1	219	698	15.01	13.08	38.7	0.79	11.12	0.19	0.13	60	0	173	215
B109	DDTS002	543.1	543.2	0.1	0.26	0.34	3.35	13.01	233	636	11.88	12.32	39.35	0.91	12.15	0.21	0.13	61	0	221	152
B109	DDTS002	543.2	543.3	0.1	0.11	0.1	0.71	10.12	204	642	12.58	12.62	37.25	0.81	10.92	0.18	0.13	50	0	236	BDL
B109	DDTS002	543.3	543.4	0.1	0.09	0.11	0.67	9.29	249	647	11.81	12.06	39.97	0.72	11.88	0.22	0.14	48	0	251	166
B109	DDTS002	543.4	543.5	0.1	0.13	0.22	1.56	10.94	213	643	14.79	12.96	37.81	0.49	12.84	0.22	0.14	66	0	103	BDL
B109	DDTS002	543.5	543.6	0.1	0.12	0.13	1.35	11.82	203	651	14.4	13.41	37.31	0.28	12.44	0.17	0.14	56	0	130	BDL
B109	DDTS002	543.6	543.7	0.1	2.00	0.38	17.7	>45	110	500	7.97	10.33	26.62	0.24	12.59	0.13	0.1	63	0	BDL	ND
B109	DDTS002	543.7	543.8	0.1	0.73	0.94	7.82	23.57	168	559	10.37	9.26	40.1	0.22	12.63	0.14	0.13	102	94	BDL	BDL
B109	DDTS002	543.8	543.9	0.1	0.37	0.28	4.19	13.48	203	793	18.78	9.48	36.26	0.18	11.98	0.12	0.09	54	0	87	BDL
B109	DDTS002	543.9	544.0	0.1	0.25	0.2	2.53	9.23	213	788	17.63	12.68	37.47	0.17	13.98	0.14	0.09	58	0	211	BDL
B109	DDTS002	544.0	544.1	0.1	0.34	0.32	3.67	10.04	236	793	16.77	11.22	36.51	0.17	15.15	0.14	0.09	72	0	212	128
B110	DDTS002	544.1	544.2	0.1	0.39	0.17	4.22	12.81	225	707	16.2	10.48	36.23	0.2	13.34	0.13	0.09	61	0	151	BDL
B110	DDTS002	544.2	544.3	0.1	0.22	0.12	2.07	8.8	254	796	18.76	9.99	36.61	0.14	13.98	0.16	0.1	57	0	215	BDL
B110	DDTS002	544.3	544.4	0.1	0.14	0.09	1.06	6.95	252	763	16.63	11.21	38.05	0.15	14.25	0.15	0.1	42	0	220	161
B110	DDTS002	544.4	544.5	0.1	0.27	0.19	2.75	9.87	316	771	15.87	9.24	37	0.15	14.47	0.18	0.1	53	0	159	BDL
B110	DDTS002	544.5	544.6	0.1	0.46	0.18	4.08	12.45	227	700	14.57	10.46	34.47	0.15	13.61	0.16	0.1	60	0	161	BDL
B110	DDTS002	544.6	544.7	0.1	0.31	0.61	3.39	13.17	239	631	14.29	12.01	38.49	0.19	14.7	0.15	0.12	67	0	146	BDL
B110	DDTS002	544.7	544.8	0.1	0.48	0.21	4.98	15.13	221	654	15.78	12.67	35.25	0.19	13.43	0.15	0.1	51	0	156	BDL



B110	DDTS002	544.8	544.9	0.1	0.51	0.89	4.23	19.11	251	748	9.13	9.49	33.42	0.14	13.61	0.15	0.12	77	0	101	BDL
B110	DDTS002	544.9	545.0	0.1	0.48	0.8	4.21	12.97	199	688	17.41	10.33	35.95	0.12	12.87	0.13	0.09	67	0	112	BDL
B110	DDTS002	545.0	545.1	0.1	0.53	0.53	5.3	15.26	219	731	14.08	11.05	32.56	0.13	12.77	0.15	0.09	67	0	162	BDL
B110	DDTS002	545.1	545.2	0.1	0.42	0.32	4.35	11.7	260	792	14.83	11.38	36.02	0.18	14.07	0.17	0.09	55	0	125	BDL
B110	DDTS002	545.2	545.3	0.1	0.36	0.47	3.92	13.45	194	648	13.69	12.57	36.01	0.26	13.3	0.14	0.11	54	0	143	BDL
B110	DDTS002	545.3	545.4	0.1	0.4	1.62	4.66	13.16	262	679	13.69	9.74	35.91	0.16	15.94	0.15	0.09	83	0	170	BDL
B110	DDTS002	545.4	545.5	0.1	0.52	0.8	6.11	16.24	215	624	9.92	10.66	33.07	0.34	14.91	0.18	0.11	53	0	217	BDL
B110	DDTS002	545.5	545.6	0.1	0.32	1.03	3.7	11.67	251	717	12.3	10.42	36.96	0.17	13.41	0.16	0.11	87	0	142	BDL
B110	DDTS002	545.6	545.7	0.1	0.38	0.47	4.27	12.89	200	594	12.61	12.68	36.1	0.32	13.37	0.16	0.11	68	0	271	BDL
B110	DDTS002	545.7	545.8	0.1	0.42	0.5	4.58	15.16	276	817	14.55	9.45	37.58	0.24	14.03	0.19	0.13	86	0	221	BDL
B110	DDTS002	545.8	545.9	0.1	0.27	0.14	2.92	13.96	224	612	11.48	12.58	36.09	0.31	10.8	0.16	0.15	47	0	205	BDL
B110	DDTS002	545.9	546.0	0.1	0.17	0.13	1.79	9.51	198	655	7.19	13.48	33.6	0.41	11.92	0.15	0.12	60	0	265	BDL
B110	DDTS002	546.0	546.1	0.1	0.43	0.19	2.54	16.12	234	601	13.22	9.92	34.97	0.31	10.36	0.16	0.14	64	0	135	BDL
B110	DDTS002	546.1	546.2	0.1	0.42	0.18	3.83	17.43	244	762	13.07	9.64	35.17	0.28	12.6	0.17	0.14	56	0	144	BDL
B110	DDTS002	546.2	546.3	0.1	0.26	0.15	2.74	13.01	192	585	9.72	13.83	38.08	0.46	11.79	0.15	0.13	48	0	218	BDL
B110	DDTS002	546.3	546.4	0.1	0.13	0.08	1.26	10.07	226	609	11.15	14.72	39.12	0.74	10.98	0.18	0.14	47	0	264	199
B110	DDTS002	546.4	546.5	0.1	0.5	0.3	5.9	16.55	211	683	11.04	13.3	35.9	0.95	11.82	0.21	0.12	56	0	207	186
B110	DDTS002	546.5	546.6	0.1	0.63	0.4	5.61	18.8	191	608	12.94	12.23	34.73	0.56	10.69	0.18	0.12	54	0	129	BDL
B110	DDTS002	546.6	546.7	0.1	0.44	0.13	3.86	15.79	204	663	13	11.47	35.87	0.3	11.18	0.17	0.13	47	0	68	BDL
B110	DDTS002	546.7	546.8	0.1	0.31	0.25	2.56	14.26	225	552	7.65	12.09	38.76	0.82	10.95	0.21	0.14	64	0	225	BDL
B110	DDTS002	546.8	546.9	0.1	0.46	0.37	4.09	16.02	243	507	10.6	11.5	35.47	0.94	11.2	0.23	0.13	56	0	269	BDL
B110	DDTS002	546.9	547.0	0.1	0.74	0.13	6.95	21.84	143	597	7.26	10.11	30.06	0.67	12.66	0.14	0.11	67	0	185	BDL
B110	DDTS002	547.0	547.1	0.1	2.78	0.25	20.46	>45	146	425	5.92	10.1	24.35	0.72	7.86	0.21	0.11	68	0	112	BDL
B110	DDTS002	547.1	547.2	0.1	5.35	0.29	28.33	>45	76	260	0	4.99	12.68	0.36	5.42	0.09	0.06	0	0	BDL	ND
B110	DDTS002	547.2	547.3	0.1	2.2	0.35	16.94	>45	115	372	4.33	9.94	23.24	0.62	9.75	0.13	0.12	53	0	152	BDL
B110	DDTS002	547.3	547.4	0.1	0.99	0.26	9.75	28.11	118	276	7.27	17.84	31.25	1.4	7.89	0.15	0.2	69	0	390	BDL
B110	DDTS002	547.4	547.5	0.1	0.28	0.21	2.14	14.04	164	336	9.19	18.29	34.58	1.24	6.91	0.14	0.19	73	0	366	235
B110	DDTS002	547.5	547.6	0.1	0.18	0.1	1.72	8.86	209	381	8.25	20.66	36.59	1.98	9.67	0.15	0.14	53	0	456	249
B110	DDTS002	547.6	547.7	0.1	0.1	0.09	0.64	8.65	225	457	9.03	16.62	36.47	1.39	9.79	0.15	0.13	49	0	321	209
B110	DDTS002	547.7	547.8	0.1	0.13	0.15	1.12	9.21	270	479	11.36	14.12	37.1	1.26	12.73	0.2	0.15	49	0	287	274

B110	DDTS002	547.8	547.9	0.1	0.06	0.05	0.26	6.24	261	449	10.53	16.35	41.2	1.33	13.1	0.24	0.13	44	0	177	BDL
B110	DDTS002	547.9	548.0	0.1	0.11	0.08	0.71	9.36	273	583	9.06	11.79	33.61	1.18	14.35	0.19	0.14	77	0	514	BDL
B110	DDTS002	548.0	548.1	0.1	0.07	0.09	0.29	5.07	225	495	11.48	16.91	39.51	0.94	14.47	0.18	0.12	51	0	372	238
B110	DDTS002	548.1	548.2	0.1	0.05	0.05	0.2	5.8	241	488	12.44	16.69	41.17	1.23	13.7	0.2	0.12	55	0	413	166
B110	DDTS002	548.2	548.3	0.1	0.07	0.08	0.35	7.18	250	480	12.97	16.48	40.66	1.11	12.76	0.19	0.13	56	0	306	181
B110	DDTS002	548.3	548.4	0.1	0.24	0.24	3.04	9.74	222	297	10.91	18.19	40.14	1.35	11.19	0.24	0.12	50	0	358	BDL
B110	DDTS002	548.4	548.5	0.1	0.18	0.21	1.36	11.31	274	281	9.78	14.55	38.68	1.27	11.29	0.29	0.15	78	0	407	275
B110	DDTS002	548.5	548.6	0.1	0.35	0.87	5.88	16.48	221	452	7.05	16.41	43.5	0.99	8.75	0.27	0.13	72	0	318	159
B110	DDTS002	548.6	548.7	0.1	0.22	0.15	2.09	12.86	215	517	8.91	14.3	43.67	1.05	8.2	0.27	0.16	78	0	328	150
B110	DDTS002	548.7	548.8	0.1	0.17	0.1	1.35	11.76	160	164	6.16	19.31	43.88	1.44	6.55	0.22	0.18	87	0	320	BDL
B110	DDTS002	548.8	548.9	0.1	0.31	0.26	2.51	10.81	291	239	3.13	20.35	40.96	1.14	5.45	0.29	0.13	84	0	487	286
B110	DDTS002	548.9	549.0	0.1	0.32	0.24	3.03	12.85	300	155	4.74	15.97	46.53	1.04	4.92	0.29	0.19	92	0	513	BDL
B111	DDTS002	549.0	549.1	0.1	0.22	0.24	1.75	10.97	271	190	7.08	19.19	38.73	1.16	3.65	0.26	0.1	104	0	380	242
B111	DDTS002	549.1	549.2	0.1	0.68	0.95	6.52	20.32	284	459	0	16.13	37.81	1.01	6.07	0.27	0.1	67	0	357	273
B111	DDTS002	549.2	549.3	0.1	0.46	0.22	3.07	22.22	335	858	8.96	11.09	35.51	1.22	8.77	0.27	0.2	99	0	227	228
B111	DDTS002	549.3	549.4	0.1	0.12	0.06	0.57	10.14	311	817	9.47	16.82	40.26	1.75	10.69	0.25	0.15	76	0	182	250
B111	DDTS002	549.4	549.5	0.1	0.53	0.29	4.25	20.89	320	831	8.47	10.62	35.75	1.3	11.33	0.26	0.18	98	0	160	BDL
B111	DDTS002	549.5	549.6	0.1	0.39	0.77	4.14	19.62	302	748	10.01	11.72	36.36	1.08	10.79	0.23	0.17	97	0	115	219
B111	DDTS002	549.6	549.7	0.1	0.55	0.34	6.5	24.22	287	712	9.37	10.34	35.68	0.73	11.09	0.23	0.15	94	0	100	BDL
B111	DDTS002	549.7	549.8	0.1	0.44	0.21	4.66	21.38	252	668	9.78	12.69	37.92	1.17	10.3	0.22	0.16	84	0	123	241
B111	DDTS002	549.8	549.9	0.1	2.96	0.97	20.42	>45	139	535	5.7	7.88	22.75	0.56	7.48	0.14	0.12	80	0	87	ND
B111	DDTS002	549.9	550.0	0.1	4.4	2.98	26.72	>45	154	420	0	3.69	13.93	0.17	4.73	0.07	0.09	0	0	BDL	BDL
B111	DDTS002	550.0	550.1	0.1	1.41	1.9	10.24	>45	289	595	6.83	13.38	29.81	0.2	6.23	0.24	0.13	65	0	BDL	BDL
B111	DDTS002	550.1	550.2	0.1	0.6	1.68	5.34	25.26	164	457	7.54	12.74	31.43	0.78	11.15	0.21	0.16	105	0	95	BDL
B111	DDTS002	550.2	550.3	0.1	0.24	0.86	2.68	18.24	253	1097	16.64	6.81	38.78	0.36	11.61	0.29	0.17	87	0	BDL	BDL
B111	DDTS002	550.3	550.4	0.1	0.27	0.34	2.67	16.4	237	861	13.64	8.54	37.4	0.39	11.01	0.29	0.15	80	0	BDL	240
B111	DDTS002	550.4	550.5	0.1	0.78	0.99	7.45	25.6	186	741	11.13	8.8	33.44	0.75	10.69	0.25	0.13	86	0	62	BDL
B111	DDTS002	550.5	550.6	0.1	0.46	0.55	4.56	17.63	210	873	11.41	11.64	36.42	0.94	10.91	0.23	0.13	81	0	75	180
B111	DDTS002	550.6	550.7	0.1	0.3	0.42	3.82	14.46	193	896	14.35	8.6	38.84	0.65	9.96	0.18	0.13	61	0	55	159
B111	DDTS002	550.7	550.8	0.1	0.2	0.26	2	10.11	204	906	9.21	12.47	43.26	1.18	10.48	0.2	0.11	56	0	152	156

B111	DDTS002	550.8	550.9	0.1	0.14	0.1	1.56	11.28	178	838	15.91	12.19	40.28	0.84	9.41	0.18	0.13	52	0	153	BDL
B111	DDTS002	550.9	551.0	0.1	0.37	0.52	3.74	14.59	200	888	13.96	10.08	36.53	1.33	10.94	0.26	0.13	67	0	210	221
B111	DDTS002	551.0	551.1	0.1	0.78	0.42	8.4	28.77	175	778	8.18	9.86	32.32	0.99	9.62	0.19	0.19	83	0	201	BDL
B111	DDTS002	551.1	551.2	0.1	1.69	1.2	18.48	>45	125	649	10.35	8.71	28.43	0.56	7.13	0.13	0.16	58	0	85	BDL
B111	DDTS002	551.2	551.3	0.1	0.82	0.6	9.19	25.41	165	882	9.88	9.99	34.86	0.8	9.92	0.21	0.15	71	0	159	BDL
B111	DDTS002	551.3	551.4	0.1	0.47	0.42	4.72	17.6	171	939	12.62	12.68	37.43	1.07	9.35	0.18	0.14	57	0	140	BDL
B111	DDTS002	551.4	551.5	0.1	0.28	0.31	2.53	15.28	253	1330	11.54	8.18	36.14	1.04	12.3	0.26	0.16	71	0	182	280
B111	DDTS002	551.5	551.6	0.1	0.17	0.14	1.62	10.31	237	1246	15.97	10.38	40.7	1.08	11.65	0.25	0.13	54	0	131	239
B111	DDTS002	551.6	551.7	0.1	0.12	0.16	0.62	8.48	219	1071	10.35	11.48	38.25	1.12	10.45	0.22	0.12	46	0	135	220
B111	DDTS002	551.7	551.8	0.1	0.69	1.01	7.22	24.05	199	1031	8.05	8.6	34.93	0.86	11.86	0.24	0.13	66	0	148	BDL
B111	DDTS002	551.8	551.9	0.1	0.63	0.88	7.72	21.55	178	797	12.93	9.88	36.6	0.87	10.85	0.22	0.12	51	0	143	BDL
B111	DDTS002	551.9	552.0	0.1	0.09	0.09	0.24	8.79	198	909	10.78	9.75	40.39	0.8	11.01	0.24	0.12	57	0	182	213
B111	DDTS002	552.0	552.1	0.1	0.13	0.44	0.98	7.41	224	672	8.93	11.66	44.67	1.13	12.36	0.27	0.12	67	0	201	273
B111	DDTS002	552.1	552.2	0.1	0.13	0.19	0.92	7.51	197	541	10.49	14.22	43.02	1.63	10.88	0.22	0.12	50	0	207	245
B111	DDTS002	552.2	552.3	0.1	0.14	0.38	1.17	9.11	208	725	8.62	11.44	41.91	1.08	11.95	0.23	0.13	53	0	127	216
B111	DDTS002	552.3	552.4	0.1	0.37	0.54	3.02	11.72	164	497	8.69	9.89	42.79	0.88	10.06	0.28	0.11	62	0	56	BDL
B111	DDTS002	552.4	552.5	0.1	0.3	0.54	2.91	14.18	214	695	9.53	9.92	36.24	0.73	11.43	0.24	0.13	76	0	64	146
B111	DDTS002	552.5	552.6	0.1	0.23	0.49	1.29	8.99	184	691	13.8	13.37	41.32	1.34	10.7	0.22	0.12	54	0	152	BDL
B111	DDTS002	552.6	552.7	0.1	0.08	0.08	0.19	7.75	234	811	10.4	10.74	44.89	0.99	11.27	0.27	0.12	52	0	82	219
B111	DDTS002	552.7	552.8	0.1	0.12	0.1	0.56	7.11	209	827	8.65	12.7	43.1	1.13	10.51	0.24	0.11	42	0	111	234
B111	DDTS002	552.8	552.9	0.1	0.21	0.16	1.59	11.66	202	716	7.93	11.05	41.53	1	10.68	0.27	0.12	57	0	80	269
B111	DDTS002	552.9	553.0	0.1	0.1	0.07	0.37	8.86	212	776	7.69	10.29	43.51	0.28	13.41	0.21	0.13	56	0	BDL	196
B111	DDTS002	553.0	553.1	0.1	0.17	0.16	0.79	6.2	155	549	6.88	7.97	43.14	0.11	15.23	0.17	0.11	47	0	BDL	BDL
B111	DDTS002	553.1	553.2	0.1	0.12	0.13	0.61	8.86	233	842	15.63	9.33	42.03	0.53	13.41	0.28	0.13	57	0	BDL	231
B111	DDTS002	553.2	553.3	0.1	0.14	0.14	0.77	7.92	240	644	10.95	10.91	47.11	0.64	11.52	0.31	0.11	53	0	40	227
B111	DDTS002	553.3	553.4	0.1	0.14	0.12	1.14	5.58	220	513	10.49	12.87	44.74	0.77	14.09	0.23	0.1	59	0	BDL	BDL
B111	DDTS002	553.4	553.5	0.1	0.1	0.08	0.63	6.74	216	673	11.67	10.84	48.63	0.89	12.73	0.31	0.11	53	0	43	BDL
B111	DDTS002	553.5	553.6	0.1	0.08	0.11	0.31	8.99	238	731	8.12	11.62	43.6	0.54	13.71	0.27	0.13	54	0	BDL	BDL
B111	DDTS002	553.6	553.7	0.1	0.1	0.06	0.54	7.75	195	483	11.11	12.78	46.49	1.07	11.24	0.26	0.11	48	0	59	168
B111	DDTS002	553.7	553.8	0.1	0.3	0.18	1.02	9.22	202	527	12.29	12.95	41.94	1.05	12.16	0.24	0.12	48	0	56	159



B111	DDTS002	553.8	553.9	0.1	0.35	0.43	3.23	11.78	204	590	9.87	9.93	43.75	1.03	11.31	0.3	0.11	57	0	98	176
B111	DDTS002	553.9	554.0	0.1	0.16	0.18	1.39	8.58	193	651	8.24	13.06	41.69	1.06	13.95	0.24	0.11	59	0	98	265
B112	DDTS002	554.0	554.1	0.1	0.1	0.08	0.35	8.13	209	837	10.61	11.12	44.77	1.1	13.75	0.28	0.12	64	0	104	330
B112	DDTS002	554.1	554.2	0.1	0.11	0.08	0.41	6.93	203	673	11.38	11.19	43.58	1.17	13.75	0.25	0.11	59	0	124	187
B112	DDTS002	554.2	554.3	0.1	0.21	0.15	1.86	12.07	204	639	8.43	10.31	42.35	1.19	12.79	0.27	0.12	70	0	126	194
B112	DDTS002	554.3	554.4	0.1	1.2	0.55	10.12	32.12	205	380	5.94	4.85	38.1	0.45	11.7	0.2	0.11	119	0	BDL	BDL
B112	DDTS002	554.4	554.5	0.1	0.13	0.12	0.83	9.01	236	792	12.29	10.89	42.91	1	13.87	0.27	0.12	57	0	59	158
B112	DDTS002	554.5	554.6	0.1	0.14	0.15	0.84	7.93	239	903	11.05	10.89	44.39	1.07	14.47	0.33	0.12	53	0	67	212
B112	DDTS002	554.6	554.7	0.1	0.35	0.56	2.74	15.56	217	927	14.23	8.31	39.23	0.59	11.8	0.24	0.13	71	0	74	199
B112	DDTS002	554.7	554.8	0.1	0.28	0.38	2.7	14.98	206	1017	15.77	6.52	41.69	0.21	12.45	0.25	0.13	57	0	79	BDL
B112	DDTS002	554.8	554.9	0.1	0.25	0.27	1.91	12.97	213	975	9.7	8.36	35.86	0.22	11.31	0.26	0.12	53	0	104	183
B112	DDTS002	554.9	555.0	0.1	0.28	0.36	2.2	16.46	209	956	14.74	7.33	37.82	0.24	12.18	0.24	0.14	71	0	129	BDL
B112	DDTS002	555.0	555.1	0.1	0.32	0.37	3.02	15.67	229	828	15.72	8.76	38.17	0.25	11.3	0.24	0.12	63	0	89	160
B112	DDTS002	555.1	555.2	0.1	0.55	0.68	4.59	21.43	215	830	14.98	7.32	32.46	0.25	11.25	0.26	0.13	76	0	97	BDL
B112	DDTS002	555.2	555.3	0.1	0.32	0.28	2.8	15.11	236	859	18.77	7.41	37.46	0.22	11.93	0.25	0.13	53	0	93	BDL
B112	DDTS002	555.3	555.4	0.1	0.34	0.39	2.5	15.97	304	857	16.59	5.87	37.83	0.23	13.28	0.33	0.12	65	0	98	227
B112	DDTS002	555.4	555.5	0.1	0.35	0.36	3.39	17.85	297	659	16.51	7.83	37.4	0.19	10.12	0.31	0.13	62	0	63	BDL
B112	DDTS002	555.5	555.6	0.1	0.42	0.47	4.12	18.72	297	720	14.01	8.18	36.12	0.25	10.7	0.33	0.13	64	0	71	318
B112	DDTS002	555.6	555.7	0.1	0.36	0.31	3.45	18.74	283	765	13.07	6.69	35.44	0.21	11.64	0.31	0.14	61	0	72	173
B112	DDTS002	555.7	555.8	0.1	0.38	0.53	3.52	17.8	229	687	13	8.9	38.27	0.2	10.05	0.3	0.13	67	0	67	BDL
B112	DDTS002	555.8	555.9	0.1	0.27	0.26	2.31	16.09	264	699	13.93	7	36.84	0.21	9.55	0.33	0.13	58	0	72	198
B112	DDTS002	555.9	556.0	0.1	0.27	0.14	2.43	19.18	281	767	11.88	6.56	38.27	0.27	10.25	0.37	0.15	76	0	79	241
B112	DDTS002	556.0	556.1	0.1	0.43	0.35	3.81	19.24	244	677	16.68	7.12	37.86	0.24	9.17	0.34	0.13	64	0	BDL	172
B112	DDTS002	556.1	556.2	0.1	0.2	0.13	1.35	15.19	271	733	16.8	7.8	40.98	0.22	10.36	0.38	0.14	63	0	61	262
B112	DDTS002	556.2	556.3	0.1	0.25	0.19	2.37	15.14	225	702	14.1	6.49	39.69	0.17	10.01	0.29	0.12	61	0	52	BDL
B112	DDTS002	556.3	556.4	0.1	0.23	0.17	2.4	16.03	223	760	15.68	6.32	40.89	0.13	10.16	0.28	0.13	63	0	64	BDL
B112	DDTS002	556.4	556.5	0.1	0.16	0.21	1.23	13.13	238	632	17.34	6.98	44.2	0.4	9.47	0.36	0.12	67	0	66	237
B112	DDTS002	556.5	556.6	0.1	0.27	0.26	1.98	15.98	187	543	12.28	5.46	41.53	0.23	7.85	0.28	0.13	64	0	BDL	BDL
B112	DDTS002	556.6	556.7	0.1	0.41	0.51	2.75	16.2	166	665	12.36	6.14	43.85	0.25	9.32	0.25	0.13	58	0	BDL	169
B112	DDTS002	556.7	556.8	0.1	0.28	0.3	2.69	14.73	155	664	15.41	6.03	43.38	0.34	9.75	0.21	0.13	65	0	BDL	BDL

B112	DDTS002	556.8	556.9	0.1	0.48	0.75	3.72	22.64	163	888	15.78	5.38	37.28	0.24	10.95	0.23	0.24	133	0	BDL	BDL
B112	DDTS002	556.9	557.0	0.1	0.25	1.01	2.26	17.24	119	703	10.2	6.93	43.27	0.15	10.27	0.22	0.22	134	0	BDL	BDL
B112	DDTS002	557.0	557.1	0.1	0.43	0.44	2.91	26.64	163	786	14.08	5.69	38.53	0.11	9.94	0.28	0.28	122	0	BDL	190
B112	DDTS002	557.1	557.2	0.1	0.52	0.42	4.66	26.3	161	690	15.52	5.64	40.51	0.09	8.56	0.25	0.24	98	0	BDL	BDL
B112	DDTS002	557.2	557.3	0.1	0.69	0.35	5.54	26.35	158	841	17.46	4.91	36.15	0.09	8.84	0.21	0.23	93	0	BDL	BDL
B112	DDTS002	557.3	557.4	0.1	1.1	0.67	11.33	35.62	127	886	12.67	5.11	36.08	0.08	7.26	0.2	0.17	59	0	BDL	BDL
B112	DDTS002	557.4	557.5	0.1	1.12	0.58	11.22	36.49	150	817	9.26	4.64	37.68	0.05	6.46	0.21	0.16	63	0	BDL	BDL
B112	DDTS002	557.5	557.6	0.1	3.94	4.71	24.46	>45	60	563	5.85	3.75	25.92	0.06	2.2	0.12	0.11	69	0	BDL	ND
B112	DDTS002	557.6	557.7	0.1	5.94	0.55	32.25	>45	113	530	0	4.47	18.57	0.12	0.62	0.15	0.11	0	0	BDL	ND
B112	DDTS002	557.7	557.8	0.1	4.03	2.38	23.51	>45	144	608	0	5.96	29.57	0.44	1.16	0.22	0.13	0	0	BDL	BDL
B112	DDTS002	557.8	557.9	0.1	5.97	0.83	29.21	>45	149	536	0	4.56	18.13	0.91	1.15	0.2	0.07	0	0	BDL	BDL
B112	DDTS002	557.9	558.0	0.1	5.44	4.16	30.12	>45	101	542	0	5.6	23.13	0.9	2.27	0.2	0.08	0	0	BDL	BDL
B112	DDTS002	558.0	558.1	0.1	5.07	7.8	32.42	>45	58	464	0	4.55	21.29	0.38	2.03	0.18	0.16	0	0	BDL	ND
B112	DDTS002	558.1	558.2	0.1	3.42	1.17	21.14	>45	103	310	0	8.05	31.56	1.01	1.48	0.21	0.11	0	0	BDL	BDL
B112	DDTS002	558.2	558.3	0.1	1.06	0.53	7.48	32.09	160	135	0	13.42	42.84	2.51	1.22	0.28	0.1	88	0	200	566
B112	DDTS002	558.3	558.4	0.1	0.63	0.27	5.89	15.98	178	87	0	13.26	46.53	2.71	1.37	0.35	0.06	74	0	274	537
B112	DDTS002	558.4	558.5	0.1	0.11	0.18	1.38	4.01	236	74	0	16.74	53.92	3.02	1.73	0.38	0.05	75	0	301	580
B112	DDTS002	558.5	558.6	0.1	0.08	0.24	1.86	5.87	206	115	0	14.8	48.52	3.48	1.93	0.38	0.05	94	0	362	585
B112	DDTS002	558.6	558.7	0.1	0.09	0.3	1.63	8.89	208	132	3.78	15.12	49.15	1.34	6.58	0.43	0.12	96	0	471	311
B112	DDTS002	558.7	558.8	0.1	0.06	0.18	1.12	3.62	222	96	0	14.38	52.95	2.24	5.33	0.45	0.08	85	0	413	583
B112	DDTS002	558.8	558.9	0.1	0.06	0.31	1.44	2.98	233	96	0	15.51	56.53	2.84	2.72	0.43	0.04	90	0	287	647
B112	DDTS002	558.9	559.0	0.1	0.04	0.05	1.25	1.06	240	84	0	16.63	57.12	3.65	1.88	0.43	0.04	62	0	242	764
B113	DDTS002	559.0	559.1	0.1	0.05	0.04	1.17	1.26	217	56	0	15.11	57.53	2.66	3.07	0.5	0.04	82	0	352	635
B113	DDTS002	559.1	559.2	0.1	0.05	0.08	0.93	2.31	258	58	0	11.97	52.31	2.81	3.11	0.57	0.07	96	0	365	647
B113	DDTS002	559.2	559.3	0.1	0.09	0.22	1.34	2.01	235	88	0	14.16	53.92	2.85	2.56	0.46	0.04	97	48	294	528
B113	DDTS002	559.3	559.4	0.1	0.06	0.13	1.48	7.52	308	177	0	14.16	49.71	3.61	2.23	0.79	0.06	124	0	254	659
B113	DDTS002	559.4	559.5	0.1	0.05	0.07	1.05	2.23	238	88	0	15.53	53.72	3.13	2.38	0.51	0.04	82	0	329	475
B113	DDTS002	559.5	559.6	0.1	0.05	0.14	1.92	3.94	250	118	0	16.31	53.15	3.28	2.21	0.45	0.04	96	0	278	593
B113	DDTS002	559.6	559.7	0.1	0.06	0.29	1.02	1.78	218	97	0	17.16	56.25	2.61	3.36	0.44	0.04	70	0	316	547
B113	DDTS002	559.7	559.8	0.1	0.08	0.5	1.5	3.99	234	96	0	14.94	51.13	2.11	3.84	0.41	0.05	93	0	394	549

B113	DDTS002	559.8	559.9	0.1	0.04	0.06	1.32	2.4	266	91	0	18.23	54.72	3.25	2.38	0.45	0.04	82	0	350	691
B113	DDTS002	559.9	560.0	0.1	0.04	0.05	1.05	2.37	237	89	0	16.16	49.56	2.37	2.13	0.41	0.04	63	0	295	479
B113	DDTS002	560.0	560.1	0.1	0.04	0.04	1.05	3.08	245	79	0	19.89	57.46	3.74	1.99	0.42	0.05	78	0	284	699
B113	DDTS002	560.1	560.2	0.1	0.04	0.03	0.33	1.43	234	251	0	17.8	53.98	2.72	2.56	0.48	0.04	93	0	308	434
B113	DDTS002	560.2	560.3	0.1	0.04	0.03	0.32	0.54	258	73	0	17.79	54.75	3.19	2.63	0.52	0.04	110	0	305	595
B113	DDTS002	560.3	560.4	0.1	0.05	0.08	0.51	1.36	237	79	0	16.02	54.17	3.25	2.33	0.49	0.05	96	0	313	579
B113	DDTS002	560.4	560.5	0.1	0.05	0.04	0.79	0.42	199	95	0	17.52	56.19	3.48	2.74	0.44	0.04	74	0	261	691
B113	DDTS002	560.5	560.6	0.1	0.06	0.14	0.99	0	203	0	0	16.38	53.83	3.48	3.62	0.28	0.03	60	0	211	839
B113	DDTS002	560.6	560.7	0.1	0.14	1.07	2.04	4.97	344	87	0	14.54	48.43	2.9	2.16	0.39	0.04	92	0	252	558
B113	DDTS002	560.7	560.8	0.1	0.07	1.68	1.5	4.57	308	83	0	18.39	51.09	5.04	3.05	0.51	0.05	107	0	217	1029
B113	DDTS002	560.8	560.9	0.1	0.07	0.08	0.83	2.69	220	58	0	15.48	55.12	2.7	2.48	0.57	0.04	110	0	332	497
B113	DDTS002	560.9	561.0	0.1	0.04	0.02	0	0	221	0	0	17.85	60.11	2.28	2.53	0.58	0.04	96	0	306	482
B113	DDTS002	561.0	561.1	0.1	0.04	0.03	0.41	1.77	195	54	0	15.57	57.31	4.23	1.96	0.56	0.04	90	0	299	675
B113	DDTS002	561.1	561.2	0.1	0.04	0.03	0.46	0	205	76	0	16.8	59.9	2.45	2.52	0.43	0.03	91	0	309	565
B113	DDTS002	561.2	561.3	0.1	0.05	0.27	0.84	1.52	189	70	0	17.01	53.55	3.55	2.33	0.39	0.04	76	0	276	637
B113	DDTS002	561.3	561.4	0.1	0.07	0.06	1.12	1.16	233	75	0	16.09	56.83	3.52	1.87	0.36	0.03	77	0	221	765
B113	DDTS002	561.4	561.5	0.1	0.05	0.06	1.12	1.03	220	47	0	16.17	56.28	3.7	1.43	0.36	0.04	79	0	221	763
B113	DDTS002	561.5	561.6	0.1	0.04	0.13	0.8	2.32	230	64	0	16.4	55.81	4.56	2.15	0.42	0.05	77	0	270	690
B113	DDTS002	561.6	561.7	0.1	0.05	0.05	0.74	4.55	273	88	0	16.95	52.02	3.2	2.07	0.47	0.05	96	0	302	504
B113	DDTS002	561.7	561.8	0.1	0.05	0.07	0.97	0.35	221	84	0	16.22	55.22	2.65	2.07	0.41	0.04	73	0	237	668
B113	DDTS002	561.8	561.9	0.1	0.05	0.06	0.7	0	230	69	0	16.05	57.82	2.34	2.5	0.43	0.03	79	0	322	512
B113	DDTS002	561.9	562.0	0.1	0.04	0.07	0.47	0	172	38	0	13.39	49.39	2.36	1.87	0.36	0.03	72	0	366	479
B113	DDTS002	562.0	562.1	0.1	0.06	0.21	0.49	0	201	98	0	13.71	53.3	4.07	3.05	0.43	0.03	55	0	326	707
B113	DDTS002	562.1	562.2	0.1	0.05	0.03	0	1.1	213	63	0	13.64	54.56	4.45	2.14	0.51	0.04	82	0	352	670
B113	DDTS002	562.2	562.3	0.1	0.04	0.06	1.58	6.91	286	98	3.4	17.13	49.75	3.44	1.79	0.45	0.05	94	0	295	801
B113	DDTS002	562.3	562.4	0.1	0.04	0.03	0.39	2.55	202	75	0	15.93	50.82	2.66	2.98	0.52	0.05	104	0	383	535
B113	DDTS002	562.4	562.5	0.1	0.04	0.02	0.21	2.19	211	81	0	17.96	55.93	2.77	2.4	0.55	0.04	91	0	280	545
B113	DDTS002	562.5	562.6	0.1	0.05	0.02	0	3.05	211	63	0	13.38	56.06	4.91	1.92	0.49	0.04	100	0	315	584
B113	DDTS002	562.6	562.7	0.1	0.05	0.03	0.51	5.43	304	92	0	15.02	52.51	3.68	2.09	0.52	0.05	99	0	310	562
B113	DDTS002	562.7	562.8	0.1	0.05	0.03	0.69	1.77	226	102	0	13.34	56.38	3.63	1.65	0.43	0.04	73	0	256	690



## APPENDIX 2 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
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</li> </ul>	<ul style="list-style-type: none"> <li>NQ sized Diamond drill core was collected in core trays and has not been cut at this stage.</li> <li>Whole drill core was processed through the Minalyzer CS continuous XRF scanner unit in Sweden.</li> </ul>
	<ul style="list-style-type: none"> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	<ul style="list-style-type: none"> <li>7.5m of core from 12DDTS006 was submitted for calibrating the Minalyze XRF scanner against known laboratory assay results (reported in 2012 &amp; 2013).</li> <li>There was a high correlation between the assay and the XRF scanner results.</li> </ul>
	<ul style="list-style-type: none"> <li>Aspects of the determination of mineralisation that are material to the Public Report.</li> </ul>	<ul style="list-style-type: none"> <li>Mineralisation in hole 21DDTS002 has been verified by Minalyzer XRF continuous scanning.</li> <li>Determination of sulphide mineralisation in subsequent holes has been based on geological logging in Sweden and photo analysis in Australia. Visual sulphide estimates have been tabulated in the report body.</li> </ul>
	<ul style="list-style-type: none"> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information</li> </ul>	<ul style="list-style-type: none"> <li>Diamond Core drilling was used to obtain 3m length samples from the barrel which are then marked in one meter intervals based on the drillers core block measurement.</li> <li>XRF assay samples were collected in 10cm intervals using continuous scanning and analytical compositing.</li> <li>Further samples will be determined by geological/sulphide boundaries then dispatched, cut and sampled by MSA analytical in Sweden and assayed by MSA analytical an accredited laboratory in Vancouver</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Drilling was undertaken by Allroc AB using NQ2 sized drill core.</li> <li>Hole was collared with mud rotary from surface (~4m) and cored with NQ2 sized cored to EOH.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>Core recovery was recorded by the drill crew and verified by the geologist.</li> <li>RQD measurements will be digitally recorded to ensure recovery details are captured.</li> <li>Sample recovery in both holes was high with negligible loss of recovery observed.</li> <li>Diamond core drilling is the highest standard and no relationship has been established between sample recovery and reported grade as the core is in very good condition.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Logging</b>	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>Detailed industry standard of collecting core in wooden core trays, marking meter intervals and logging will be undertaken</li> <li>Core trays were photographed prior to logging.</li> <li>Drill hole logs are to be recorded in Excel spread sheets and validated in Micromine Software as the drilling progress.</li> <li>The entire length of both holes was summary logged with detailed logging to commence.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Calibration core was ½ sawn and scanned by the Minalyzer CS scanner.</li> <li>Assay results for the calibration samples were supplied to Minalyzer who generated calibrated XRF results.</li> <li>Core from 21DDTS002 was kept whole for scanning in the Minalyzer CS scanner and utilised the calibrations.</li> <li>QAQC calibration was completed by Minalyze to ensure sample representivity between holes.</li> <li>Core will be ½ sawn for traditional laboratory analysis.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>Ragnar commissioned Minalyzer CS to scan diamond drill core using a non-destructive X-ray fluorescence (XRF) analysis by energy-dispersive spectrometry. The X-ray beam scans at a width of 2cm by 1mm thick perpendicular to the drill core axis.</li> <li>Drill core was scanned with an Ag anode X-ray tube at 30 kV and 24 mA.</li> <li>Scans and completed in 10cm intervals and the results digitally averaged for the interval.</li> <li>Two ORES standards were used during the calibration process.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> </ul>	<ul style="list-style-type: none"> <li>Significant interval samples are being cut and sent to MSAAnalytical an accredited laboratory for analysis</li> </ul>
	<ul style="list-style-type: none"> <li>The use of twinned holes.</li> </ul>	<ul style="list-style-type: none"> <li>NA</li> </ul>
	<ul style="list-style-type: none"> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	<ul style="list-style-type: none"> <li>The data was collected and logged using Excel spreadsheets and validated using Micromine Software. The data will be loaded into a Dropbox hosted database by Geolithic geological consultant.</li> </ul>
	<ul style="list-style-type: none"> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Data is presented in the 10cm assays intervals that was supplied by Minalyze.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> </ul>	<ul style="list-style-type: none"> <li>The holes were pegged by GeoVista consultants using a hand held GPS ± 3m. The collar positions and initial azimuths will later be surveyed with RTK GPS</li> <li>The rig was setup over the nominated hole position and final GPS pickup occurred at the completion of the hole.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>SWEREF99TM</li> <li>More than adequate given the early stage of the project &amp; relatively flat nature of the terrain.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Refer to Cross Section and Plans in report body</li> <li>Minalyzer CS produces samples at both 10cm and 1m resolution. Intersections in the report body utilise the 10cm resolution data as tabulated in Appendix 1.</li> <li>No Mineral Resource is being stated.</li> <li>No post sample compositing has been applied and is presented as length-weighted averages.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>The drill line and drill hole orientation are oriented normal to the contact of the targeted model</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Samples are in the possession of GeoVista personnel from field collection to laboratory submission.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No audits or reviews have been conducted for this release given the very small size of the dataset.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>All regulatory and heritage approvals have been met and work permits approved. There are no known impediments to operate in the area.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<p>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.</p>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<p>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.</p> <p>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</p>



Criteria	JORC Code explanation	Commentary
		<p>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.</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 21st century technologies such as electrical geophysics to historic mining belts and warrants further evaluation and exploration.</p>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> </ul>	<ul style="list-style-type: none"> <li>All reported drill results have been length-weighted averaged at a nominal 0.5%Ni cutoff for the upper and lower sulphide boundaries.</li> <li>No maximum cutoff has been applied.</li> <li>Internal dilution of &lt;0.5% Ni is included within the overall mineralised sulphide zone for continuity.</li> </ul>
	<ul style="list-style-type: none"> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>No metal equivalents are reported.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>The 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 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.</li> <li>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.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being</li> </ul>	<ul style="list-style-type: none"> <li>Appropriate maps, sections and tables are included in the body of the Report.</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.	
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>All new drillholes within this announcement are detailed in the body of this report.</li> <li>High and low grade results have been reported for hole 21DDTS002</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; 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>	<ul style="list-style-type: none"> <li>Everything meaningful and material is disclosed in the body of the report.</li> <li>Geological observations are included in the report.</li> <li>No bulk samples, metallurgical, bulk density, groundwater, geotechnical and/or rock characteristics test were carried out.</li> <li>There are no known potential deleterious or contaminating substances.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>DHEM &amp; DHIP geophysical testing of the drill holes will commence soon.</li> <li>Further targeting, drill hole planning and submission of environment and work permits is currently being undertaken.</li> <li>All holes will be sent off for laboratory multielement analysis including Ni, Cu, Co, Au &amp; PGEs.</li> </ul>