talga

ASX Release
3 April 2023

ASX:TLG

Successful exploration grows Talga's Swedish natural graphite resource

- Exploration drilling of **1km long "Niska Link" target and extensions delivers 71% increase** of total Niska graphite Mineral Resource in northern part of Vittangi Graphite Project in Sweden
- Updated total project resource, including new drill results and applying a higher cut-off grade of 11% graphite, boosted by 23% to **36.9 million tonnes at 23.1% graphite**
- Deposits remain open with significant potential to grow **Europe's largest natural graphite resource; a critical and strategic raw material** for local, green European Li-ion battery and electric vehicle production

Battery materials company Talga Group Ltd ("**Talga**" or "**the Company**") (**ASX:TLG**) is pleased to announce increases in the Company's Swedish natural graphite mineral resources which will feed production of its low-emission flagship anode products.

In addition to high-grade graphite from the Company's Vittangi Graphite Project ("Vittangi") in northern Sweden (Figure 2), Talga's wholly-owned anode supply chain uses 100% renewable electricity and is vertically integrated within the EU, making it an important contributor to Europe's growing Li-ion battery industry.

To support the Company's business strategy Talga has completed further exploration activities at its Niska deposit and continues to develop the project through technical and economic feasibility studies.

The latest update, based on its 2022 Niska drilling campaign, increases the Vittangi Graphite Project Global Mineral Resource estimate by 23% to 36.9 million tonnes ("Mt") of graphite ore at 23.1% graphite ("Cg") using an 11% Cg cut-off grade. Definitions for resource categories used in this release are consistent with those defined by JORC (2012).

The growth in the Company's graphite mineral resources, which are already the largest in Europe, will underpin potential expansion pathways to anode production beyond the 100,000 tonnes per annum ("tpa") outlined under the Vittangi Anode Project (ASX:TLG 1 July 2021) and Niska expansion (ASX:TLG 7 December 2020).

Commercial offtakes and market

Talga and European battery maker Automotive Cells Company SE are in advanced stages of completing a binding offtake agreement for supply of Talnode®-C (ASX:TLG 30 November 2022). In addition, Talga and French battery manufacturer Verkor finalised a non-binding Letter of Intent to supply Talnode®-C (ASX:TLG 11 January 2023). These outcomes followed successful Talnode®-C customer qualification testwork to date.

The European lithium-ion battery market continues to grow. By 2031, Benchmark Mineral Intelligence forecasts demand for coated graphite anode in Europe alone to reach over 1.3Mt per year[1]. This, along with Talga's increasing number of customers, underscores the requirement to further increase the Vittangi resource.

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VITTANGI MINERAL RESOURCE UPDATE

The Vittangi Graphite Mineral Resource update was completed by independent mining consultant SLR Consulting Limited, incorporating 2022 diamond drilling completed at and around the Niska graphite deposits, part of Talga's Vittangi Graphite Project (Figure 3 and 4).

Applying an 11% Cg cut-off grade across the entire project, and constrained within Whittle open pit shells, the Vittangi Mineral Resource is estimated to total 36.9Mt averaging 23.1% Cg, containing 8.5Mt of graphite. This includes Indicated Resources estimated to total 27.8Mt averaging 23.8% Cg and Inferred Resources estimated to total 9.0Mt averaging 21.2% Cg (see Table 1).

The estimate includes a maiden Mineral Resource for new extensions to graphite mineralisation at the Niska deposit named the Niska Link (see Figure 1), the delineation of which continues to support the continuity of graphite grade between known deposits. The total Niska Mineral Resource has increased to an estimated total of 14.9Mt averaging 21.8% Cg, containing 3.3Mt of graphite, including Indicated Resources estimated to total 12.0Mt averaging 22.0% Cg and Inferred Resources estimated to total 2.9Mt averaging 21.0% Cg (see Table 1).

The updated Mineral Resource represents a 22.5% increase in total resource tonnes (23.1% increase in Indicated Resource tonnes and 20.9% increase in Inferred Resource tonnes) over the previous Vittangi Mineral Resource estimate (ASX:TLG 27 May 2022). The Vittangi graphite deposit remains open along strike and depth.

The updated Vittangi Graphite Mineral Resource estimate revises Talga's Swedish graphite resource inventory to an estimated total 72.7Mt averaging 18.6% Cg, containing 13.5Mt of graphite (see Table 3), including Indicated Resources estimated to total 31.2Mt averaging 21.8% Cg and Inferred Resources estimated to total 41.4Mt averaging 16.2% Cg.

Figure 1 Niska Link vertical cross section.

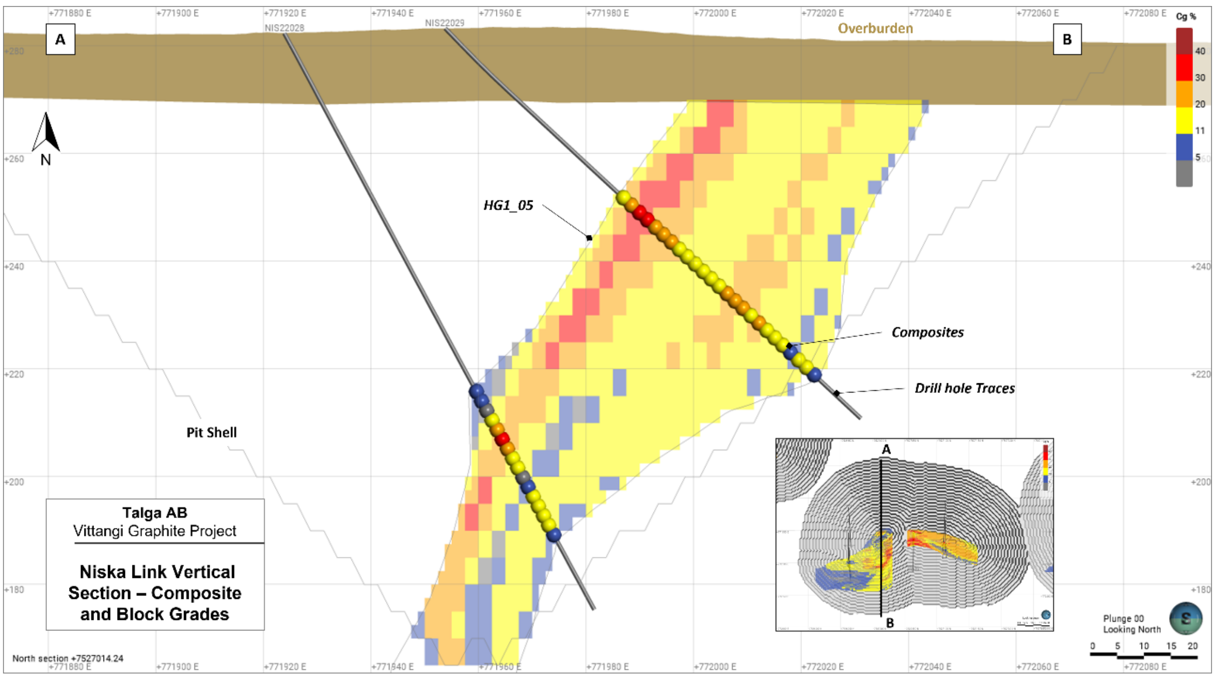
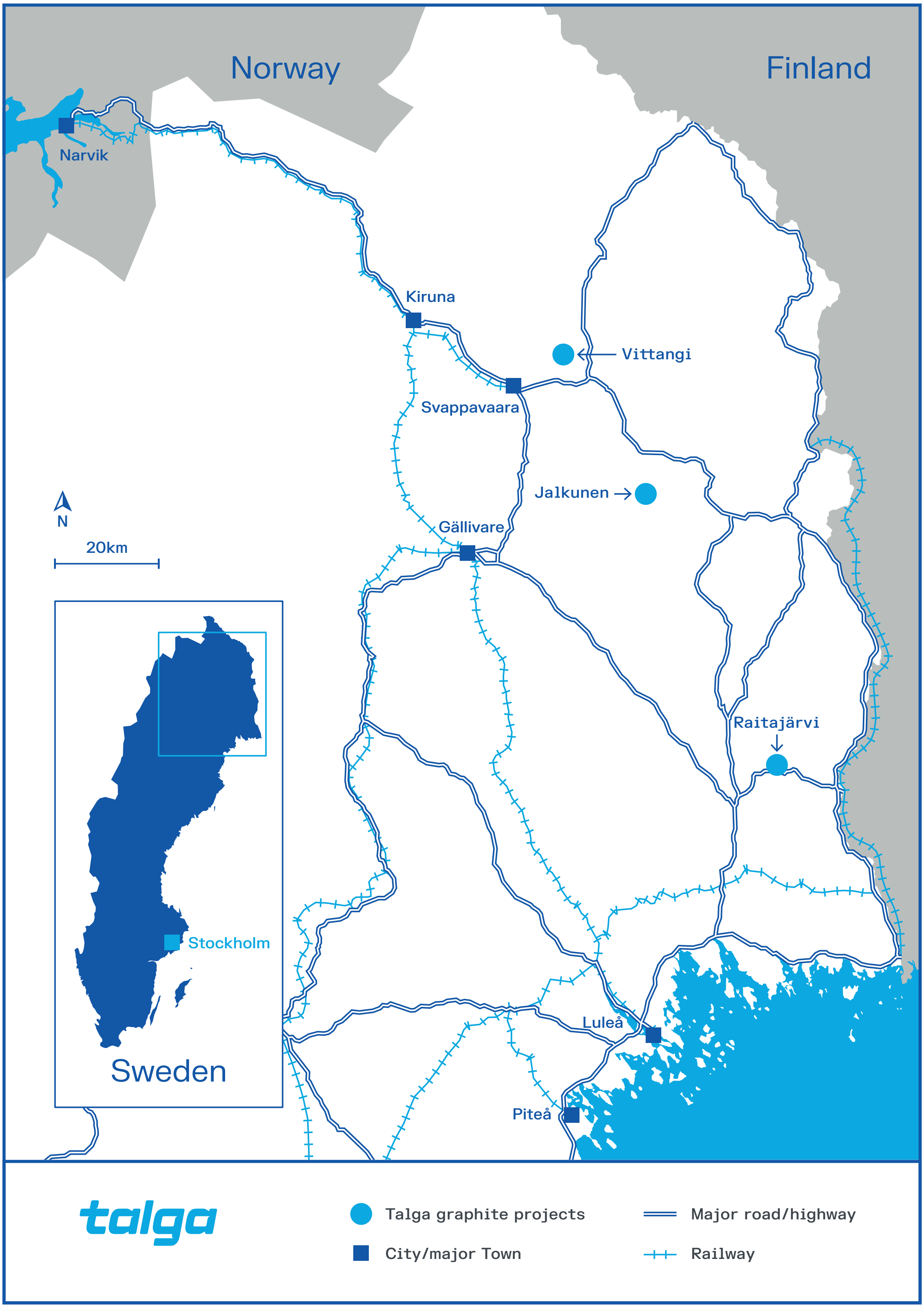


Figure 2 Location of Talga's graphite projects in Sweden.



Geology

The geology of the area surrounding Vittangi, hosting the Nunasvaara South-North-East and Niska North-South graphite mineral resources, consists of a Proterozoic-aged greenstone sequence (Vittangi Greenstone Group) of sediments, volcaniclastics 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 15m to 70m wide lithologically continuous units. Graphite mineralisation occurs as a very fine-grained, dark grey to black graphitic rock containing approximately 10% Cg to 50% Cg as highly crystalline, ultra-fine flakes. Pyrite, pyrrhotite and trace chalcopyrite may accompany the graphite mineralisation.

The main graphite-bearing strata has been interpreted across six main deposit areas with a total strike length of approximately five kilometres. Drillhole intersections have shown the graphite units to be steeply dipping along its entire length, typically between 75° and vertical.

The deposits have also been found to have two orientations, with a distinct change in orientation of approximately 90° occurring within the Nunasvaara South deposit. The southern portion of the Nunasvaara South deposit trends towards 320° and dips steeply (75-85°) to the southwest 230° with a strike length of approximately 800m. An apparent hinge changes the orientation of the northern portion of the deposit towards 55°, dipping steeply (70-80°) to the northwest with a strike length of approximately 500m.

Moving north, the Nunasvaara North and Niska deposits all show a generally consistent strike towards 040°, although new domains delineated through 2022 drilling at Niska (between the previous Niska North and Niska South) strike 000° and 150°, respectively. While all the deposits are also steeply dipping in these areas, some evidence of overturning has been observed. Nunasvaara North is generally vertical or steeply dipping (85°) to the northwest or southeast, Niska South dips steeply (75-85°) to the northwest, and Niska North dips steeply (75-85°) to the southeast. The new deposits at Niska dip steeply (70-85°) to the west and steeply (60-65°) southwest, respectively. Drilling to date has intersected the graphite mineralisation to a maximum depth of approximately 200m.

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

Historical diamond drill core is known to have been sampled as half core at regular two metre intervals. Similarly, historical trench/channel samples as smaller intervals of rock chips were composited into regular two metre intervals for consistency with drill core.

Talga diamond drill core was sampled as either half or quarter-core at one metre or two metre intervals or to geological boundaries, to maintain consistency with historical sampling where possible. 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.

Figure 3 Vittangi Graphite Mineral Resources over 2021 SkyTEM electromagnetic survey and DFS mine infrastructure.

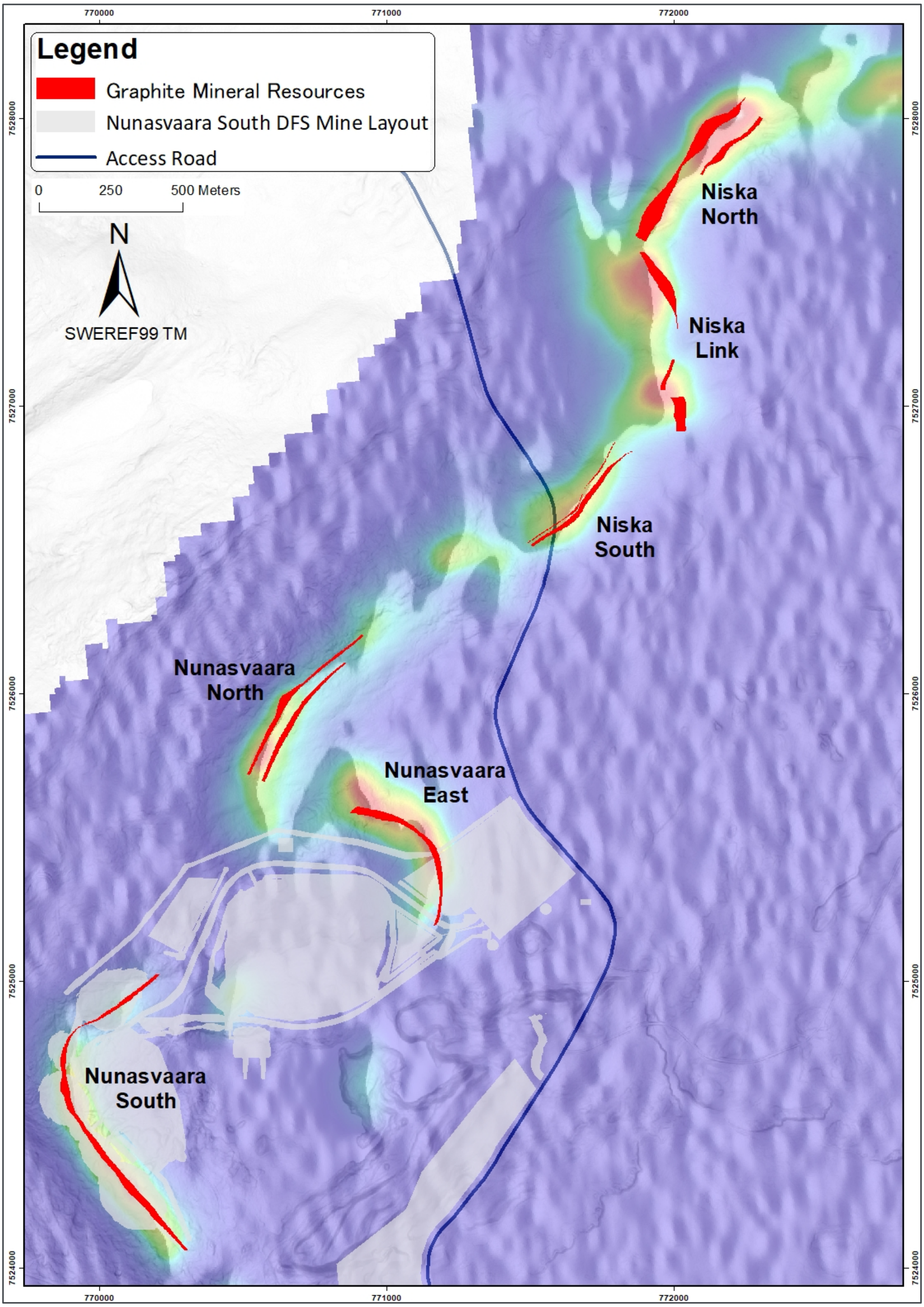
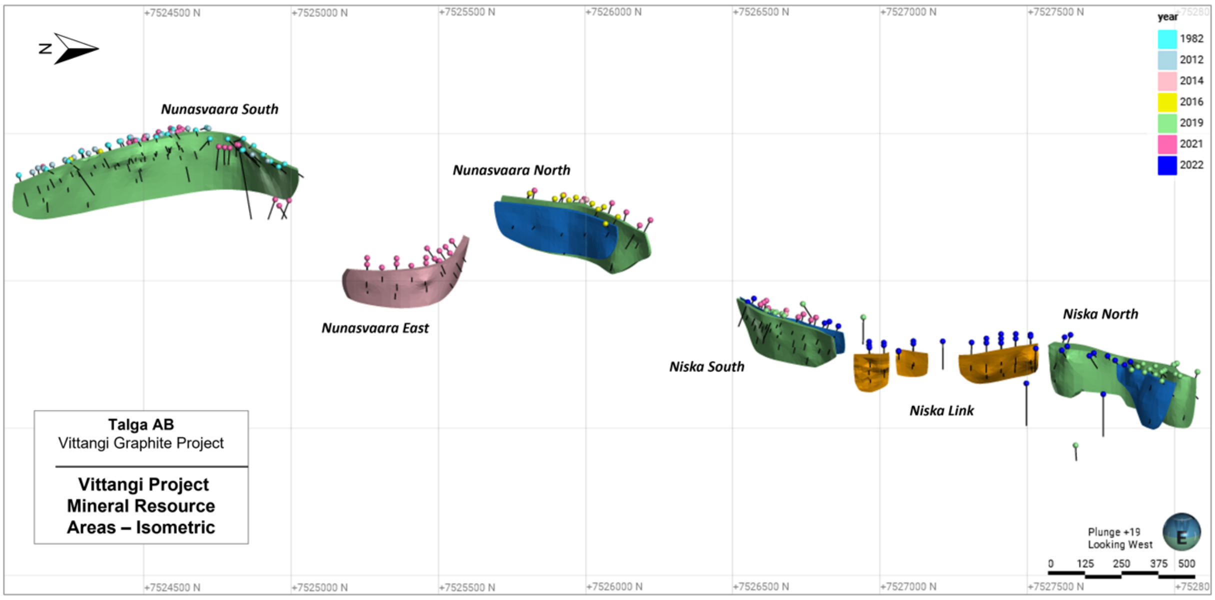


Figure 4 Vittangi Graphite Mineral Resource Domains (Isometric View looking west).



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 four-acid digest, and graphitic carbon was analysed via ALS-Chemex method C-IR18 (Graphitic Carbon via Leco) or method C-IR06 (Organic Carbon) for 2012 samples, and method C-IR07 (Total Carbon via spectroscopy). The methods are appropriate for graphite deposit assessment and are considered a total digest and analysis.

For historical drillholes, graphite analysis 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 in 2012 returned analytical results within 0.5% Cg of the historical data, confirming the original assay results.

Drilling Techniques

Vittangi drilling to date has comprised historical diamond core drilling at size WL56 (39mm core diameter) completed by LKAB in 1982 at Nunasvaara South, and recent diamond core drilling at sizes WL66 (50.5mm core diameter), WL76 (57.5mm core diameter), and NQ2 (50.6mm core diameter) completed by Talga in 2012, 2014, 2016, 2019, 2021, and 2022. Core recoveries are observed to be high and appropriate for confirming sample representativeness.

Other Exploration

In addition to drilling, several geophysical surveys have been undertaken across the Vittangi area. This has included ground-based electromagnetic surveys (Slingram) in 2014, 2016 and 2020, but most recently involved an aerial electromagnetic survey (SkyTEM) in 2021 (ASX:TLG 26 October 2021). The survey results (Figure 3) have been used by Talga to corroborate drilling results and inform ongoing exploration within the Vittangi Graphite Project area.

Mining and Metallurgical Methods and Parameters

In 2014, Talga released a Scoping Study which confirmed the eventual economic extraction of the graphite mineralisation (ASX:TLG 9 October 2014). In 2015 and 2016, Talga conducted a trial mining program, with graphite material extracted for process tests and production of Talga graphene, Talphene®, 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 (ASX:TLG 15 May 2018). Metallurgical testwork has since focussed on producing a range of Talnode® and Talphene® products via Talga's proprietary processing methods.

In 2019, Talga released a Vittangi Anode Project Pre-Feasibility Study ("PFS"), based solely on the Nunasvaara South Ore Reserve (ASX:TLG 23 May 2019), confirming outstanding project economics of a vertically integrated mine-to-anode operation. The PFS outlined a preferred mining method of drill and blast with mineral processing at an on-site concentrator followed by anode production at the nearby port city of Luleå. In 2021, Talga released a Vittangi Anode Project Detailed Feasibility Study ("DFS"), based on an updated Nunasvaara South Ore Reserve (see Table 2) (ASX:TLG 1 July 2021), confirming the project's ability to produce 19,500tpa of Talnode®-C.

In 2020, Talga released a Scoping Study on its Niska expansion underpinned by an underground mining study of the Niska South, Niska North and Nunasvaara North graphite deposits (ASX:TLG 7 December 2020). The positive Scoping Study supports stand-alone production of ~85,000tpa Talnode®-C and ~8,500tpa Talphene® for silicon anodes. This adds to the existing Vittangi Anode Project towards total >100,000tpa anode production by 2025-2026, defining a path for Talga to become one of the largest Li-ion battery anode producers outside China.

In 2022, Talga successfully commissioned its Electric Vehicle Anode (EVA) qualification plant in northern Sweden (ASX:TLG 31 March 2022). The EVA is Europe's first Li-ion battery anode plant and produces large scale commercial samples of Talga's coated active anode material for battery customer qualification.

In 2022, Talga completed its Niska South trial mining campaign (ASX:TLG 29 July 2022), extracting a total of 25,000 tonnes of graphite ore to provide feed for large scale battery anode sample production. Customer battery anode sample production takes place across Talga's Swedish EVA plant, which produces Talnode®-C for advanced EV Li-ion battery qualification, and German Pilot Plant, which produces Talnode®-Si for ongoing customer testing programs.

Numerous metallurgical testwork has been completed on the Vittangi graphite mineralisation and successful results have been achieved at various large volume scale-ups.

Resource Estimation, Methodology & Assumptions

The Vittangi Mineral Resource estimate was based on all drilling completed as of 2 May 2022 including an additional 36 drillholes for 4,154.8m of diamond core drilling at the Niska deposit area completed since the previous estimate. The effective date of the Mineral Resource estimate is 20 March 2023.

All data was validated for collar, survey, lithology, and assay accuracy prior to input into Leapfrog Geo geological modelling software. Further validation was provided using Leapfrog three-dimension (3D) visualisation.

Geological logging and a nominal cut-off grade of 10% Cg was used to domain the graphite horizon and a low-grade graphite horizon.

Internal low-grade or barren waste rock lithologies – interpreted as transgressive sills of dolerites, diorites and gabbros – which range in thickness from less than 0.2m to over three metres were not domained separately and have instead been managed through grade interpolation parameters and treated as internal waste within the Mineral Resource estimate.

The block-model parent block size was 2.5m x 2.5m x 5m with sub-blocks of 1.5m x 1.5m x 2.5m. Block sizes were selected based on a likely selective mining unit (SMU) and anticipated 10m bench heights for an open pit mining operation, although the underground potential was also noted. Individual, unrotated block models were created covering each of the Vittangi deposit areas.

A single-pass estimation strategy was employed using a minimum of one and maximum of five samples for block estimates, limited to a maximum of two samples per drill hole. A second broader pass was employed in selective domains where a small number of peripheral blocks were left un-interpolated. A cross-section through the Niska Link block model showing drill hole composites is illustrated in Figure 1.

Inverse distance cubed (ID^3) was used to estimate graphitic carbon using analytical samples composited into two metre intervals within each graphite domain with no grade capping applied. All the material was classified as fresh with in-situ bulk density values estimated for each domain after the removal of outliers, averaging 2.67t/m^3 within graphite domains.

The spatial distribution of drillhole data and samples is deemed appropriate for the style of mineralisation and sufficient to establish confidence in geological and grade continuity. The degree of confidence in continuity is reflected in the classification applied to the Mineral Resource estimate that includes Indicated and Inferred Resources. For the purposes of determining Reasonable Prospects for Eventual Economic Extraction (“RPEEE”), the Mineral Resource estimate are reported within preliminary pit shells for each deposit area above a cut-off of 11% Cg.

Next Step

Following this Mineral Resource update, a new Exploration Target will be estimated across the project area. The estimate of exploration potential will include a strategy to test the target. This will include drilling of the deeper potential extensions of the existing Mineral Resources, as well as infill drilling of the deposit strike extensions.

Authorised for release by the Board of Directors of Talga Group Ltd.

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[1] Benchmark Mineral Intelligence, Battery Gigafactory Assessment, January 2023

Table 1 *Total Vittangi Project Graphite Mineral Resources as of 20 March 2023.*

Deposit	Resource Category	Tonnage (t)	Graphite (% Cg)	Contained Graphite (t)
Nunasvaara South	Indicated	8,528,000	24.8	2,115,000
	Inferred	2,738,000	24.3	666,000
Nunasvaara North	Indicated	4,231,000	27.2	1,151,000
	Inferred	1,952,000	15.8	309,000
Nunasvaara East	Indicated	3,029,000	23.2	702,000
	Inferred	1,449,000	22.9	332,000
Niska North	Indicated	7,906,000	22.7	1,792,000
	Inferred	1,710,000	22.3	381,000
Niska Link	Indicated	1,156,000	16.6	192,000
	Inferred	944,000	19.1	180,000
Niska South	Indicated	2,964,000	22.2	658,000
	Inferred	246,000	18.9	46,000
Total	**Indicated**	**27,814,000**	**23.8**	**6,610,000**
	Inferred	**9,039,000**	**21.2**	**1,915,000**
Total	**Indicated & Inferred**	**36,853,000**	**23.1**	**8,526,000**

Notes: *1. All Mineral Resources have been reported in accordance with the 2012 JORC Code reporting guidelines. 2. Mineral Resources are reported within preliminary pit shells and above a cut-off grade of 11% Cg. 3. Mineral Resources are estimated using a graphite price of US$4,500. 4. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. 5. Average bulk density is 2.67t/m^3. 6. Numbers may not add due to rounding.*

Table 2 *Vittangi Project Nunasvaara Probable Ore Reserve Statement.*

Deposit	Reserve Category	Tonnage (t)	Graphite (% Cg)	Contained Graphite (t)
Nunasvaara South	Probable	2,260,140	24.1	544,693
Total		**2,260,140**	**24.1**	**544,693**

Notes: *1. Due to rounding totals may not reconcile exactly. 2. The Nunasvaara Ore Reserve was disclosed in July 2021 in accordance with the 2012 JORC Code (ASX:TLG 1 July 2021) and is based on the previously disclosed Mineral Resource estimate for Nunasvaara South (ASX: TLG 17 September 2020).*

Table 3 *Talga Total Graphite Mineral Resources.*

Deposit	Resource Category	Tonnage (Mt)	Graphite (% Cg)	Contained Graphite (Mt)
Vittangi	Indicated	27.8	23.8	6.6
	Inferred	9.0	21.2	1.9
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**	**72.7**	**18.6**	**13.5**

Notes: *1. Due to rounding totals may not reconcile exactly. 2. Mineral Resources are reported at various cut-off grades: Vittangi 11% Cg, Jalkunen 5% Cg and Raitajärvi 5% Cg. 3. Mineral Resources rounded to nearest hundred thousand tonnes. 4. The Jalkunen Project Mineral Resource was disclosed in August 2015 in accordance with the 2012 JORC Code (ASX:TLG 27 August 2015). 5. 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 Vittangi Graphite Mineral Resource estimate has been updated following the incorporation of diamond drilling completed by Talga in 2022. The Company confirms that it is not aware of any other information or data that materially affects the information included in the market announcement.

The information contained in this announcement relates to a Mineral Resource estimate report for the Vittangi Graphite Project prepared by Ms Katharine Masun (HBSc Geology, MSc Geology, MSA Spatial Analysis), Principal Geologist at SLR Consulting (Canada) Limited. Ms Masun is registered as a Professional Geologist in the Provinces of Ontario, Newfoundland and Labrador, and Saskatchewan, Canada, and is a Competent Person as defined by the JORC Code. Ms Masun has sufficient experience relevant to the style of mineralisation and type of deposit under consideration, and to the activity being undertaken, to qualify as a Competent Person as defined in the December 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). Ms Masun has reviewed and approved the information in this announcement.

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 announcements titled 'Robust Vittangi Anode Project DFS' dated 1 July 2021 and 'Positive Niska Scoping Study Outlines Pathway to Globally Significant Battery Anode Production' dated 7 December 2020. 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.

The Information in this announcement that relates to prior exploration results for the Vittangi Graphite Project is extracted from ASX announcements available to view on the Company's website at www.talgagroup.com. The Company confirms that it is not aware of any new information or data that materially affects the exploration results included in the relevant original market announcements. The Company confirms that the form and context in which the Competent Person and Qualified Person's findings are presented have not been materially modified from the relevant original market announcements.

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About Talga

Talga Group Ltd (ASX:TLG) is building a European battery materials supply chain to offer products critical to the green transition. Talga's innovative technology and vertical integration of 100% owned Swedish graphite resources provides security of supply and creates additional value for stakeholders. Website: www.talgagroup.com

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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JORC Tables

Section 1 Sampling Techniques and Data

Criteria	Explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *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 1m samples from which 3kg 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.*	• Core samples from diamond drill holes have been taken following geological logging and are therefore based on observed intersection of graphite mineralisation. • Historical diamond drill holes have been sampled as half-core samples taken over two metre length intervals. • Information on historical costean/channel samples is limited although from historical reports it is understood these were sampled as rock chips over variable length intervals. Results from these intervals were composited into two metre lengths for comparison to drill core intersections. • Recent diamond drill holes by Talga since 2012 have similarly been sampled as half-core samples taken over regular one metre or two metre intervals. Quarter core samples have also been taken as field duplicates. • All sampling of core in holes since 2012 has been undertaken by Talga after detailed geological logging. • No other sampling methods, such as downhole sampling, has been undertaken.

Criteria	Explanation	Commentary
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Drilling has been undertaken using diamond coring methods. No reverse circulation, auger, or other drilling methods have been used. • Historical drill holes were completed in 1982 by the exploration company of the organisation for special projects, OSP, on behalf of LKAB and were drilled using WL56 equipment producing core of 39mm diameter. • Recent drilling completed by Talga since 2012 were drilled by Northdrill Oy of Finland using WL66, WL76 and NQ2 equipment producing core of 50.5mm, 57.5mm, and 50.6mm diameter respectively. • Core orientations, where taken, were done using a Reflex ACT 3 core orientation instrument. Core orientation was undertaken in drill holes in 2012, 2014, 2021, and 2022.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Core recovery was not recorded in historical holes at the time. During check assaying of two LKAB holes in 2012 by Talga (NUN4487 and NUN4488), core recovery was logged as a check on historical drilling performance. Recovery was generally lower near surface and in the first 15m to 20m, but otherwise averaged 96% and 92% respectively. • No recovery information is available for costeans. • For Talga drill holes, core recoveries were typically recorded by the drillers for each drill run (typically 3m lengths). The core length recovered for each drill run was recorded and used to calculate core recovery as a percentage of the run length. Instances of core loss was recorded by the drillers in the core box and checked by Talga geologist's during geological logging. • Core recovery information was provided for drilling in 2012, 2014, 2016, 2021, and 2022. No core recovery information was available for drilling in 2019. • SLR evaluated core recovery records against grouped lithologies within the geological model which show no bias by domain or graphite content. • Core recovery records demonstrate generally high core recovery across the Project with 92% of intervals having core recovery greater than 90% and 87% greater than 95% recovery. No samples were removed or adjusted in drillhole database to reflect lower than expected core recoveries as these have been attributed to isolated instances rather than a widespread issue of recovery and sample representativeness across the deposits. • No additional measures have been taken to maximise sample recovery.
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*	• Historical drill holes and costeans were logged by LKAB at the time. Records available from the time are limited, although historical reports were provided as scanned documents. Simple geological/graphic logs recording lithology/rock type for each interval in drill holes and costeans are available. The reports also include cross sections of drill holes and costeans showing graphite intersections, sample sheets, and laboratory analytical results. No original photographs or other detailed logging records are available, although a small number of historical drill collar and core photos were taken by Talga.

Criteria	Explanation	Commentary
	quantitative in nature. Core (or costean, channel, etc) photography. • *The total length and percentage of the relevant intersections logged.*	• Detailed geological logging has been undertaken by Talga since 2012 and includes logging of lithology (rock types), colour, weathering, alteration, mineralogy, mineralisation, and any structural observations. Detailed descriptions of each logged intervals were also taken. • All Talga drill core has been photographed both wet and dry.
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 representivity of 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.*	• Samples were taken over regular two metre intervals and analysed as half-core samples. Sampling information for costeans is limited although from historical reports it is understood samples were taken as rock chips Similarly, sample preparation procedures used historically are unknown. No QA/QC sampling exists for historical drill holes or costeans. • All Talga drill core was first logged, and samples marked at the SGU (Swedish Geological Survey) logging facility, also in Malå, Sweden by Talga geologists. Core was subsequently sent to ALS Global in Malå, Sweden, where core was saw cut, and samples taken as half-core. Samples are taken over regular one metre or two metre intervals for consistency. • Considering the fine-grained nature and style of the graphite mineralisation, samples taken as half-core over these standard interval lengths are deemed to be of an appropriate size to maintain sample representativeness. • Sample preparation since 2012 was undertaken by the appointed accredited laboratory, thereby following standard practices for creating homogenous samples for analysis and reducing the possibility of sample biases or contamination. Samples were finely crushed with 70% passing less than two millimetres then reduced in a splitter whereby a reject sample and a 250g sample produced. The 250g sample is then pulverised with 85% passing <75µm which completely homogenises the sample. A sub-sample of pulp is taken for digestion in a four-acid digest, total graphitic carbon (Cg) and fire assay for gold. Samples with high carbon content were pre-roasted to 700°C prior to analysis for gold. • Check assaying of two historical LKAB drill holes (NUN4487 and NUN4488) showed 0.3-0.4% Cg variation to historical analytical data. Relative differences were found to be 1.5% and 8.6% in the two re-analysed drill holes. • QA/QC programmes implemented by Talga since 2012 includes the insertion of field duplicates (taken as quarter core samples), Certified Reference Material (CRMs)/standards, and blanks. Additional laboratory pulp duplicates, internal CRMs, and laboratory blanks were also inserted by ALS The following insertion rates have been achieved for each sample type. o Pulp Duplicates (ALS): 6-13% o Field Duplicates (Talga): 2-4% o CRMs (Talga): 3-5% o CRMs (ALS): 14-18% o Blanks (ALS): 2-8% o Blanks (Talga): 2-4%

Criteria	Explanation	Commentary
		• For each drilling programme implemented by Talga, overall insertion rates were between 14% and 26%. This is higher than the typically expected 10-20%. • Evaluation of QA/QC data by SLR has shown that duplicates and blanks generally performed as expected except for isolated outliers. CRMs were also generally found to perform within the expected limits with few failures beyond acceptable limits.

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 (ie lack of bias) and precision have been established.*
		• Historical drillhole samples were analysed for sulphur and trace elements at LKAB's laboratory in Malmberget. The exact analytical method (whether partial or total) is not known. Carbon was analysed using an Infrared (IR) detector at SSAB's laboratory in Luleå.
		• No opinion can be provided regarding sulphur or trace element analytical methods. Carbon analysis by IR detector remains a recognised, industry standard analytical method, and while the type of detector used is unknown, SLR consider the method to be appropriate.
		• The accreditation status of the LKAB and SSAB laboratories at the time of analysis is not known although it is expected that standard practices for the time would have been adopted. Check assays taken by Talga and analysed by SGS in 2012 showed reasonable replication of historical grades.
		• Analysis for 2012, 2014, 2016, 2019, 2021, and 2022 drill holes has included the following:
		  ○ Cg by Leco furnace. Samples are digested in 50% HCl acid, then filtered, washed, and dried before being roasted at 425°C. Residues are analysed for carbon by high temperature Leco furnace with IR detector (IR06 for organic carbon in 2012, IR07 spectroscopy for total carbon, and IR18 spectroscopy for Cg for 2014 onwards).
		  ○ Multi-element analysis by four-acid digestion (48-element, except for in 2016 which was 33-element) with inductively coupled plasma (ICP) optical/atomic emission spectrometry (OES/AES) or ICP mass spectrometry (MS) finish (ME-MS61). Four-acid digest is deemed to be appropriate for achieving near-complete digestion.
		  ○ Whole rock analysis by ICP-AES (ME-ICP06)
		  ○ Gold analysis using a 25g sample with an atomic absorption (AA) finish. Samples with a high carbon content were pre-roasted to 700°C.
		  ○ PGM analysis including 30g fire assay ICP for Au, Pt, Pd.
		• No geophysical or handheld analytical equipment has been used as the basis for analytical results.
		• Internal QA/QC samples were introduced by the laboratory (ALS) included pulp duplicates, internal CRMs, and blanks.

Verification of sampling and assaying	• *The verification of significant intersections by either independent*	• Check assaying of two historical LKAB drill holes (NUN4487 and NUN4488) showed 0.3-0.4% Cg variation to historical analytical data. Relative differences were

Criteria	Explanation	Commentary
	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.*	found to be 1.5% and 8.6% in the two re-analysed drill holes. • Limited twin drilling has been completed by Talga in instances of hole re-drilling. NUN16005 was drilled approximately one metre from NUN16004 which failed at shallow depths. The failed hole was not sampled for analysis, however, lithological logging in both holes show consistent intersection and interpretation of graphite mineralisation. Elsewhere, scissor holes drilled in proximity from opposite sides of the graphite mineralisation at Niska North have allowed for comparison, and drilling in 2021 at Nunasvaara South are also in proximity to existing holes although are not direct twins. • All spatial and geological data relating to drill holes is stored in Excel spreadsheets by Talga. Data entry has been by manual input and validation. Numerous versions of spreadsheets and databases exist for the Project that have been created at different stages of Talga's ownership, and by different people. Most files were found to corroborate one another, although several instances of conflicting data, discrepancies and duplicate data between versions were found. • In Q4 2021, Talga appointed an independent database management company, Perth-based Rock Solid Data Limited (Rock Solid), to compile all geological and analytical data from first principles. SLR has completed validation of the provided MSAccess database compiled by Rock Solid with some discrepancies resolved in collaboration with Rock Solid and Talga. • No adjustments have been made to assay data. A small number of 0% Cg grade results were inserted by SLR into unsampled intervals, for example in instances of core loss within non-graphitic intervals.
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.*	• Historical drillhole collars were initially surveyed in an unknown local coordinate system. During initial exploration by Talga in 2012, historical holes were re-surveyed using a Digital GPS unit. Except for those in 2019 that were surveyed by an independent surveyor, all drill hole collars have been surveyed by handheld GPS by Talga with an accuracy of ±1.0m. Planned drilling azimuths were set using handheld compass with azimuths and inclinations then recorded by downhole surveying. • Talga drill holes were surveyed downhole using either a Reflex EZTrac or Devico Deviflex Gyro instrument at regular intervals. • The grid system used by Talga for all spatial data in the Swedish Coordinate system SWEREF99 TM. In some cases, historical coordinates were transformed from Swedish Grid RT90 into SWEREF99 TM by Talga. • SLR made minor modifications to collar and survey data for historical channels/costeans to ensure the correct representation of overburden and graphite domains in the geological model while also ensuring channel sample assay results were used during estimation. • Topographic control was initial established by GPS. All drillhole collars have since been registered onto a topography surface obtained by LiDAR survey obtained by Talga. Differences between GPS collar elevations and the

Criteria	Explanation	Commentary
		LiDAR dataset was evaluated by SLR and no material discrepancies for drill holes used for Mineral Resource estimation were found.
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.*	• Drillhole spacings vary by deposit area but are typically between 50m and 150m along strike and 25m to 125m down dip. More closely spaced drilling down to approximately 25m along strike has been completed in Nunasvaara South and Niska South. • The spatial distribution of drillhole data and samples is deemed appropriate for the style of mineralisation and sufficient to establish confidence in geological and grade continuity. The degree of confidence in continuity is reflected in the classification applied to the Mineral Resource estimate that includes Indicated and Inferred Resources. • Grade estimation is based on samples composited into two metre intervals within each mineralised domain. Residual lengths less than 0.5m are distributed among the remaining composite intervals and as such composite lengths are not strictly fixed.
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 drill holes have been drilled along fences/sections orientated approximately perpendicular to the strike of the graphite mineralised unit. This is deemed appropriate to avoid sampling bias considering the geometry of the deposit. • Drill holes have been completed at inclinations of between 40° and 80° from horizontal to intersect the near vertical or sub-horizontal graphite mineralisation. As such, drill hole intersections are oblique to the mineralisation. Geological interpretation by SLR considers the difference between true and apparent thickness. • No sample biases due to orientation have been identified.
Sample security	• *The measures taken to ensure sample security.*	• Sample security measures for historical drill holes and costeans are not known. • Sample security and chain of custody for Talga drill holes are managed by the Company. Core is stored in a secure core storage facility, and samples were transported to the laboratory by courier, accompanied by sample submission sheets.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• SLR has conducted a review from first principles of the data made available. Individual database issues or discrepancies were identified and resolve in consultation with Talga and Rock Solid. This included validation against original records and against the validated databases used by SLR for the previous estimate. • No other external audits or review of core logging or sample techniques have been undertaken to support this Mineral Resource estimate.

Section 2 Reporting of Exploration Results

Criteria	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 Vittangi Project is located within exploration licence areas held by Talga, namely the Nunasvaara nr 2 and Vittangi nr 2 licences. Licences are owned by Talga through the Company's Swedish subsidiary Talga AB. • According to information available from the local mining authority, Bergsstaten, the expiry dates of the two exploration licence areas are 05-02-2024 (Nunasvaara nr 2) and 26-08-2021 (Vittangi nr 2). Regarding the expiry dates, due to pending decisions from the Mining Inspectorate on Talga's applications for exploitation concessions (which were submitted during the validity period) both exploration licences remain valid throughout the application period until a decision has been made. At this time, Talga will be required to apply for a new licence for the areas that fall outside of the exploitation concession areas. This new application will involve Talga submitting a proposed licence area and coordinates with an associated justification/motivation for the application. It is anticipated that a new licence application and associated fees payable under the Mining Act will be made once Talga has been informed of the outcome of the exploitation concession applications. • Two other exploration licences in the Vittangi area include Vittangi nr 6 and Nunasvaara nr 3, valid until 21-01-2025 and 29-06-2025, respectively. • The licences owned by the Company and are located within areas which carry various environmental classifications, including for wetlands and forestry land. The area is also used for winter seasonal grazing by local indigenous Sami reindeer herders. For future development, Talga will be required to apply for the necessary concessions and provide compensation commensurate with the existing land classifications. • Other environmental areas include the Natura 2000 registered Torne River, located approximately 1km to the south of the Nunasvaara South deposit, and the Vittangi River, located approximately one kilometre north of the Niska North deposit. • No Mineral Resources have been estimated within the Natura 2000 areas of the Torne and Vittangi rivers.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Exploration was initially undertaken during the early 1900's by a number of private entities and the Swedish Geological Survey (SGU). In the early 1980s, LKAB conducted diamond drilling and test mining at the Nunasvaara South deposit; the source of historical diamond drilling and costean data used by SLR. • More recent investigations include by Anglo American and Teck Cominco for copper and base metals, although this is understood to have been undertaken across the wider Vittangi area. • Talga's exploration commenced in 2012, with subsequent drilling programmes completed in 2014, 2016, 2019, 2021, and 2022.

Criteria	Explanation	Commentary
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The mineralisation at Nunasvaara and Niska comprises two sub-vertical lithological units of very fine grained, dark grey to black graphite containing ~10% Cg to 50% Cg, ranging in thickness from approximately three metres to 80m. The graphitic units are regionally extensive over approximately five-kilometre strike length and are interpreted to have originated as early accumulation of organic compounds occupying a large and flat-lying, freshwater sedimentary basin of early Proterozoic age (1.8 billion years, Ga). • Subsequent deformation, possibly related to domal and/or plunging folded intrusive volcanics have metamorphosed and rotated the graphite units to their current sub-vertical position as identified by exploration drilling. Lithological units within the Project area are variably folded and faulted, dipping steeply (65-90°) predominantly to the northwest but also the southeast. • The basin is now characterised as a sequence of sediments, volcaniclastics, and intrusive rocks. The hangingwall is comprised of mafic volcaniclastics and tuffaceous units and the footwall to the mineralisation is a mafic intrusive (dolerite-gabbro). • The majority of the graphite at Vittangi is very fine grained, highly crystalline and very high grade. Pyrite, pyrrhotite and trace chalcopyrite accompany the graphite mineralisation.
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.*	• Drill hole locations used by SLR for this Mineral Resource estimate are shown in the figures throughout the Mineral Resource Report. Due to the advanced nature of exploration of the Vittangi Project comprising 193 drill holes, individual drill hole coordinates, elevations, dip/azimuths, and hole lengths has not been tabulated here. • The material change to drill hole information since the previous estimate is the incorporation of diamond drilling completed by Talga in 2022. This included expansion drilling along strike between the two existing Niska North and Niska South deposit areas. The results of exploration drilling results from 2022 have been publicly reported separately by Talga.

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Criteria	Explanation	Commentary
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.*	• Mineral Resources have been estimated using a 11% Cg cut-off and within Whittle open pit shells. • Capping analysis was completed by SLR although no grade capping has been applied to the assay data or composites. The assay data shows a normal distribution and capping of high grades is not considered appropriate for the style of mineralisation, strata bound, graphite-bearing schist. • Other than compositing of sample intervals into two metre composite lengths for grade estimation, no other aggregation methods have been required due to the regular sample lengths. • No metal equivalents have been used in the reporting on Mineral Resources.
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 drill hole 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 (e.g. 'down hole length, true width not known').*	• All drill holes have been drilled along fences/sections orientated approximately perpendicular to the strike of the graphite mineralised unit. This is deemed appropriate to avoid sampling bias considering the geometry of the deposit. • Drill holes have been drilled at 40°-80° inclination, with the graphite mineralisation being approximately sub-vertical or near vertical (65°-85°).
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, cross sections, photographs, and tabulations have been included throughout the Mineral Resource Report and have not been repeated here.

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Criteria	Explanation	Commentary
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 to avoid misleading reporting of Exploration Results.*	• The Mineral Resource Report provides details of graphite mineralisation, low and high grades, and grade distribution within the deposits thereby providing balanced reporting. • Exploration Results associated with the most recent drilling in 2022 have been released separately by Talga.
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.*	• In addition to exploration drilling, geophysical surveying comprising electromagnetics has been flown across the Vittangi Project area. The surveys have been successful in identifying the existence of graphite mineralisation across each of the Vittangi deposits as delineated by drilling. The results were most recently used to inform the 2022 exploration program. Appropriate plans of the geophysical results are included in the Mineral Resource Report. • Trial mining has been undertaken by Talga in 2015-2016 at Nunasvaara South (SWEREF99 TM 770088 E, 7524299 N). An approximate 5kt bulk sample was taken using dimension stone circular saw and diamond wire methods. This material was subsequently used for metallurgical testing to identify potential graphene products from the Vittangi Graphite deposits. Other pilot testing for Li-ion battery anode product potential has since been undertaken. The LiDAR topography used by SLR for the Mineral Resource estimate post-dates this trial mining area that was not subsequently backfilled, and therefore no depletion has been necessary. • Trial mining has also been undertaken by Talga in 2021-2022 at Niska South (SWEREF99 TM 771626 E, 7526576 N). In total, a 25kt bulk sample was extracted using drill and blast methods. The purpose was to trial drill and blast methods, to test potential environmental impacts and mitigation measures for noise, dust, and water, to test the robustness of the hydrogeological model and water treatment. Talga also plans to run large-scale metallurgical pilot tests, which will fed through to a large-scale anode plant (currently operating in Luleå, Sweden) for customer qualification samples. A mined-out survey was provided to SLR and used to apply depletion to the Niska South estimate. • Metallurgical testing has been completed by Talga to confirm the production of anode material for lithium-ion (Li-ion) batteries. This testing has predominantly been based to date on the bulk sample material collected at Nunasvaara South in 2015-2016. • In 2015 and 2016, graphite ore material extracted for process tests and production of Talga graphene, Talphene®, 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 (ASX:TLG 15 May 2018). Metallurgical testwork has since focussed on producing a

Criteria	Explanation	Commentary
		range of Talnode® and Talphene® products via Talga's proprietary processing methods. • Metallurgical testing has concluded the graphite to be high-grade, with high conductivity and high graphite crystallinity. It has also been shown to have an extremely narrow flake size distribution with high anode yield. Testing to date has confirmed that mined ore can be beneficiated into a graphite concentrate (through crushing, grinding, and flotation), followed by purification, shaping and coating at a dedicated anode plant to produce an anode product (Talnode®-C) with a final >99.95% Cg content. Metallurgical testing and anode pilot plant testing has determined that approximately 80% of the graphite from Vittangi mined material is converted into saleable Talnode®-C product. • Bulk density testing has been taken by Talga using core from diamond drill holes. In total, 920 density measurements are available across the deposits. Most density measurements were made using the Archimedes method, with some densities also being determined by ALS laboratory. • The density of graphite mineralisation ranges from 2.61g/cm^3 to 2.76g/cm^3. Density has been estimated into the block models using a regression with graphitic carbon. • There are no material deleterious elements within the deposits which affect metallurgical recoveries or product value. SLR has incorporated additional geochemical analysis results for 10 gangue elements including Fe, Na, Si, Ti, Al, Ba, Ca, K, Mg, and S into the geological model to provide elemental distributions to inform metallurgical design criteria.
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.*	• Following this Mineral Resource update, a new Exploration Target will be estimated across the project area. The estimate of the exploration potential will include a strategy to test the target that may include drilling of the deeper potential extensions of the existing Mineral Resources, as well as drilling along strike in between the deposit areas and mineralised domains.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	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.*	• All data was made available by Talga in a secure virtual data room. • All spatial and geological data relating to drill holes is stored in Excel spreadsheets by Talga. Data entry has been by manual input and validation. In Q4 2021, Talga appointed an independent database management company, Rock Solid, to compile all geological and analytical data from first principles. Databases provided by Rock Solid were validated by SLR through a combination of manual and automated checks. This included spot checks against original laboratory certificates and geological logs. Automated checks and 3D visual validation using Leapfrog modelling software to identify overlapping intervals, missing intervals, and typographical errors were also completed. In this sense, geological and analytical data used for the Mineral Resource estimate has been checked independently on several occasions. • Overall, SLR is satisfied that the databases used for Mineral Resource estimation are sufficiently robust and are representative of the originally collected data. • Due to discrepancies between historic survey records for the costeans and the recently acquired LiDAR topography data, SLR modified the original costean surveys to prevent logging and analytical data sitting above the topography and being ignored during estimation as a result. • Analytical results were checks for anomalies between grade and geological logging, and between graphitic and total carbon. No material anomalies were identified. • Drillhole intervals logged as graphite but for which no analytical data was available has been treated as null, thereby being ignored during grade estimation. Those logged as other non-graphitic lithologies were assigned a 0% Cg grades. A small number of intervals from costeans logged as graphite but not sampled were also assigned 0% Cg grades. This was considered the more appropriate, conservative approach in absence of any additional historical records.
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.*	• A site visit by the Competent Person has not been undertaken at this time due to weather conditions preventing ground truthing and data verification, however, members of the SLR team have been involved in the Project since 2018 and have previously conducted site visits to the Vittangi Project. A site visit by the SLR Competent Person is planned for Q2 2023 when work on the Project will resume. • Talga's Project Geologist also visited the SLR team during the geological modelling phase to provide input into geological interpretations and to assist in data validation. • Other members of the SLR team have visited the Project including Mr John Walker, Technical Director Mining Advisory at SLR, conducted a site visit in September 2018. The purpose of the site visit was to oversee the exploration activities at Nunasvaara South. Mr Walker subsequently acted as Competent Person for Ore Reserve estimation (based on the 2019 Mineral Resource estimate. ASX:TLG 15 October 2019) for the Nunasvaara

Criteria	Explanation	Commentary
		South deposit in 2021. Mr. Xander Gwynn, Principal Geotechnical Engineer at SLR, conducted a site visit in November 2021. The purpose of the site visit was to review geotechnical drilling and logging procedures for geotechnical drill holes completed by Talga at Nunasvaara South in 2021. The visit involved visiting the project area, Talga's logging and core storage facilities, holding technical discussing with Talga, overseeing geotechnical logging and sampling.
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.*	• The interpretation of graphite mineralisation at the Vittangi Project is based on geological logging whereby graphite is strata bound as a graphite schist that is distinct from the surrounding host/ waste rock lithologies. The graphite has been interpreted to have originally accumulated as a horizonal stratiform unit which has been subsequently metamorphosed, deformed, and rotated into its current geometry. • Geological logging of graphite has been confirmed through laboratory analysis of samples taken within the graphite schist lithology. Analytical results have been used to define several graphite domains/wireframes within each deposit area, and these wireframes have been used as hard boundaries during grade estimation. The graphite domains can be broadly separated into High Grade (HG) and Low Grade (LG) domains. HG domains exist within all known deposit areas including Nunasvaara South, East, and North, and Niska with average grades of 22% to 27% Cg. LG domains have been interpreted in the footwall at Nunasvaara North and Niska North, and in the hangingwall at Niska South and exhibit average grades of 12% to 13% Cg. New domains delineated by SLR in 2023 using 2022 drill hole data average 13% Cg and 17% Cg, respectively. • Analysis of samples has confirmed the graphite to have a clearly distinct grade in comparison to the surrounding host rock and a natural grade boundary of approximately 10% Cg can be visualised consistently within all deposit areas. • Given the strata bound nature of the mineralisation, drilling completed to-date has shown the deposit to be highly laterally continuous within each deposit area in comparison to other styles of mineralisation. Drilling and geophysical surveying completed to-date indicates the potential for the graphite mineralisation to be discontinuous between the defined (named) deposit areas, although some areas such as between Nunasvaara North and Niska South, and Nunasvaara North and Nunasvaara East remain untested by drilling. • Based on drilling and supporting geophysical surveying, confidence in the overall geological interpretation of the graphite is deemed to be high. • Uncertainty in the geological interpretation exists with regards to potential cross-cutting or transgressive sills which have been intersected within the graphite schist. These intersections appear as alternative lithologies (including dolerites and diorites) which exhibit negligible or barren graphite grades. The intervals vary in thickness from approximately 20cm up to several metres thick and have been shown to be laterally discontinuous within the graphite schist; interpreted to have been boudinaged

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Criteria	Explanation	Commentary
		during deformation of the deposit post-deposition. SLR has not considered it appropriate to create solid domains/wireframes for these intersections and has instead sought to manage them through the adopted grade interpolation parameters. With further infill drilling it may be possible to refine the interpretation of these units or create solid domains in areas where their lateral continuity can be more confidently defined.
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 graphite mineralisation of the resources at Vittangi comprises two sub-vertical, continuous lithological units ranging in thickness from approximately 3m to 80m. • The main graphitic bearing strata has been interpreted across six main deposit areas with a total strike length of approximately five kilometres. The deposits have also been found to have two orientations, with a distinct change in orientation of approximately 90° occurring within the Nunasvaara South deposit. The southern portion of the Nunasvaara South deposit trends towards 320° and dips steeply (75-85°) to the southwest 230° with a strike length of approximately 800m. Conversely, a hinge in Nunasvaara South changes the orientation of the northern portion of the deposit towards 055°, dipping steeply (70-80°) to the northwest with a strike length of approximately 500m. Moving north, the Nunasvaara North, Niska South and Niska North deposits all show a generally consistent strike towards 040°. While all the deposits are also steeply dipping in these areas, some evidence of overturning has been observed. Nunasvaara North is generally vertical or steeply dipping (85°) to the northwest or southeast, Niska South dips steeply (75-85°) to the northwest, and Niska North dips steeply (75-85°) to the southeast. Nunasvaara East, approximately 500m southeast of Nunasvaara North, is curved in shape but generally strikes 137° and dips (65-75°) to the southwest. • New deposit areas at Niska delineated by 2022 drilling are orientated north-south (000°) and 150°, both dipping towards the west at 65-80°. • Drilling to-date has intersected the graphite mineralisation to a maximum true depth of approximately 200m.
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*	• The Vittangi Project is host to six separate deposit areas defined to date, through a combination of exploration drilling and geophysical surveying. Within each deposit area, geological logging and assaying of drill core has informed the interpretation of graphite-bearing schists from which wireframes/domains have been constructed for the purposes of constraining the estimation. • Domains were constrained by maximum extrapolation distances of approximately 80m beyond the nearest drill holes. • Interburden (discordant or transgressive sills) have not been modelled as separate wireframes/domains and are instead interpreted as being laterally discontinuous. These discordant lithologies with associated negligible graphite grades were instead controlled during grade estimation and should therefore be considered internal dilution included in the Mineral Resource estimate. • The geological model and Mineral Resource estimate were undertaken using Leapfrog Geo and Leapfrog Edge software packages.

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Criteria	Explanation	Commentary

	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.*
		• Based on statistical evaluation of the analytical results which show a normal distribution and the style of mineralisation, high-grade capping has not been considered necessary prior to Mineral Resource estimation.
		• Block modelling is based on parent block sizes of 2.5m x 2.5m x 5m and sub blocked to 1.5m x 1.5m x 2.5m, based on a Selective Mining Unit (SMU) and anticipated 10m bench heights for open pit mining.
		• All block models for each of the deposit areas are unrotated.
		• The block models fully enclose the mineralised domains and pit shells used to constrain the Mineral Resource estimate.
		• Variography of Cg was undertaken using all available two metre composite samples in two principal orientations to represent the two major orientations of the Vittangi Project i.e., NW-SE for Nunasvaara South (southern limb) and NE-SW for Nunasvaara South (northern limb), Nunasvaara North and East, and Niska. Variography was used to inform Mineral Resource classifications only.
		• Cg was interpolated into blocks by ID^3 using variable orientation and a single pass estimation strategy. A second broader pass was employed in selective domains where a small number of peripheral blocks remained un-interpolated.
		• Interpolation was restricted by the mineralised wireframe models, which were used as hard boundaries to prevent the use of composite samples outside of the domain to interpolate block grades.
		• The first pass used an X and Y search distance of 180m, and a Z search distance of 10m. The second pass used an X and Y search distance of 270m, and a Z search distance of 30m.
		• A minimum of one and maximum of five samples were used for block estimates, limited to two samples per drillhole.
		• Identical interpolation parameters were used in all mineralised domains.
		• Comparison to previous estimate (May 16, 2022):
		  ○ The 2022 Mineral Resource estimation the Vittangi Deposit in the combined Nunasvaara and Niska areas included 22.6Mt classified as Indicated at an average Cg grade of 24.9% and 7.5Mt classified as Inferred at an average Cg grade of 21.8%. Mineral Resources were estimated at a 10% Cg cut-off grade and constrained inside pit shells.
		  ○ The increase in the tonnage of both Indicated and Inferred Mineral Resources is attributed to the inclusion of additional drilling that expanded existing domains and delineated several new domains. The minor variation in the Cg grade is also attributed to these factors, in addition to the inclusion of additional lower-grade assay data (generally between 5% and 10% Cg) along hangingwall and footwall contacts.
		• The Vittangi Project has no history of operations and therefore no product records or reconciliation data exists.

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		No analytical data for trial mining areas at Nunasvaara South and Niska South were available to SLR although depletions using mined-out surveys have been applied. • SLR validated the block model by visual inspection, volumetric comparison, and statistical comparison of block grades to assay and composite grade. Visual comparison on vertical sections and plan views, and a series of swath plots indicate good overall correlation between the block grade estimates and supporting composite grades in SLR's opinion.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• The Mineral Resource estimate is estimated on a natural moisture basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• Due to the style of mineralisation, analytical results to-date have demonstrated a natural Cg boundary of approximately 10% Cg. Along with lithological logging, this has been used to guide the construction of solid domains/wireframes for the graphite mineralisation within each deposit area, although has not been used as a strict cut-off for wireframe construction. • Due to the small quantity of graphite material below the cut-off, there is not expected to be a significant change to the estimate by using a higher cut-off, except in Low Grade domains. • Using pricing and cost information available, a cut-off grade has been calculated at 11.2% Cg. SLR has adopted a Mineral Resource cut-off grade of 11% Cg. • For the purposes of demonstrating RPEEE preliminary open pit shells were generated using Whittle software and a slope angle of 45°.

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*	• SLR has assumed that the Vittangi Project deposits will be amenable to open pit mining methods. This is based on feasibility-level studies undertaken for the Nunasvaara South deposit whereby open pit geotechnical studies have been completed. While other early-stage evaluations have been previously completed for the Niska deposits and show a combination of open pit and underground mining may be more appropriate, SLR consider that further study work is required to optimise the mining methods.
		• For determining RPEEE, SLR conducted preliminary pit optimisations for each of the six deposit areas assuming the following parameters, in addition to proprietary ore related cost and process recovery inputs provided by Talga. The resultant pits have been used by SLR to constrain the Mineral Resource estimate.
		  ○ Price: US$4,500/t purified graphite product (99.92% Cg)
		  ○ Concentrate grade: 99.92% Cg
		  ○ Bench heights: 10m based on Nunasvaara South feasibility-level studies
		  ○ Overall Slope Angle: 45° based on Nunasvaara South feasibility-level studies and geotechnical investigations

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	the basis of the mining assumptions made.	• No mining recovery or dilution factors have been applied to the Mineral Resource estimate. Internal dilution from discordant sills is included in the grade and tonnage estimates. • Based on the updated Mineral Resource estimate by SLR, Talga plans to undertake feasibility level studies on the Vittangi Project to optimise the potential mining method, mine design, and extraction rates from each deposit. This is expected to involve evaluation of alternative mining methods.
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 testing has concluded the graphite to be high-grade, with high conductivity and high graphite crystallinity. It has also been shown to have an extremely narrow flake size distribution with high anode yield. It is expected that mined ore will initially be beneficiated into a graphite concentrate (through crushing, grinding, and flotation), followed by purification, shaping and coating at a dedicated anode plant to produce an anode product (Talnode®-C) with a final >99.95% Cg content. Metallurgical testing and anode pilot plant testing has determined that approximately 80% of the graphite from Vittangi mined material is converted into saleable Talnode®-C product.
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.*	• The licences owned by the Company and are located within areas which carry various environmental classifications, including for wetlands and forestry land. The area is also used for winter seasonal grazing by local indigenous Sami reindeer herders. For future development, Talga will be required to apply for the necessary concessions and provide compensation commensurate with the existing land classifications. • Stakeholder engagement has been undertaken since commencement of exploration in 2012 and all trial mining and exploration activities completed by Talga have received the necessary permits and stakeholder permissions to proceed. • Other environmental areas include the Natura 2000 registered Torne River, located approximately one kilometre to the south of the Nunasvaara South deposit, and the Vittangi River, located approximately one kilometre north of the Niska North deposit. • No Mineral Resources have been estimated within the Natura 2000 areas of the Torne and Vittangi rivers. • The Swedish Geological Survey has demarcated the Vittangi Project as a mineral deposit of national interest (Riksintressen Mineral). Under the Swedish Environmental Code, this demarcation may ensure that other activities

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	Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	which could significantly impact mineral exploitation could be prevented. • An Environmental Impact Assessment has been completed and the Environmental Permit application was submitted to Swedish authorities in May 2020. A subsequent application for a Natura 2000 permit has been submitted to the relevant agency. These assessments are intended to ensure environmental and social issues are integrated into ongoing study and project development work. • Reindeer Herding Impact Assessments have been completed.
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 density testing has been taken by Talga using core from diamond drill holes. In total, 920 density measurements are available across the deposits including from mineralised and hangingwall/footwall lithologies. Most density measurements were made using the Archimedes method, with some densities also being determined by ALS laboratory. • Density values have been estimated using a regression with graphitic carbon after discarding outliers. The global average density of the Mineral Resource is 2.67g/cm^3. • The hangingwall metatuffs and footwall metavolcanics have been assigned density values of 2.96g/cm^3 and 2.89g/cm^3, respectively. Overburden has been assigned a density of 1.7g/cm^3.

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 Mineral Resource estimate has been classified into Indicated and Inferred Mineral Resource categories, in accordance with the Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).
		• A range of criteria has been considered in determining the final Resource classifications, including:
		  ○ Confidence and uncertainty in geological interpretations
		  ○ 3D continuity of mineralisation, including the robustness of average Cg grades
		  ○ Data quantity and quality
		  ○ Drill hole spacing, both in the along strike and down-dip directions
		  ○ Geostatistical evaluation, including variography
		• Indicated Resources have been defined using a nominal 80m drillhole spacing where supported by intersections along strike and down dip. Inferred Resources have been defined by overall geological continuity and the extent of

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	the Competent Person's view of the deposit.	wider spaced drill holes. The final Mineral Resource classifications reflect the degree of confidence in the geological and grade continuity in the view of the Competent Person. • Block model validation indicates that the final block estimate is a reasonable representation of the input drillhole data.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• In addition to the data validation undertaken by SLR throughout the geological modelling process, the final Mineral Resource estimate and block model has been subject to an internal Peer Review process adopted by SLR to ensure a robust estimate.
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 in the Mineral Resource estimate is not explicitly stated. Block estimation of grades has been undertaken using ID^3.This method is considered the most appropriate and reasonable representation of graphite concentrations with each graphite domain/wireframe. This includes the best representation of low-grade graphite or internal barren/waste intervals within the graphite domains that could not be reliably interpreted or delineated as separate domains. Other means of estimation, including Ordinary Kriging (OK) have been tested by SLR. • Variography in two major orientations – representing the two major orientations of the Vittangi Project – and downhole has been evaluated by SLR. The results were used to inform Mineral Resource classifications. • The accuracy and precision of data used in the Mineral Resource estimate is primarily based on that achieved by the analytical laboratory ALS Global. The results provided by ALS have been evaluated through the implementation of QA/QC programmes, and it can be concluded that the overall accuracy and reliability of the data is suitable for Mineral Resource estimation. • The relative confidence level in the Mineral Resource estimate is reflected in the Mineral Resource classifications assigned including Indicated and Inferred Resources. The Indicated Resources should be used for future technical and economic evaluation, for example the estimation of Ore Reserves. • A source of potential uncertainty in the estimate is the interpretation of internal waste lithologies and the extent to which these units may be more, or less laterally continuous throughout the deposit. Additional infill drilling will be required where drillhole spacings are wider to further refine these interpretations. • No production data exists for the deposit.