

Talga Substantially Increases Flagship Graphite Resource Size, Grade and Status

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Corporate Information

ASX Codes **TLG, TLGOA**

Shares on issue **181.9m**

Options (listed) **44.9m**

Options (unlisted) **28.7m**

Company Directors

Terry Stinson

Non-Executive Chairman

Mark Thompson

Managing Director

Grant Mooney

Non-Executive Director

Stephen Lowe

Non-Executive Director

Technology minerals company Talga Resources Ltd (“**Talga**” or the “**Company**”) (ASX Code: TLG) is pleased to announce an updated JORC Mineral Resource Estimate (“**MRE**”) of its flagship Nunasvaara graphite deposit (“**Nunasvaara**”) following diamond drilling and test mining programs in the latter part of 2016. Nunasvaara forms part of Talga’s 100% owned Vittangi Graphite Project (“**Vittangi**”) located 50km east of Kiruna in northern Sweden.

Highlights of the Talga MRE include:

- ✓ **The global MRE now stands at 12.3Mt @ 25.5%Cg for 3.1Mt of contained graphite based on a 17%Cg lower cut-off.**
 - *Represents a **25% increase in total resource tonnes and contained graphite** over previous resource of 9.8Mt @ 25.3%Cg based on a 10%Cg lower cut-off¹.*
 - *Maintains position as **world’s highest grade graphite mineral resource**² and reflects progressive growth of deposits with minimal exploration.*
- ✓ **87% of the global MRE now classified as Indicated.**
 - ***Doubles JORC (2012) Indicated tonnage** from MRE used in 2014 scoping study³.*
 - *Provides further confidence in quality and consistency of deposit.*
 - *Enables inclusion of additional zones for mining permitting purposes and economic studies. Provides more flexible development options.*
- ✓ **MRE includes high grade domain of 2.0Mt @ 32.6% Cg for 652,000t contained graphite based on a 30%Cg lower cut-off.**
 - *Higher grade zone starts from surface, offering early stage boost to any development.*
- ✓ **Mineralisation in MRE present from surface to approximately 220m depth and is open along strike and at depth.**
 - *Provides further increase in scale and development options if required.*

Talga Managing Director Mark Thompson commented:

“The updated JORC (2012) - compliant resource for Nunasvaara builds on what is already the world’s highest grade graphite mineral resource. We have added significant scale, improved grade and boosted the majority of tonnes into higher status resource categories.

This enables us to extend our planning and development options for this large, high-grade and unique graphite deposit, on which we have only just scratched the surface. It gives Talga confidence that additional highly prospective exploration targets already identified in our Vittangi project area have strong potential to convert to further resources as required to supply future demand growth for both graphite and graphene products.”



Mineral Resource Overview

The Nunasvaara MRE update was completed by independent geological consultants Oliver Mapeto and Albert Thamm utilising results from diamond drilling completed at the Nunasvaara North prospect (“**Nunasvaara North**”) in 2016. Nunasvaara North is located ~1,200m to the northeast of the main Nunasvaara graphite deposit (“**Nunasvaara South**”).

Further details and MRE estimation parameters are provided in Table 1-4, text below and in Appendix 1-2.

Table 1 Global Nunasvaara MRE (17% Cg lower cut-off, April 2017).

Resource Category	Tonnes	Graphite (% Cg)	Contained Graphite (Tonnes)
Indicated	10,700,000	25.7	2,749,900
Inferred	1,600,000	23.9	382,400
Total	12,300,000	25.5	3,136,500

Note: Due to rounding totals may not reconcile exactly.

Figure 1 Global JORC/NI43-101 Graphite Resources by Grade. Adapted from Technology Metals Research Advanced Project Graphite Index²

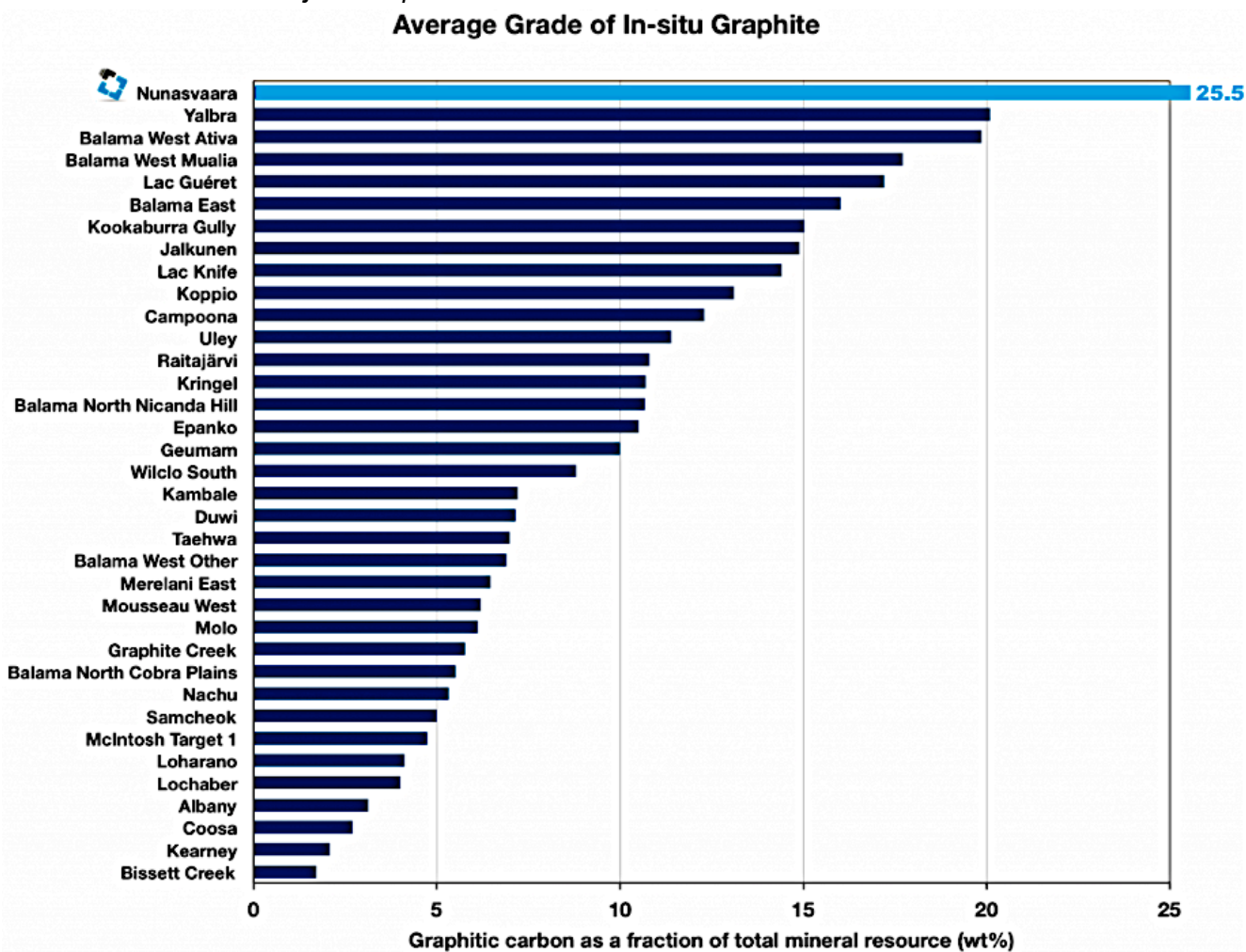
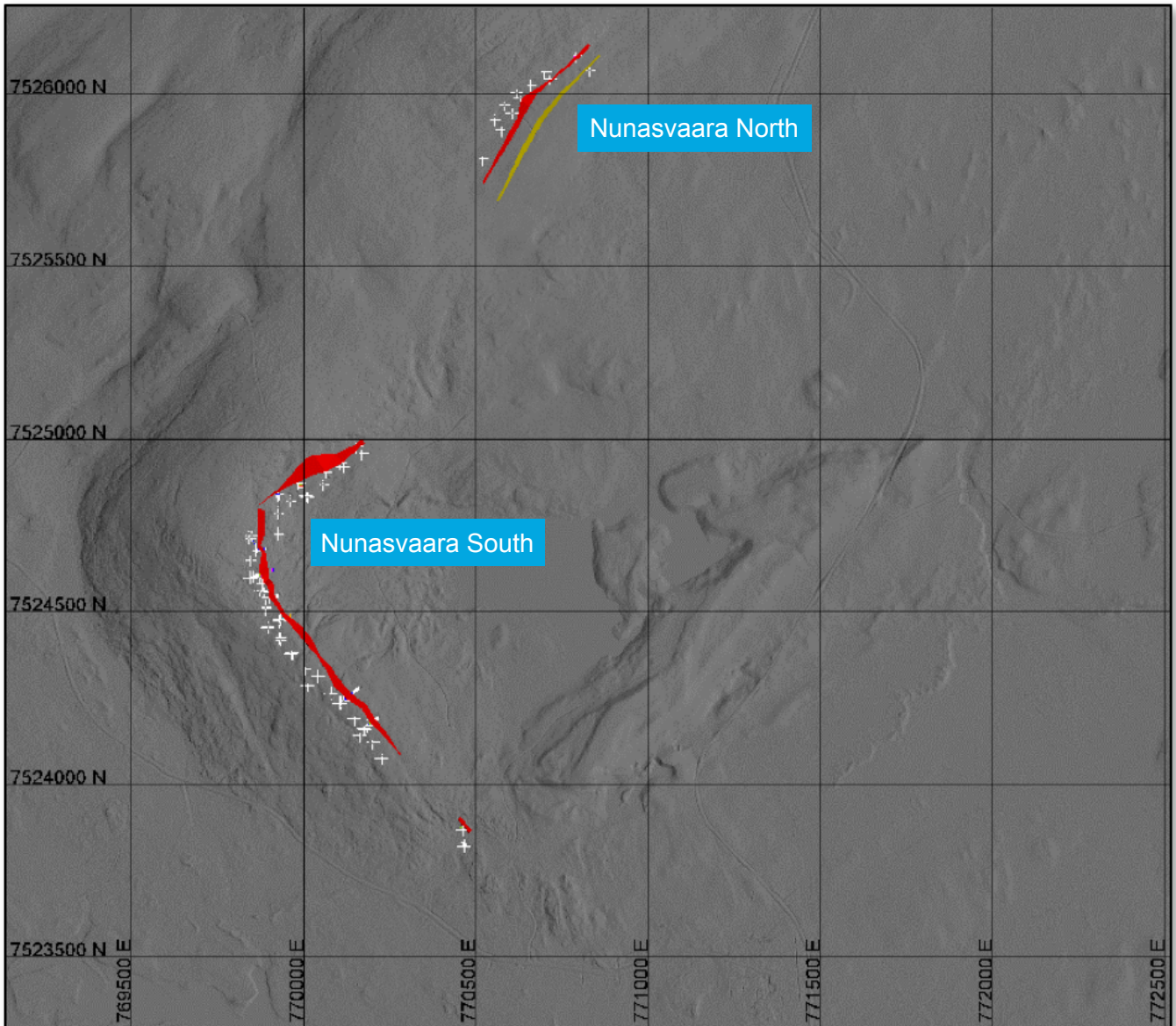


Figure 2 Location plan showing drillhole locations and mineralisation at Nunasvaara. Main 'hangingwall' graphite unit in red and 'footwall' graphite unit in yellow. Base imagery is laser topographic imagery.



Nunasvaara Mineral Resource Estimate

Geology

The geology of the Vittangi graphite project area (hosting the Nunasvaara graphite deposit) consists of a Proterozoic 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 as two individual, sub-vertical 15-60m wide lithologically continuous units of a very fine grained, dark-grey to black graphite rock containing between 10-46% graphitic carbon as highly crystalline, ultra-fine flakes. Pyrite, pyrrhotite and trace chalcopyrite may accompany the graphite mineralisation.

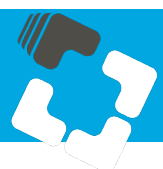
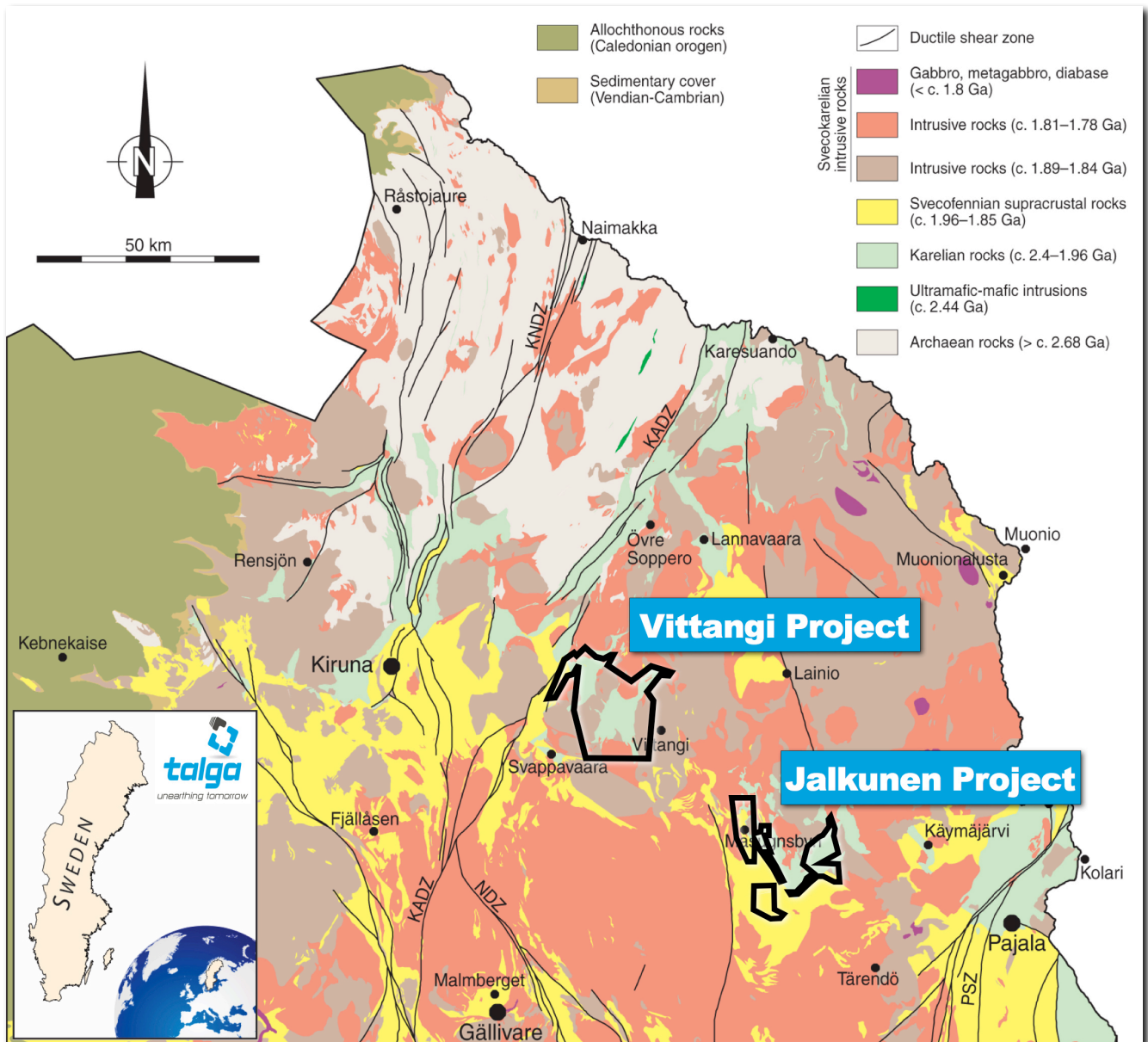


Figure 3 Geology and location plan of the Vittangi and nearby Jalkunen Graphite Projects.



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 via Piteå, 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.

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 quarried during the 2015 and 2016 trial mining programs is currently being processed and tested for graphene extraction at the Company's test facility in Rudolstadt, Germany.

Metallurgical test work completed by Talga has produced graphite and graphene products from the material via Talga proprietary processing methods and preliminary marketing of these products with a potential range of buyers has suggested economic potential beyond the original estimates.

Resource Estimation, Methodology & Assumptions

The Nunasvaara MRE was based on all drilling completed at both the Nunasvaara South and Nunasvaara North prospect areas and reported as public data (Refer to ASX release dated 6th December 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 (040° and 140°) to create block models.

A three-pass estimation strategy was employed with search parameters as listed in Table 2 below.

Table 2 Nunasvaara block model estimation parameters.

Run Number	Search Ellipsoid			Sample Count		
	x	y	z	Minimum	Maximum	Max/Hole
1	100	20	75	8	12	4
2	125	20	120	6	12	3
3	160	25	150	4	12	2

Ordinary Kriging (OK) was used to estimate graphitic carbon (Cg) for the main graphite horizon. Inverse Distance Weighting (Power 2) was used for estimation of graphitic carbon (Cg) in the footwall low-grade graphite horizon and sulphur (S) for all graphite horizons. Estimation used geological matching of mineralisation ('ore' or 'lgore') in the drillhole database and the block model. Blocks not estimated after third pass were assigned the mean grade lying within the validated wireframe solids.

All of the material is classified as fresh with a mean insitu bulk density (ISBD) of 2.801 based on statistical analysis as supplied.



Table 3 Nunasvaara MRE by Deposit (17% Cg lower cut-off, April 2017).

Deposit	Resource Category	Tonnes	Cg (%)	Contained Graphite (Tonnes)
Nunasvaara South	Indicated	8,900,000	25.0	2,225,000
	Inferred	1,500,000	23.5	345,000
Total		10,400,000	24.8	2,579,200
Nunasvaara North	Indicated	1,800,000	29.4	529,200
	Inferred	100,000	27.4	27,400
Total		1,900,000	29.2	554,800
TOTAL		12,300,000	25.5	3,136,500

Note: Due to rounding totals may not reconcile exactly.

Table 4 Nunasvaara MRE-High Grade Domain (30% Cg lower cut-off grade, April 2017). Note 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	Tonnes	Cg (%)	Contained Graphite (Tonnes)
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: Due to rounding totals may not reconcile exactly.



Competent Person's Statement

The information in this document that relates to exploration results is based on information compiled by **Amanda Scott**, a Competent Person who is a Member 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 information in this report that relates to Resource Estimation is based on information compiled by **Oliver Mapeto** and reviewed by **Albert Thamm**. Both Mr Mapeto and Mr Thamm are consultants to the Company. Mr Mapeto is a Member of both the Australian Institute of Mining and Metallurgy (Membership No.306582) and Australian Institute of Geoscientists (Member No 5057) and Mr Thamm (Member No 203217) is a Fellow Member of the AusIMM.

Both Mr Mapeto and Mr Thamm have sufficient experience relevant to the styles of mineralisation and types of deposits which are covered in this document and to the activity which both are 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 Mapeto and Mr Thamm consent to the inclusion in this report of the Matters based on this information in the form and context in which it appears.

For further information visit www.talgaresources.com or contact:

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References

1. *TLG:ASX Release 30 May 2016 – "Vittangi Graphite Resource Upgrade"*.
2. *TMR Advanced Graphite Projects Index, last updated 22 September 2015 - "List of natural-graphite projects formally defined as mineral resources or reserves under NI 43-101 or JORC Code"*.
3. *TLG: ASX Release 8 November 2012 - "110% Increase in Nunasvaara Graphite Resource"*.
4. *TLG: ASX Release 9th October 2014 – "Scoping Study Demonstrates Robust Returns from Vittangi Graphite-Graphene Project"*.

About Talga

Talga Resources Ltd (ASX: TLG) is a technology minerals company enabling stronger, lighter and faster products for the coatings, battery, construction and carbon composites markets using graphene and graphite. Talga has significant advantages owing to 100% owned unique high grade conductive deposits in Sweden, a pilot test facility in Germany and in-house graphene product technology. Testing of Talga materials and products is underway with a range of corporations including industrial conglomerates Tata and BASF subsidiary Chemetall, UK listed Haydale and German based Jena Batteries.



APPENDIX 1

Figure 4 Block model cross-section for Nunasvaara South with blocks coloured to graphitic carbon grade.

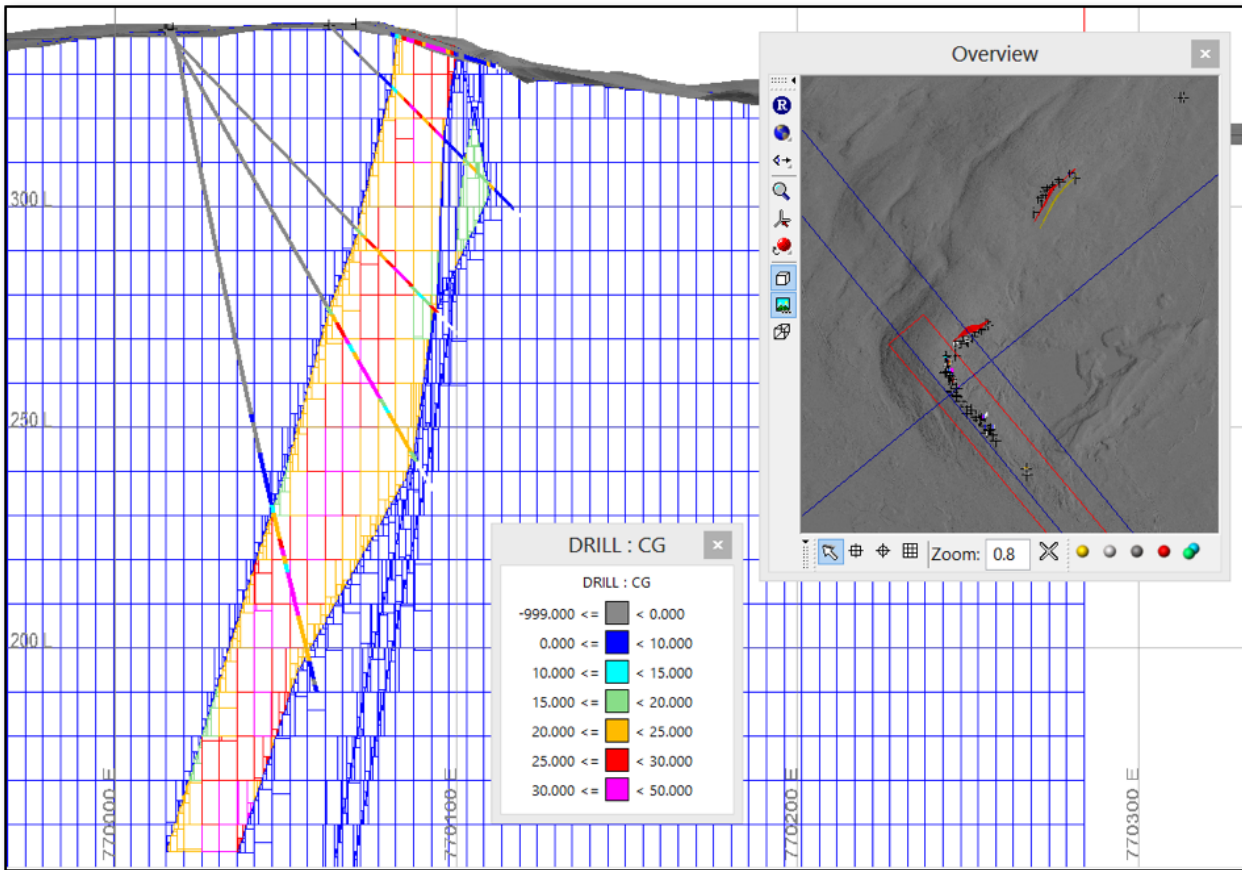


Figure 5 – Block model cross-section for Nunasvaara North with blocks coloured to graphitic carbon grade.

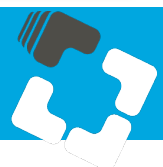
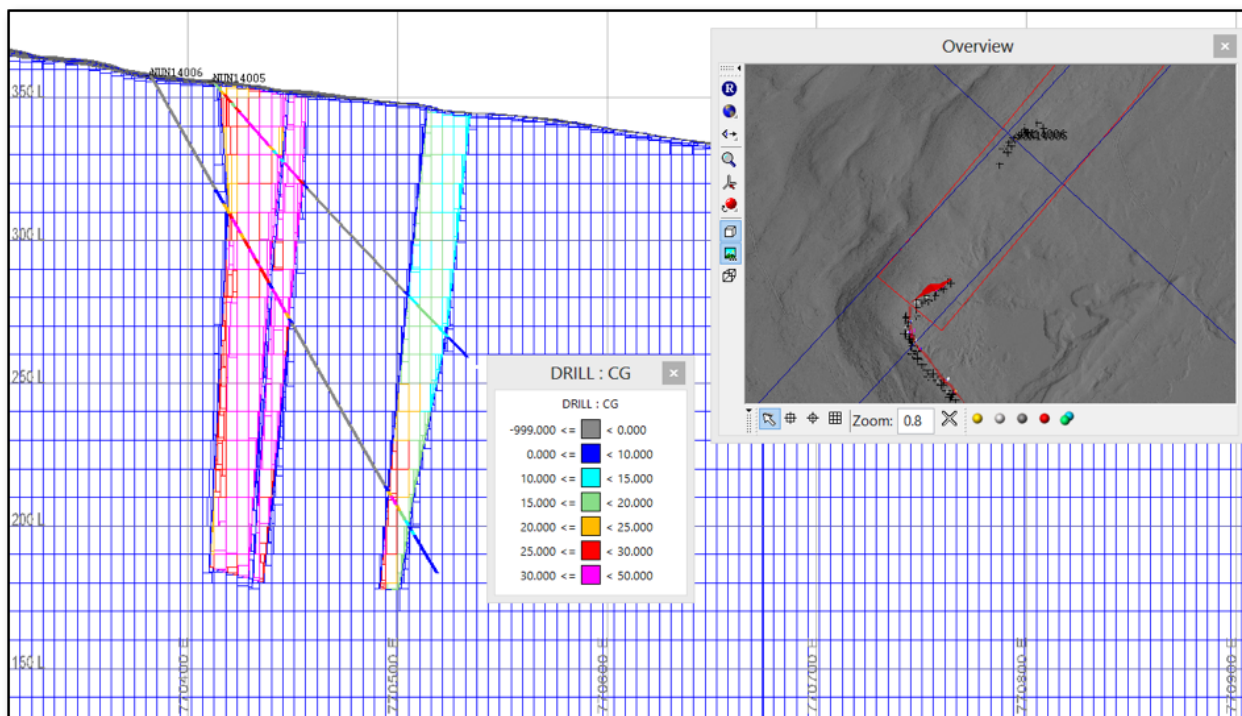
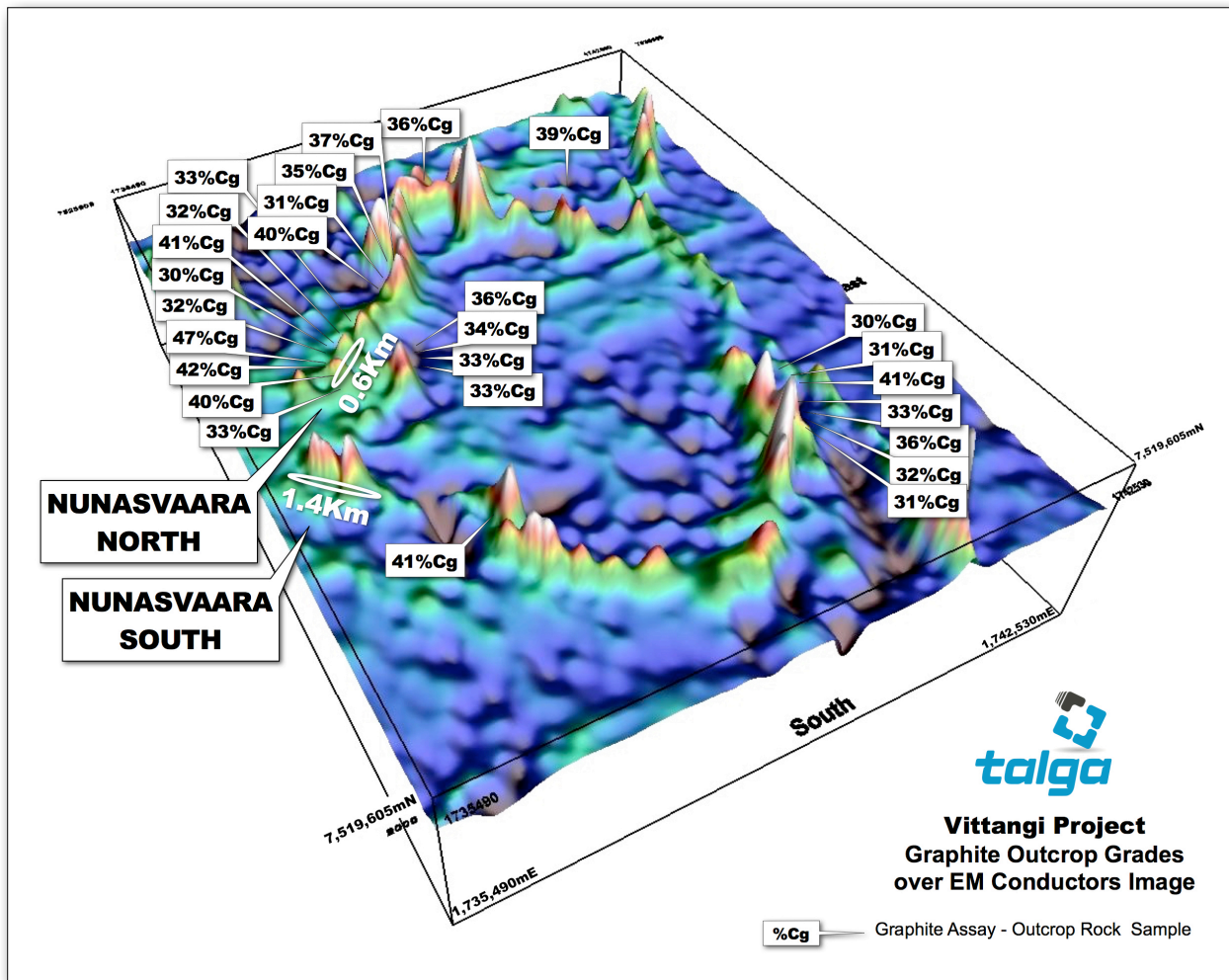


Figure 6 Electro-magnetic (EM) imagery showing conductive graphite lithology and surface rock sampling graphite assays at Vittangi project including Nunasvaara deposit.



APPENDIX 2: JORC 2012 TABLES

Table 1, Section 1 - Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

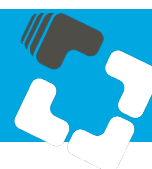
Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i> <i>Include reference to measures taken to ensure sample “representivity” and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <i>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.</i> 	<ul style="list-style-type: none"> 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 Talgas’ 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	<ul style="list-style-type: none"> <i>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.).</i> 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> <i>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.</i> 	<ul style="list-style-type: none"> 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.



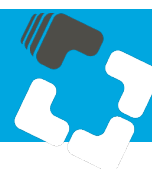
Criteria	JORC Code Explanation	Commentary
Logging	<ul style="list-style-type: none"> • <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> • 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.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representative nature to the samples.</i> • <i>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.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> • 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.



Criteria	JORC Code Explanation	Commentary
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>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.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • 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 utilized; 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 CO₂. Residue is filtered, washed, dried and then roasted at 425°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 QA/QC methods include the insertion of certified reference material standards, blanks, and duplicates.



Criteria	JORC Code Explanation	Commentary
Verification of sampling and assaying	<ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> • 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 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	<ul style="list-style-type: none"> • <i>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.</i> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> • Historic drillholes and Talgas' 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	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>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.</i> • <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> • 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.

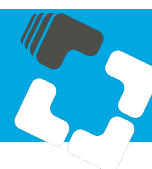


Criteria	JORC Code Explanation	Commentary
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> • <i>If 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.</i> 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> • An external review of the sampling, logging and core handing techniques was completed in December 2016 by Albert Thamm ahead of the current MRE being completed.

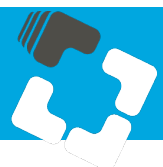
Section 2 - Reporting of Exploration Results

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

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> • <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • 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 Mining Pty Ltd Filial Sweden. • 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. • The licences are in good standing with the local mining authority, Bergsstaten.
Exploration done by other parties	<ul style="list-style-type: none"> • <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> • Talga completed diamond drilling at Nunasvaara in 2012, 2014 and 2016. Graphite was first identified at Nunasvaara in the early 1900's and has been extensively explored since that time. In the early 1980's LKAB completed diamond drilling and test mining at Nunasvaara. More recently the area has been explored by Anglo American and Teck Cominco for copper and base metals prospectivity.



Criteria	JORC Code Explanation	Commentary
Geology	<ul style="list-style-type: none"> • <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> • The mineralisation at Nunasvaara and Nunasvaara North comprises two sub-vertical, 20-30m wide lithologically continuous units of very fine grained, dark-grey to black graphite containing 10-46% graphitic carbon. 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 kilometres and are interpreted to have developed in a shallow fresh water 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 graphite at Nunasvaara is very fine grained (classified as micro-crystalline) and very high grade and metallurgical testwork completed by the Company shows graphite and graphene products can be produced.
Drill hole Information	<ul style="list-style-type: none"> • <i>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:</i> <ul style="list-style-type: none"> • <i>easting and northing of the drill hole collar</i> • <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> • <i>dip and azimuth of the hole</i> • <i>down hole length and interception depth</i> • <i>hole length.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • Drillhole locations used in the current MRE are shown in the figures contained within the text of this report.
Data aggregation methods	<ul style="list-style-type: none"> • <i>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.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • A lower cut-off grade of 17% 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.

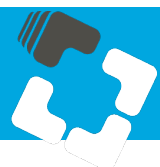


Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</i> <i>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').</i> 	<ul style="list-style-type: none"> The geometry of the graphite mineralisation at both Nunasvaara South and North is well understood and all drilling has been completed perpendicular to the strike of the mineralisation.
Diagrams	<ul style="list-style-type: none"> <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i> 	<ul style="list-style-type: none"> Appropriate maps, photographs and tabulations are included in the main body of this report.
Balanced reporting	<ul style="list-style-type: none"> <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i> 	<ul style="list-style-type: none"> The report provides the total information available to date and is considered to represent a balanced report.
Other substantive exploration data	<ul style="list-style-type: none"> <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i> 	<ul style="list-style-type: none"> Previous exploration results, including all drilling results and previous JORC Inferred Mineral Resource Estimates for Nunasvaara have been previously reported. No other exploration data is considered material at this stage.
Further work	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> Metallurgical testwork on NUN16004 is still ongoing at the Company's pilot plant in Germany. Petrographical, geophysical and geological interpretation of all prospects is ongoing. A revised scoping study for the project is also currently in progress.

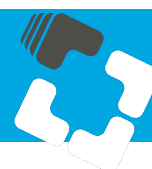


Section 3 - Estimation and Reporting of Mineral Resources

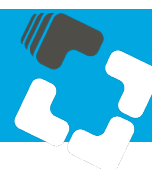
Criteria	JORC Code Explanation	Commentary
Database integrity	<ul style="list-style-type: none"> • <i>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</i> • <i>Data validation procedures used.</i> 	<ul style="list-style-type: none"> • Data package was supplied and downloaded on as a Dropbox™ company dataset. The dataset was also supplied on a USB. The data package included historic, 2012-2014, 2016 drill data, resource and pit design files, QAQC resources and other previous drilling and resource estimate reports. • Drill data consisted of excel files for collar, survey, lithology and assay data. • The data was validated for the following: <ul style="list-style-type: none"> • 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.
Site visits	<ul style="list-style-type: none"> • <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i> • <i>If no site visits have been undertaken indicate why this is the case.</i> 	<ul style="list-style-type: none"> • Albert Thamm (Competent Person) is a Geological Consultant and undertook a site visits 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 to visually inspect and better understand the scale and nature of the subsurface geology.



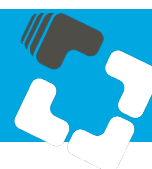
Criteria	JORC Code Explanation	Commentary
Geological interpretation	<ul style="list-style-type: none"> • <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i> • <i>Nature of the data used and of any assumptions made.</i> • <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i> • <i>The use of geology in guiding and controlling Mineral Resource estimation.</i> • <i>The factors affecting continuity both of grade and geology.</i> 	<ul style="list-style-type: none"> • Confidence in the interpretation of the Nunasvaara stratigraphy is considered to be high given: <ul style="list-style-type: none"> • 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. • Using a lower grade cut-off of 15% Cg would not change the volume of the mineralised envelopes except for the low-grade horizon.
Dimensions	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • The Nunasvaara South mineralisation strikes 137°/317° for a total distance of 3.6Km with a dip of 75° towards 230°. The Nunasvaara North mineralisation strikes at about 40°/220° for a distance of 0.5km and dips steeply towards 310° to near vertical. • The mineralisation pinches and swells to a maximum thickness of 60m. Average true mineralisation thickness varies between 15m and 20m. • The mineralisation extends from surface to a maximum depth of 150m often covered by up to 2m of overburden material. • Mineralisation is open laterally and at depth due to limited drill data.



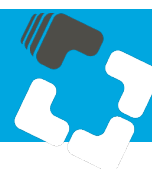
Criteria	JORC Code Explanation	Commentary
Estimation and modelling techniques	<ul style="list-style-type: none"> • <i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i> • <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i> • <i>The assumptions made regarding recovery of by-products.</i> • <i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i> • <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i> • <i>Any assumptions behind modelling of selective mining units.</i> • <i>Any assumptions about correlation between variables.</i> • <i>Description of how the geological interpretation was used to control the resource estimates.</i> • <i>Discussion of basis for using or not using grade cutting or capping.</i> • <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i> 	<ul style="list-style-type: none"> • 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 40° and 140°. • 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 variogr • 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.



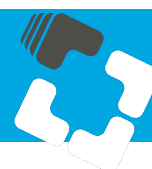
Criteria	JORC Code Explanation	Commentary
		<ul style="list-style-type: none"> • In the first search pass, a minimum of 8 composite samples and maximum of 12 with no more than 4 samples per drill hole was required to estimate a block. Blocks not estimated in the first pass were re-evaluated in the second 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: <ul style="list-style-type: none"> • 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. • 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	<ul style="list-style-type: none"> • <i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i> 	<ul style="list-style-type: none"> • All mineralised tonnages are estimated by applying a mean bulk density of 2.801g/cc, with natural moisture.



Criteria	JORC Code Explanation	Commentary
Cut-off parameters	<ul style="list-style-type: none"> <i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i> 	<ul style="list-style-type: none"> A natural mineralisation cut-off occurs at 10% Cg and was used to define the mineralised envelope. Resource estimates were based on a lower cut-off of grade of 17% & 30% chosen around the time of the studies to 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 the low-grade foot wall horizon.
Mining factors or assumptions	<ul style="list-style-type: none"> <i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution.</i> <i>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.</i> <i>Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</i> 	<ul style="list-style-type: none"> Talga Resource currently envisages to use open pit mining method with a possible option for underground mining. Studies are underway to optimise resource extraction. The mining method and height was chosen to maximise recovery. Current design parameters are a bench height of 20m, with a berm width of 5m, batter angle of 70° to give an overall pit slope of 58°. The northern wall varies in slope most likely to incorporate ramps. Assessment is underway of alternative mining method to cutting and sawing the final pit without blasting. It is assumed that this method will result in achieving a batter angle of 80° and a berm width of 2.5m. Trial mining has been successfully completed in 2016. No geotechnical data supporting this alternative mining method exists.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Metallurgical sample testing is underway from ore extracted from trial open pit mining. Results of metallurgical testing are not available.



Criteria	JORC Code Explanation	Commentary
Environmental factors or assumptions	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Based on mining studies, volumes of ore and waste have been quantified. Further studies are required for waste disposal.
Bulk density	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Bulk densities used in the Mineral Resource Estimate are based on a mean bulk density of 2.801g/cc for all mineralisation. The bulk density determination was as follows: both the mean and geomean of 147 field measurements using the Archimedes principal. Laboratory measurements by ALS Malå report within this tolerance. The same density measurements were applied as prior resource reporting.
Classification	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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.



Criteria	JORC Code Explanation	Commentary
		<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> <i>The results of any audits or reviews of Mineral Resource estimates.</i> 	<ul style="list-style-type: none"> 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.
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i> 	<ul style="list-style-type: none"> 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.

