Talga boosts Swedish graphite project with maiden Niska resource

Advanced battery anode materials and graphene additives provider Talga Resources Ltd ("**Talga**" or "**the Company**")(**ASX: TLG**) is pleased to announce a maiden JORC Mineral Resource Estimate ("**MRE**") for its Niska graphite deposits ("**Niska**") which form part of the wider Vittangi Graphite Project located in northern Sweden.

The Niska deposits (North and South) are located 1-2km northeast along strike of the current Nunasvaara JORC-compliant (2012) MRE of **12.3Mt @ 25.5% graphite** ("**Cg**") (ASX:TLG 27 Apr 2017). Highlights of the Niska MRE include:

- Maiden JORC (2012) Indicated resource of **4.6Mt @ 25.8% Cg** using a 10% lower cut-off
- 100% of the Niska MRE is classified as *Indicated*
- Mineralisation starts within 4m from surface and deposits remain open, both at depth and along strike, with potential to expand the deposits, via additional drilling, considered high based on geophysical data (EM)
- Expands Talga's total JORC resource inventory in Sweden to **52.7Mt containing 9.3Mt graphite** (ASX:TLG 27 Sep 2019 and Table 5)
- Niska preliminary economic study to commence in November to scope development options and commence permitting process

Talga Managing Director, Mr Mark Thompson: *"This new and first resource for the Niska discovery is a very positive development. Not only is it more than double the size of the Nunasvaara ore reserve that underlies the PFS we published in May, it is higher in grade and opens up a range of potential options for development that we will scope out separately at this stage. This conversion of Niska from discovery to resources adds further strength to Talga's plans to build a large, long term European source of anode products for the lithium-ion battery industry."*

Mineral Resource Overview

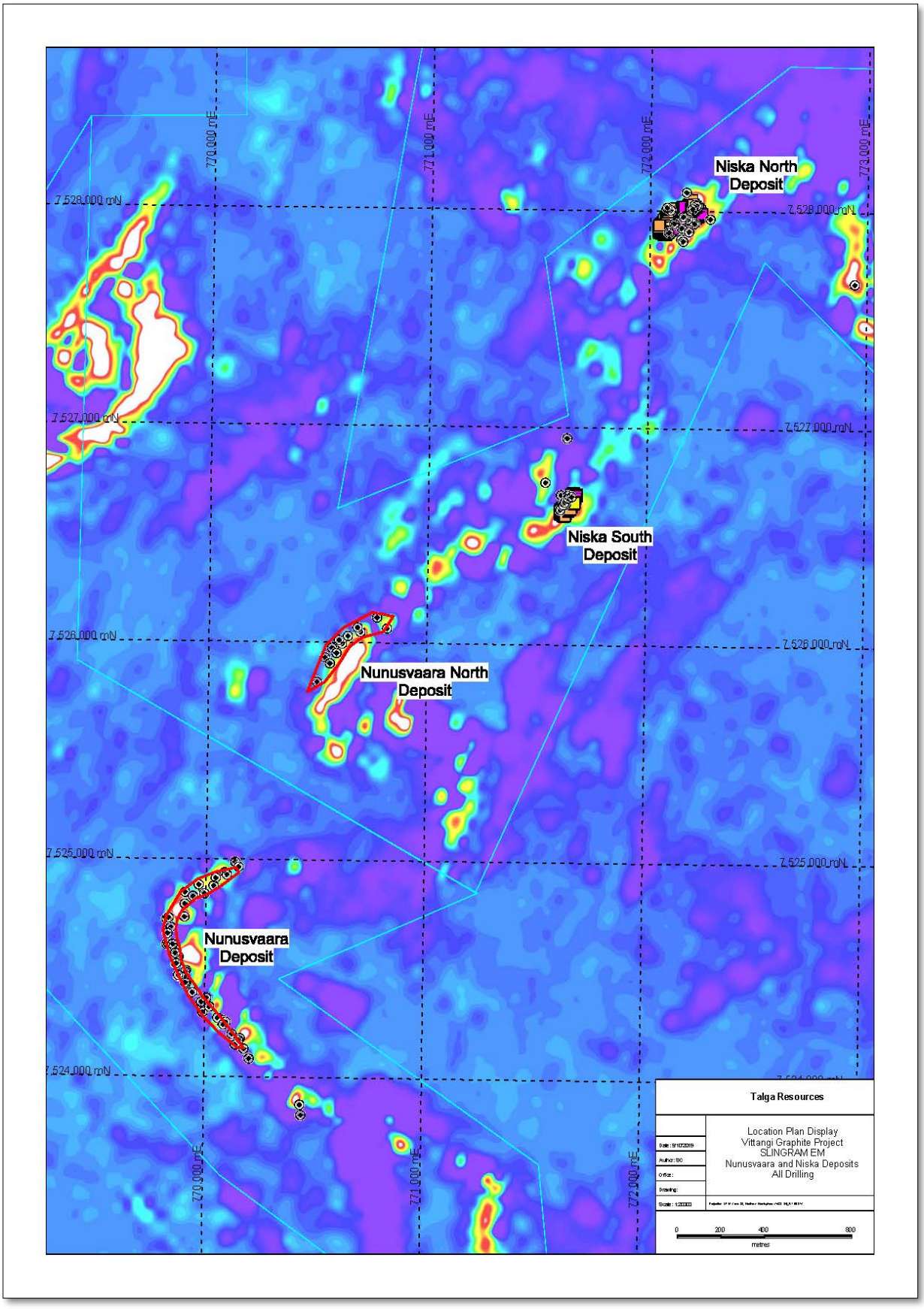
The Niska MRE estimate was completed by independent geological consultancy Coxsrocks Pty Ltd following a diamond drilling campaign completed in the first half of 2019 comprising a total of 28 NQ diamond holes for 3046m. The Indicated Mineral Resources for Niska have been estimated according to the guidelines of the 2012 edition of the JORC Code and are summarised in Table 1 below.

Table 1 *Niska JORC (2012) Code Compliant Mineral Resource Statement.*

Resource Category	Orebody	Density	Tonnage (t)	Graphite (% Cg)	Contained Graphite (t)
Indicated	Niska North	2.6	4,160,000	25.83	1,074,528
Indicated	Niska South	2.6	480,000	25.77	123,696
Total		**2.6**	**4,640,000**	**25.82**	**1,198,050**

Notes: 1. *Minimum 10% Cg cut-off applied.*
2. *Indicated Mineral Resources rounded down to nearest 1000t.*
3. *Errors may exist due to rounding.*

Figure 1 *Niska South and Niska North Deposits: Location Plan and drilling on Slingram EM Imagery.*



Niska Mineral Resource Estimate

Geology

The project area geology (hosting the Niska graphite deposits) consist of a Proterozoic age sequence of sediments, volcanoclastics and intrusive rocks centred on the Vittangi district of Northern Sweden. The host lithology consists of a sub-vertical, lithologically continuous unit of very fine-grained dark grey to black graphite rock containing between 10-50% graphitic carbon. Two parallel units have been identified from drilling, mapping, sampling and EM surveys, however only the higher-grade unit was considered in this latest MRE.

The lithological units are variably folded and faulted, with true widths up to 70m, have local continuity over hundreds of metres and regionally extend over many kilometres. Pyrite, pyrrhotite and trace chalcopyrite accompany the graphite mineralisation. The graphitic rock units may have originated as early accumulation of organic compounds occupying large, flat lying sedimentary basins extending over several hundred kilometres. Subsequent deformation, possibly related to domal and or doubly plunging folded intrusives have metamorphosed and tilted the units to the sub-vertical orientations presented today.

Exploration & Drilling

The estimate was based on all drilling completed at the Niska South and Niska North area totalling 28 diamond holes for 3046 metres and reported as public data to the ASX on 4 April 2019, 5 June 2019 and 2 July 2019. In addition, 2 diamond holes drilled in 2014 (NUN14007 and NUN14008) had been drilled at Niska South and initially identified the potential of this area. Individual statistics for the drilling at Niska South and Niska North are presented below.

Table 2 *Niska South and Niska North Drilling Statistics and Deposit Dimensions.*

Deposit	No. Holes	No. Metres	Section & Hole Spacing (m)	Length (m)	Average Width (m)	Depth Extent (m)
Niska North	19	2356	20-50	200	60	180
Niska South	11	866	15-20	120	15	90

All drilling completed was diamond drilling and conducted by Northdrill Oy from Finland. The diamond drilling was completed using WL66 core drilling equipment with a diameter of 50.5 mm. Core recoveries were considered excellent. All drill core was orientated using a Reflex ACT 3 core orientation tool and downhole surveying completed using a Reflex EZTrac survey instrument.

The sampling method was half-core sampling of the WL66 diamond core, with quarter-core sampling adopted where a duplicate sample was taken. Samples were delivered to ALS Global in Malå where the core was cut and sampled. The sample preparation follows industry best practice whereby 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. 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 where practicable; standard and blank results for all holes are within accepted limits.

Any intervals which were not assayed were assigned a zero value for graphite and 0.25% for sulphur. These values are incorporated into the interpolation and statistical results to allow for any narrow barren dolerite dykes which intrude the sequence to be captured and considered as internal dilution to the resource estimates.

Mineral Processing & Metallurgical Testwork

Niska-specific metallurgical testwork is currently underway using drillcore from the 2019 drilling. Given the geological similarities and close spatial relationship between the Nunasvaara North and South deposits and the Niska deposits, which are considered part of the same lithological unit and based on the successful metallurgical testwork from the 2015-2016 trial mining at Nunasvaara South, the 2016 drilling at Nunasvaara North and the 2019 Nunasvaara South PFS, it is considered there is reasonable prospects for economic extraction at Niska as part of this MRE.

Mineral Resource Estimation, Methodology & Assumptions

All data was validated for the collar, survey, lithology and assay accuracy prior to loading into Micromine Mining Software (64 bit) and running drill hole validation processes. Further validation was completed in three-dimension visualisation (3D) using Micromine, 3D Vizex.

Geological logging and a lower-grade cut-off of 10% graphitic carbon were used for interpretation and modelling of the graphite horizon with separate wireframes and domains constructed for the different areas and deposits. This cut-off accurately relates to the geology characterised as the logged and visually distinct graphite geological horizon. No top cuts were considered relevant or applied to the data.

Both deposits are open along strike and at depth and reference to the EM data (Slingram) which has been used to target the initial drilling, suggests excellent potential to expand the resources with further drilling.

All of the material is classified as fresh with in situ bulk densities (ISBD) based on a mean bulk density of 2.60 g/cc (t/bcm) for all mineralisation. This is determined from a total of 131 drill core measurements of the graphite unit using the Archimedes method. At Niska values ranged from 2.51 to 2.82, with a mean of 2.62 g/cc (t/bcm).

Adopted block model parent block size was 5m x 5m x 5m and the block models were aligned along the principal strike directions with sub-blocks of 2.5m x 2.5m x 2.5m to accurately fill the wireframes. A strike directions of 70 degrees to the north east, parallel and consistent with the trend of the graphite lithology was used to create block models.

A single pass estimation strategy was employed with search parameters documented in Table 3.

Table 3 *Block Model Search Estimation Parameters.*

Deposit	Azimuth (°)	Dip	N Search Dimension (m)	E Search Dimension (m)	Z Search Dimension (m)
Niska North	60	-75 SE	80	80	8
Niska South	60	-75 NW	80	80	4

Inverse Distance Weighting (Power 2) was used for estimation of Cg % and S % in the graphite horizon. A typical plan and cross section of the Niska South and Niska North block models are presented below.

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Figure 2 *Niska North Plan Display Block Model on Topographic Image.*

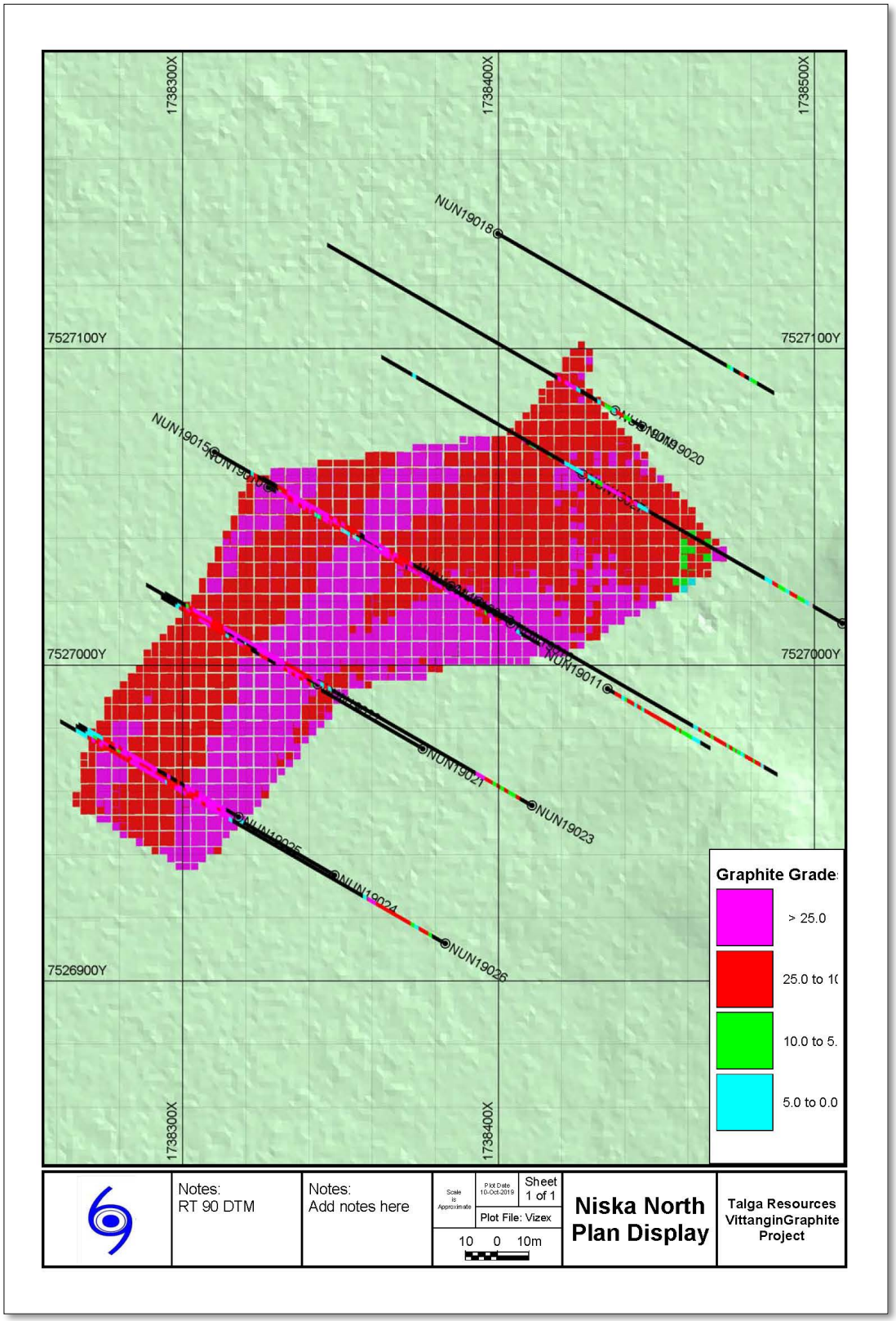

Figure 3 *Niska North Cross Section Block Model Display.*

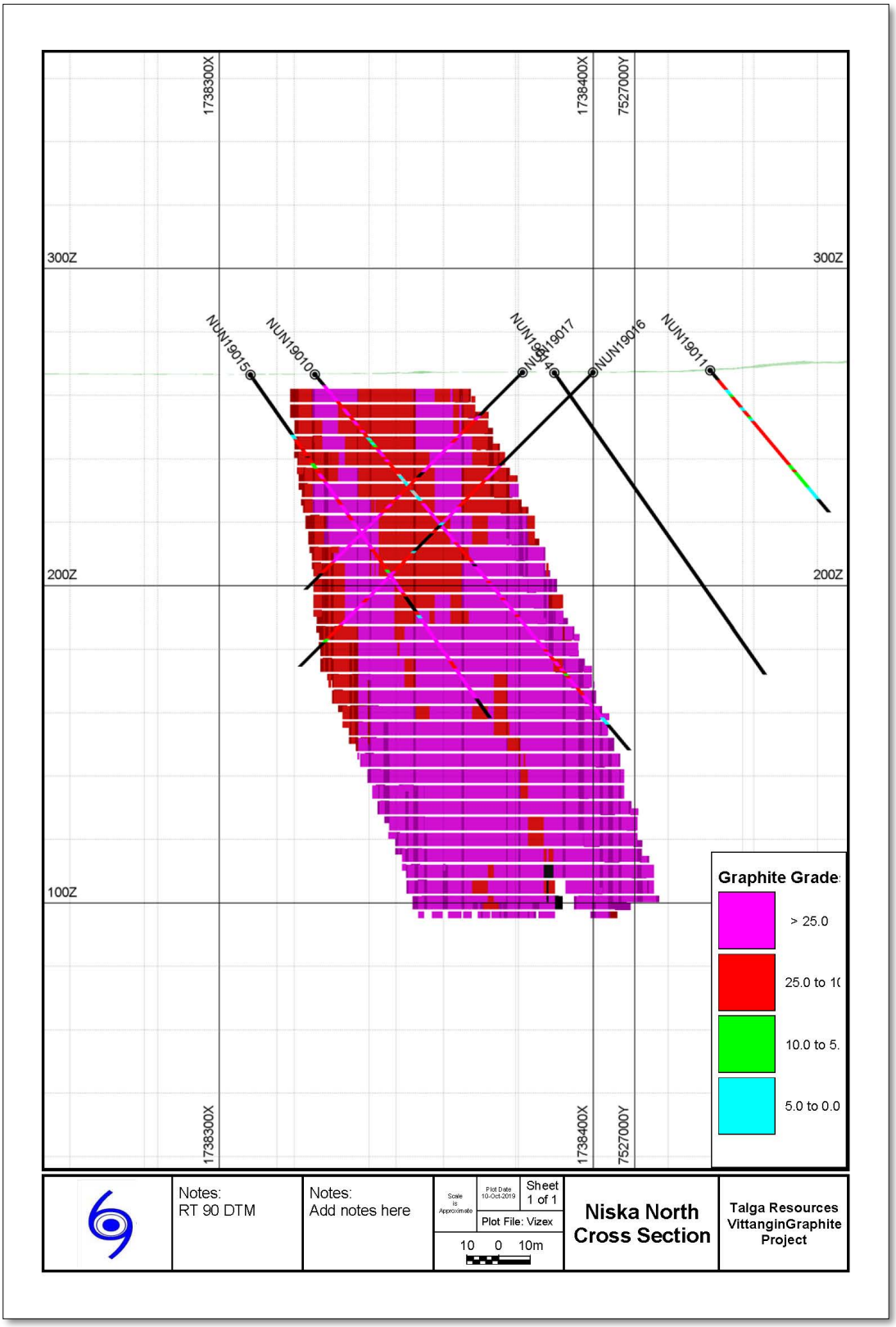

Figure 4 *Niska South Plan Display Block Model on Topographic Image.*

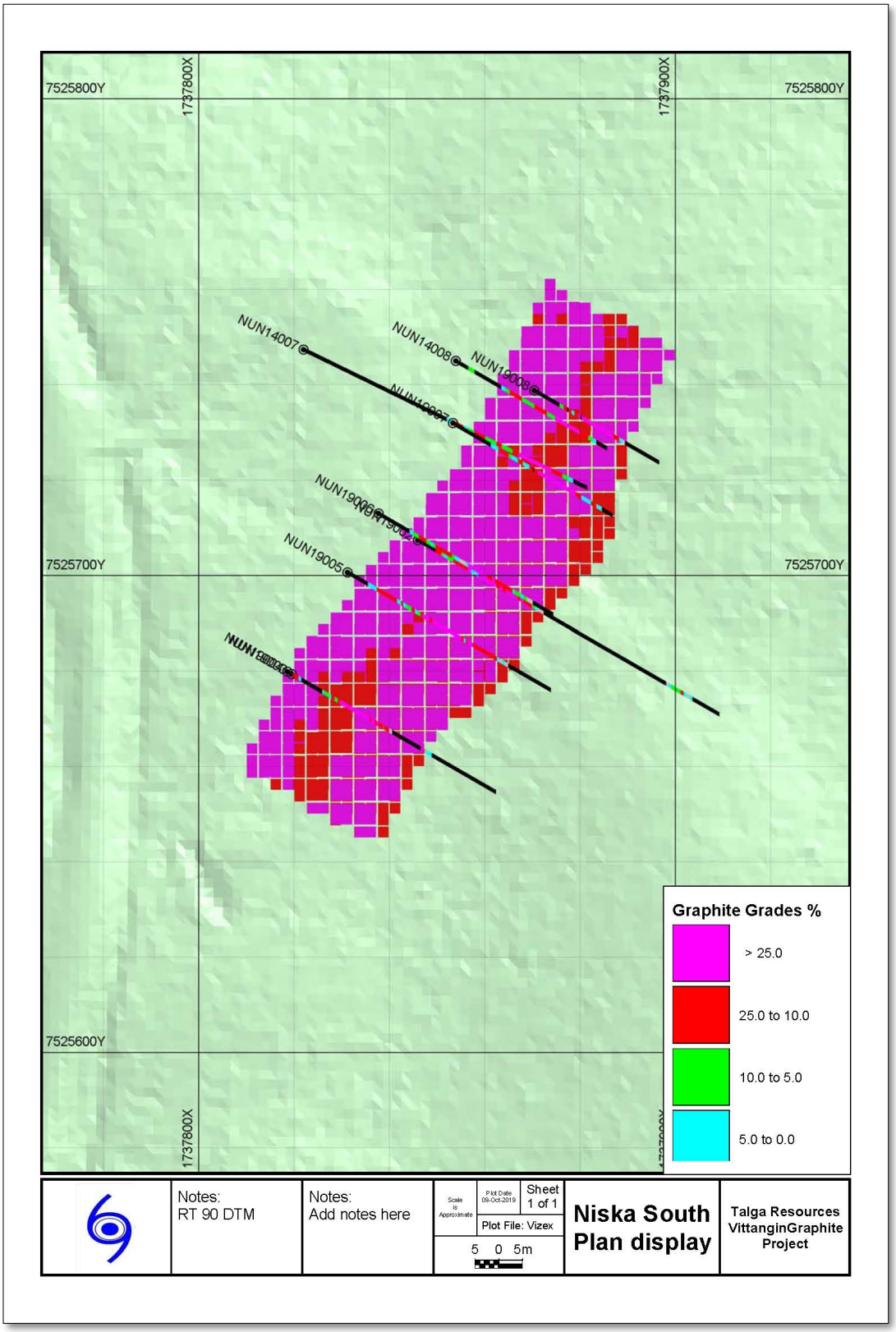

Figure 5 *Niska South Cross Section Block Model Display.*

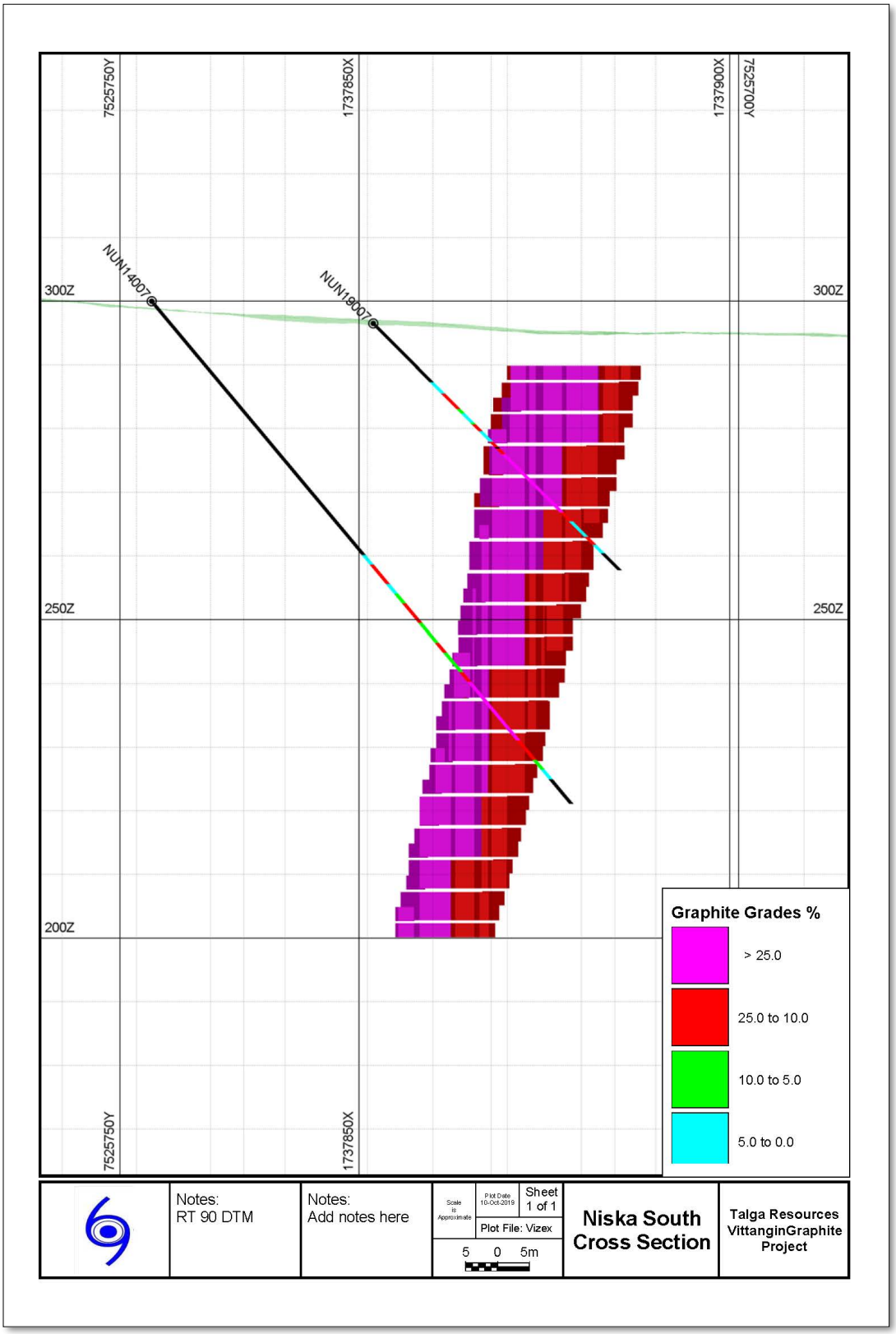

Table 4 *Total Vittangi Project Graphite Mineral Resources*

Deposit	Resource Category	Tonnage (t)	Graphite (% Cg)	Contained Graphite (t)
Nunasvaara South	Indicated	8,900,000	25.0	2,225,000
	Inferred	1,500,000	23.0	345,000
Nunasvaara North	Indicated	1,800,000	29.4	529,200
	Inferred	100,000	27.4	27,400
Niska North	Indicated	4,160,000	25.8	1,074,528
Niska South	Indicated	480,000	25.8	123,696
Sub-total	**Indicated**	**15,340,000**	**25.8**	**3,952,424**
	Inferred	**1,600,000**	**23.9**	**382,400**
Total	**Indicated & Inferred**	**16,940,000**	**25.6**	**4,334,824**

Note:
1. Mineral Resources are reported at various cut-off grades: Nunasvaara 17% Cg and Niska 10% Cg.
2. Niska South and North Indicated Mineral Resources rounded down to nearest 1000t.
3. Nunasvaara Mineral Resources rounded to nearest 100,000t.
4. Errors may exist due to rounding.
6. The Nunasvaara Mineral Resource was disclosed in April 2017 in accordance with the 2012 JORC Code (ASX: TLG 27 Apr 2017).

Table 5 *Talga Total Graphite Mineral Resources*

Deposit	Resource Category	Tonnage (Mt)	Graphite (% Cg)	Contained Graphite (t)
Vittangi	Indicated	15.3	25.8	3.9
	Inferred	1.6	23.9	0.4
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**	**52,700,000**	**17.7**	**9,300,000**

Note:
1. Mineral Resources are inclusive of Ore Reserves.
2. Mineral Resources are reported at various cut-off grades: Nunasvaara 17% Cg, Jalkunen 5% Cg, Raitajärvi 5% Cg and Niska 10% Cg.
3. Mineral Resources rounded to nearest 100,000t.
4. Errors may exist due to rounding.
5. The Nunasvaara Mineral Resource was disclosed in April 2017 in accordance with the 2012 JORC Code (ASX: TLG 27 Apr 2017).
6. The Jalkunen Project Mineral Resource was disclosed in August 2015 in accordance with the 2012 JORC Code (ASX: TLG 27 Aug 2015).
7. The Raitajärvi Project Mineral Resource was disclosed in August 2013 in accordance with the 2004 JORC Code (ASX: TLG 26 Aug 2013).

Competent Persons 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 Simon Coxhell, Principal Consultant of CoxsRocks Pty Ltd. Mr Coxhell is a consultant to the Company. Mr Coxhell is a Member of the Australian Institute of Mining and Metallurgy. Mr Coxhell has sufficient experience relevant to the styles of mineralisation and types of deposits which are covered in this document and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" ("JORC Code"). Mr Coxhell has supervised both mining and diamond drilling at both Nunasvaara and the initial diamond drilling at Niska South. Mr Coxhell consents to the inclusion in this report of the Matters based on this information in the form and context in which it appears.

The Nunasvaara Mineral Resource estimate was first reported in the Company's announcement dated 27 April 2017 titled 'Talga Substantially Increases Flagship Graphite Resource Size, Grade and Status'. The Company confirms that it is not aware of any new information or data that materially affects the information included in the previous market announcement and that all material assumptions and technical parameters underpinning the Resource estimate in the previous market announcement continue to apply and have not materially changed.

The 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.

About Talga

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

JORC CODE 2012 EDITION

Section 1 Sampling Techniques and Data

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	• Sampling method is half-core sampling of WL66 diamond drill core. Quarter-core sampling utilised where a duplicate sample has been taken. • Sampling was carried out using Talga's sampling protocols and QAQC procedures as per industry best practice. • Diamond drilling completed using WL66 coring equipment. 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, total graphitic carbon and sulphur by Leco, fire assay and AAS for gold and lithium metaborate fusion with ICP-AES for major oxides.
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.).*	• Diamond drilling completed by Northdrill Oy from Finland. • WL66 conventional diamond drilling with core diameter of 50.5mm. • Selected drillholes have been orientated. • Downhole surveying completed using a Devico Deviflex downhole survey instrument.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• 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. • Careful drilling techniques in areas of broken ground are employed with communication between the geologist and drillers to maximise core recovery. • A sampling bias has not been determined.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	• All drillcore has been transported from the drill sites to Scott Geological AB located in Malå for cleaning, reconnection of core lengths and measurement of metre marks where required, over the entire hole. • Geological logging has been completed on the entire length of all holes by Amanda Scott (Scott Geological AB), Talga's Exploration Manager, who has significant experience in this style of exploration and mineralisation. • The lithological, mineralogical, alteration and structural characteristic of the core has been logged in digital format and following established procedures. • All drillholes have been photographed in both wet and dry states.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub- sampling stages to maximise 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.*	• All samples delivered to ALS Global in Malå where the core was cut and sampled. • All samples are 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 (multi-element), total graphitic carbon and sulphur by Leco, fire assay for gold and lithium metaborate fusion for major oxides. • 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 where practicable; standard and blank results for all holes are within accepted limits. • The sample sizes are considered appropriate for the type of mineralisation under consideration.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• All samples are assayed using a four- acid digest multi-element suite (48 elements) with 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 and sulphur 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 425ºC. The roasted residue is analysed for C and S by high temperature Leco furnace with infrared detection. • Selected 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. • Selected samples are assayed for major oxides using a lithium metaborate fusion with ICP-AES finish. A prepared sample (0.100 g) is added to lithium metaborate/lithium tetraborate flux, mixed well and fused in a furnace at 1000°C. The resulting melt is then cooled and dissolved in 100 mL of 4% nitric acid/2% hydrochloric acid. This solution is then analyzed by ICP-AES and the results are corrected for spectral inter- element interferences. Oxide concentration is calculated from the determined elemental concentration and the result is reported in that format. • The analytical methods are considered appropriate for this style of mineralisation. • No geophysical tools or handheld instruments were utilised in the preparation of this announcement. • 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; standard and blank results for all holes are within accepted limits. • Laboratory QAQC methods include the insertion of certified reference material standards, blanks, and duplicates.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Determination of the reported downhole intervals of mineralisation have been verified by alternative company personnel both in person and via electronic photographic data. • No twin-hole drilling completed to date although several scissor holes have been completed and showed excellent correlation. • All geological and location data is stored in Excel spreadsheets prior to being uploaded to the Company's database. Data entry has been by manual input and validation of the data has been done by checking input on-screen prior to saving. • No adjustments or calibrations were made to any assay data used in this report.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Drillhole locations were planned using a combination of GIS software packages. • Drillhole locations were determined using a Garmin handheld GPS unit with an accuracy of +/- 1m. Drill azimuths were determined with a hand-held Suunto compass that has a precision of +/- 0.5 degrees. • Downhole surveys were completed using a Devico Deviflex downhole survey instrument at regular intervals. • Original Grid system is Swedish Coordinate system SWEREF99, which has been transformed to RT 90 for display on EM and aerial imagery. • Topographic control has been established by handheld GPS and cross- correlation with digital laser topographic imagery and is considered and is adequate for the greenfields exploration completed.
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.*	• Drill hole profile spacing is at 50m, 25m or 12.5m. See attached location plans, cross sections and tables. • Previous drilling (Talga and historical) combined with trial mining, trenching, rock chip sampling of outcropping ore and detailed electromagnetic (EM) geophysical data show and confirm excellent continuity of the stratigraphic graphite unit. The current drillhole spacing at Niska North and South is considered appropriate to allow for an eventual JORC-compliant Mineral Resource Estimate (MRE) to be completed. • Through the main graphite zones, nominal 2m sampling has been applied where appropriate and sampled to geological boundaries elsewhere.
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.*	• The drillhole orientation is considered appropriate with the drill holes being drilled perpendicular to the interpreted strike of the geological units and graphite mineralisation. The graphite units across the Vittangi Project dip very steeply (80- 90°) to the north west and south east and drilling to date has been completed drilling across-dip. The most recently drilled profile has revealed that the graphite units are dipping very steeply (80-90°) to the east and the drilling azimuth has been amended accordingly.
Sample security	• *The measures taken to ensure sample security.*	• All drill core was transported by courier transport from the project to Scott Geological AB's secure logging facility in Malå.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No external audits or reviews of the sampling techniques and data have been completed to date. Results have been reviewed internally by the company's exploration manager Ms Amanda Scott and no issues have been identified.

Section 2 Reporting of Exploration Results

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Vittangi Project is located on licences Nunasvaara nr 2, Vittangi nr 2 and Vittangi nr 3 owned 100% by the Company's Swedish subsidiary, Talga Graphene AB. The diamond drilling at Niska North and South is located entirely on licence Vittangi nr 2. • 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 Vittangi River is located approximately 2km to the east of Niska. • The licence is in good standing with no known impediments.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Graphite was first identified at Nunasvaara in the early 1900's and 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.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The graphite mineralisation at the Vittangi Project is a sub-vertical, ~20-70m wide lithologically continuous unit of very fine grained, dark-grey to black graphite containing 10-45% graphitic carbon. The hangingwall is comprised of volcanoclastics and tuffaceous units and the footwall to the mineralisation is a mafic intrusive (gabbros and dolerites). The graphite units are regionally extensive over many kilometers 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 the Vittangi Project is very fine grained and very high grade. Metallurgical testwork completed by the Company shows battery-grade graphite and graphene products can be produced

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this*
		• Drillhole information pertaining to the drilling at Niska is summarised in the figures and tables in the text of this announcement and comprehensively reported in previous ASX releases related to the drilling results at Niska South and Niska North.

CRITERIA	JORC CODE 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.*	• The significant graphite intercepts in this announcement are based on ≥ 10% Cg and include varying amounts of internal dilution as specified in the applicable tables. Select high-grade intercepts have used a cut-off grade of 30% Cg. • No high-grade cut-off has been used in this announcement. • Length-weighted averaging has been used to calculate all intercepts in this announcement. Length-weighted averaging has been used given that sampling intervals were determined geologically and not always nominally. • No metal equivalents have been used in this report.
Relationships 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').*	• The reported mineralisation intercepts are downhole widths and not true widths, which are unknown at this time. • The geometry of the graphite mineralisation at the Vittangi Project is quite well understood and all drilling has been completed perpendicular to the strike of the mineralisation. The main hangingwall graphite unit is sub-vertical and appears to have a variable dip (~80- 90°). Several drillholes at Niska North have been drilled at 300° and others at 120°; as the dip is so close to vertical the Company does not believe a significant bias has been introduced but drilling in either direction. Tighter spaced drilling is required to determine the exact dip of the graphite unit but the drillhole information received to date does appear to support a variable dip.
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 and cross-sections have been included in the text of this announcement.
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.*	• All significant intercepts above the nominal cut-off grade of 10% Cg have been reported. • This announcement provides the total information available to date and is considered to represent a balanced report.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• A substantial amount of work has been completed at the Vittangi Project by both historic explorers and more recently by Talga. Work has included geophysical surveys, rock chip sampling, MMI soil sampling, trenching, diamond drilling, metallurgical testwork and trial mining. A PFS and Probable Ore Reserve for the Nunasvaara deposit was recently published by the Company.
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.*	• Metallurgical and process testwork on drillcore from Niska is currently underway.

Section 3 Estimation and Reporting of Mineral Resources

CRITERIA	JORC CODE EXPLANATION	COMMENTARY

Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*
	• *Data validation procedures used.*
		• Data package was supplied and downloaded 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:
		  ○ 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 Micromine (64 bit) geological modelling software.
		• Data plotted correctly on the topographical surface and on the collar location as planned and supported on the documentation supplied.
		• 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 zero Cg grade to relate the assay data file to the geology logging.

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.*	• Simon Coxhell (Competent Person) is a Geological Consultant and undertook a number of site visits in 2014 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.

Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*
	• *Nature of the data used and of any assumptions made.*
	• *The effect, if any, of alternative interpretations on Mineral Resource estimation.*
	• *The use of geology in guiding and controlling Mineral Resource estimation.*
	• *The factors affecting continuity both of grade and geology.*
		• Confidence in the interpretation of the Nunasvaara and Niska stratigraphy is considered to be high given:
		  ○ Domain interpretation was completed with a consideration for field logs, geochemical data and surrounding holes
		  ○ Drill hole domains interpretation were validated visually and statistically
		• Consideration is always given to mining and estimation practicalities to ensure models are fit for purpose and realistic.
		• Graphite is distinct geochemically and visually 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 wireframes of the interpreted mineralisation and act as ‘hard’ boundaries during estimation for the 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.
		• The 10% Cg cut-off equates very well to the logging descriptions and boundary of the geology.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
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.*	• As currently defined the Niska South mineralisation strikes 210/60º for a total distance of 120 metres with a dip of 75º towards 340º. The Niska South mineralisation strikes at about 210/60º for a distance of200 metres and dips steeply towards 120º at approximately 75-80 degrees. The mineralisation pinches and swells to a maximum thickness of 80m. Average true mineralisation thickness varies between 15m and 60m. • The mineralisation extends from surface to a maximum depth of 220m often covered by up to 2-4m of overburden material. • Mineralisation is open at depth.

Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*
	• *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*
	• *The assumptions made regarding recovery of by-products.*
	• *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).*
	• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*
	• *Any assumptions behind modelling of selective mining units.*
	• *Any assumptions about correlation between variables.*
	• *Description of how the geological interpretation was used to control the resource estimates.*
	• *Discussion of basis for using or not using grade cutting or capping.*
	• *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*
		• Samples are collected at varying sample intervals based on the graphite mineralisation (ore) domain or waste. Sample data was flagged by domains using wireframe solids for mineralisation (ore).
		• 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, and estimations were carried out using Micromine 3D mining software.
		• Two block models were constructed based on the main principal strike direction 40º and 140º.
		• Block model was constructed using geological surfaces as hard boundaries. Parent block sizes 5m x 5m x 5mRL based on quarter the nominal drill hole spacing within an area with sub blocks of 2.5m x 2.5m x 2.5m. Block models were aligned with strike direction.
		• Total Graphitic Carbon (Cg) and Sulphur (S) were estimated as in-situ grades. Both Cg and S were estimated separately.
		• Identical search ellipse orientations and search parameters for Cg and S grade were used for estimation based on a combination of statistical analysis and drill spacing.
		• A single 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.
		• Only data belonging to a domain was used to estimate that domain and hard boundaries were used.
		• No top cuts were applied, based on visual review of all data and statistical analysis of the data lying within the hard mineralised boundaries, and is consistent with all previous resource estimates of the Vittangi graphite horizon.
		• Validation of the final resource has been carried out in a number of ways, including:
		  ○ Visually comparing block model estimated grade against drill hole by section
		  ○ Comparison by mineralisation zone
		  ○ Comparing statistically, by domain, wireframe and block model grades versus sample and composite grades
		• All modes of validation have produced acceptable results.
		• This is the maiden resource estimate for both Niska south and Niska North.

Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• All mineralised tonnages are estimated by applying a mean bulk density of 2.60g/cc, (t/bcm). with natural moisture.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• A natural mineralisation cut-off occurs at 10% Cg and was used to define the mineralised envelope. • No material change in resource occurs by using a lower cut–off, as the cut-off grade matches the logged graphite horizon.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution.* • *It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous.* • *Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Talga 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 70º to give an overall pit slope of 58º. 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 80º and a berm width of 2.5m. Trial mining has been successfully completed in 2015 and 2016. • No geotechnical data supporting this alternative mining method exists.
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.*	• Niska-specific metallurgical testing is underway using drillcore from the 2019 drilling. • Given the geological similarities between the Nunasvaara North and South deposits, results of metallurgical testing from ore derived from the 2015-2016 trial mining, 2016 drilling, 2019 PFS and subsequent public reports have been used to support reasonable prospects for economic extraction at Niska.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• Based on mining studies, volumes of ore and waste have been quantified. Further studies are required for waste disposal.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Bulk densities used in the Mineral Resource Estimate are based on a mean bulk density of 2.60g/cc for all mineralisation. • The bulk density determination was as follows: both the mean and geomean of 131 drillcore measurements using the Archimedes principal. At Niska ISBDs for the graphite horizon above 10% Cg ranged from 2.51 to 2.82 and averaged 2.62 t/bcm. Laboratory measurements by ALS Malå report within this tolerance.

CRITERIA	JORC CODE EXPLANATION	COMMENTARY
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The Mineral Resources have been classified as the Indicated Categories, in accordance with the 2012 Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code). • A range of criteria has been considered in determining this classification including: ○ Geological continuity ○ Data quality ○ Drill hole spacing ○ Modelling techniques ○ Estimation properties including search strategy, number of informing data, average distance of data from blocks and estimation output from the interpolation • Indicated resources are typically supported by a drill hole spacing not exceeding 50m. • The results of the validation of the block model shows acceptable correlation of the input data to the estimated grades. • The Mineral Resource Classification reflects the views of the Competent Person.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• Various aspects of the data acquisition, assaying, geological modelling and resource estimation have been independently reviewed at various times over the life of the project, including this estimate, by a second CP. This included audit of standard insertion, core storage, sampling intervals recorded vs reported and review of QA/QC protocol.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• Calculated accuracy and confidence in the Mineral Resource Estimate are not explicitly stated. • However, relative accuracy is reflected in the resource classification, based on statistical analysis, and comparing the output of the results from the interpolation techniques with the mean statistical grades lying within the individual domains and wireframes. • 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. • No production data is available for the Niska South and Niska North deposits, however review of the trial mining at the related Nunasvaara deposit has taken place and is reflected in the estimates completed.