Talga Boosts European Natural Graphite Resources

Battery anode and graphene company Talga Resources Ltd ("**Talga**" or "**the Company**") (**ASX:TLG**) is pleased to announce significant increases in the Company's natural graphite mineral resources within its wholly-owned Vittangi Graphite Project in northern Sweden ("Vittangi").

Talga has completed a review of its four JORC (2012) compliant graphite mineral resources within Vittangi (see Figure 1) to standardise parameters for increased accuracy in upcoming feasibility studies and enable better mine planning, permitting and reporting.

The review also identified significant new Exploration Targets to be tested along strike and at depth from current resources, providing potential for future additional resource growth. Highlights of results of the review include:

- **Updated Nunasvaara South Mineral Resource Estimate defines 15% increase in total natural graphite resources at Vittangi**
- **Vittangi graphite mineral resource now stands at 19.5 million tonnes at 24.0% graphite (based on a revised 10% cut-off grade across the project)**
- **Vittangi remains the world's highest grade natural graphite resource[1], set to play a significant role in battery anode production for the booming electric vehicle market**
- **Talga's total graphite resource inventory in Sweden increases to 55.3 million tonnes at 17.5% graphite, representing the largest source of natural graphite defined in Europe[2]**
- **Additional growth Exploration Targets totalling 26–46 million tonnes at 20–30% graphite defined within Vittangi and set to be drill-tested for potential further increases in scale**

  Note that the potential quantity and grade of the Exploration Target is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Commenting on the resource upgrade, Talga Managing Director Mark Thompson said: *"We are pleased to continue defining and growing these globally significant and strategically important European graphite deposits."*

"The European Commission recently published an updated list of Critical Raw Materials necessary for the energy transition to a more sustainable society. Natural graphite features on this list of materials vital to European development as it forms nearly half the volume of active materials in electric vehicle batteries, where it is used as the anode."

"With projected anode demand set to reach 3.2 million tonnes by 2030[3] the potential of Talga's Swedish integrated natural graphite anode production facility is significant for the European electric vehicle supply chain and the 'green' economy."

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1 Talga Benchmark Minerals Graphite & Anode 2019 Presentation, ASX:TLG 11 Nov 2019

2 http://www.minerals4eu.eu/

3 Benchmark Mineral Intelligence, August 2020: https://www.benchmarkminerals.com/megafactories/assessments/

VITTANGI MINERAL RESOURCE UPDATE

Talga is building an integrated graphite anode refinery in Europe using 100% renewable electricity to produce ultra-low emission coated anode for greener lithium-ion ("Li-ion") batteries. Production of Talga's flagship anode product, Talnode®-C, will use the unique high-grade natural flake graphite from the Company's wholly-owned Vittangi Graphite Project ("Vittangi"), near Kiruna in northern Sweden.

To support the Company's development plans for Vittangi, including the upcoming Niska Scoping Study, Talga has completed a review of its JORC (2012) compliant mineral resources to standardise parameters across the project's four natural graphite deposits; Nunasvaara South, Nunasvaara North, Niska South and Niska North. This standardisation will increase accuracy in the feasibility studies and enable better mine planning and reporting towards permitting applications, development and future expansion.

The review also identified significant new Exploration Targets along strike and at depth of the currently defined resources, providing additional potential resource growth at Vittangi in future.

Mineral Resource Update and Overview

The Vittangi mineral resource review was completed by independent geological consultant Albert Thamm, utilising diamond drilling completed at the Nunasvaara graphite deposits in 2012, 2014 and 2016 and the Niska graphite deposits in 2019 (for deposit locations see Figure 1).

Based on a revised 10% graphite ("Cg") lower cut-off grade across the entire project, the global Vittangi JORC (2012) mineral resource estimate ("MRE") now stands at **19.5 million tonnes ("Mt") @ 24.0%Cg** for 4.7Mt of contained graphite (see Table 1). This represents a 15% increase in total resource tonnes over previous Vittangi total MRE of 16.9Mt @ 25.6%Cg (**ASX:TLG 15 Oct 2019**).

Table 1. *Vittangi Graphite Project Total (JORC) Code Compliant Mineral Resource Estimate*

Deposit	Resource Category	Tonnage (t)	Graphite (% Cg)
Nunasvaara	Indicated	10,400,00	25.6
	Inferred	4,500,000	18.3
Niska	Indicated	4,600,000	25.8
Total	**Indicated & Inferred**	**19,500,000**	**24.0**

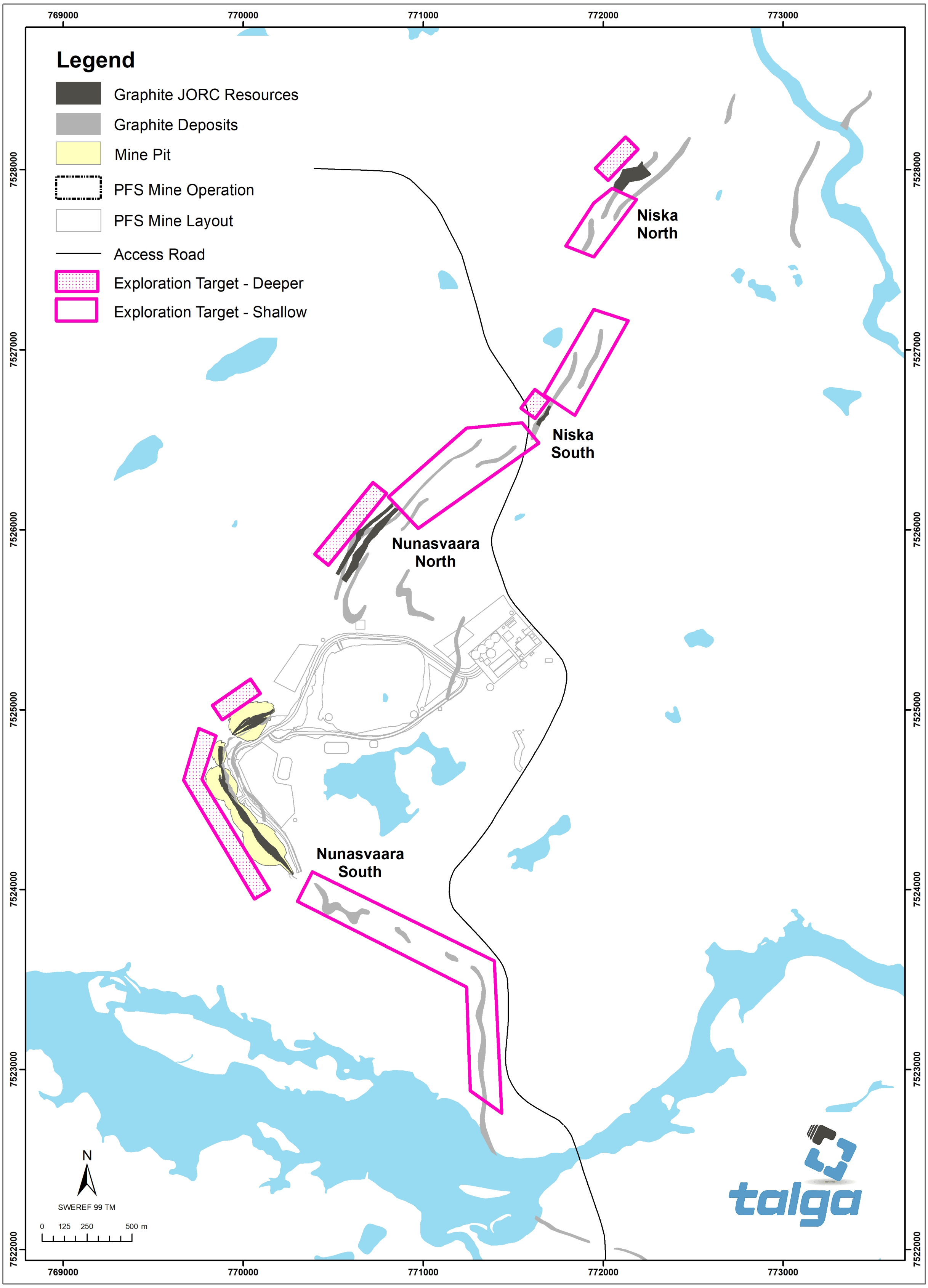
Note:
1. *Due to rounding totals may not reconcile exactly.*
2. *Ore tonnes rounded to nearest hundred thousand tonnes.*
3. *Nunasvaara Resources at 10%Cg cut-off, Niska Resources at 10%Cg cut-off as at 16 September 2020.*
4. *The Nunasvaara graphite MRE was disclosed on 16 September 2020 in accordance with the 2012 JORC Code. The Niska graphite MRE was disclosed in October 2019 in accordance with the 2012 JORC Code (ASX:TLG 15 October 2019).*
5. *The total for the Vittangi Graphite Project has increased to 19.5Mt at 24.0%Cg from the previous 16.9Mt at 25.6%Cg due to the restatement of the Nunasvaara Resources and the changes discussed above.*

Following the update, Vittangi remains the world's highest grade graphite mineral resource[3] and the largest defined graphite mineral resource in Europe. The MRE update does not affect the Nunasvaara resource high grade domain of 2.0Mt @ 32.6%Cg or the Nunasvaara ore reserve of 1.9Mt @ 23.5%Cg (see Table 3 and 4).

The updated Vittangi MRE increases Talga's total Swedish graphite resource inventory to 55.3Mt @ 17.5%Cg, containing 9.7Mt of natural graphite. As an approximate guide, there is ~1Mt of graphite anode per 20 million electric vehicles (at average 50KWh battery pack per vehicle)[4].

4 Rho Motion - EV & Battery Outlook 2020

Figure 1. *Map showing Talga's Vittangi Graphite Resources and the Exploration Targets defined as a result of the review. Note mine layout subject to change and based on Company's PFS (ASX:TLG 23 May 2019).*



Geology

The geology of the area surrounding Vittangi, hosting the Nunasvaara South-North and Niska North-South graphite mineral resources, consists of a Proterozoic-aged greenstone sequence (Vittangi Greenstone Group) of sediments, volcanoclastics and intrusive rocks centred within the Vittangi district of Northern Sweden. Stratiform to stratabound graphite mineralisation occurs at Nunasvaara and Niska as two individual, sub-vertical 15-70m wide lithologically continuous units of a very fine-grained, dark-grey to black graphitic rock containing between 10-50% graphitic carbon as highly-crystalline, ultra-fine flakes. Pyrite, pyrrhotite and trace chalcopyrite may accompany the graphite mineralisation.

The Swedish Geological Survey (SGU) reported in 2018 "In the Nunasvaara area (Vittangi Greenstone Group), a partly conformable, polydeformed, approximately 2.4km thick greenstone sequence mainly consists of basaltic (tholeiitic) metavolcanic and metavolcaniclastic rocks (amygdaloidal lava, laminated tuff). Intercalated metasedimentary units include graphite-bearing black schist, and pelite. The uppermost part consists of amphibolitic pelite with intercalated metacarbonate layers and rare meta-ironstone, metachert and meta-ultrabasic horizons. Numerous metadoleritic sills occur throughout the package."

In addition, "Both greenstone successions record the effects of overprinting syn- to late-orogenic tectonothermal events. These include complex, polyphase ductile deformation at Nunasvaara, forming the Nunasvaara dome, peak amphibolite facies metamorphism, metasomatic-hydrothermal alteration and late-stage retrogression and brittle faulting. Locally, these overprinting processes formed metamorphic graphite".

Sampling and Sub-Sampling Techniques

Talga diamond drill core was sampled as either half or quarter-core at 1m or 2m intervals or to geological boundaries. Samples were dried, crushed and pulverised to achieve 85% passing 75µm prior to assaying. The graphite is very homogenous and duplicate analysis indicated no sample bias.

Sample Analysis Method

Talga drill core was processed by ALS-Chemex in Piteå and Malå, Sweden, for 33 or 48 element analyses via ICP following 4-acid digest and graphitic carbon was analysed via ALS-Chemex method C-IR18 (Graphitic Carbon via Leco). The methods are appropriate for graphite deposit assessment and are considered a total digest and analysis. For historical drillholes, graphite analyses was undertaken by IR-detector which is industry standard for carbon analysis and as such the method used historically is considered appropriate. Check assaying of several historic core intervals by Talga returned analytical results within 1% of the historical data, confirming the original assay results.

Drilling Techniques

Nunasvaara drilling to date has comprised historic diamond core size WL56, 39mm core diameter completed by LKAB in 1982 and diamond core size WL66, 50.5mm core diameter completed by Talga in 2012, 2014 and 2016. Core recoveries were considered excellent.

Figure 2. *Vittangi graphite ore together with battery pouch cell and cylindrical battery cut to expose the graphite anode.*

Mining and Metallurgical Methods and Parameters

In 2014, Talga released a Scoping Study which suggested eventual economic extraction of the graphite mineralisation with further work required to confirm conclusions. The graphite rock was quarried during trial mining programs in 2015 and 2016 for process tests and graphene product, Talphene®, extraction at the Company's test facility in Rudolstadt, Germany.

In 2018, Talga developed and released test results of an active anode material for Li-ion batteries, later trademarked as Talnode®-C. Further metallurgical testwork since then, has focussed on producing a range of Talnode® and Talphene® products via Talga's proprietary processing methods. Marketing of these products with a range of potential buyers, has suggested economic potential beyond the original estimates and the Vittangi Anode Project Pre-Feasibility Study ("PFS") in 2019, based solely on the Nunasvaara South ore reserve (**ASX:TLG 23 May 2019**), confirmed outstanding projects economics.

The PFS outlines a preferred mining method of drill and blast with processing by milling and concentration followed by refinery purification and coating stages. Numerous metallurgical testwork has been completed on the Vittangi graphite mineralisation and successful results have been achieved at various scale-ups, including a 60 tonne bulk-sample in early 2020.

Resource Estimation, Methodology & Assumptions

The Nunasvaara MRE was based on all drilling completed at both the Nunasvaara South and Nunasvaara North prospect areas (**ASX:TLG 6 Dec 2016**).

All data was validated for collar, survey, lithology and assay accuracy prior to loading into Maptek™ Vulcan Geological Software (Vulcan). Further validation was provided using Vulcan™ three-dimension visualisation (3D).

Geological logging and a lower-grade cut-off grade of 10%Cg (graphitic carbon) was used to model/wireframe the graphite horizon ("ore") and low-grade graphite ("lgore"). This cut-off accurately relates to the geology characterised as the graphite geological horizon. No top cuts were applied to the data.

Internal dykes which range in thickness from less than 0.2m to over 3m were modelled as a separate domain to ensure mineralisation was not diluted with waste.

Block-model parent block size was 25m x 4m x 10m and the block-models were aligned along the principal strike directions with sub-blocks of 5m x 0.2m x 0.5m. Two major strike directions were used (040º and 140º) to create block models. A three-pass estimation strategy was employed with search parameters as listed in JORC (2012) Table Section 3 below.

Ordinary Kriging ("OK") was used to estimate graphitic carbon ("Cg") for the main graphite horizon, with Inverse Distance Weighting (Power 2) used for estimation of the footwall low-grade graphite horizon and sulphur ("S") for all graphite horizons. The estimation used geological matching of mineralisation (ore or lgore) in the drillhole database and the block-model. Blocks not estimated after the third pass were assigned the mean grade lying within the validated wireframe solids. All of the material is classified as fresh with a mean in-situ bulk density (ISBD) of 2.7t/m^3 based on statistical analysis.

To align the Nunasvaara North and South classified resources with the Maiden JORC 2012 classified resource at Niska North and South (**ASX:TLG 15 Oct 2019**) the cut-off grades have been standardised at 10% (previously 17% at Nunasvaara) and bulk density reset to 2.7t/m^3 (previously 2.8t/m^3). This allows for the equivalent treatment of tonnes and grade across all graphite deposits within Vittangi.

EXPLORATION TARGETS

Overview

In light of the increasing market demand for graphite anode in electric vehicle batteries, Talga is reviewing growth opportunities across its Swedish natural graphite deposits. As part of this review the Company has identified significant Exploration Targets at Vittangi both along strike between the four known graphite resources and at depth immediately below them.

As a result of this study two Exploration Targets have been defined. The total graphite Exploration Target tonnage range for the current along-strike and underground targets at Vittangi is 26–46Mt based on an assumed in-situ bulk density of 2.65t/m^3, at a grade range of 20-30%Cg.

Note that the potential quantity and grade of the Exploration Target is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Exploration Target Details

At Vittangi and regionally, graphitic schist subcrops beneath glacial moraine and interfluvial lowland and are readily mappable as conductors using Slingram (electro-magnetic) moving coil geophysics and conventional field mapping.

Talga exploration staff have compiled new and historic Slingram data, and sampled and mapped the local and regional distribution of these conductors. The Niska and Nunasvaara resources fall within these anomalies as does graphite mineralisation (shown by outcrops and Talga scout drilling) to the south of Nunasvaara and along strike between Nunasvaara and Niska. The graphite mineralisation is regional and stratigraphic in nature and correlatable over great distance; over 15km at Vittangi and 50km away at Jalkunen. In this work, the two new Exploration Targets developed at Vittangi are:

- A sub-surface open-pittable, shallow graphite target based on Slingram data and outcrop samples along strike and in-between existing drilling ("Shallow Subcrop").
- A deeper, underground graphite target present down-dip of the drilled resources at Niska and Nunasvaara, with mineralisation extending to a RL of 100m below the JORC 2012 resources ("Deeper targets").

Estimates are simple 3D polygons mapped in plan and extended to vertical depths as stated. These have been strike-limited by drilling and replace all previously reported Exploration Targets.

Table 2. *Exploration Targets at the Vittangi Graphite Project*

Type	Tonnage Low (Mt)	Tonnage High (Mt)	Grade Range Low (% Cg)	Grade Range High (% Cg)
Shallow Subcrop				
-20 to -120m below surface	15	30	20	30
Deeper Targets				
Niska North to RL -100m	3	4	20	30
Niska South to RL -100m	1	2	20	30
Nunasvaara North to RL -100m	5	7	20	30
Nunasvaara South to RL -100m	2	3	20	30
Subtotal	**11**	**16**	**20**	**30**
Total	**26**	**46**	**20**	**30**

Next Steps

Surface diamond drilling targeting the conversion of the Exploration Targets to resources to support future expansion options is planned to commence subject to statutory authorisations. Deeper drilling at each of the Niska (North and South) and Nunasvaara (North and South) Exploration Targets will test the down-dip extension of the mineralisation at depth and provide geotechnical information relevant to underground mining. Infill diamond drilling and further surface Slingram at closer spacing will test the shallow subcrop targets followed up with further diamond drilling at wide spacing along strike around the Nunasvaara Dome.

Further Slingram and drilling is also required to sterilise the sub-surface beneath the planned Life of Mine infrastructure as part of the ongoing mine planning and development. Planning and permitting of the surveys and drilling have commenced. Drilling is planned to be completed in several phases throughout 2021 with the initial drilling to commence in the first quarter.

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APPENDIX

Table 3. *Nunasvaara MRE - High Grade Domain (30% Cg lower cut-off grade, 16 September 2020). Note that the Inferred Resource at a lower cut-off grade of 30% Cg is less than 50Kt in all areas and is excluded*

Deposit	Resource Category	Tonnage (t)	Graphite (% Cg)	Contained Graphite (t)
Nunasvaara South	Indicated	1,100,000	32.2	354,200
Nunasvaara North	Indicated	900,000	33.0	297,000
Total		**2,000,000**	**32.6**	**652,000**

Note: *1. Due to rounding totals may not reconcile exactly.*

Table 4. *Vittangi Project Nunasvaara Probable Ore Reserve Statement*

Deposit	Reserve Category	Tonnage (t)	Graphite (% Cg)	Contained Graphite (t)
Nunasvaara South	Proven	0	0	0
	Probable	1,935,000	23.53	455,305
Total		**1,935,000**	**23.53**	**455,305**

Note: *1. Due to rounding totals may not reconcile exactly.*
2. The Nunasvaara Ore Reserve was disclosed in May 2019 in accordance with the 2012 JORC Code (ASX:TLG 23 May 2019).

Table 5. *Talga Total Graphite Mineral Resources*

Deposit	Resource Category	Tonnage (Mt)	Graphite (% Cg)	Contained Graphite (Mt)
Vittangi	Indicated	15	25.7	3.9
	Inferred	4.5	18.3	0.8
Jalkunen	Inferred	31.5	14.9	4.7
Raitajärvi	Indicated	3.4	7.3	0.2
	Inferred	0.9	6.4	0.1
Total	**Indicated & Inferred**	**55.3**	**17.5**	**9.7**

Note: *1. Due to rounding totals may not reconcile exactly.*
2. Mineral Resources are inclusive of Ore Reserves.
3. Mineral Resources are reported at various cut-off grades: Nunasvaara and Niska 10%Cg, Jalkunen 5%Cg and Raitajärvi 5%Cg.
4. Mineral Resources rounded to nearest hundred thousand tonnes.
5. The Nunasvaara Mineral Resource was disclosed 16 September 2020 in accordance with the 2012 JORC Code.
5. The Niska Mineral Resource was disclosed in October 2019 in accordance with the 2012 JORC Code (ASX:TLG 15 October 2015).
6. The Jalkunen Project Mineral Resource was disclosed in August 2015 in accordance with the 2012 JORC Code (ASX:TLG 27 August 2015).
7. The Raitajärvi Project Mineral Resource was disclosed in August 2013 in accordance with the 2004 JORC Code (ASX:TLG 26 August 2013).

Competent Persons Statement

The information in this report that relates to the Vittangi Graphite Project - Nunasvaara Resource Estimation is based on information compiled by Albert Thamm. Mr Thamm is a consultant to the Company. Mr Thamm is a member of the Australian Institute of Mining and Metallurgy (Membership No. 203217). Mr Thamm has sufficient experience relevant to the styles of mineralisation and types of deposits which are covered in this document and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr Thamm consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

The information in this report that relates to Exploration Targets is based on information compiled by Mr Thamm. Mr Thamm is a consultant to the Company. Mr Thamm is a member of the Australian Institute of Mining and Metallurgy (Membership No. 203217). Mr Thamm has sufficient experience relevant to the styles of mineralisation and types of deposits under consideration and to the activity which has been undertaken to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr Thamm consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

The information in this document that relates to exploration results is based on information compiled by Amanda Scott, a Competent Person who is a Fellow of the Australian Institute of Mining and Metallurgy (Membership No.990895). Amanda Scott is a full-time employee of Scott Geological AB. Amanda Scott has sufficient experience, which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which has been undertaken to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Amanda Scott consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.

The Niska Mineral Resource estimate was first reported in the Company's announcement dated 15 October 2019 titled 'Talga Substantially Increases Flagship Graphite Resource Size, Grade and Status'. The Company confirms that it is not aware of any new information or data that materially affects the information included in the previous market announcement and that all material assumptions and technical parameters underpinning the Resource estimate in the previous market announcement continue to apply and have not materially changed.

The Nunasvaara Ore Reserve statement was first reported in the Company's announcement dated 23 May 2019 titled 'Outstanding PFS results support Vittangi graphite development'. The Company confirms that it is not aware of any new information or data that materially affects the information included in the previous market announcement and that all material assumptions and technical parameters underpinning the Reserve estimate in the previous market announcement continue to apply and have not materially changed.

The Jalkunen Mineral Resource estimate was first reported in the Company's announcement dated 27 August 2015 titled 'Talga Trebles Total Graphite Resource to Global Scale'. The Company confirms that it is not aware of any new information or data that materially affects the information included in the previous market announcement and that all material assumptions and technical parameters underpinning the Resource estimate in the previous market announcement continue to apply and have not materially changed.

The Raitajärvi Mineral Resource estimate was first reported in the Company's announcement dated 26 August 2013 titled '500% Increase to 307,300 Tonnes Contained Graphite in New Resource Upgrade for Talga's Swedish Project'. The Company confirms that it is not aware of any new information or data that materially affects the information included in the previous market announcement and that all material assumptions and technical parameters underpinning the Resource estimate in the previous market announcement continue to apply and have not materially changed.

The Company first reported the production targets and forecast financial information referred to in this announcement in accordance with Listing Rules 5.16 and 5.17 in its announcement titled 'Outstanding PFS results support Vittangi graphite development' dated 23 May 2019. The Company confirms that all material assumptions underpinning those production targets and forecast financial information derived from those production targets continue to apply and have not materially changed.

Forward-Looking Statements & Disclaimer

Statements in this document regarding the Company's business or proposed business, which are not historical facts, are forward-looking statements that involve risks and uncertainties, such as estimates and statements that describe the Company's future plans, objectives or goals, including words to the effect that the Company or management expects a stated condition or result to occur. Since forward-looking statements address future events and conditions, by their very nature, they involve inherent risks and uncertainties. Actual results in each case could differ materially from those currently anticipated in such statements. Investors are cautioned not to place undue reliance on forward-looking statements.

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About Talga

Talga Resources Ltd (ASX:TLG) is building a European source of battery anode and graphene additives, to offer graphitic products critical to its customers' innovation and the shift towards a more sustainable world. Vertical integration, including ownership of several high-grade Swedish graphite projects, provides security of supply and creates long-lasting value for stakeholders. Joint development programs are underway with a range of international corporations.

Company website: **www.talgagroup.com**

JORC CODE 2012 EDITION

Section 1 Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample "representivity" and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	• Diamond drillholes were sampled based on observed graphite mineralisation. • Historic drillholes, WL 56 with core diameter of 39mm, were half -cut and sampled over 2m intervals. Samples were assayed for carbon via an IR-detector and sulphur and trace elements via an unknown method. • Talga drillholes were completed using WL 66 coring equipment with a core diameter of 50.5mm which were either quarter-cut or half-cut for sampling. Quarter-core sampling was utilised where duplicate samples have been taken. • Sampling was carried out under Talga's sampling protocols and QAQC procedures as per industry best practice. • Drillholes have been sampled on geological intervals or nominal 1m or 2m intervals where appropriate (approx. 3kg/sample). All samples have been crushed, dried and pulverised (total prep) to produce a sub sample for multi-element analysis by four-acid digest with ICPMS/OES, total graphitic carbon by Leco and fire assay and AAS for gold.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	• Talga's diamond drilling completed by Northdrill Oy from Finland. • Diamond drilling completed using WL66 core drilling equipment. • Core orientations, where taken, have been completed using a Reflex ACT 3 core orientation tool. • Talga's downhole surveying completed using a Reflex EZTrac survey instrument or a Deviflex Gyro instrument.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• For historic drillholes, core recovery was recorded by the geologists logging the core. • For Talga's drilling, core recoveries are measured by the drillers for every drill run. The core length recovered is physically measured for each run, recorded and used to calculate the core recovery as a percentage of core recovered. Any core loss is recorded on a core block by the drillers. • No additional measures have been taken to maximise sample recovery. • A sampling bias has not been determined.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	• For historic drillholes, geological logging was conducted to a reasonable standard noting alteration, structures, lithology, mineralisation and core loss. • For Talga's drillholes, geological logging of diamond core captures lithology, colour, weathering, alteration, mineralogy, mineralisation and structural observations. • All drillholes are photographed in both wet and dry states.

Criteria	JORC Code Explanation	Commentary
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representative nature to the samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• For historical drillholes, core was half-cut, prepared into nominal 2 metre composite samples. Samples were assayed for sulphur and trace elements via an unknown method at LKAB's laboratory in Malmberget. Carbon was assayed via an IR-detector at SSAB's laboratory in Luleå. No other information regarding sample preparation or quality control procedures is known. Check assaying of two historical LKAB cores showed <0.3%C variation to historical data. • For Talga's drilling all samples are either quarter-core or half-core except for duplicate samples in which case quarter-core samples have been taken. • The sample preparation follows industry best practice sample preparation; the samples are finely crushed with 70% passing <2mm then reduced in a splitter whereby a reject sample and a 250g sample is produced. The 250g sample is then pulverised with 85% passing <75 microns which completely homogenises the sample. A sub-sample of pulp is taken for digestion in a four-acid digest, total graphitic carbon and fire assay for gold. Samples with high carbon content were pre-roasted to 700°C prior to analysis for gold. • Duplicate sampling, where taken, has been completed at a rate of 1:40 where practicable; duplicate results for all holes are satisfactory. • Certified reference material standards and blanks have been inserted at a rate of 1:20 or 1:30 where practicable; standard and blank results for all holes are within accepted limits. • The sample sizes are considered appropriate for the type of mineralisation (graphite) under consideration.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• For historical drillholes, the exact method used to determine sulphur and multi-element analyses is not known so no comment can be made as to its appropriateness. For carbon analysis, it was noted that an IR-detector was utilised; whilst there is no other information other than the type of detector, IR-detectors are still industry standard for carbon analysis today and as such the method used historically is considered appropriate. • For Talga's drillholes, all samples are assayed using a four-acid digest multi-element suite (33 or 48 elements) with ICPOES or ICPMS finish. The acids used are hydrofluoric, nitric, hydrochloric and perchloric with the method approaching near total digest for most elements. • Selected samples are assayed for total graphitic carbon via Leco furnace. Graphitic carbon is determined by digesting the sample in 50% HCl to evolve carbonate as CO_2. Residue is filtered, washed, dried and then roasted at 425^{0}C. The roasted residue is analysed for %C by high temperature Leco furnace with infrared detection. • All samples are assayed for gold by firing a 25g sample with an AAS finish. Samples with a high carbon content are pre-roasted to 700°C prior to analysis for gold. • The analytical methods are considered appropriate for this style of mineralisation. • No geophysical tools or handheld instruments were utilised in the preparation of this release. • Duplicate sampling has been completed at a rate of 1:40 where practicable; duplicate results for all holes are satisfactory. • Certified reference material standards and blanks have been inserted at a rate of 1:20 or 1:30; standard and blank results for all holes are within accepted limits. • Laboratory QAQC methods include the insertion of certified reference material standards, blanks, and duplicates.

Criteria	JORC Code Explanation	Commentary
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Both Amanda Scott and Albert Thamm, competent persons to this report, have visually reviewed the diamond core and correlated results with the observed geology. • Drillhole NUN16004 & NUN16005 are twin holes; NUN16005 was drilled approximately 1m behind NUN16004 after it was abandoned due to a drilling difficulties. NUN16004 has been used as a metallurgical hole and not been assayed to date but lithological logging shows excellent consistency and repeatability between the two holes. • All geological and location data is currently stored in Excel spreadsheets. Data entry has been by manual input and validation of the small amount of data has been done by checking input on screen prior to saving. • No adjustments or calibrations have been made to any assay data used in this report.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Historic drillholes and Talga's 2012 drilling have been surveyed with DGPS. Talga's 2014 and 2016 drillhole locations have been determined using a Garmin handheld GPS unit with an accuracy of +/- 1m. Drill azimuths were laid-out with a hand-held Suunto compass that has a precision of +/- 0.5 degrees. • Downhole surveys have been completed using a Reflex EZTrac or a Deviflex Gyro downhole survey instrument at regular intervals. • Grid system is Swedish Coordinate system SWEREF99. • Topographic control has been established by handheld GPS and cross-correlation with digital laser topographic imagery.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• The current data spacing or drill profile separation is approximately 50-100m. • The data spacing and distribution is considered sufficient to establish a degree of geological and grade continuity. • Sample compositing has been applied for the current MRE; see Section 3 below.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	• All drillholes have been drilled perpendicular to the interpreted strike of the mineralisation and lithology. • No sample bias as a consequence of orientation based sampling has been identified.
Sample security	• *The measures taken to ensure sample security.*	• For historic drillholes, sample security measures are not known. • For Talga drillholes, sample chain of custody is managed by the Company. All holes are stored in a locked facility.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• An external review of the sampling, logging and core handing techniques was completed in December 2016 by Albert Thamm ahead of the 2017 MRE being completed and there are no changes to information since that time.

Section 2 Reporting of Exploration Results

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Nunasvaara South deposit is located on licence Nunasvaara nr 2 and the Nunasvaara North prospect is located on licence Vittangi nr 2. All licences are owned 100% by the Company's Swedish subsidiary, Talga Graphene AB. • The licences are wholly-owned by the Company and are located in forested areas. The area is used for seasonal grazing by local indigenous Sami reindeer herders. The Natura 2000 registered Torne River is located approximately 1km to the south of the current MRE for Nunasvaara South. • The licences are in good standing with the local mining authority, Bergsstaten.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Graphite was first identified at Nunasvaara in the early 1900's and received occasional exploration by private parties and the Swedish Geological Survey since that time. In the early 1980's, LKAB completed diamond drilling and test mining at Nunasvaara South and since then, the area has been explored by Anglo American and Teck Cominco for copper and base metals prospectivity. Talga completed diamond drilling at Nunasvaara in 2012, 2014 and 2016 and the nearby Niska graphite deposits in 2019.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The mineralisation at Nunasvaara South and Nunasvaara North comprises two sub-vertical, lithologically continuous units of very fine grained, dark-grey to black graphite containing 10-46% graphitic carbon. The units range in thickness from ~15-60m. The hangingwall is comprised of mafic volcanoclastics and tuffaceous units and the footwall to the mineralisation is a mafic intrusive (dolerite-gabbro). The graphite units are regionally extensive over many kilometers and are interpreted to have developed in a shallow freshwater basin in the early Proterozoic (Circa 1.8 billion years). Subsequent deformation, possibly related to domal intrusive bodies, have metamorphosed and tilted the units to the sub-vertical orientations present today. The majority of the graphite at Nunasvaara is very fine grained, highly crystalline and very high grade. Metallurgical testwork completed by the Company shows a range of commercial graphite and graphene products can be produced.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• Drillhole locations used in the current MRE are shown in the figures contained within the text of this report and comprehensively reported in previous ASX releases related to the drilling results at Nunasvaara South, Nunasvaara North and Niska.

Data aggregation methods	• *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.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• A lower cut-off grade of 10% graphitic carbon has been applied to the current MRE. • No top cut-off grade has been applied to the current MRE. • No metal equivalents have been used in this report.

Criteria	JORC Code Explanation	Commentary
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• The geometry of the graphite mineralisation at Nunasvaara South, Nunasvaara North and Niska is well understood and all drilling has been completed perpendicular to the strike of the mineralisation.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Appropriate maps, photographs and tabulations are included in the main body of this report.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced toavoid misleading reporting of Exploration Results.*	• The report provides the total information available to date and is considered to represent a balanced report.
Other substantive exploration data	• *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.*	• Previous exploration results, including all drilling results and previous JORC Indicated and Inferred Mineral Resource Estimates, Probable Ore Reserve and a PFS for Nunasvaara have been previously reported. No other exploration data is considered material at this stage.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Plans for further drilling of shallow targets along strike and deeper targets underneath the current resources are being planned for completion in 2021. Further large-scale metallurgical testwork is ongoing as part of a DFS for commercial production to commence in 2023. • Diagrams highlighting the areas and targets for future drill testing are included in this report.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code Explanation	Commentary

Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*
	• *Data validation procedures used.*
		• Data package was supplied and downloaded as a Dropbox™ company dataset. The dataset was also supplied on a USB. The data package included historic, 2012-2014, 2016 and 2019 drill data, resource and pit design files, QAQC resources and other previous drilling and resource estimate reports.
		• Drill data consisted of Microsoft Excel files for collar, survey, lithology and assay data.
		• The data was validated for the following:
		  • missing data issues
		  • missing interval issues
		  • overlapping sample interval issues
		  • depth issues
		  • id issues
		  • survey issues
		  • logging issues
		• A second validation was completed in 3D interpretation in Vulcan geological modelling software.
		• Data plotted correctly on the topographical surface and on the collar location as planned and supported on the documentation supplied.
		• Some trenches were not registered on topographical surface.
		• Downhole survey was checked for significant deviation. No issues were identified.
		• Assay were checked for anomalies between geology and total graphitic carbon grade ("Cg"). No anomalies were identified. Drill core with no sample assays were inserted with undefined (-999) Cg grade to relate the assay data file to the geology logging.

Criteria	JORC Code Explanation	Commentary
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Albert Thamm ("Competent Person") is a Geological Consultant and undertook a site visit in December 2016 ensuring industry standards of the resource estimation process from sampling through final block model are maintained. • These visits involved meeting with site geologist, the core storage and laboratory to visually inspect and better understand the scale and nature of the subsurface geology, the core recovered and the logistics of assay.

Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*
	• *Nature of the data used and of any assumptions made.*
	• *The effect, if any, of alternative interpretations on Mineral Resource estimation.*
	• *The use of geology in guiding and controlling Mineral Resource estimation.*
	• *The factors affecting continuity both of grade and geology.*
		• Confidence in the interpretation of the Nunasvaara stratigraphy is considered to be high given:
		  ◦ Domain interpretation was completed with a consideration for field logs, geochemical data and surrounding holes
		  ◦ Drill hole domains interpretation were validated visually and statistically
		• Consideration is always given to mining and estimation practicalities to ensure models are fit for purpose and realistic.
		• Graphite is distinct geochemically compared to the host gabbros and dolerite dykes and is defined using a graphitic carbon grade cut-off of 10%Cg.
		• Wireframe solids and surfaces of the mineralised domain are used to generate an empty geological block model. These act as 'hard' boundaries during estimation for both mineralisation and waste domains.
		• Geology and grade are generally highly continuous in mineralised graphite horizons.
		• Numerous dolerite dykes which are sub-parallel to the mineralisation vary in thickness from less than 20cm to over 3m.

Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The Nunasvaara South mineralisation strikes 137º/317º for a total distance of 3.6km with a dip of 75º towards 230º. The Nunasvaara North mineralisation strikes at about 40º/220º for a distance of 0.5km and dips steeply towards 310º to near vertical. • The mineralisation pinches and swells to a maximum thickness of 60m. Average true mineralisation thickness varies between 15m and 30m. • The mineralisation extends from surface to a maximum depth of 220m often covered by up to 2m of overburden material. • Mineralisation is open laterally and at depth.

Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*
	• *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*
	• *The assumptions made regarding recovery of by-products.*
	• *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).*
	• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*
	• *Any assumptions behind modelling of selective mining units.*
	• *Any assumptions about correlation between variables.*
	• *Description of how the geological interpretation was used to control the resource estimates.*
	• *Discussion of basis for using or not using grade cutting or capping.*
	• *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*
		• Samples are collected at varying sample intervals based on the graphite mineralisation ("ore") domain or waste. Sample data was flagged by domains using wireframe solids for mineralisation ("ore") low grade ("lgore") and dykes and waste.
		• All assay data has been composited to 2m based on the domain. 2m composite samples were used in the estimation with minimum composite sample of length of 1m.
		• Initial statistical analysis was carried to provide geostatistical parameters for domain modelling.
		• All volume modelling, variogram modelling and estimations were carried out using Maptek ™Vulcan 3D mining software.
		• Two block models were constructed based on the main principal strike direction 40º and 140º.
		• Block model was constructed using geological surfaces as hard boundaries. Parent block sizes 25mx4mx10mRL based on half the nominal drill hole spacing within an area with sub blocks of 5m x 0.2m x 0.5m. Block models were aligned with strike direction.
		• Block discretisation is 5x5x2.
		• Total Graphitic Carbon ("Cg") and Sulphur ("S") were estimated as in-situ grades. Both Cg and S were estimated separately.
		• Geostatistical analysis was carried out on a domain basis in the Nunasvaara South with the highest density of drill data and this produced robust well defined variogram structures with a very low nugget effect (~2% of total sill). Ranges were generally short with maximum direction showing a range of 77m.
		• Similar search ellipse orientations and search parameters for Cg and S grade were used for estimation based on a combination of variography and drill spacing.
		• Due to differences in variogram ranges in the three directions search ellipse dimensions were kept anisotropic weighting was applied via the variogram models in all directions.
		• A multiple search pass strategy was adopted, whereby the search range was expanded if first search failed to find enough samples to estimate blocks. Estimation search strategies have sought to ensure robust estimates while minimizing conditional bias.
		• In the first search pass, a minimum of 8 composite samples and maximum of 12 with no more than 4 samples per drill hole was required to estimate a block. Blocks not estimated in the first pass were re-evaluated in the second and subsequently third passes.
		• The second and third passes relaxed the minimum number of samples used per estimate as well as increasingly larger search radii. Blocks not estimated in the second pass were re-evaluated in the third pass. Blocks not estimated in the third pass were assigned the mean grade of the specific pit area drill sample data.
		• Only data belonging to a domain was used to estimate that domain and hard boundaries were used. Ordinary Kriging was used to estimate Cg for mineralisation.
		• The low-grade footwall zone at Nunasvaara north was estimated using an inverse distance weighting method (to power 2).
		• No top cuts were applied.
		• Validation of the final resource has been carried out in a number of ways, including:
		  ◦ Visually comparing block model estimated grade against drill hole by section
		  ◦ Comparison by mineralisation zone
		  ◦ Comparing statistically, by domain, block model grades versus sample and composite grades
		• All modes of validation have produced acceptable results.

Criteria	JORC Code Explanation	Commentary
		• Modelling results have been compared to the previous resource estimates. The increase in the resource is predominantly due to additional resources delineated from the 2016 drilling.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• All mineralised tonnages are estimated by applying a mean bulk density of 2.7g/cc, with natural moisture. LOI assay is routine.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• A natural mineralisation cut-off occurs at 10%Cg and was used to define the mineralised envelope. • The updated resource estimates were based on a lower cut-off of grade of 10%Cg and 30%Cg chosen to provide equivalence with the more recent Niska Resource estimate and represent the optimal cut-off required to achieve the desired product specifications at the time. • No material change in resource occurs by using a lower cut–off except in a low-grade footwall horizon.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution.* • *It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous.* • *Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Talga currently envisages to use an open pit mining method with a possible option for underground mining. • Feasibility level studies are underway to optimise resource extraction. The mining method and height was chosen to maximise recovery. • Open pit at extraction rates approximately of 100,000 tpa with the deepest part of the early stage pit to reach -80 meters. Mining will utilize articulated trucks. • Current design parameters are a bench height of 20m, with a berm width of 5m, battered to give an overall pit slope of 47º. • Assessment is underway of alternative mining methods to the final pit without blasting. It is assumed that a cutting and sawing method will result in achieving a batter angle of 80º and a berm width of 2.5m. Trial mining has been successfully completed with this method in 2015 and 2016. • Studies may include underground mining options as an alternative, typically as 25m spaced levels using long hole open stoping with backfill (ASX:TLG 5 August 2020). • No geotechnical data supporting this alternative mining method exists.

Criteria	JORC Code Explanation	Commentary
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• Metallurgical sample testing has been conducted on ore extracted from trial open pit mining. • Results of metallurgical testing have been quantified in the in the 2019 PFS and subsequent public reports suggesting reasonable prospects for economic extraction. • A sample of 600kg of ore extracted from the trial mine at Vittangi was subjected to crushing-grinding-flotation test work. The first program conducted grinding tests on the Vittangi composite material to determine the grinding times needed to achieve P80 of 75 µm, 150 µm and 250 µm in a laboratory scale rod mill ahead of flotation. Regrind and cleaner flotation was also tested. The test produced a high concentrate grade of 95.1% Cg at a high recovery rate of 91%, at premium anode graphite flake size, as part of 2019 PFS testwork. Further larger scale metallurgical tests have subsequently improved on these results. • The PFS sets out an initial two stage crushing process followed by grinding, rougher floatation, regrinding, cleaner floatation and concentrate dewatering to produce a high-grade concentrate. • Appropriate Ore and waste Metallurgical Characterisation work from representative core was completed by Core Metallurgy in Australia, CTP (Belgium), CSIRO (Australia) and Independent Metallurgical Laboratories (IMO)(Australia). A number of testing programs and core processing simulation was used to develop the process flowsheets. Core Metallurgy Pty Ltd based in Queensland Australia undertook the design process and would be regarded as having an appropriate level of experience to determine the process design, recovery factors and product specification.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a Greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• Within the concession area there are established indigenous rights to practice reindeer herding during the winter season with two reindeer herding cooperatives (Sameby) operating in the area. • Reindeer Herding Impact Assessments have been or are being completed by the two reindeer herding cooperatives. Stakeholder engagement has been undertaken since commencement of exploration in the area in 2012. Multiple trial mining campaigns and drilling programs have occurred during this time, all receiving the relevant permits and stakeholder consent required to proceed. • Further, an extensive Stakeholder Engagement Plan has been prepared for implementation as the project proceeds towards a Detailed Feasibility Study. • This includes a Consultation Plan, already in place, for initial consultation for the Environmental permit and potential Natura 2000 permit. • The Swedish Geological Survey (“SGU”) has completed a demarcation of the Company’s Vittangi graphite resources as a mineral deposit of national interest. This designation adds support of the exploitation of Vittangi as a mineral deposit to government authorities when reviewing any competing land uses. • Under Chapter 3, Section 7 of the Swedish Environmental Code, deposits of valuable substances or materials can be defined as being of national interest, meaning municipalities and central government agencies may not authorise activities that might prevent or significantly hinder exploitation of the mineral deposit. The national interest area covers the entirety of Talga’s currently defined Vittangi graphite resources.

Criteria	JORC Code Explanation	Commentary
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Bulk densities used in the Mineral Resource Estimate are based on a mean bulk density of 2.7g/cc for all mineralisation. • The bulk density determination was as both the mean and geomean of drillcore measurements using the Archimedes principal. Laboratory measurements by ALS Malå report within this tolerance. The same density measurements where applied as prior resource reporting. Waste BD measurements with the wireframed mineralisation have been excluded.

Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.*
	• *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).*
	• *Whether the result appropriately reflects the Competent Person's view of the deposit.*
		• The Mineral Resource has been classified in the Indicated and Inferred categories, in accordance with the 2012 Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code).
		• A range of criteria has been considered in determining this classification including:
		  • Geological continuity
		  • Data quality
		  • Drill hole spacing
		  • Modelling techniques
		  • Estimation properties including search strategy, number of informing data, average distance of data from blocks and estimation output from the interpolation
		• Indicated resources are typically supported by a drill hole spacing not exceeding 50m.
		• Inferred resources are largely based on confidence in geological continuity, wider drill spacing or isolated mineralisation with limited drill and sample data.
		• The results of the validation of the block model shows acceptable correlation of the input data to the estimated grades.
		• The Mineral Resource Classification reflects the views of the Competent Person.

Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• Various aspects of the data acquisition, assaying, geological modelling and resource estimation have been independently reviewed at various times over the life of the project, including this estimate, by a second CP. This included audit of standard insertion, core storage, sampling intervals recorded vs reported and review of QA/QC protocol. Reviews are commissioned annually as part of the Annual Report compilation.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• Calculated accuracy and confidence in the Mineral Resource Estimate are not explicitly stated. • However, relative accuracy is reflected in the resource classification, based on relative kriging variance output from the estimation algorithms. • The Indicated Mineral Resource Estimates are considered to represent a local estimate as there is reasonable confidence in the location of mineralisation and waste domains. • Inferred Mineral Resource Estimates are less certain, particularly on strike and at depth due to limited drill hole data density.