ASX: PSM

ASX ANNOUNCEMENT

23 May 2018

HIGH-PURITY GRAPHITE CONCENTRATE RESULTS CONFIRM POTENTIAL OF HIGH-GRADE GAPYEONG PROJECT

- Initial metallurgical testing of high-grade Gapyeong bulk composite (17.7% total graphitic carbon, "TGC") produces high-purity concentrate results of 95.4% TGC (target >95% TGC)
- Further sizing analysis will be carried out prior to generation of a >5kg, high-purity, concentrate sample for downstream spherical graphite testing, targeting >99.95% TGC purity for lithium-ion batteries
- Drill targeting in progress to define a large, high-grade, graphite resource for potential development and downstream processing to produce high-purity spherical graphite for the Korean battery industry

Peninsula Mines Ltd (ASX:PSM) announces **high-purity metallurgical concentrate results of 95.4% TGC for the high-grade Gapyeong graphite deposit**, located 50km northeast of Seoul in South Korea (see Figure 1).

The high-purity metallurgical concentrate result of 95.4% TGC has been obtained by Independent Metallurgical Operations Pty Ltd ("IMO") from initial batch grinding and flotation testing of the >80kg composite sample^{D1} from the Gapyeong graphite deposit, that produced a **high-grade confirmatory bulk composite assay of 17.7% TGC** (Appendix 1). Initial graphite recovery into concentrate was 81.7%, which may be improved through further grinding and addition of reagents. The results are summarised in Table 1 below.

			Gra	de	
Screen	Mass	Mass	TC (TGC)	LOI1000	Recovery
μm	g	%	%	%	%
>106	6.0	4.0%	92.3	92.4	
>75	11.6	7.7%	94.7	96.1	
<75	131.8	88.3%	95.5	95.2	
Calc Head	149.3	100.0%	95.4	95.2	81.7

TC = Total Carbon- equivalent to Total Graphitic Carbon (TGC), LOI 1000 = Loss on Ignition at 1000°C

Table 1: Gapyeong Graphite Project, high-purity graphite concentrate results

Previous rockchip and channel sampling of the Gapyeong graphite deposit indicates an average grade of >16% TGC^{D2} over a strike length of approximately 1km and widths of up to 10m, to be confirmed by systematic channel sampling to commence once surface access agreements are in place. Electromagnetics ("EM")^{D3} indicates continuity of the thick and high-grade graphitic unit to >500m depth (see Figure 1 below), indicating significant resource tonnage potential that will be estimated following completion of the channel sampling.

IMO have been commissioned to process the Gapyeong bulk composite to produce a >5kg, high-purity (>95% TGC) flake-graphite concentrate sample for spherical graphite testing. This final stage will be initiated following laser sizing of the <75 μ m fraction of the Gapyeong composite, to determine likely losses due to micronisation (to <20 μ m) and spheroidisation. This high-purity concentrate sample will then be subjected to a testing programme designed to generate >99.95% TGC purity, uncoated, spherical graphite suitable for offtakers producing lithium-ion (graphite) battery anodes in South Korea.

The production of spherical graphite is a value-added process that increases the potential value of the graphite product from a current market price for fine flake graphite concentrate (<150 μ m, >94-95% TGC) of AUD 1,000/t^{D3} to a market price for un-coated, purified (>99.95% TGC) spherical graphite of >AUD 4,000/t^{D4}.

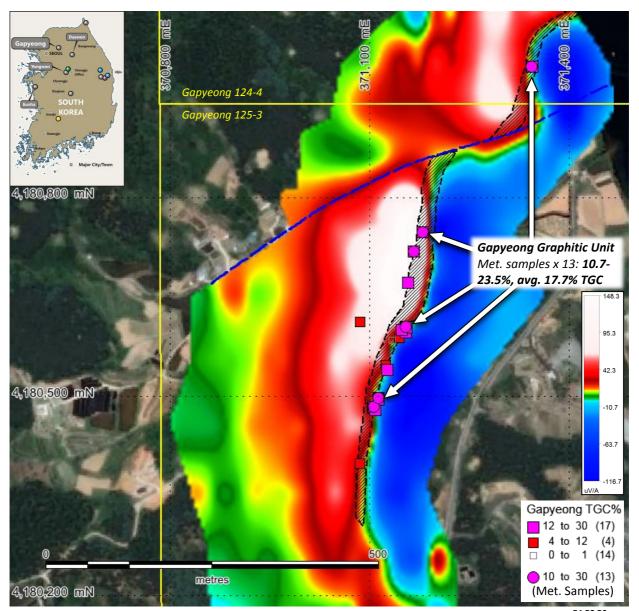


Figure 2: Gapyeong Project, rockchip & metallurgical sample locations, graphitic unit & EM anomalies D1,D2,D3

Based on these high-purity (95.4% TGC) initial metallurgical concentrate results and confirmation of the substantial, high-grade, resource potential of the Gapyeong graphitic unit, a channel sampling and resource drilling programme will now be planned.

Discussions are advanced with private landholders in the Gapyeong area and final tenement inspections have been conducted by the Korean government, Mines Registration Office ("MRO"), to allow grant of the key tenement, Gapyeong 125-3, in the near future.

Peninsula Managing Director, Jon Dugdale, commented, "These high-purity metallurgical results, from the large and high-grade Gapyeong graphitic unit, pave the way for further spherical graphite testing as well as a resource drilling and channel sampling programme to define a substantial resource for potential development."

ENDS

For further information contact:

Jon Dugdale

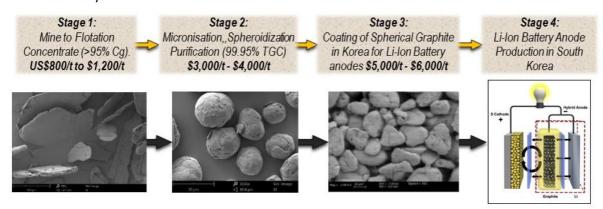
Managing Director, Peninsula Mines Ltd (ASX:PSM) S2, L2, 20 Kings Park Rd. West Perth, WA, 6005

E: jdugdale@peninsulamines.com.au Ph: +61 8 6143 1840 M: +61 402 298 026

About the Peninsula Mines Limited Graphite Business:

Peninsula Mines Ltd ("Peninsula") is an Australian listed, exploration/development company focused on developing opportunities for mineral discovery and production in South Korea, where the Company is well established with a network of key contacts, having worked in the Country for over five years.

South Korea is one of the world's largest producers of lithium-ion batteries, but obtains downstream graphite products, including spherical graphite for Lithium-Ion battery anodes, predominantly from China (see value-chain below). Peninsula has identified the opportunity to mine and process graphite to produce value-added spherical graphite in South Korea, to directly supply lithium-ion battery manufacturers and other graphite endusers in-country.



Note: US\$ pricing from Benchmark Mineral Intelligence graphite price assessments, March - April 2018^{D4}.

Peninsula and its subsidiaries have tenements and tenement applications in South Korea with fine to large and jumbo flake graphite identified. Peninsula intends to progress these and other projects to JORC compliant resource definition and, potentially, development of mining and flake graphite concentrate production for spherical graphite – Lithium-ion battery applications and/or expandable graphite and other markets in Korea.

Peninsula signed a Memorandum of Understanding ("MOU") with Korean expandable graphite producer, Graphene Korea, in June 2017^{D5}, which envisages long-term strategic cooperation with respect to offtake of graphite concentrate and development of graphite mining and processing projects both within and potentially outside Korea.

Peninsula has also secured a Binding Supply Agreement with Canadian listed DNI Metals Inc ("DNI"). Subject to various conditions, DNI will supply up to 24,000 tonnes per year of flake graphite to Peninsula's 100% owned subsidiary, Korea Graphite Company Limited ("KGCL"), for on-sale to Korean end-users^{D6}. Peninsula and DNI are discussing options to cooperate with respect to fast-tracking the development of DNI's large-flake graphite projects in Madagascar, which are situated close to port access and are saprolite (weathered rock) hosted with low cost mining and processing potential.

Summary list of Peninsula ASX releases and other documents referenced in this announcement:

- D1 Peninsula Launches Testing for Value-Added Spherical Graphite Processing in Korea, 24/04/18
- D2 New High-Grade Graphite Results Confirm Resource Drilling Target at Gapyeong, 19/03/18
- D3 Exceptional EM Conductors Define Drilling Targets at Gapyeong Graphite Project, ASX: 14/03/18
- D4 Benchmark Mineral Intelligence Graphite Pricing Assessment, April 2018
- D5 Flake-Graphite Offtake & Development MOU signed with Korean End-User, ASX: 14/06/17
- D6 PSM signs MOU to supply Flake Graphite to Korean End-Users, ASX: 15/08/17

For full versions of the Company's releases see Peninsula's website www.peninsulamines.com.au

Forward Looking Statements

This report contains certain forward-looking statements. These forward-looking statements are not historical facts but rather are based on Peninsula Mines Ltd's current expectations, estimates and projections about the industry in which Peninsula Mines Ltd operates, and beliefs and assumptions regarding Peninsula Mines Ltd's future performance. Words such as "anticipates", "expects", "intends", "plans", "believes", "seeks", "estimates" "potential" and similar expressions are intended to identify forward-looking statements. These statements are not guarantees of future performance and are subject to known and unknown risks, uncertainties and other factors, some of which are beyond the control of Peninsula Mines Ltd, are difficult to predict and could cause actual results to differ materially from those expressed or forecasted in the forward-looking statements. Peninsula Mines Ltd cautions shareholders and prospective shareholders not to place undue reliance on these forward-looking statements, which reflect the view of Peninsula Mines Ltd only as of the date of this report. The forward-looking statements made in this report relate only to events as of the date on which the statements are made. Peninsula Mines Ltd does not undertake any obligation to report publicly any revisions or updates to these forward-looking statements to reflect events, circumstances or unanticipated events occurring after the date of this report except as required by law or by any appropriate regulatory authority.

Competent Persons Statements

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Daniel Noonan, a Member of the Australian Institute of Mining and Metallurgy. Mr Noonan is an Executive Director of the Company.

Mr Noonan has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration 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'. Mr Noonan consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

The information in this release that relates to metallurgical test work is based on information compiled and / or reviewed by Mr Peter Adamini who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Adamini is a full-time employee of Independent Metallurgical Operations Pty Ltd. Mr Adamini consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this release that relates to Geophysical Results and Interpretations is based on information compiled by Karen Gilgallon, Principal Geophysicist at Southern Geoscience Consultants. Karen Gilgallon is a Member of the Australasian Institute of Geoscientists (AIG) and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration 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'. Karen Gilgallon consents to the inclusion in the release of the matters based on this information in the form and context in which it appears.

JORC Code, 2012 Edition: Table 1 Section 1: Sampling Techniques and Data

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

Criteria	JORC – Code of Explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	An ~80kg metallurgical composite sample was generated from the original bulk sample which was in excess of 100 kg collected from the Gapyeong project in March 2018 the results of the analyses of the 13 individual samples were released in Apri 2018 ^{D1} . The results for previous surface rock chip sampling have been discussed in detail in earlier releases ^{D2, D3} . As discussed previously, each individual rock chip sample was analysed for a suite of elements by XRF as well as Total Carbon (TC%), Total Graphitic Carbon (TGC%), Total Organic Carbon (TOC%) and Total Inorganic Carbon (TIC%) and sulphur (S %) at NAGRON laboratory in Perth, Australia.
		NAGROM operate a LECO analyser: C and S values were determined from sample mass differences, using precision scales, resulting from heating to burn off carbon and sulphur which were emitted as CO ₂ and SO ₂ .
		The locations of the previous rock chip sampling points are shown as squares and the 13 metallurgical samples shown as circles in Figure 1. The individual assay results were tabulated in earlier releases ^{D1, D2, D3} . All coordinates were recorded in WGS84 UTM Zone 52N coordinate system.
		The 13 metallurgical samples were irradiated at Steritech ir Brisbane and then forwarded to Independent Metallurgical Operations (IMO) in Perth for the metallurgical testing.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	All 13 metallurgical samples GPM prefixed samples were all grad samples ^{D1} . All the samples were taken using a hammer and chise and funnelled into a calico bag with the aid of a rubber mat. All the sample location were referenced with a hand-held GPS unit ^{D1} (Figure 1).

Criteria	JORC – Code of Explanation	Commentary
	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.	The metallurgical grab samples were taken from sub-crop or float exposures close to the ridge crest or along the NW facing ridge flank were the Gapyeong structure is exposed at surface. The original field graphite bearing metallurgical samples averaged 6kg to 9kg, were air dried at NAGROM prior to analysis to avoid baking of the clays. Samples post drying were crushed to a nominal top size of 6.3mm using a jaw crusher. A 500g subsample was riffle split and then pulverised to provide a final aliquot for analysis to generate a grade for each sample and to provide a head grade for the subsequent metallurgical concentration. The Nagrom sub-samples was pulverised using a LM5 pulveriser until 80% of the sample passed 75 microns. A >10g subsample of the pulverised material was then randomly selected for analysis with the balance of the coarse reject and pulverised material retained for the metallurgical studies. NAGROM utilised a LECO analyser and gravimetric analyses, where C and S values were determined from mass differences (using precision scales) during the high temperature heating and subsequent CO2 and SO2 generation inside the analyser. This method was considered near total for C and S and was the preferred method for accurate graphite sample analysis. From these analyses, the Total Carbon, Total Graphitic Carbon (TGC), Organic Carbon and Inorganic Carbon (as carbonate) and Sulphur were reported ^{D1} . The final 13 coarse metallurgical sample rejects from the initial Nagrom work were composited to produce an (~80kg) sample, made up of 13, 5kg to 8kg rock chip samples that were collected from various sampling sites along the strike length of the Gapyeong structure. The met samples were collected in calico bags with vegetative material and soil removed. The samples have been dispatched to Independent Metallurgical Operations (IMO) in Perth for metallurgical testing.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, facesampling bit or other type, whether core is oriented and if so, by what method, etc).	No drilling has been undertaken by the company and no commentary is being presented here on past drilling results. Drilling referenced in this release is proposed only.

Criteria	JORC – Code of Explanation	Commentary
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	No drilling has been undertaken by the company. Drilling referenced in this release is proposed only.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	All metallurgical samples were surface grab samples so sample recovery is not relevant. The 13 samples were collected from various surface exposures along the full strike length of the Gapyeong structure to provide a representative composite sample for the full Gapyeong structure exposure, sample sites
	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.	are shown as circles in figure 1.
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.	No drilling has been undertaken by the company. Drilling referenced in this release is proposed only. In the case of each metallurgical grab sample geological information such as rock type, gangue minerals and estimated grade were recorded in a field notebook and transferred to an excel spreadsheet for database entry.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	
	The total length and percentage of the relevant intersections logged.	
Sub- sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	No drilling has been undertaken by the company. Drilling referenced in this release is proposed only.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	The metallurgical samples were all collected dry. The samples were taken using a geology hammer and/or a mallet and chisel. Samples were collected in a calico bag using a piece of rubber matting to funnel rock chips into the open prelabelled sample bag.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	In the case of the metallurgical sampling, a sub-sample was crushed and then split to produce a sample for analysis. The details of the applicable sample preparation have been discussed more fully in subsequent sections.

Criteria	JORC – Code of Explanation	Commentary
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	The metallurgical grab sample were selected based on visual grade aiming to maximise the graphite content from each sample site, samples included fresh to partially oxidised rock.
		The final metallurgical subsamples were taken after coarse jaw crushing the original field sample to sub 6.3mm and then riffle splitting the sample down to generate a 500g sub-sample for analysis. A small sub sample was used to maximise the volume of coarse reject sample available for metallurgical appraisal. The aim of the initial assaying by Nagrom was to generate an overall head grade for the final 80kg composite sample. IMO then further jaw crushed the 6.3mm reject to passing 3.35mm in preparation for the subsequent testwork.
	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.	All samples were grab samples taken to maximise the grade from each individual sample site. The samples were taken from 13 different sample sites along the strike length of the Gapyeong unit to account for any variability in grade or graphite flake size over the length of the Gapyeong structure. The bulk composite grade does not represent the likely in-situ grade of the Gapyeong Prospect but was collected with the aim of producing a final concentrate sample mass in excess of 5kg to assess the suitability of the Gapyeong graphite for micronisation (to $<\!20\mu m$) and spheroidisation. At this point in time, no duplicate samples have been taken at any of the sample sites. No sample splits have been analysed other than those routinely analysed by the laboratory as part of their own internal QA/QC process.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sample size was considered more than adequate to assess TGC content of the graphite mineralisation from the sampled sites at the Gapyeong project.

Criteria	JORC – Code of Explanation	Commentary
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.	All metallurgical samples were rock chip samples collected using a hammer, ± chisel, rubber mat and calico bag. At NAGROM, samples were air dried. Samples post drying were crushed to a nominal top size of 6.3mm using a jaw crusher then riffle split to generate a 500g sub-sample for pulverisation. Each sample was pulverised using a LM5 pulveriser until 80% of the sample passed 75 microns. A >10g subsample of the pulverised material was then randomly selected for analysis with the balance of the pulverised material retained for future use. The NAGROM analyses utilised a LECO analyser and were gravimetric analyses, where C and S values were determined from mass differences (using precision scales) during the high temperature heating and subsequent CO2 and SO2 generation inside the analyser. This method was considered near total for C and S and was the globally preferred method for accurate graphite sample analysis. From these analyses, the Total Carbon, Total Graphitic Carbon (TGC), Organic Carbon and Inorganic Carbon (as carbonate) and Sulphur were reported ^{D1} . The assays were considered total for the key elements of C and S. Additional XRF analyses of gangue minerals were also undertaken as part of the overall analysis suite. The XRF results were not considered material and were not included in the 24 April 2018 release D1.
	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 derivations, etc.	The Company commissioned Southern Geoscience Consultants (SGC) of Perth to undertake fixed loop electromagnetic (FLEM) surveys across the Gapyeong graphitic unit. The purpose of the survey was to determine the EM (conductivity) response of the outcropping graphitic unit and map the extent and geometry of the conductive unit along strike and at depth. The geophysical programme parameters were as follows: Planning/Supervision: Southern Geoscience Consultants Pty Ltd (SGC) Survey Configuration: Fixed Loop TEM (FLEM) TX Loop Size: 200m x 700m (Gapyeong – 3 overlapping loops). Three overlapping TX loops at each site. Transmitter: ZT-30 Transmitter: ZT-30 Transmitter Power: 72V (6 x 12V car batteries) Receiver: SMARTem24 Sensor: RVR coil – vertical (Z) component Line Spacing: 75m and 100m at Gapyeong Line Bearing: 090° at Gapyeong

Criteria	JORC – Code of Explanation	Commentary
		Station Spacing: 25m and 50m TX Frequency: 5 Hz for Gapyeong (200msec time base) Duty cycle: 50% Current: 5 to 10 Amp Stacks: 256 stacks Readings: At least 3 repeatable readings per station Powerline Frequency: 60 Hz Data was received on 29 channels from early to late time (shallow to deeper) during the Gapyeong survey. The anomaly displayed in Figure 1 shows the channel 25 image (50 msec after TX turnoff) approximating the location of the stronger and deeper parts of the conductive mineralisation down-dip from outcrop. The results of the EM work were discussed more fully in 14 March 2018 release ^{D3} .
	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.	The Company did not include any QA/QC or check samples with this first phase of sampling. A full QA/QC programme will be implemented when full scale trenching and rook saw channel programme is initiated at the Gapyeong projects. NAGROM undertakes routine blank, CRM and repeat analyses as part of the labs own internal QA/QC procedures. The results of the laboratory's own internal QA/QC do not indicate any issues with the assay results reported herewith. No blind sample repeats have been undertaken at this point in time. The labs routine sample repeats show excellent correlation.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	The graphite results shown in this release are the location and results of the initial individual analyses of the 13 metallurgical samples (Figure 1). These initial assay results were reported previously 19 March 2018 ^{D2} . The individual samples were subsequently composited to produce a bulk sample for metallurgical appraisal. The results of this work is summarised in Table 1 and a full list of results are included as Appendix 1.
	The use of twinned holes.	No drilling has been undertaken by the company. Drilling referenced in this release is proposed only.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Assay results were stored in an Excel database. All results were checked by the responsible geologist on entry to the database. The Company's data was stored in an Excel database and routinely transferred to the Perth Head Office.
	Discuss any adjustment to assay data.	The data presented in the accompanying Appendix 1 includes the results of the metallurgical tests. Based on the initial

Criteria	JORC – Code of Explanation	Commentary
		analyses of the original 13 field samples it was concluded that Total Carbon (TC) was a very good approximation for Total Graphitic Carbon (TGC) and hence IMO only reported TC content in their staged analyses of the Gapyeong bulk sample (Appendix1). All the IMO carbon analyses were performed at NAGROM.
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.	No drilling has been undertaken by the company. Drilling referenced in this release is proposed only. The layout of the EM loop and station reading points were all taken with a hand-held Garmin GPS unit.
		The location of all the samples were referenced using a handheld Garmin GPS unit.
	Specification of the grid system used.	All sample sites were surveyed in the UTM WGS84 zone 52N coordinate system.
	Quality and adequacy of topographic control.	Geophysical measurement locations were determined using a hand-held Garmin GPS60CSx. The accuracy of this unit at most sample sites was +/- 3m to 5m.
		Topographic controls were based on The National Geographic Information Institute (NGII), 1:5,000 scale digital contour data available for the entire country.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	The metallurgical samples were collected at varying distances along the strike length of the Gapyeong unit as and where suitable exposures could be located at surface.
		Further channel sampling and proposed drilling is planned to be conducted initially at 80m section intervals.
	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.	The metallurgical samples were taken at irregular spacing along the entire sub-cropping strike length of the Gapyeong structure where ever suitable surface exposure could be located. None of the initial sampling work undertaken at Gapyeong is intended for use in any form of Mineral Resource estimation. The aim of the sampling was to generate sufficient bulk sample mass for concentrate generation.
		Planned follow-up systematic trenching is planned at 40m spacing where possible along the entire structures length.
	Whether sample compositing has been applied.	The coarse rejects from the 13 individual field samples from the Gapyeong Project were composited post initial analytical testing at NAGROM. The final composited sample was also analysed at

Criteria	JORC – Code of Explanation	Commentary
		Nagrom and the result compared very closely with the weight base average of the 13 original field sample assays (Appendix 1).
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.	There is a degree of bias in the sampling due to the irregular spacing of the samples and the fact that material collected from each site was handpicked to maximise graphite grade. The reader should note that the individual analyses form each of the 13 metallurgical samples do not truly reflect the grade of the structure at the sampled point. The samples were collected with the sole aim of generating a bulk sample that would yield greater than 5kg of concentrate material for downstream testing.
	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.	No drilling has been undertaken by the company. Drilling referenced in this release is proposed only.
Sample security	The measures taken to ensure sample security.	All samples were collected into pre-labelled calico sample bags. The specific details of each sample and sample site were recorded into a field notebook and later transferred to an Excel spreadsheet. Samples were packed into cardboard cartons and dispatched via FedEx to Steritech in Brisbane for irradiation prior to onward shipment to IMO Perth and subsequent transport to Nagrom laboratories, Perth. All the Company's graphite samples were declared as surface samples and irradiated as required by AQIS to destroy any soil or airborne pathogens prior to release for analysis.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	The NAGROM Laboratory, Kelmscott has been visited by Company personnel and met full international standards. NAGROM is internationally recognised, particularly in the field of graphite analysis.
		Similarly, the IMO metallurgical laboratory in Welshpool, Perth, WA has been visited by Company personnel and meets full international standards. IMO are also internationally recognised, particularly in the field of metallurgical evaluations.

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

Section 2: Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section.)

Criteria	JORC – Code of Explanation	Commentary
Criteria Tenement and land tenure status	JORC – Code of Explanation 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.	At the Gapyeong project the Company submitted an MDS report to the Mines Registration Office (MRO) for sub-block Gapyeong 125-3 in September 2017 and the formal Ministry site inspection was conducted on 16 May 2018. The Company is expecting formal written notification of the tenements grant at some point within the next month. In addition, the Company has filed an MDS over the adjoining sub-block Gapyeong 124-4 (Figure 1). The majority of the land at the northern end of the Gapyeong project and along the western margin of the outcropping graphite unit is privately held agricultural or forest land. Along the main ridge where the structure daylights the land is Government owned and held by the North Han River Water Management Board. The bulk of the outcropping graphite structure lies within the 500m wide riparian zone. The Company is seeking clarification from the Local Government authority regarding the approval process to conduct certain activities within the riparian zone. Initial inquiries suggest that drilling activities may be possible across the bulk of the project other than at the northern end which lies within 50m of the northern arm of the Han River. Each Korean tenement block covers a 1-minute graticule and has a nominal area of 276 hectares. The Company has 100% sole rights over each of the Daewon and Gapyeong tenement applications for graphite. Graphite, like other industrial minerals, is classified as a minor mineral under Korean Mineral Law. In the case of minor minerals such as graphite, each 1-minute graticule block is further subdivided into four 30"x 30" sub-blocks (sub-blocks are only applicable for industrial minerals and road metal and dimension stone quarry permits). The Company must complete and file a Mineral Deposit Survey (MDS) over each sub-block to secure a potential 6-year exploration right for each sub-block. There are no native title interests in Korea. It is a generally accepted requirement that mineral title holders gain the consent of local land owners and residents before

Criteria	JORC – Code of Explanation	Commentary
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in	The Company does not anticipate any issues with the grant of the two Gapyeong sub-blocks for which MDS reports have so far been undertaken.
	the area.	Once an MDS application is approved the Company has one year in which to file a prospecting plan and from the point at which the prospecting plan is filed the title holder is granted an initial 3-year exploration period which can be extended to 6 years upon submission of a supplementary application to the Ministry. Further, the Company can convert the exploration licence to a formal mining right at any point during the 6 year exploration period by the filing of a prospecting report. A recent change to the Korean Mineral Law now requires that a mineral right holder must include details of the defined Mineral Resource with any application for extension to an Exploration Right or for the grant of a full Mining Right. There are minimum Resources requirements that must now be met at each stage of the application process.
		Upon approval of a Mining Right the Company has 3 years to file and have a Mine Planning Application (MPA) approved. The MPA is submitted to and approved by the Local Government and is akin to local council planning approval. As part of the MPA process, the title holder must secure a "no objection certificate" from the residents of the local village(s). An MPA primarily covers design, implementation, environmental and safety aspects of all surface activities associated with the planned mining venture. The approval of the MPA then grants the mining Right holder a 20-year production period that can be extended further upon application, provided all statutory requirements have been met over the life of the mine. From the date of grant of the Mining Right, the title holder has a 3-year period in which mine production must commence. During this 3-year period, the title holder must make a minimum level of investment on plant and mine infrastructure in the amount of KWon100million (~A\$120,000). In addition, certain minimum annual production levels must be met depending on the commodity being mined and its commercial value. In the case of graphite, it is 50 tonnes concentrate containing 75% TGC.
		The Company has recently refiled applications over the Gapyeong tenements. These applications are valid for up to 6 months. At some future date the Company could again reapply for a 6 months extension to the application period but there is no certainty that further extensions will be successful (subject to first come first served review). Where possible the Company aims to locate surface mineralisation that will meet the requirements of the Korean Mineral Law for a successful

Criteria	JORC – Code of Explanation	Commentary
		tenement grant and then complete an MDS over each applied tenement within the current application period.
Exploration done by other parties	Acknowledgement and appraisal of exploration by other parties.	In 1971, the Korea Mineral Promotion Corporation (KMPC) completed a programme of surface mapping and sampling at the Gapyeong Project including the collection of 21 samples from surface trenches. They reported grades ranging from 6.8 to 30% TGC. They identified outcropping graphitic schist unit over 700m of strike with widths varying from 5 to 15m and dipping between 60 to 90 degrees to the northwest. They described granitic gneisses, limestones and calcsilicate units. KIGAM has flown airborne radiometrics and airborne magnetics across South Korea as part of an ongoing data capture programme conducted over the last 30 or more years. These surveys cover the Gapyeong project area. KIGAM has also completed 1:50,000 scale mapping across the project area. The Company is currently not aware of any exploration work by other non-Government agencies/parties.
Geology	Deposit type, geological setting and style of mineralisation.	At Gayeong the main graphitic schist horizon exposed along the NE-SW trending ridge crest. There is a marked conductivity contrast between the non-conductive footwall gneisses and the highly conductive Gapyeong graphitic schist horizon. The graphitic schist is locally overlain by limestone and marly hornblende bearing calcsilicate units. These form part of a broader suite of overlying schists and biotite and feldspar bearing gneisses. A FLEM has identified a fault offset of the unit along the northern east-west valley. The Gapyeong structure dips at 60 to 90° to the west-northwest.

Criteria	JORC – Code of Explanation	Commentary		
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 (Reduce 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	All the Gapyeong sample results and sample location deta were included in previous releases the sample locations a shown in Figure 1 ^{D1,D2,D3} . No drilling has been completed by the company at the Gapyeong project. The Company is planning to continue metallurgical studies evaluating the suitability of the Gapyeong concentrate firmicronisation (to <20μm) and spheroidisation.		
	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.	No material information has been excluded from this release.		
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.	No data has been cut or truncated.		
	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.	All sample assay values discussed are raw assays while the metallurgical assays are analyses of sub-samples taken for analysis during various stages of the metallurgical evaluation process (Table 1 & Appendix 1).		

Criteria	JORC – Code of Explanation	Commentary			
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values have been reported.			
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.	No tonnage or Mineral Resource potential has be commented on in this release. Commentary on the potential width of the Gapye structure is based on surface observations. It is the Compa intention to determine the true width of the Gapye structure through a systematic programme of rock channel sampling.			
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Drilling referenced in this release is proposed only.			
	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').	Drilling referenced in this release is proposed only.			
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.	Figure 1 shows the locations of the Gapyeong EM anomaly as defined by the recently completed FLEM survey ^{D3} . Preliminary modelling of the FLEM data has been completed and shows that the conductors are located down-dip from the outcropping graphitic schists. The figure also shows the location of current and past surface sampling.			
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 assay values and sample location details have been reported previously and are summarised in Figure 1 ^{D1,D2,D3} . The results of the initial metallurgical tests are shown in Appendix 1.			

Criteria	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.	Commentary	
Other substantive exploration data		All data considered relevant and material have been included and commented upon in this announcement or included in the earlier announcement D1,D2,D3.	
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).	Surface trenching and channel sampling is planned on 40m sections where possible along the full 1000m of geophysically defined strike length at Gapyeong. In conjunction with this work access negotiations with local residents at Geumdae-ri are underway. Once the title is approved by the MRO the Company will then approach the Local Gapyeong-gun Government to discuss surface drilling programme at the project site. The suitability of the initial ~5kg of high-grade concentrate will now be assessed for further down-stream processing including micronisation then spheronisation to produce a spherical graphite concentrate for final purification and coating prior to lithium-ion battery anode production. As well as assessing its suitability for use in emerging expandable graphite industry.	
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	The included Figure 1 shows the modified position of previously KMPC mapped location of the graphite seams at Gapyeong and the EM geophysical conductors projected to surface on the Google earth satellite image. The figure also shows the location of past surface sampling and recently completed follow-up sampling undertaken post the EM survey ^{D3} . The inset in Figure 1 shows the location of the Gapyeong and to the Company's other projects and major Korean cities.	

Appendix 1: Gapyeong bulk-composite results compared to individual sample assays $\mathsf{grade}^{\mathsf{D1}}$

Gapyeong Bulk Composite

Sample ID		y - %	% Difference
		TC	
Confirmatory Bulk Composite Assay ¹	17.7	17.7	0.00%
Calculated from Individual Samples ²		17.6	1.14%

- 1. Sample taken from bulk composite once crushed to 3.35 mm and blended.
- 2. Calculated from the individual analyses of samples ${\rm GPM00001\text{-}00013^{D1}}$