



HIGH-GRADE GRAPHITE CHANNEL INTERSECTIONS AT GAPYEONG

- Thick, high-grade, graphite channel sampling intersections including up to 6.66m @ 17.2% graphite
- Drilling access agreement with local landholder to allow initial drilling of this high-grade graphite unit

Peninsula Mines Ltd (ASX:PSM) announces thick and high-grade total graphitic carbon (TGC) intersections from channel sampling at its 100% owned and granted^{D1} **Gapyeong Graphite Project**, located 50km northeast of Seoul in South Korea (see Figure 1), including:

GC0001: 12.5m (8.0m true width, TW) @ 10.6% TGC from 0.00m including 2.6m (2m TW) @ 14.5% TGC

GC0002: 13.1m (10.4m TW) @ 12.3% TGC from 1.16m including 6.66m (5.2m TW) @ 17.2% TGC

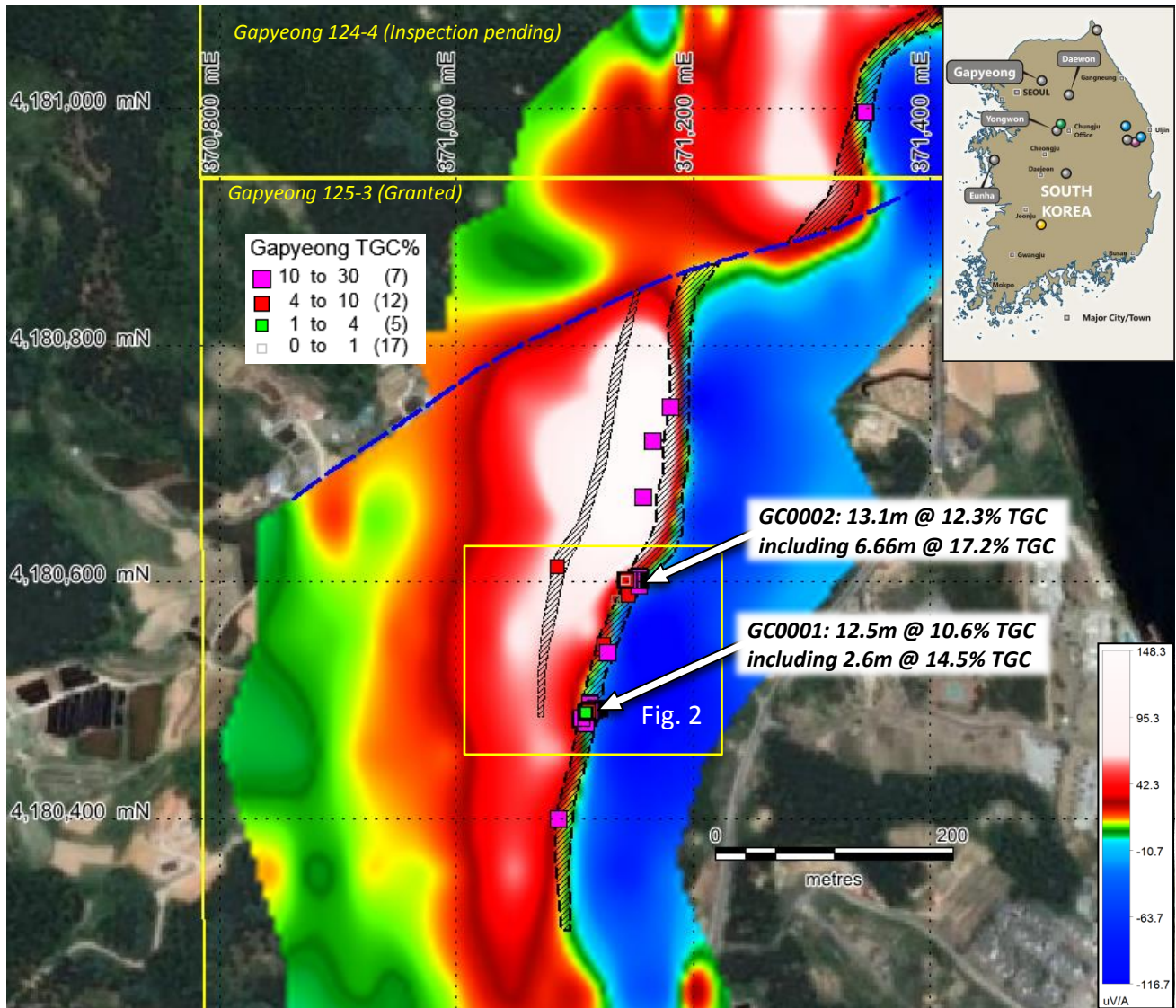


Figure 1: Gapyeong Project, channel and other rockchip sample locations, graphitic units and EM anomalies^{D2,D4,D5}

The initial channel sampling was carried out along manually dug trenches across the graphitic unit at approximately 100m trench spacing. Individual samples were taken at 0.4m to 1.25m intervals and analysed for graphitic carbon and other elements at Nagrom laboratories in Perth (see Appendix 1 and 2).

These very encouraging channel sampling results have confirmed that the high-grade graphitic unit at Gapyeong is approximately 10m thick (true width) and averages >10% TGC to 17.2% TGC, including up to 22.1% TGC (see Figure 2 and Appendix 1 and 2).

Further channel sampling will be planned for areas of sub-crop to further test the 1km strike of this intensely conductive EM anomaly / graphitic unit at Gapyeong.

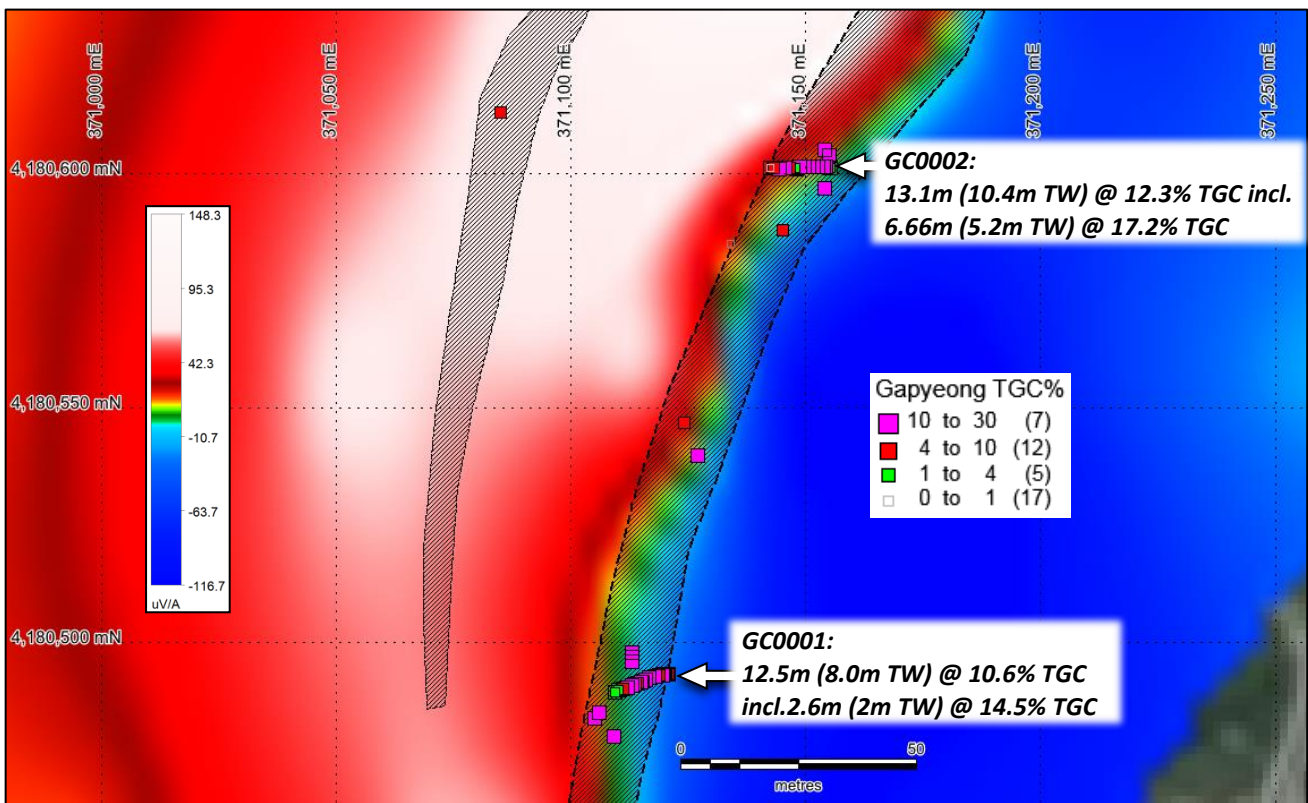


Figure 2: Gapyeong Project, channel sampling locations, graphitic units and enlarged EM anomaly^{D2,D4,D5}

An Exploration Target will now be estimated for the Gapyeong graphitic unit, incorporating the channel sampling, other rockchip sampling results and modelling of electromagnetic (EM) imagery. Gapyeong is the largest and most intense EM anomaly that the Company has generated in Korea^{D5}.

Drilling access agreement has been reached with a local landholder and negotiations are advanced with a second landholder to allow initial drilling of this high-grade graphite target. Drilling will commence as soon as access is established with the objective of confirming the Exploration Target prior to resource definition drilling to define a maiden Mineral Resource at Gapyeong.

The Company previously achieved a high-grade, flake-graphite, concentrate result of 95.4% TGC (target 95% TGC) from initial batch grinding and flotation testing of a >80kg, 17.7% TGC, composite sample^{D2} from the Gapyeong graphite deposit. Independent Metallurgical Operations (IMO) have been commissioned to process the Gapyeong bulk composite to produce a >5kg, high-grade (94% - 95% TGC), -150µm/+30µm, flake-graphite concentrate sample for spherical graphite testing in Germany^{D3}.

The spherical graphite test-work will include micronisation, spheronisation and purification with the objective of generating a >99.95% TGC purity, uncoated, spherical graphite product suitable for lithium-ion (graphite) battery anode production in 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 (<150µm, >94-95% TGC) of ~AUD 1,000/t^{D6} to a current market price for un-coated, purified (>99.95% TGC) spherical graphite of >AUD 4,000/t^{D6}.

Peninsula Managing Director, Jon Dugdale, commented, “These very encouraging channel sampling results have confirmed the substantial thickness and high-grade of the Gapyeong graphitic unit.

“The next step is to drill test the Gapyeong graphite deposit and confirm the potential to define a large, high-grade, flake-graphite resource and, at the same time, complete spherical graphite test-work to confirm downstream processing potential to produce this key component of the Lithium-Ion battery, in Korea.”

ENDS

For further information contact:

Jon Dugdale

Managing Director, Peninsula Mines Ltd (ASX:PSM)

S2, L2, 20 Kings Park Rd. West Perth, WA, 6005

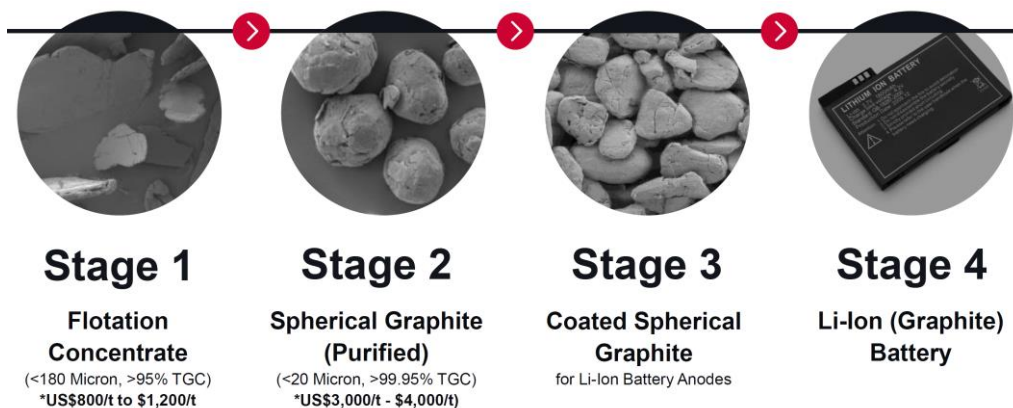
E: jdugdale@peninsulamines.com.au

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 end-users in-country.



Note: US\$ pricing from Benchmark Mineral Intelligence graphite price assessments, May – June 2018^{D6}.

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^{D7}, 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^{D8}. 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 Key Tenement Granted over Gapyeong Graphite Project, ASX: 12/06/18
 - D2 High-Purity Concentrate Result for Gapyeong Graphite Project, ASX: 23/05/18
 - D3 Peninsula Launches Testing for Value-Added Spherical Graphite Processing in Korea, ASX: 24/04/18
 - D4 New High-Grade Graphite Results Confirm Resource Drilling Target at Gapyeong, ASX: 19/03/18
 - D5 Exceptional EM Conductors Define Drilling Targets at Gapyeong Graphite Project, ASX: 14/03/18
 - D6 Benchmark Mineral Intelligence Graphite Pricing Assessment, June 2018
 - D7 Flake-Graphite Offtake & Development MOU signed with Korean End-User, ASX: 14/06/17
 - D8 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	<p><i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></p>	<p>At the Gapyeong Project, 35 channel samples were cut in the wall and floor of two hand dug trenches 100m apart. The samples were cut using a diamond blade fitted angle grinder or with a plaster spatula in the case of highly weathered samples from channels in the wall of the trenches approximately 7cm wide and 7cm deep. The channel was cut as near as possible to horizontal across the moderately, easterly dipping graphitic unit.</p> <p>The sample quality was excellent, fresh to partially oxidised rock. Each sample was collected across an interval of between 0.25m to 1.25m.</p> <p>The samples were 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 NAGROM laboratory in Perth, Australia.</p> <p>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 CO₂ and SO₂. The analytical results are tabled in Appendix 1 and 2, below.</p> <p>The locations of the sample points are shown on Figures 1 and 2. All coordinates were recorded in WGS84, UTM Zone 52N coordinate system. The full list of analyses are tabulated in Appendix 2 and selected intervals are reported in the text of this release.</p>
	<p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p>	<p>The channel sampling results released in this announcement are from cut channels, approximately 7cm wide, taken along the wall or floor of the hand excavated trench. Sampling was undertaken as close as possible to normal to strike of the variably dipping graphitic unit.</p> <p>All the sample locations were referenced with a hand-held GPS unit (Figures 1 & 2).</p>

Criteria	JORC – Code of Explanation	Commentary
	<p><i>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.</i></p>	<p>The surface channel samples were collected from hand excavated trenches. A channel approximately 7cm wide, was cut across the variably dipping, graphitic unit. The entire channel cut sample was collected in the intervals ranging from 0.25m to 1.25m.</p> <p>The graphite was evenly distributed within the graphitic unit. The entire exposed interval was sampled and dispatched as individual samples to NAGROM Laboratories in Perth, WA.</p> <p>The graphitic samples, averaging 1kg to 9kg, were heat treated at +65 degrees for customs purposes. Samples post drying were crushed to a nominal top size of 6.3mm using a jaw crusher. The coarse jaw crushed sample was then riffle split to generate a sub-sample for pulverisation.</p> <p>The sample was pulverised using a LM5 pulveriser until 80% of the sample passed 75 microns. A ~150g subsample of the pulverised material was then randomly selected for analysis with the balance of the coarse and pulverised material retained for possible future metallurgical studies.</p> <p>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.</p> <p>From these analyses, the Total Carbon, Total Graphitic Carbon (TGC), Organic Carbon and Inorganic Carbon (as carbonate) and Sulphur were reported (Appendix 2).</p>
Drilling techniques	<p><i>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, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></p>	<p>No drilling has been undertaken by the company and no commentary is being presented here on past drilling results. Any drilling referenced in this release is proposed only.</p>
Drill sample recovery	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p>	<p>No drilling has been undertaken by the company. Any drilling referenced in this release is proposed only.</p> <p>The initial trenching was aimed at gauging the potential width of the Gapyeong structure. Sample sites were limited by access. The trenches are considered representative of the surface mineralisation at the sampled sites.</p>

Criteria	JORC – Code of Explanation	Commentary
	<i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i>	
Logging	<p><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<p>No drilling has been undertaken by the company. Any drilling referenced in this release is proposed only.</p> <p>All channel sample intervals were photographed prior to and post cutting. The geology of each sampled interval was recorded in a field notebook and transferred to an Excel spreadsheet. Logging included rock type, degree of weathering and oxidation, gangue minerals observed, nature of the mineralisation, width and depth of each sample. Structural information, such as bedding dip and direction were collected. Sketch maps of the channel and sampled intervals were also made.</p> <p>The geology for the entire sampled interval was recorded. There were no areas of sample loss within any of the channel sampled intervals.</p>
Sub-sampling techniques and sample preparation	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p>	<p>No drilling has been undertaken by the company. Any drilling referenced in this release is proposed only.</p> <p>All channel samples were taken with two parallel saw cuts with the rock between the cuts removed using a geology hammer and/or a mallet and chisel. In cases where the sample was highly oxidised and weathered the sample was cut with a plaster spatula and with material in between the spatula cuts removed with a chisel or another spatula. The entire sampled interval was cut and a rubber mat was used to help funnel material into a calico sample bag. Samples were dried in the Company's secure core cutting shed using a gas heater prior to dispatch.</p> <p>The details of the applicable sample preparation have been discussed more fully in subsequent sections.</p> <p>The channel cut sample was collected in intervals ranging from 0.25m to 1.25m ensuring that a representative sample was taken across the length and breadth of each sampled interval. Sample quality was excellent and samples included fresh to partially oxidised rock.</p> <p>The Company included blank samples after samples visually estimated to have a higher graphite content. Certified Reference sample was analysed with every batch of 20 samples. Similarly, a repeat sample was taken and a blank included in each batch of</p>

Criteria	JORC – Code of Explanation	Commentary
		20 samples. The results of the QA/QC samples were within statistically acceptable limits.
	<i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i>	As previously stated, the entire channel cut sample was collected in the intervals ranging from 0.25m to 1.25m ensuring a representative sample. The field duplicate samples have an excellent correlation with the results of the prime sample. 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.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	The sample size was considered more than adequate to assess TGC content of the graphite mineralisation from the sampled sites at the Gapyeong project.
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	<p>At NAGROM, the channel 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.</p> <p>Each sample was pulverised using a LM5 pulveriser until 80% of the sample passed 75 microns. A >10g subsample of the pulverised material will then randomly selected for analysis with the balance of the pulverised material retained for future use.</p> <p>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 is considered near total for C and S and was the globally preferred method for accurate graphite sample analysis.</p> <p>From these analyses, the Total Carbon, Total Graphitic Carbon (TGC), Organic Carbon and Inorganic Carbon (as carbonate) and Sulphur will be reported.</p> <p>The assays are 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.</p>
	<i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivations, etc.</i>	<p>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.</p> <p>The geophysical programme parameters were as follows: Planning/Supervision: Southern Geoscience Consultants Pty Ltd (SGC)</p>

Criteria	JORC – Code of Explanation	Commentary
		<p>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 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 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</p> <p>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^{D5}.</p>
	<p><i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></p>	<p>The Company included blank and CRM samples as part of the channel sample analyses. Blind field repeats were also included and the correlation between the analysis results for the original and blind repeat sample were good though the repeat sample consistently assayed higher than the primary channel sample. In addition, NAGROM undertakes routine blank, CRM and repeat analyses as part of the labs own internal QA/QC procedures. The results of the Company's and the laboratory's own internal QA/QC do not indicate any issues with the assay results reported herewith. The labs routine sample repeats show excellent correlation.</p>
<p>Verification of sampling and assaying</p>	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p>	<p>All reported intercepts have been confirmed by one or more of the Company's geologists. None of the results reported or commented upon in this release have been independently checked by non-Company personnel. This is not considered material at this early reconnaissance stage of the project's evaluation.</p>
	<p><i>The use of twinned holes.</i></p>	<p>No drilling has been undertaken by the company. Any drilling referenced in this release is proposed only.</p>

Criteria	JORC – Code of Explanation	Commentary
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Assay results are stored in an Excel database. All results were checked by the responsible geologist on entry to the database. The Company's data is entered into an Excel database and routinely transferred to the Perth Head Office.
	<i>Discuss any adjustment to assay data.</i>	The channel data presented in the accompanying Appendix 1 and 2 is raw laboratory data. The organic carbon and inorganic carbon content were calculated using the results of the total and graphitic carbon and non-inorganic carbon analyses. This is standard practice in the reporting analyses of various carbon species.
Location of data points	<i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	No drilling has been undertaken by the company. Any 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. Control points were also surveyed using a handheld Garmin GPS unit at each of the trench sites as well as pegs placed at the start and end of each trench. These surveyed pegs were used to reference the location of each channel sample to an accuracy of +/- 10m using a chain, compass and clinometer survey to spatially locate the start and end of each channel sample.
	<i>Specification of the grid system used.</i>	All sample sites were surveyed in the UTM WGS84 zone 52N coordinate system.
	<i>Quality and adequacy of topographic control.</i>	Geophysical measurement locations were determined using a hand-held Garmin GPS64CSx. The accuracy of this unit at most sample sites was +/- 5m to 10m. 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	<i>Data spacing for reporting of Exploration Results.</i>	The initial graphite channel-sampling intersection was based on continuous channel sampling across the reported intersection. The channel sites were nominally 100m apart. Further channel sampling and proposed drilling is planned to be conducted initially at 80m section intervals.
	<i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve</i>	The channel sampling was undertaken where graphitic exposures were identified at surface. This initial sampling work at Gapyeong is for investigative purposes but has been undertaken to a standard that would allow the data to be utilised in any future Mineral Resource estimation that may be undertaken.

Criteria	JORC – Code of Explanation	Commentary
	<i>estimation procedure(s) and classifications applied.</i>	Planned follow-up systematic trenching is planned at 40m spacing where possible along the entire structures length.
	<i>Whether sample compositing has been applied.</i>	None of the channel results have been composited. The assay results for each channel sampled interval have been reported in Appendix 2.
Orientation of data in relation to geological structure	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	The trenches have been dug close to normal to the strike of the Gapyeong graphitic unit. Even sized samples have been taken from each interval. The sampling is considered unbiased.
	<i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	No drilling has been undertaken by the company. Any drilling referenced in this release is proposed only. The channel samples were all sawn as close to horizontal as possible given the limitations of the pre-existing trench topography and basal trench outcrop. The channel angle is generally 10 to 30 degrees to the structures dip. All channel samples accurately reflected the grade of the sampled interval. True widths for each interval have been calculated using the observed structural dips, the channel dip and angle between the channel direction and dip direction of the graphite bearing structures.
Sample security	<i>The measures taken to ensure sample security.</i>	All channel 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 initially stored and dried in staff hotel rooms. At the completion of the channel sampling programme samples were transported to the Company's secure core yard at Soate-myeon. There samples were further dried prior to packing into cardboard cartons and dispatch via Fed Ex to NAGROM Laboratories, Australia. All the Gapyeong channel samples were declared as surface samples and heat treated as required by AQIS to destroy any soil or airborne pathogens prior to analysis by NAGROM.
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	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
Tenement and land tenure status	<p><i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></p>	<p>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 received formal written notification of the tenements grant on 11 June 2018 and paid the registration tax on 20 July 2018.</p> <p>In addition, the Company has filed an MDS over the adjoining sub-block Gapyeong 124-4 (Figure 1). The MDS site inspection is scheduled to take place the week of the 21 August 2018.</p> <p>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.</p> <p>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.</p> <p>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 undertaking any major exploration activity, such as drilling. The local community was very engaging and interested in the recent EM survey work at Gapyeong and have so far exploration efforts have been favourably received by the local Geumdae-ri community.</p>

Criteria	JORC – Code of Explanation	Commentary
	<p><i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i></p>	<p>The Company has been formally granted one sub-block and expects the second northern sub-block to be granted by October following the Ministry inspection slated for the third week of August. The company has currently valid applications over adjoining sub-blocks.</p> <p>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.</p> <p>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.</p> <p>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 re-apply 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</p>

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	<i>Acknowledgement and appraisal of exploration by other parties.</i>	<p>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.</p> <p>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.</p> <p>The Company is currently not aware of any exploration work by other non-Government agencies/parties.</p>
Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	At Gapyeong the main graphitic schist horizon exposed along the NE-SW trending ridge crest. There is a marked conductivity contrast between the non-conductive eastern 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.
Drill hole information	<p><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i></p> <ul style="list-style-type: none"> • <i>easting and northing of the drill hole collar</i> • <i>elevation or RL (Reduce Level) – elevation above sea level in metres) of the drill hole collar</i> • <i>dip and azimuth of the hole</i> • <i>down hole length and interception depth</i> • <i>hole length</i> 	<p>All the Gapyeong sample results and sample location details were included in previous releases the recent channel sample locations are shown in Figure 1^{D2,D4,D5}.</p> <p>No drilling has been completed by the company at the Gapyeong project.</p> <p>The Company is planning to continue metallurgical studies evaluating the suitability of the Gapyeong concentrate for micronisation (to <20µm) and spheroidisation.</p>

Criteria	JORC – Code of Explanation	Commentary
	<i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i>	No material information has been excluded from this release.
Data aggregation methods	<i>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.</i>	No data has been cut or truncated.
	<i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i>	All sample assay values discussed are raw assays (Appendix 2).
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No metal equivalent values have been reported.
Relationship between mineralisation widths and intercept lengths	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	No tonnage or Mineral Resource potential has been commented on in this release. Commentary on the potential width of the Gapyeong structure is based on surface observations and the results of this most recent channel sampling programme. It is the Company's intention to undertake further systematic rock saw channel sampling.

Criteria	JORC – Code of Explanation	Commentary
	<i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>	Drilling referenced in this release is proposed only.
	<i>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’).</i>	Drilling referenced in this release is proposed only.
Diagrams	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	Figure 1 (and Figure 2) shows the locations of the Gapyeong EM anomaly as defined by the recently completed FLEM survey ^{D5} . Modelling of the FLEM data has been completed and shows that the conductors are dipping steeply to both the east and west and in places vertically. The figure also shows the location of current and past surface sampling.
Balanced reporting	<i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	All assay values and sample location details have been reported previously and are summarised in Figure 1 ^{D2,D4,D5} .

Criteria	JORC – Code of Explanation	Commentary
Other substantive exploration data	<i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	All data considered relevant and material have been included and commented upon in this announcement or included in the earlier announcement ^{D2,D4,D5} .
Further work	<i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	<p>Surface trenching and channel sampling is planned on 40m sections where possible along the full 1000m of geophysically defined strike length at Gapyeong. Drill access negotiations with local residents are underway at Geumdae-ri. Once the surface drill access negotiations are complete the Company will then approach the Local Gapyeong-gun Government to discuss surface drilling programme at the project site.</p> <p>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.</p>
	<i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	<p>The included Figures 1 and 2 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. Figures 1 and 2 also show the location of past surface sampling and recently completed channel sampling on the EM imagery^{D5}.</p> <p>The inset in Figure 1 shows the location of the Gapyeong and to the Company's other projects and major Korean cities.</p>

Appendix 1: Gapyeong Project Channel Sample Location Details

ChannelID	Sample ID	East	North	mRL	From	To	Channel Length (m)	Channel True Width	Lith
GC0001	GPC0005	371120.7	4180493	118.8	0.00	0.56	0.56	0.46	Pgn
GC0001	GPC0006	371120.2	4180493	118.9	0.56	1.07	0.51	0.15	Pgn
GC0001	GPC0007	371119.8	4180493	119.2	1.07	1.47	0.40	0.25	Pgn
GC0001	GPC0007B	371119.4	4180493	119.3	1.47	1.67	0.20	0.10	NS
GC0001	GPC0008	371119.4	4180493	119.5	1.67	2.45	0.78	0.44	Pgn
GC0001	GPC0009	371118.7	4180493	119.7	2.45	3.43	0.98	0.73	Pgn
GC0001	GPC0009B	371117.8	4180493	119.8	3.43	3.58	0.15	0.08	NS
GC0001	GPC0010	371117.8	4180493	120.0	3.58	4.74	1.16	0.81	Pgn
GC0001	GPC0012	371116.7	4180493	120.2	4.74	5.74	1.00	0.29	Pgn
GC0001	GPC0013	371115.9	4180492	120.7	5.74	6.34	0.60	0.19	Pgn
GC0001	GPC0014	371115.5	4180492	121.0	6.34	7.06	0.72	0.51	Pgn
GC0001	GPC0014B	371114.8	4180492	121.0	7.06	7.27	0.21	0.11	NS
GC0001	GPC0015	371114.8	4180492	121.2	7.27	7.97	0.70	0.51	Pgn
GC0001	GPC0016	371114.2	4180491	121.2	7.97	8.72	0.75	0.53	Pgn
GC0001	GPC0016B	371113.4	4180491	121.3	8.72	8.88	0.16	0.08	NS
GC0001	GPC0017	371113.4	4180491	121.4	8.88	9.50	0.62	0.44	Pgn
GC0001	GPC0018	371112.9	4180491	121.4	9.50	10.50	1.00	0.73	Pgn
GC0001	GPC0019	371111.9	4180490	121.5	10.50	11.49	0.99	0.84	Pgn
GC0001	GPC0021	371111	4180490	121.2	11.49	12.50	1.01	0.79	Pgn
GC0001	GPC0021B	371110.1	4180490	121.1	12.50	12.84	0.34	0.17	NS
GC0001	GPC0022	371110.1	4180490	120.8	12.84	13.61	0.77	0.54	Pgn
GC0001	GPC0023	371109.4	4180489	120.7	13.61	14.50	0.89	0.69	Pgn
GC0001	GPC0023	371108.6	4180489	120.5	14.50	14.50	0.00	0.00	
GC0002	GPC0024	371155.3	4180601	121.4	0.00	1.16	1.16	0.98	Pgn
GC0002	GPC0025	371154.2	4180601	121.4	1.16	1.80	0.64	0.25	Pgn
GC0002	GPC0026	371153.7	4180601	121.8	1.80	2.80	1.00	0.75	Pgn
GC0002	GPC0027	371152.7	4180601	122.0	2.80	3.80	1.00	0.79	Pgn
GC0002	GPC0028	371151.7	4180601	122.1	3.80	4.80	1.00	0.85	Pgn
GC0002	GPC0030	371150.7	4180601	122.1	4.80	5.80	1.00	0.85	Pgn
GC0002	GPC0031	371149.7	4180601	122.1	5.80	6.80	1.00	0.84	Pgn
GC0002	GPC0032	371148.7	4180601	122.1	6.80	7.82	1.02	0.90	Pgn
GC0002	GPC0033	371147.7	4180601	121.9	7.82	9.00	1.18	1.01	Pgn
GC0002	GPC0033B	371146.5	4180601	121.9	9.00	9.29	0.29	0.15	NS
GC0002	GPC0034	371146.5	4180601	122.2	9.29	9.79	0.50	0.42	Pgn
GC0002	GPC0034B	371146	4180601	122.2	9.79	10.16	0.37	0.19	NS
GC0002	GPC0035	371146	4180601	121.8	10.16	10.53	0.37	0.29	Pgn
GC0002	GPC0036	371145.7	4180601	121.8	10.53	11.76	1.23	1.00	Pgn
GC0002	GPC0036B	371144.4	4180601	121.9	11.76	12.05	0.29	0.15	NS
GC0002	GPC0037	371144.4	4180601	121.6	12.05	13.30	1.25	1.09	Pgn

ChannelID	Sample ID	East	North	mRL	From	To	Channel Length (m)	Channel True Width	Lith
GC0002	GPC0037B	371143.2	4180601	121.5	13.30	13.51	0.21	0.11	NS
GC0002	GPC0038	371143.2	4180601	121.3	13.51	14.27	0.76	0.74	Pgn
GC0002	GPC0039	371142.5	4180601	121.1	14.27	15.19	0.92	0.83	Pgn
GC0002	GPC0039	371141.6	4180602	121.0	15.19	15.19	0.00	0.00	

Rock Codes

Pgn Gneiss
NS No sample (offsets in the channel direction)

Appendix 2: Gapyeong Channel Sample Assay results

Sample ID	Channel/ Hole Number	From (m)	To (m)	TGC%	TC%	S%	TCC%	TOC%
GPC0005	GC0001	0.00	0.56	5.2	5.2	<0.1	<0.1	<0.1
GPC0006	GC0001	0.56	1.07	8.0	8.4	<0.1	0.2	0.2
GPC0007	GC0001	1.07	1.47	16.1	16.4	<0.1	0.3	<0.1
GPC0008	GC0001	1.67	2.45	12.5	13.1	<0.1	0.5	<0.1
GPC0009	GC0001	2.45	3.43	5.6	5.6	<0.1	<0.1	<0.1
GPC0010	GC0001	3.58	4.74	13.8	14.7	<0.1	0.9	<0.1
GPC0012	GC0001	4.74	5.74	13.5	15.4	<0.1	1.9	<0.1
GPC0013	GC0001	5.74	6.34	11.8	12.2	<0.1	0.4	<0.1
GPC0014	GC0001	6.34	7.06	5.7	5.8	<0.1	<0.1	<0.1
GPC0015	GC0001	7.27	7.97	15.7	17.1	<0.1	1.3	0.1
GPC0016	GC0001	7.97	8.72	6.2	6.6	<0.1	0.4	<0.1
GPC0017	GC0001	8.88	9.50	16.9	18.6	<0.1	1.7	<0.1
GPC0018	GC0001	9.50	10.50	14.8	15.5	<0.1	0.7	<0.1
GPC0019	GC0001	10.50	11.49	12.6	13.1	<0.1	0.5	<0.1
GPC0021	GC0001	11.49	12.50	9.6	9.6	<0.1	<0.1	<0.1
GPC0022	GC0001	12.84	13.61	1.2	1.5	<0.1	0.2	0.1
GPC0023	GC0001	13.61	14.50	3.2	3.3	<0.1	<0.1	<0.1
GPC0024	GC0002	0.00	1.16	1.2	1.4	<0.1	<0.1	0.1
GPC0025	GC0002	1.16	1.80	22.1	25.2	<0.1	3.1	<0.1
GPC0026	GC0002	1.80	2.80	15.4	17.7	<0.1	1.8	0.5
GPC0027	GC0002	2.80	3.80	14.3	14.7	<0.1	0.4	<0.1
GPC0028	GC0002	3.80	4.80	15.8	17.7	<0.1	1.9	<0.1
GPC0030	GC0002	4.80	5.80	21.3	23.1	0.1	1.8	<0.1
GPC0031	GC0002	5.80	6.80	18.1	19.4	<0.1	1.3	<0.1
GPC0032	GC0002	6.80	7.82	15.5	15.9	<0.1	0.4	<0.1
GPC0033	GC0002	7.82	9.00	2.6	2.8	<0.1	<0.1	0.2
GPC0034	GC0002	9.29	9.79	7.2	8.0	<0.1	<0.1	0.8
GPC0035	GC0002	10.16	10.53	1.8	2.1	0.1	<0.1	0.3
GPC0036	GC0002	10.53	11.76	13.7	14.6	<0.1	0.5	0.4
GPC0037	GC0002	12.05	13.30	14.1	14.8	<0.1	0.4	0.3
GPC0038	GC0002	13.51	14.27	5.6	5.6	<0.1	<0.1	<0.1
GPC0039	GC0002	14.27	15.19	0.2	0.4	<0.1	<0.1	0.2

Appendix 2, cont.: Gapyeong Channel Sample Assay results

Sample ID	Al %	As %	Ba %	Ca %	Cl %	Co %	Cr %	Cu %	Fe %	K %	Mg %	Mn %	Mo %	Na %	Nb %
GPC0005	10.243	<0.001	0.047	0.543	0.008	0.006	0.028	0.123	9.959	1.017	0.725	0.075	0.009	0.306	<0.001
GPC0006	9.646	<0.001	0.032	0.609	0.014	0.003	0.030	0.114	7.609	0.863	0.141	0.020	0.005	0.138	0.001
GPC0007	7.642	<0.001	0.109	1.233	0.016	0.003	0.019	0.044	8.744	2.832	0.109	0.035	0.005	0.132	0.001
GPC0008	7.511	<0.001	0.049	2.152	0.014	0.008	0.020	0.034	11.775	1.267	0.346	0.121	0.003	0.869	<0.001
GPC0009	8.549	<0.001	0.074	2.693	0.011	0.004	0.026	0.025	5.242	2.080	0.538	0.122	0.008	1.678	0.004
GPC0010	7.179	<0.001	0.068	0.393	0.011	0.003	0.021	0.017	5.767	2.424	0.425	0.056	0.005	0.281	<0.001
GPC0012	6.108	<0.001	0.080	0.210	0.015	0.002	0.021	0.021	5.508	2.244	0.213	0.037	0.017	0.314	0.002
GPC0013	5.725	<0.001	0.059	0.122	0.008	0.004	0.023	0.034	16.761	1.291	0.225	0.053	0.013	0.077	<0.001
GPC0014	8.570	<0.001	0.050	2.223	0.013	0.005	0.024	0.038	9.720	1.183	1.247	0.096	0.004	0.516	<0.001
GPC0015	7.048	<0.001	0.089	0.727	0.013	0.001	0.019	0.011	5.660	2.696	0.551	0.050	0.001	0.332	0.002
GPC0016	7.780	<0.001	0.052	0.613	0.011	0.004	0.018	0.018	9.715	2.266	1.477	0.090	0.001	0.178	0.001
GPC0017	6.213	<0.001	0.078	0.048	0.013	0.002	0.023	0.008	3.980	3.180	0.292	0.024	0.003	0.113	0.001
GPC0018	6.280	<0.001	0.068	0.157	0.012	0.004	0.020	0.011	5.179	2.573	0.218	0.044	0.003	0.111	0.002
GPC0019	5.956	0.002	0.048	0.031	0.014	0.004	0.022	0.020	5.251	2.123	0.151	0.045	0.006	0.084	0.002
GPC0021	6.680	0.001	0.056	0.033	0.011	0.004	0.020	0.017	12.748	2.046	0.252	0.088	0.003	0.134	0.003
GPC0022	11.292	<0.001	0.056	0.090	0.016	0.008	0.011	0.017	11.688	2.190	1.162	0.059	<0.001	0.345	0.002
GPC0023	7.981	0.002	0.031	0.100	0.015	0.005	0.011	0.020	20.971	2.153	0.435	0.126	0.003	0.307	<0.001
GPC0024	14.170	<0.001	0.060	0.423	0.016	0.011	0.020	0.087	10.447	0.759	0.372	0.057	0.003	0.515	0.003
GPC0025	9.855	<0.001	0.037	0.174	0.012	0.007	0.019	0.076	8.391	0.853	0.137	0.025	0.006	0.150	0.001
GPC0026	8.087	<0.001	0.076	0.789	0.009	0.009	0.020	0.082	8.475	1.800	0.239	0.060	0.004	0.191	0.002
GPC0027	7.763	<0.001	0.062	0.206	0.010	0.009	0.020	0.079	13.448	2.190	0.174	0.068	0.004	0.142	<0.001
GPC0028	9.039	<0.001	0.065	0.504	0.010	0.004	0.018	0.073	7.350	2.204	0.178	0.047	0.003	0.158	<0.001
GPC0030	8.121	<0.001	0.101	0.232	0.014	0.004	0.019	0.066	4.729	3.480	0.156	0.026	0.003	0.238	<0.001
GPC0031	7.895	<0.001	0.062	0.102	0.013	0.006	0.020	0.094	7.561	2.061	0.155	0.035	0.004	0.135	0.002
GPC0032	7.506	<0.001	0.084	0.272	0.014	0.005	0.016	0.034	7.907	2.741	0.172	0.056	0.005	0.212	<0.001
GPC0033	10.545	<0.001	0.071	1.033	0.011	0.006	0.024	0.036	10.130	1.800	0.798	0.145	0.002	0.519	<0.001
GPC0034	8.870	<0.001	0.055	1.626	0.015	0.005	0.018	0.024	9.662	1.745	0.643	0.146	0.005	0.141	<0.001
GPC0035	11.705	<0.001	0.078	1.011	0.022	0.007	0.023	0.028	9.396	2.133	1.116	0.219	0.002	0.298	0.001
GPC0036	6.599	<0.001	0.068	0.367	0.004	0.002	0.022	0.007	7.000	2.413	0.387	0.055	0.005	0.087	0.002
GPC0037	6.131	<0.001	0.049	0.104	0.006	0.005	0.022	0.021	6.905	1.727	0.266	0.040	0.007	0.297	<0.001
GPC0038	7.438	<0.001	0.019	4.135	0.034	0.005	0.013	0.018	9.931	1.015	1.704	0.114	0.004	0.956	0.002
GPC0039	8.437	<0.001	0.021	4.380	0.044	0.005	0.010	0.014	10.853	0.840	3.299	0.081	0.002	1.418	0.003

Appendix 2, cont.: Gapyeong Channel Sample Assay results

Sample ID	Ni %	P %	Pb %	S %	Sb %	Si %	Sn %	Sr %	Ta %	Ti %	V %	W %	Zn %	Zr %
GPC0005	0.010	0.127	0.004	0.035	<0.001	21.050	<0.001	<0.001	<0.001	1.810	0.097	<0.001	0.007	0.029
GPC0006	0.010	0.138	0.002	0.014	<0.001	23.754	<0.001	<0.001	<0.001	0.631	0.129	0.002	0.004	0.017
GPC0007	0.010	0.114	0.004	0.014	<0.001	20.448	<0.001	<0.001	<0.001	0.599	0.171	0.002	0.029	0.016
GPC0008	0.027	0.109	0.002	0.013	<0.001	19.626	<0.001	0.003	<0.001	0.545	0.239	0.003	0.043	0.021
GPC0009	0.017	0.082	0.002	0.010	<0.001	25.987	<0.001	0.014	<0.001	0.962	0.153	0.003	0.012	0.033
GPC0010	0.022	0.054	0.003	0.008	<0.001	24.704	<0.001	<0.001	<0.001	0.495	0.210	<0.001	0.005	0.022
GPC0012	0.018	0.047	0.002	0.005	<0.001	26.526	<0.001	<0.001	<0.001	0.374	0.177	<0.001	0.002	0.020
GPC0013	0.034	0.099	0.004	0.009	<0.001	20.125	<0.001	<0.001	<0.001	0.243	0.322	<0.001	0.009	0.013
GPC0014	0.041	0.085	0.002	0.012	<0.001	22.368	<0.001	<0.001	<0.001	1.192	0.131	0.002	0.008	0.019
GPC0015	0.013	0.052	<0.001	0.008	<0.001	23.584	<0.001	<0.001	<0.001	0.571	0.158	0.002	0.005	0.028
GPC0016	0.030	0.102	0.002	0.020	<0.001	23.051	<0.001	<0.001	<0.001	1.347	0.137	0.002	0.009	0.022
GPC0017	0.013	0.043	0.002	0.006	<0.001	25.828	<0.001	<0.001	<0.001	0.418	0.167	<0.001	0.002	0.017
GPC0018	0.017	0.049	0.003	0.010	<0.001	26.104	<0.001	<0.001	<0.001	0.390	0.192	<0.001	0.003	0.020
GPC0019	0.021	0.031	0.002	0.014	<0.001	27.939	<0.001	<0.001	<0.001	0.359	0.161	<0.001	0.002	0.018
GPC0021	0.024	0.078	0.003	0.017	<0.001	22.464	<0.001	<0.001	<0.001	0.620	0.271	<0.001	0.005	0.024
GPC0022	0.022	0.111	0.002	0.011	<0.001	19.437	<0.001	<0.001	<0.001	2.138	0.119	0.002	0.006	0.027
GPC0023	0.022	0.204	0.003	0.016	<0.001	16.436	<0.001	<0.001	<0.001	1.477	0.144	<0.001	0.012	0.028
GPC0024	0.012	0.104	0.003	0.023	<0.001	18.348	0.002	<0.001	<0.001	1.527	0.092	<0.001	0.005	0.025

Sample ID	Ni%	P%	Pb %	S%	Sb%	Si%	Sn %	Sr%	Ta%	Ti %	V%	W %	Zn %	Zr %
GPC0025	0.011	0.057	0.003	0.004	<0.001	15.611	<0.001	<0.001	<0.001	0.588	0.080	<0.001	0.006	0.016
GPC0026	0.012	0.079	0.003	0.020	<0.001	20.211	<0.001	<0.001	<0.001	0.697	0.117	0.002	0.006	0.015
GPC0027	0.012	0.105	0.003	0.031	<0.001	18.143	<0.001	<0.001	<0.001	0.513	0.188	0.002	0.021	0.012
GPC0028	0.007	0.072	0.004	0.023	<0.001	19.850	<0.001	<0.001	<0.001	0.569	0.122	<0.001	0.010	0.015
GPC0030	0.008	0.057	0.005	0.011	<0.001	20.404	0.002	<0.001	<0.001	0.653	0.052	<0.001	0.003	0.019
GPC0031	0.011	0.075	0.004	0.013	<0.001	20.454	<0.001	<0.001	<0.001	0.781	0.088	<0.001	0.004	0.018
GPC0032	0.013	0.069	0.003	0.008	<0.001	22.105	<0.001	<0.001	<0.001	0.467	0.146	<0.001	0.033	0.015
GPC0033	0.021	0.119	0.002	0.011	<0.001	21.039	<0.001	<0.001	<0.001	1.978	0.114	0.002	0.020	0.022
GPC0034	0.020	0.092	0.002	0.023	<0.001	21.280	0.002	<0.001	<0.001	1.327	0.151	0.002	0.014	0.020
GPC0035	0.054	0.123	0.003	0.026	<0.001	19.625	<0.001	<0.001	<0.001	2.335	0.105	0.002	0.017	0.026
GPC0036	0.031	0.068	0.002	0.007	<0.001	24.451	<0.001	<0.001	<0.001	0.441	0.215	0.002	0.002	0.019
GPC0037	0.018	0.048	0.004	0.014	<0.001	26.843	<0.001	<0.001	<0.001	0.473	0.178	<0.001	<0.001	0.017
GPC0038	0.010	0.117	<0.001	0.025	<0.001	22.376	<0.001	<0.001	<0.001	1.463	0.086	0.003	0.002	0.026
GPC0039	0.010	0.111	<0.001	0.012	<0.001	21.120	<0.001	<0.001	<0.001	1.914	0.050	0.002	0.003	0.024