PENINSULA MINES
LIMITED
ASX: PSM

ASX ANNOUNCEMENT

11 December 2018

HIGH-GRADE GRAPHITE INTERSECTIONS FROM GAPYEONG DRILLING

- **All six initial drill holes have intersected graphite at the high-grade Gapyeong Flake-Graphite Project**
- **High-grade graphite intersections on the eastern limb of interpreted synformal structure include: GPD0005: 10.63m @ 11.6% Total Graphitic Carbon (TGC) including 8.63m @ 12.1% TGC**
- **Metallurgical testing initiated on drilling samples to confirm previously achieved >95% TGC concentrate grade[D6] prior to further drilling to define a maiden flake-graphite mineral resource in South Korea**

Peninsula Mines Ltd (ASX:PSM) has produced multiple, high-grade, flake-graphite intersections, including up to **10.63m @ 11.6% TGC including 8.63m @ 12.1% TGC**, from its initial drilling programme at the Gapyeong Graphite Project, located 50km east of Seoul in South Korea (see Figure 1, inset, for location).

The initial drilling[D2,D3] included six diamond drill holes for 458m on two 80m spaced cross sections across the high-conductivity electromagnetic (EM) anomaly[D11] that corresponds with the graphitic units (see Figure 1).

Two drill holes on each section, including GPD0001 and GPD0002 on section 4,180,760mN, and GPD0004 and GPD0005 on section 4,180,680mN, intersected multiple, steeply dipping, skarn/marble hosted, graphitic units, interpreted to be folded into a shallowly north plunging synformal structure (see cross sections Figures 2 & 3).

Peak graphite intersections from diamond drill-core sampling of the Gapyeong fold structure are as follows:

GPD0001: 6.55m (5.1m True width (TW)) @ 7.9% TGC from 39.6m incl. 2.47m (2.1m TW) @ 11.9% TGC

GPD0002: 10.56mm (6.7m TW) @ 7.1% TGC from 70.91m including 5.44m (3.0m TW) @ 10.0% TGC, and, 1.81m (1.14m TW) @ 10.7% TGC from 86.95m

GPD0004: 6.45m (5.1m TW) @ 4.6% TGC from 15.22m and 2.64m (2.5m TW) @ 7.7% TGC from 38.13m

GPD0005: 10.63mm (7.4m TW) @ 11.6% TGC from 61.9m including 8.63m (6.0m TW) @ 12.1% TGC

Peninsula's Managing Director, Jon Dugdale, said: *"These intersections of high-grade flake graphite at Gapyeong are very encouraging, and confirm the thickness and high-grades of over 12 percent graphite intersected in previous trenching.*

"The next step is to complete confirmatory concentrate metallurgy on fresh rock samples before we continue drilling to target a maiden flake-graphite mineral resource in South Korea."

The western fold limb hosts lower grade disseminated flake graphite with associated skarn/calc-silicate alteration and sulphide mineralisation while on the eastern fold limb the abundance of flake graphite noticeably increases as does the alteration and sulphide mineralisation. (see cross sections Figures 2 and 3).

The two holes drilled to the west (GPD0003 and GPD0006) intersected lower grade graphite mineralisation associated with a major north-south trending fault structure. Some minor areas of skarn mineralisation with associated flake graphite were observed immediately adjacent to the western fault structure (see Table 1).

The Exploration Target model for Gapyeong is for a shallow plunging synformal structure, as indicated by the EM model[D5,D11], and this has been confirmed by the initial drilling (see cross sections Figures 2 and 3).

"The main graphitic unit appears to be thickening closer to the interpreted fold hinge at depth, representing a target for thicker, high-grade, graphite intersections similar to those produced by previous trenching", said Mr Dugdale. These include: **GC0002: 13.1m @ 12.3% TGC including 6.66m @ 17.2% TGC** on section 4,180,600mN and **GC0001: 12.5m @ 10.6% TGC including 2.6m @ 14.5% TGC** on section 4,180,500mN[D4] (see Figure 1).

Additional trenching and associated channel sampling has been completed on section 4,180,680mN and further to the south on section 4,180,400mN, with results to come, confirming that the graphitic units extend over a 400m strike length, corresponding to the southern EM anomaly[D5,D11] (see Figure 1). The total flake-graphite exploration target strike length at Gapyeong is up to 1km[D5].

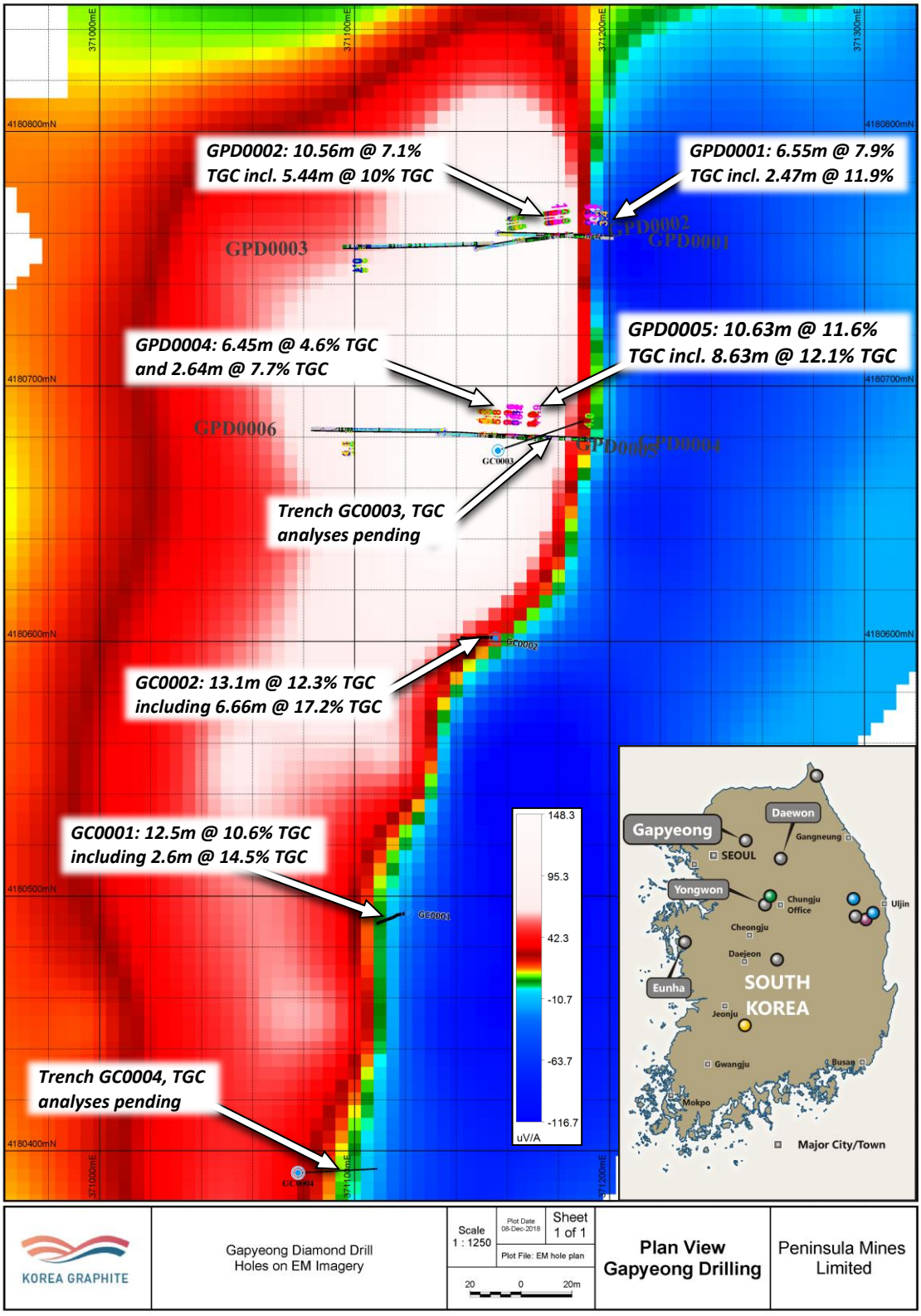


Figure 1: Gapyeong drill hole locations and results, trench locations and intersections on EM imagery

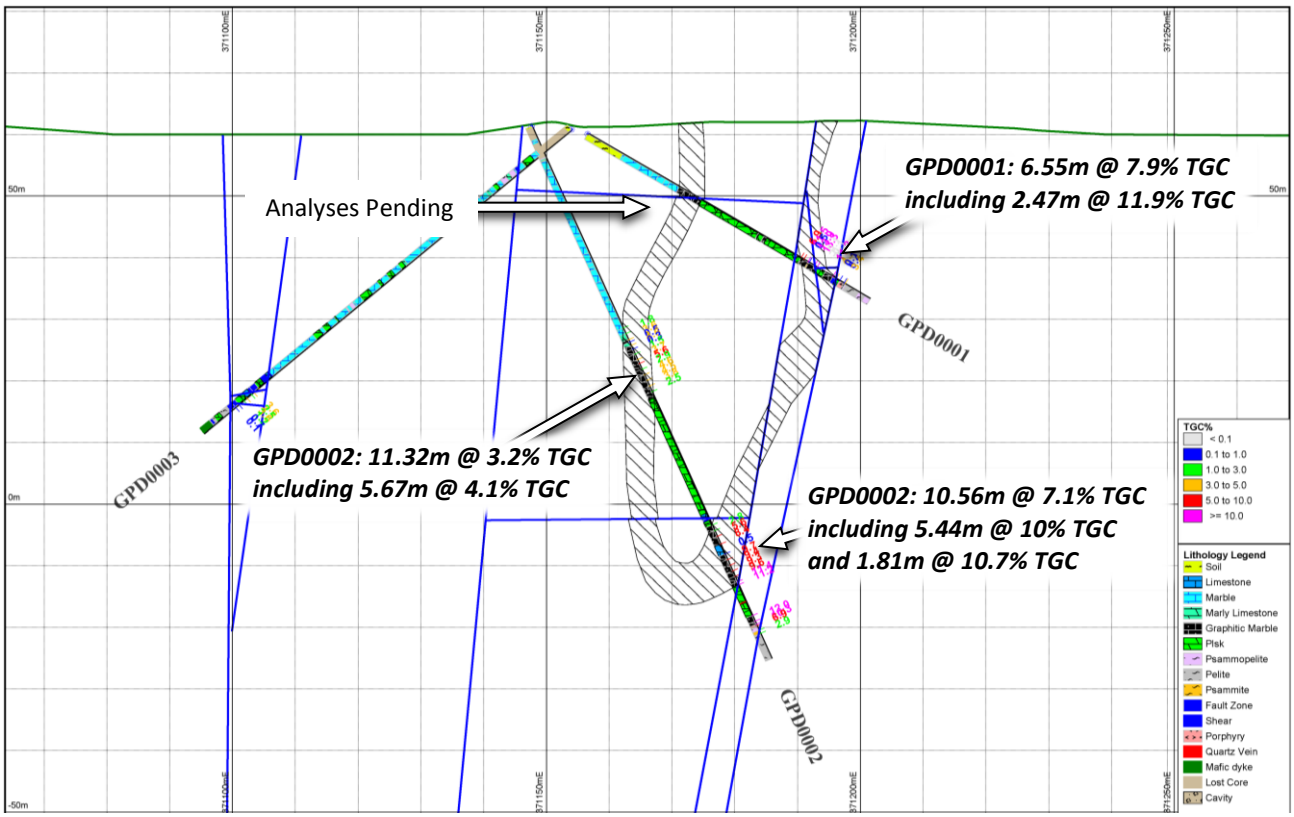


Figure 2: Gapyeong cross section 4,180,760mN showing drilling intersections & interpreted synformal graphitic unit

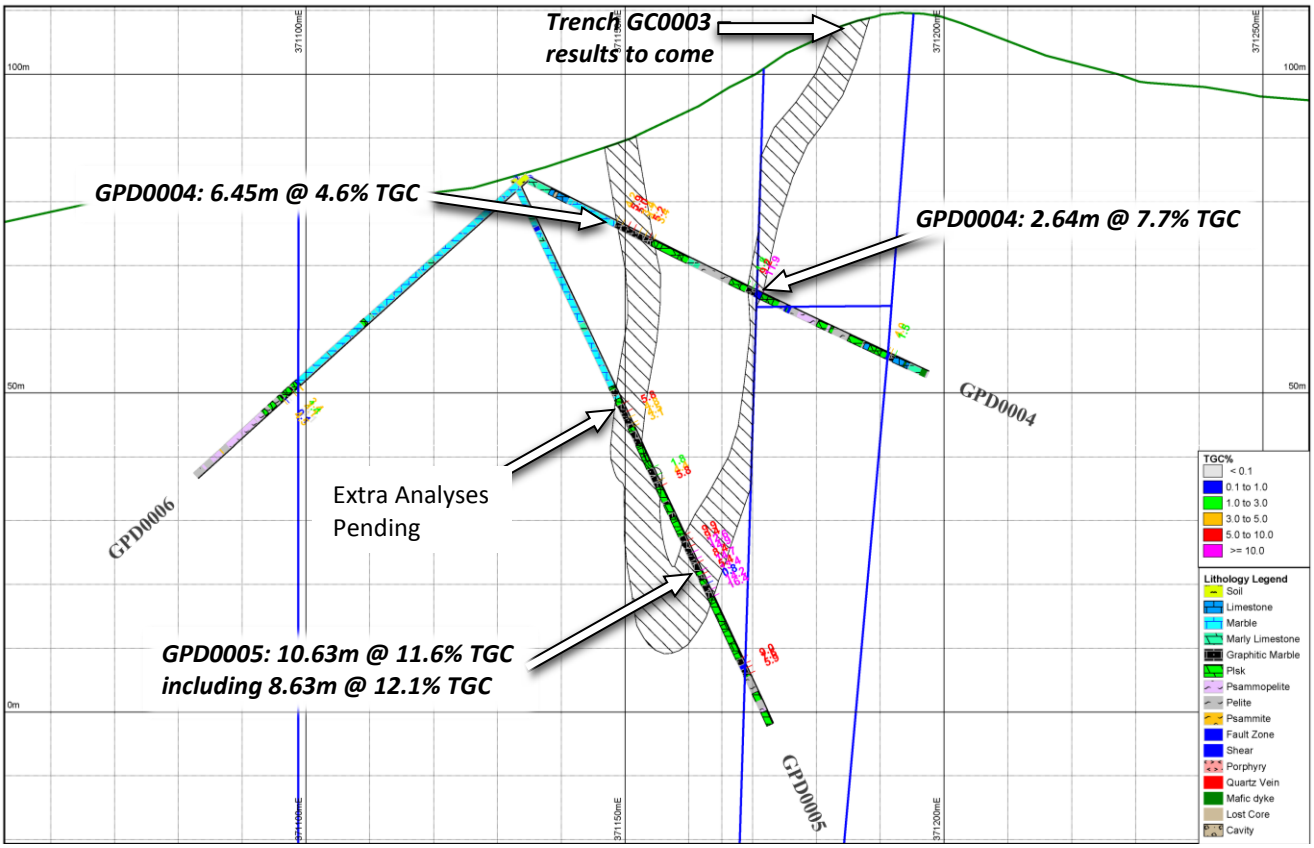


Figure 3: Gapyeong cross section 4,180,680mN showing drilling intersections & interpreted synformal graphitic unit

Flake graphite in the drilling intersections at Gapyeong is associated with sulphides, dominantly pyrite and pyrrhotite with trace chalcopyrite and sphalerite. The presence of strong sulphide mineralisation was not evident in previous channel sampling and was most likely oxidised and leached at surface. Further metallurgical testing has been initiated on the fresh-rock drilling samples to confirm that a >95% TGC concentrate can be generated from the sulphide bearing graphitic material. Previous testing on surface trenching samples produced high-purity metallurgical concentrate of 95.4% TGC[D6].

Further drilling to define a maiden flake-graphite resource at Gapyeong will be planned subject to the results of the further metallurgical testwork on fresh rock from the drill core samples.

Subject to achieving the requisite concentrate grade, the Company will look to generate a five kilogram graphite concentrate sample for spherical graphite testwork with the objective of reaching 99.95% TGC purity spherical graphite product to meet the specifications of South Korean Lithium-ion battery anode manufacturers.

"The ultimate goal is to develop a high-grade graphite mineral resource and prove the potential to produce high-purity, battery grade, spherical graphite on the doorstep of the world's largest Li-ion battery industry, and these drilling results are a key step towards achieving these objectives", added Mr Dugdale.

Table 1: Gapyeong drilling intersections

Hole Number	From (m)	To (m)	Interval	True Width	TGC %	TCC%	TOC%	TC%	S%
GPD0001 (760mN)	39.60	46.15	**6.55**	**5.1**	**7.9**	0.5	0.4	8.7	3.3
Including	40.10	42.57	**2.47**	**2.1**	**11.9**	0.6	0.4	12.8	3.5
GPD0002 (760mN)	35.93	47.25	11.32	4.2	3.2	2.1	0.6	5.8	1.4
Including	40.58	46.25	5.67	1.8	4.1	2.7	0.8	7.6	1.5
GPD0002 (760mN)	70.91	81.47	**10.56**	**6.7**	**7.1**	1.9	0.2	9.1	3.7
Including	76.03	81.47	**5.44**	**3.0**	**10.0**	2.3	0.0	12.3	4.4
GPD0002 (760mN)	86.95	88.76	**1.81**	**1.14**	**10.7**	0.9	0.0	11.6	3.3
GPD0003 (760mN)	65.18	67.64	2.46	1.65	3.4	2.9	0.5	6.8	2.0
GPD0004 (680mN)	15.22	21.67	**6.45**	**5.1**	**4.6**	3.0	0.5	8.1	1.5
GPD0004 (680mN)	38.13	40.77	**2.64**	**2.5**	**7.7**	2.1	0.8	10.7	3.0
GPD0005 (680mN)	61.90	72.53	**10.63**	**7.4**	**11.6**	0.6	0.5	12.7	3.0
Including	63.90	72.53	**8.63**	**6.0**	**12.1**	0.4	0.6	13.1	2.7
GPD0006 (680mN)	48.60	51.98	3.38	2.6	1.4	1.5	0.3	3.2	1.9
Including	48.60	50.03	1.43	1.15	2.2	2.0	0.6	4.7	1.7

See Appendix 1 for drill hole locations and details and Appendix 2 for a detailed tabulation of all available drill core analyses and summary lithology.

ENDS

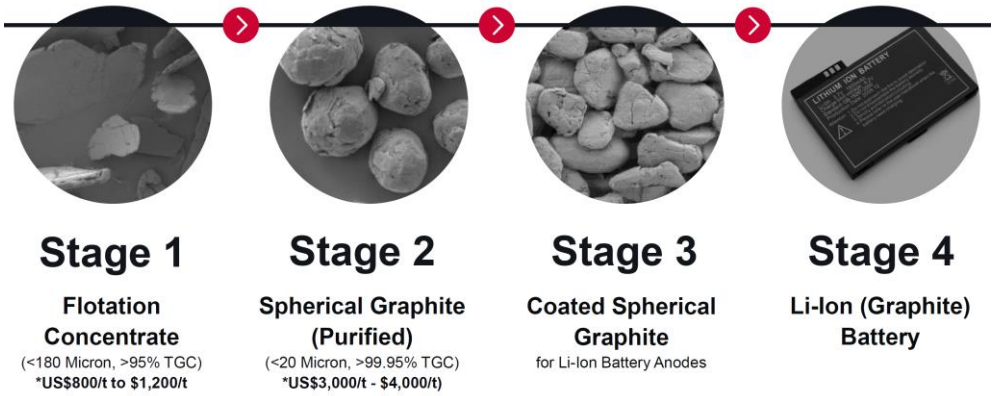
For further information contact:

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 more than 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. 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, July - November 2018[D7].

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[D8], 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 extended a Binding Supply Agreement with Canadian listed DNI Metals Inc ("DNI")[D9]. Subject to various conditions, DNI will supply up to 24,000 tonnes per year of flake graphite for on-sale to Korean end-users. 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 Gapyeong Drilling Intersections Confirm Exploration Target, ASX: 23/11/18
D2 Gapyeong High-Grade Graphite Drilling Underway, ASX: 09/10/18
D3 Drilling commenced Testing Key Korean Projects, ASX: 20/09/18
D4 Gapyeong High-Grade Graphite Channel-Sampling Intersections, ASX: 01/08/18
D5 Exploration Target for Key Korean Flake-Graphite Projects, ASX: 15/08/18
D6 High-Purity Graphite Concentrate Confirms Potential of High Grade Gapyeong Project, ASX:23/05/18
D7 Benchmark Mineral Intelligence Graphite Pricing Assessment, November 2018
D8 Flake-Graphite Offtake and Development MOU signed with Korean End-User, ASX: 14/06/17
D9 PSM extends Large-Flake Graphite supply Agreement with DNI, ASX: 22/10/18
D10New High-Grade Graphite Results Confirm Resource Drilling Target at Gapyeong, ASX: 19/03/18
D11Exceptional EM Conductors Define Drilling Targets at Gapyeong Graphite Project, ASX: 14/03/18
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 and Exploration Targets 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.*	The diamond drill core from the initial 6-hole Gapyeong diamond drill programme was cut in half using the company's diamond bladed saw with the core half containing the orientation line kept as a permanent drill core record with the other half of the cut core placed in a prelabelled calico bag. The first hole GPD0001 was drilled with an HQ drill string with the balance of the programme completed using an Q3 drill string which produce 50mm diameter core. The core quality at Gapyeong has been excellent with minimal weathering and no core loss has occurred other than from isolated points from within the first 25m of the holes mainly associated with washing away of soil. The core quality is excellent, dominantly fresh with minimal partially oxidised rock near surface. The locations of the drill holes are shown in Figures 1, 2 and 3. All coordinates were recorded in WGS84, UTM Zone 52N coordinate system and are tabulated in Appendix 1. A further, 10 channel samples were cut in the wall and floor of a third hand dug trench excavated on the 4180680mN section and 13 samples from a fourth trench excavated at 4180400mN. 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 steep dipping graphitic unit. The sample quality was excellent, fresh to partially oxidised rock. Each sample was collected across an interval of between 0.64m to 1.33m. All half core samples and channel samples were dispatched via FedEx to Nagrom laboratories, Perth. Results for this sampling work are still pending. 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. 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 drill core analysis

Criteria	*JORC – Code of Explanation*	Commentary
		results are tabled in Appendix 2, below. All coordinates were recorded in WGS84, UTM Zone 52N coordinate system.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Standard diamond drilling has been undertaken but due to access spatial restrictions holes have been drilled slightly oblique to the folded graphitic structure on section 4180760mN. The results from the channel discussed in this are still pending. All channels samples were cut from 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 some variation in the trench direction was necessary to avoid large trees. All the drill hole collar locations have been surveyed using Differential GPS (DGPS) unit by a contract surveyor. The channel sample locations were referenced to pegs the location of these reference pegs were also surveyed using the DGPS (DGPS). The location of specific channels was referenced from pegs using vectors calculated using taped distances and hand-held Sunto compass bearings and clinometer angles.
	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.	Standard diamond drilling has been undertaken to generate HQ and Q3 diameter drill core. Core has been placed in wooden or plastic core trays for subsequent detailed logging. Core has been orientated using a Devicore BBT electronic core orientation device generating orientation data for each drill run. The drill core was sawn in half at the Company's dedicated core logging and cutting facility at Sotae-myeon. The half core with the orientation line will be preserved and the other half was sent to Nagrom Laboratories, Perth for analysis. 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 0.64m to 1.33m. A 33.5m long trench was excavated at 4180680mN across the graphite bearing structures but only the two separate graphite bearing zones were sampled, while at 4180395mN a 31m long trench was excavated across two separate graphitic zones (analysis. results pending). The graphitic channel samples, averaging 1kg to 9kg, were heat treated at 165 degrees Celsius for customs purposes. While the core samples were air dried and being sourced from more than 2m below surface did not require heat treatment. Samples post drying were crushed to a nominal top size of 6.3mm using a jaw

Criteria	*JORC – Code of Explanation*	Commentary
		crusher. The coarse jaw crushed sample was then riffle split to generate a sub-sample for pulverisation. 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. 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 CO_2 and SO_2 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 (Appendix 2).
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, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	All the drilling referenced in this release has been surface diamond drilling. The pre-collar of each drill hole was drilled with an open bit and generally the soil and loose rock from the soil profile was washed away. Minor compacted soil was recovered from the first 1 to 2m of the holes when water was not used during the drilling process. Post the pre-collar holes were cased with HW drill rods and conventional HQ or Q3 drilling was then undertaken using a standard triple tube core barrel. All drill core has been orientated using a Devicore BBT electronic core orientation tool.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.* *Measures taken to maximise sample recovery and ensure representative nature of the samples.* *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	The core recovery has been excellent except as discussed previously from within the first 10 to 25m where some loss has occurred as a result of washing away soils during the pre-collar. A 0.55m wide cavity was intersected within the marble from 4.45m in hole GPD0004 and an 8cm wide cavity from 41.9m in hole GPD0006. To maximise core recovery dedicated mud mix has been utilised following input from the Australian Mud Company, Perth, who have supplied specific drill additives to assist in areas of weak core or fractured ground. Core recovery and core quality has been outstanding throughout the programme. No sample bias is expected given the quality of the drill core throughout each of the 6 holes drilled to date.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation,*	All holes are orientated and the ori line marked up at the drill site for logging. Preliminary core logging was undertaken at the drill site with detailed logging completed at the Company's dedicated core logging shed at Sotae-myeon prior to sampling. All holes were geologically, geotechnically logged in addition

Criteria	*JORC – Code of Explanation*	Commentary
	mining studies and metallurgical studies.	core alteration details were recorded. Point structural data was routinely acquired to help define the fold geometry and attitude of faults and joint systems. Specific Gravity records are currently being collected for each geological interval. All logging work has been completed to a level that would support a planned future Mineral Resource estimation. Further, it is the company's intention to retain all sample rejects for additional metallurgical testing by IMO, Perth. Logging is both qualitative and quantitative in nature. All core trays are photographed during drilling and again in detail prior to sampling but post core mark-up and logging. The geology for the entire drill hole will be logged in detail. 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 descriptions of 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 also collected. Sketch maps of the channel and sampled intervals were also made. The geology for the entire channel sampled interval was recorded. There were no areas of sample loss within any of the channel sampled intervals.
	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.*	Half core sampling was completed from the targeted graphite bearing structures.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	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 were 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 to Nagrom laboratories, Perth.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The details of the applicable sample preparation are discussed above and below.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	The Company included blank samples after samples visually estimated to have a higher graphite content. Certified Reference sample will be analysed with every batch of 20 samples.

Criteria	*JORC – Code of Explanation*	Commentary
		Similarly, a repeat sample will at some future date be sent to another lab as a reference check. The channel cut sample was collected in intervals ranging from 0.64m to 1.33m 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.
	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.	Diamond drilling is a high-quality industry standard sampling method. Due to limitations in surface drill site access some compromise was required when designing drill holes and as a result holes while drilled normal to the target structure have been drilled a variable drill dips and as a result the drill intercepts generated are not true width intercepts. As previously stated, the entire channel cut sample was collected in the intervals ranging from 0.64m to 1.33m ensuring a representative sample was collected. The field duplicate samples taken from previous channel sampling at the Gapyeong project had 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.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The core and channel sample sizes are 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	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	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. 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. 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 CO_2 and SO_2 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. From these analyses, the Total Carbon, Total Graphitic Carbon (TGC), Organic Carbon and Inorganic Carbon (as carbonate) and Sulphur will be reported.

Criteria	*JORC – Code of Explanation*	Commentary
		The analyses 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.
	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 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 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].
	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 included blank and CRM samples as part of the drill core and channel sample analyses. Blind field repeats will be sent to an alternative lab at some future date as a cross check on the primary analyses. 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 analysis results reported herewith. The labs routine sample repeats show excellent correlation.

Criteria	*JORC – Code of Explanation*	Commentary
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	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.
	The use of twinned holes.	This is the first ever drill programme at the Gapyeong project at this point in time no holes have been twinned.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All core and channel sampling logging details are stored in an Excel database. All results are 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.
	Discuss any adjustment to assay data.	The core drilling data discussed in this release is summarised in the accompanying Appendices 1 and 2. Length weighted averages have been calculated and presented in the main body of this release. All data in the appendices 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	*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.*	All drill holes have been down hole surveyed at nominal 18m survey interval using the Company's own Ezyshot survey instrument. The instrument was serviced by Reflex in Perth immediately prior to the commencement of the Gapyeong drill programme. The presence of pyrrhotite in the drill holes may have had a minor effect on the azimuth component of the survey but magnetic data readings at each survey were within acceptable bounds. Further, the Ezyshot dip data is cross checked against the Devicore BBT regular nominally 3m spaced dip data generated from gravity accelerometer readings taken during the core orientation process. The drill hole collar locations were surveyed by a contract surveyor using a Differential GPS and are considered accurate to +/- 0.1m. The layout of the EM loop and station reading points were all taken with a hand-held Garmin GPS unit. Trench sampling control points were initially 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 reference control pegs were subsequently surveyed by a contract surveyor using a DGPS unit. Chain, compass and clinometer survey has been used to spatially locate the start and end of each channel sample relative to specific reference peg.

Criteria	*JORC – Code of Explanation*	Commentary
	Specification of the grid system used.	All drill hole collar locations and trench locations were surveyed in the UTM WGS84 zone 52N coordinate system.
	Quality and adequacy of topographic control.	Topographic controls were based on The National Geographic Information Institute (NGII), 1:5,000 scale digital contour data available for the entire country. Geophysical measurement locations were determined using a hand-held Garmin GPS64CSx. The accuracy of this unit at most sample sites was +/- 5m to 10m.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	The initial drill section spacing is on nominal 80m spaced north-south sections with holes at 40m spacing down dip for the two easterly drilled holes drilled on each drill section. A single hole was drilled back to the west targeting a second EM anomaly that has subsequently been found to be related to graphite mineralisation along and adjacent to a steep westerly dipping fault structure. The initial interpretation has been modified following the completion of the drill programme. The high-quality core orientation data obtained from the drill programme indicates that there is an upright northerly plunging synformal fold structure located to the east of the two drill pad locations. Further, channel sampling and drilling is planned and will be conducted initially at 80m section intervals. To date trenches have been excavated at 4180400mN, 4180500mN, 4180600mN and 4180680mN.
	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 planned 80 x 40m drill hole and surface channel sample spacing is considered adequate to provide sufficient geological confidence in the continuity of the targeted graphitic structures. All drilling and channel sampling will be undertaken to a standard that will allow the data to be utilised in any future Mineral Resource estimation. Planned follow-up systematic trenching is planned at 40m spacing where possible along the entire structure's length.
	Whether sample compositing has been applied.	No sample compositing has been undertaken. Though core sample rejects will be composited to generate a fresh sample for metallurgical testing. The analysis results for each drill hole interval sampled have been reported in Appendix 2.
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.*	Drill holes are targeting 80m spaced sections with holes drilled normal to the strike of the graphitic unit wherever possible given surface access limitations. 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.

Criteria	*JORC – Code of Explanation*	Commentary
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	The channel samples were all sawn as close to horizontal as possible given the limitations of the trench topography and basal trench outcrop. The channel angle is generally 10 to 30 degrees to the structures dip. True widths for each interval will be calculated using the observed structural dips, the channel dip and angle between the channel direction and dip direction of the graphite bearing structures. All 6 diamond drill holes completed to date were drilled as close to normal to the strike of the target structures with 3 holes drilled on each of the two 80m spaced sections. Some compromise had to be made due to available drill pad access areas. The drilled dip of the holes and the angle of intersection with the targeted structures has meant that down hole intercept widths exceed true width in all 6 holes completed thus far.
Sample security	*The measures taken to ensure sample security.*	Core was initially kept at the drill site while orientation line mark-up and initial core logging work was undertaken. All core was then transported at the end of the drill programme to the company's secure core shed facility where detailed logging and checking of the orientation line mark-up was undertaken by the exploration manager. At the company's core cutting facility cut lines were also marked up on the core prior to detailed core photography been completed and core cutting initiated using the company's diamond bladed brick saw. Once cut samples were placed in clean prelabelled calico bags and air dried in the secure shed. Samples once dry were packed into cardboard cartons and dispatched via FedEx to NAGROM Laboratories, Australia.
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
Tenement and land tenure status	*Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	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. In addition, the Company filed an MDS survey on 16 May 2018 and received notification of the grant of the adjoining northern sub-block Gapyeong 124-4 by mail in October 2018 and has paid the required Government taxes to finalise the tenement grant on 30 November 2018. The company has applications over the adjacent 3 sub-blocks on tenements 124 and 125 and will seek to identify outcropping mineralisation that will facilitate the grant of further adjoining sub blocks. 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 of the northern arm of the Han River. The Company is seeking clarification from the Local Government authority regarding the approval process to conduct certain activities within the riparian zone. The company was given Local Government approval to undertake drilling activities on privately held land subject to the company signing agreements with the local land holders. Further, approval has been obtained to drill on privately owned forest land subject to the company finalising agreements with local land holders and completing and lodging a forest rehabilitation plan with the Local Government Forest office. 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 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

Criteria	JORC – Code of Explanation	Commentary
		(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 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. Similarly, to date thee have been no objections from local residents regarding the company's drilling activities.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The Company has been formally granted two sub-blocks Gapyeong 125-3 and Gapyeong 124-4 and has valid 6-month applications over adjoining subblocks on tenement blocks 124 and 125.The company will aim to file additional MDS reports to facilitate he grant of further sub-blocks prior to the expiry of the applications. 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

Criteria	JORC – Code of Explanation	Commentary
		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.
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 Gapyeong the eastern limb of the main graphitic skarn/marble horizon is exposed along a NE-SW trending ridge crest the western limb of the synformal fold structure daylights 20 to 35m to the west. There is a marked conductivity contrast between the non-conductive eastern pelitic schists and the highly conductive Gapyeong graphite bearing skarn horizon. The lower grade graphitic mineralisation on the western synformal fold limb is hosted in graphite bearing marble that passes into higher grade graphitic skarn on the eastern limb. To the west the core of the antiform is composed of marbles, lesser remnant limestone and minor local skarnified bands. The core of the synform and the eastern fold limb is more intensely altered skarn. Further, to the east synform and across a major north-south trending fault structure there are altered pelitic and psammopelitic schists locally cut by narrow mafic dykes. The FLEM has identified a fault offset of the unit along the northern east-west valley. The eastern limb of the Gapyeong structure dips at 60 to 90° to the west-northwest while the western limb varies in dip from 60 to 90 degrees to east-southeast but also roles to dip to the west (see Figures 2 & 3).

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 previous Gapyeong sample results and sample location details were included in previous releases [D4,D6,D10,D11]. All drill hole analysis data is included as appendix 2 along with a brief summary of the lithologies from each drill hole. The collar locations and dip and azimuth details for the 6 drill holes are tabled in Appendix 1. The Company is planning to continue metallurgical studies evaluating the suitability of the Gapyeong concentrate for micronisation (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. Pending analyses from the channel sampling discussed briefly in this release along with additional drill hole sampling results from the western fold limb intersection (16.99 to 21.14m) in hole GPD0001 will be released when analyses are available. Also pending are the results of some additional infill sampling from holes GPD0002, GPD0003 and GPD0005.
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. Length weighted averages have been reported in the body of the release.
	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.	A full list of analysis results are included in Appendix 2 with length weighted averages for key intercepts summarise din the body of the release and in Table 1.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values have been reported.

Criteria	JORC – Code of Explanation	Commentary
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.*	Reference has been made to the previously announced Gapyeong Project exploration target[D1,D5]. True width of the graphite bearing zones have been included Table 1 and in the summary of key intervals within the body of the text.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Drill holes have been drilled close to normal to the strike of the target structure within the limitations of available drill access points. Holes are cutting the synformal structure obliquely due to limitations in drill pad access and topography.
	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').	Both downhole and true width of logged graphite bearing zone have been discussed in the body of the text and summarised in Table 1.
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 completed drill holes on the Gapyeong EM anomaly as defined by the FLEM survey[D11]. The figure also includes an insert showing the location of the Gapyeong project with respect to major Korean cities and the company's the projects. Figure 2 is a cross sectional view through the 3 holes completed on section 4180760mN while Figure 3 shows the 3 drill holes completed on section 4180680mN.
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 analyses values and sample location details have been reported previously [D4,D6,D10,D11]. A full list of available analysis results are included as Appendix 2. Additional analysis results are pending for the Gapyeong channel sampling work and for additional sampling of the western fold limb intercept from hole GPD0001. These will be released once they are available.

Criteria	JORC – Code of Explanation	Commentary
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	All data considered relevant and material have been included and commented upon in this announcement or included in the earlier announcement [D4,D6,D10,D11].
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).*	The company plans to complete additional metallurgical testing on a composite sample sourced from the coarse reject and additional ground reject material from this initial phase of drill core sampling. The fresh metallurgical testwork will assess whether the sulphides (predominately pyrite and pyrrhotite) have any adverse impact on the metallurgical recovery. The aim being to produce a 5 kg sample with >95% graphite concentration that can then be used for spherical graphite testwork with the objective of reaching +99.95% TGC purity product to supply Korean Li-ion battery anode manufactures. Pending a favourable outcome from the additional metallurgical testwork the drill programme will be expanded to test additional drill sections further to the south with the aim of generating a maiden Mineral Resource for the Gapyeong project. Surface trenching and channel sampling is planned on 40m sections where possible along the full 1000m of geophysically defined strike length of the Gapyeong structure.
	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 location of the completed drill holes. Figure 2 is a cross section through the first completed drill section at 4180760mN while Figure 3 is a cross section through the second drill section at 4180680mN. The inset in Figure 1 shows the location of the Gapyeong and the Company's other projects and major Korean cities.

Appendix 1: Gapyeong Graphite Project diamond drill hole locations and details

Hole ID	Project	Prospect	Tenement	Coordinate System	Easting (m)	Northing (m)	RL (m)	Dip (degrees)	True Azimuth (degrees)	Hole Size	Total Depth (m)
GPD0001	Gapyeong	Geumdaeri	Gapyeong 125-3	UTM WGS84 R52N	371156.4	4180760.1	60.1	-30.6	91.4	HQ	52.5
GPD0002	Gapyeong	Geumdaeri	Gapyeong 125-3	UTM WGS84 R52N	371147.7	4180754.2	61.3	-66.3	79.4	Q3	94.59
GPD0003	Gapyeong	Geumdaeri	Gapyeong 125-3	UTM WGS84 R52N	371154	4180755.6	60.8	-39.8	267.8	Q3	76.56
GPD0004	Gapyeong	Geumdaeri	Gapyeong 125-3	UTM WGS84 R52N	371135.1	4180681.5	83.7	-27.1	90.4	Q3	69.57
GPD0005	Gapyeong	Geumdaeri	Gapyeong 125-3	UTM WGS84 R52N	371133.0	4180681.7	83.8	-64.8	89.2	Q3	94.58
GPD0006	Gapyeong	Geumdaeri	Gapyeong 125-3	UTM WGS84 R52N	371135.1	4180682.3	83.7	-41.7	268.9	Q3	70.12

Appendix 2: Gapyeong diamond drill core sample analyses and summary lithology

HoleID	From	To	Interval	Lithology	SampleID	TC%	S%	TCC%	TGC%	TOC%
GPD0001	0	1.5	1.5	Soil						
GPD0001	1.5	6.5	5	Soil						
GPD0001	6.5	6.9	0.4	Marble						
GPD0001	6.9	9.91	3.01	Marble						
GPD0001	9.91	12.21	2.3	Marble						
GPD0001	12.21	13.21	1	Marble						
GPD0001	13.21	14.42	1.21	Marble						
GPD0001	14.42	15.3	0.88	Marble						
GPD0001	15.3	16.99	1.69	Marble						
GPD0001	16.99	17.99	1	Graphitic Marble	GPD0001-015	AP	AP	AP	AP	AP
GPD0001	17.99	18.99	1	Graphitic Marble	GPD0001-016	AP	AP	AP	AP	AP
GPD0001	18.99	19.99	1	Graphitic Marble	GPD0001-017	AP	AP	AP	AP	AP
GPD0001	19.99	20.72	0.73	Graphitic Marble	GPD0001-018	AP	AP	AP	AP	AP

HoleID	From	To	Interval	Lithology	SampleID	TC%	S%	TCC%	TGC%	TOC%
GPD0001	20.72	21.14	0.42	Graphitic Marble	GPD0001-020	AP	AP	AP	AP	AP
GPD0001	21.14	22.14	1	Skarn (calcsilicate)						
GPD0001	22.14	24.14	2	Skarn (calcsilicate)						
GPD0001	24.14	25	0.86	Skarn (calcsilicate)						
GPD0001	25	28	3	Skarn (calcsilicate)						
GPD0001	28	30.87	2.87	Skarn (calcsilicate)						
GPD0001	30.87	31.66	0.79	Skarn (calcsilicate)						
GPD0001	31.66	31.87	0.21	Graphitic Marble	GPD0001-022	AP	AP	AP	AP	AP
GPD0001	31.87	32.68	0.81	Skarn (calcsilicate)	GPD0001-023	AP	AP	AP	AP	AP
GPD0001	32.68	33.24	0.56	Graphitic Marble	GPD0001-024	AP	AP	AP	AP	AP
GPD0001	33.24	33.96	0.72	Skarn (calcsilicate)						
GPD0001	33.96	34.94	0.98	Skarn (calcsilicate)						
GPD0001	34.94	37.14	2.2	Skarn (calcsilicate)						
GPD0001	37.14	38.71	1.57	Skarn (calcsilicate)						
GPD0001	38.71	38.95	0.24	Fault & Limestone	GPD0001-025	AP	AP	AP	AP	AP
GPD0001	38.95	39.6	0.65	Skarn (calcsilicate)	GPD0001-026	AP	AP	AP	AP	AP
GPD0001	39.6	40.1	0.5	Graphitic Marble	GPD0001-001	8.8	4.8	1.1	6.9	0.8
GPD0001	40.1	40.87	0.77	Graphitic Marble	GPD0001-002	13.1	4.1	1	11.5	0.6
GPD0001	40.87	41.08	0.21	Psammite	GPD0001-003	1	3.9	0.2	0.6	0.3
GPD0001	41.08	42.08	1	Graphitic Marble	GPD0001-004	14.1	3	0.2	13.9	<0.1
GPD0001	42.08	42.57	0.49	Graphitic Marble	GPD0001-006	14.9	3.6	0.7	13.3	0.9
GPD0001	42.57	43.34	0.77	Skarn (calcsilicate)	GPD0001-007	0.6	1	0.4	<0.1	0.1
GPD0001	43.34	44.09	0.75	Skarn (calcsilicate)	GPD0001-008	0.3	0.7	0.3	<0.1	0.1
GPD0001	44.09	45.51	1.42	Graphitic Marble & Porphyry	GPD0001-009	12.2	4.3	0.3	11.2	0.8
GPD0001	45.51	46.15	0.64	Fault & Porphyry	GPD0001-010	4.8	4.9	0.5	4.2	<0.1
GPD0001	46.15	46.79	0.64	Skarn (calcsilicate)	GPD0001-011	0.7	2.5	0.4	0.1	0.2
GPD0001	46.79	47.57	0.78	Porphyry & Skarn	GPD0001-012	0.9	2	0.4	0.4	<0.1
GPD0001	47.57	47.79	0.22	Graphitic Marble	GPD0001-013	3.7	2.4	0.2	3.4	<0.1
GPD0001	47.79	48.03	0.24	Psammopelite						
GPD0001	48.03	50.32	2.29	Pelite						
GPD0001	50.32	51.03	0.71	Psammopelite						
GPD0001	51.03	51.51	0.48	Pelite						
GPD0001	51.51	52.5	0.99	Psammopelite						
GPD0002	0	0.3	0.3	Soil						

HoleID	From	To	Interval	Lithology	SampleID	TC%	S%	TCC%	TGC%	TOC%
GPD0002	0.3	2.17	1.87	Lost Core (Soil)						
GPD0002	2.17	2.5	0.33	Marble						
GPD0002	2.5	2.93	0.43	Marble						
GPD0002	2.93	5.45	2.52	Lost Core (Pelite)						
GPD0002	5.45	5.65	0.2	Psammopelite						
GPD0002	5.65	5.91	0.26	Marl						
GPD0002	5.91	6.01	0.1	Lost Core						
GPD0002	6.01	7.43	1.42	Marble						
GPD0002	7.43	7.9	0.47	Marble						
GPD0002	7.9	8.59	0.69	Marble						
GPD0002	8.59	10.5	1.91	Marble						
GPD0002	10.5	13.4	2.9	Marble						
GPD0002	13.4	16.4	3	Marble						
GPD0002	16.4	19.4	3	Marble						
GPD0002	19.4	22.46	3.06	Marble						
GPD0002	22.46	24.15	1.69	Marble						
GPD0002	24.15	24.85	0.7	Marble						
GPD0002	24.85	25.35	0.5	Marble						
GPD0002	25.35	27.5	2.15	Marble						
GPD0002	27.5	29.13	1.63	Marble						
GPD0002	29.13	30.84	1.71	Marble						
GPD0002	30.84	33.84	3	Marble						
GPD0002	33.84	35.93	2.09	Marble						
GPD0002	35.93	36.93	1	Graphitic Marble	GPD0002-001	4.2	0.6	1.2	1.8	1.2
GPD0002	36.93	38.01	1.08	Graphitic Marble	GPD0002-002	5.3	1.3	1.7	3.6	<0.1
GPD0002	38.01	38.43	0.42	Graphitic Marble	GPD0002-003	1.7	0.1	0.9	0.5	0.3
GPD0002	38.43	39.02	0.59	Marl	GPD0002-004	5.3	0.2	0.6	4.6	0.1
GPD0002	39.02	39.68	0.66	Graphitic Marble	GPD0002-005	1	1.2	0.6	0.3	0.2
GPD0002	39.68	40.58	0.9	Graphitic Marble	GPD0002-006	2.4	3.7	0.9	1.5	<0.1
GPD0002	40.58	41.55	0.97	Graphitic Marble	GPD0002-007	6.7	1.7	2.9	3.7	<0.1
GPD0002	41.55	42.25	0.7	Graphitic Marble	GPD0002-008	6.5	1.9	0.6	5.6	0.3
GPD0002	42.25	43.25	1	Graphitic Marble	GPD0002-009	6.7	1.3	2.9	2.9	0.9
GPD0002	43.25	44.25	1	Graphitic Marble	GPD0002-010	9.6	1.1	3.1	4.6	1.9
GPD0002	44.25	45.25	1	Graphitic Marble	GPD0002-011	7.5	1.9	2.9	4.5	<0.1

HoleID	From	To	Interval	Lithology	SampleID	TC%	S%	TCC%	TGC%	TOC%
GPD0002	45.25	46.25	1	Graphitic Marble	GPD0002-012	8.2	1.2	3.2	3.8	1.2
GPD0002	46.25	47.25	1	Graphitic Marble	GPD0002-013	6.5	1.3	3.3	2.5	0.7
GPD0002	47.25	48.2	0.95	Graphitic Marble	GPD0002-032	AP	AP	AP	AP	AP
GPD0002	48.2	48.37	0.17	Skarn (calcsilicate)						
GPD0002	48.37	48.83	0.46	Skarn (calcsilicate)						
GPD0002	48.83	50.06	1.23	Skarn (calcsilicate)						
GPD0002	50.06	52.25	2.19	Skarn (calcsilicate)						
GPD0002	52.25	55.3	3.05	Skarn (calcsilicate)						
GPD0002	55.3	57.43	2.13	Skarn (calcsilicate)						
GPD0002	57.43	58.8	1.37	Skarn (calcsilicate)						
GPD0002	58.8	60.06	1.26	Skarn (calcsilicate)						
GPD0002	60.06	63.45	3.39	Skarn (calcsilicate)						
GPD0002	63.45	65.53	2.08	Skarn (calcsilicate)						
GPD0002	65.53	68	2.47	Skarn (calcsilicate)						
GPD0002	68	68.75	0.75	Skarn (calcsilicate)						
GPD0002	68.75	69.63	0.88	Limestone & Fault						
GPD0002	69.63	70	0.37	Fault & Limestone						
GPD0002	70	70.37	0.37	Skarn (calcsilicate)						
GPD0002	70.37	70.91	0.54	Skarn (calcsilicate)						
GPD0002	70.91	71.91	1	Graphitic Marble	GPD0002-014	6	1.6	3.1	2.8	0.1
GPD0002	71.91	72.91	1	Graphitic Marble	GPD0002-015	8.1	2.9	1.8	5.6	0.8
GPD0002	72.91	74.28	1.37	Graphitic Marble	GPD0002-016	9.6	3.7	0.7	8.4	0.5
GPD0002	74.28	76.03	1.75	Limestone	GPD0002-017	1.3	3.2	0.7	0.5	<0.1
GPD0002	76.03	77.03	1	Graphitic Marble	GPD0002-018	10.2	4.8	0.6	9.7	<0.1
GPD0002	77.03	78.03	1	Graphitic Marble	GPD0002-021	12.4	4	3	9.4	<0.1
GPD0002	78.03	79.03	1	Graphitic Marble	GPD0002-022	12.4	4.2	3.1	9.3	<0.1
GPD0002	79.03	80	0.97	Sheared Graphitic Marble	GPD0002-023	12.1	4.2	2.5	9.6	<0.1
GPD0002	80	80.96	0.96	Sheared Graphitic Marble	GPD0002-024	13.8	5.4	2.5	11.4	<0.1
GPD0002	80.96	81.47	0.51	Sheared Graphitic Marble	GPD0002-026	13.3	3.4	2.2	11.2	<0.1
GPD0002	81.47	82.47	1	Skarn (calcsilicate)						
GPD0002	82.47	84.4	1.93	Skarn (calcsilicate)						
GPD0002	84.4	84.59	0.19	Quartz Vein						
GPD0002	84.59	85.95	1.36	Skarn (calcsilicate)						
GPD0002	85.95	86.95	1	Skarn (calcsilicate)	GPD0002-033	AP	AP	AP	AP	AP

HoleID	From	To	Interval	Lithology	SampleID	TC%	S%	TCC%	TGC%	TOC%
GPD0002	86.95	87.96	1.01	Graphitic Marble	GPD0002-027	13	2.3	1	12	<0.1
GPD0002	87.96	88.48	0.52	Graphitic Marble	GPD0002-028	11.5	5.1	1.2	10.3	<0.1
GPD0002	88.48	88.76	0.28	Porphyry	GPD0002-029	7	3.4	<0.1	6.9	0.1
GPD0002	88.76	89.56	0.8	Psammite & Porphyry	GPD0002-034	AP	AP	AP	AP	AP
GPD0002	89.56	90.11	0.55	Psammite	GPD0002-030	3.2	4.2	0.2	2.9	<0.1
GPD0002	90.11	91.11	1	Pelite						
GPD0002	91.11	93.11	2	Pelite						
GPD0002	93.11	94.59	1.48	Pelite						
GPD0003	0	0.7	0.7	Soil						
GPD0003	0.7	6.5	5.8	Lost Core (Soil)						
GPD0003	6.5	6.82	0.32	Marble						
GPD0003	6.82	7.74	0.92	Marble						
GPD0003	7.74	9.25	1.51	Skarn (calcsilicate)						
GPD0003	9.25	9.45	0.2	Skarn (calcsilicate)						
GPD0003	9.45	10.45	1	Sheared Marble						
GPD0003	10.45	11.07	0.62	Fault						
GPD0003	11.07	11.3	0.23	Marble						
GPD0003	11.3	12.2	0.9	Psammopelite						
GPD0003	12.2	12.94	0.74	Marl						
GPD0003	12.94	13.95	1.01	Psammopelite						
GPD0003	13.95	14.75	0.8	Marble						
GPD0003	14.75	14.8	0.05	Lost Core						
GPD0003	14.8	15.53	0.73	Skarn (calcsilicate)						
GPD0003	15.53	16.4	0.87	Marble						
GPD0003	16.4	16.97	0.57	Marly Marble						
GPD0003	16.97	18.35	1.38	Marly Marble						
GPD0003	18.35	18.85	0.5	Faulted Marble						
GPD0003	18.85	19.39	0.54	Marly Marble						
GPD0003	19.39	19.98	0.59	Marly Marble						
GPD0003	19.98	20.15	0.17	Fault						
GPD0003	20.15	22.2	2.05	Marl						
GPD0003	22.2	23.1	0.9	Porphyry						
GPD0003	23.1	23.27	0.17	Marly Skarn						
GPD0003	23.27	26.17	2.9	Marble						

HoleID	From	To	Interval	Lithology	SampleID	TC%	S%	TCC%	TGC%	TOC%
GPD0003	26.17	26.85	0.68	Marble						
GPD0003	26.85	27.35	0.5	Marly Marble						
GPD0003	27.35	29.13	1.78	Marble						
GPD0003	29.13	31.06	1.93	Marly Marble						
GPD0003	31.06	34.05	2.99	Marly Marble						
GPD0003	34.05	34.5	0.45	Marl						
GPD0003	34.5	35.27	0.77	Marly Skarn						
GPD0003	35.27	36.7	1.43	Marly Marble						
GPD0003	36.7	37.71	1.01	Skarn (calcsilicate)						
GPD0003	37.71	39.08	1.37	Marble						
GPD0003	39.08	39.66	0.58	Marly Skarn						
GPD0003	39.66	41.44	1.78	Marly Marble						
GPD0003	41.44	43.26	1.82	Marly Skarn						
GPD0003	43.26	44.54	1.28	Marble						
GPD0003	44.54	44.79	0.25	Sheared Marble						
GPD0003	44.79	45.44	0.65	Psammopelite						
GPD0003	45.44	45.99	0.55	Marly Marble						
GPD0003	45.99	46.2	0.21	Psammopelite						
GPD0003	46.2	48.34	2.14	Marly Marble						
GPD0003	48.34	48.61	0.27	Marly Skarn						
GPD0003	48.61	50	1.39	Marble						
GPD0003	50	51.04	1.04	Skarn (calcsilicate)						
GPD0003	51.04	51.67	0.63	Marble						
GPD0003	51.67	53.01	1.34	Skarn (calcsilicate)						
GPD0003	53.01	54.1	1.09	Marble						
GPD0003	54.1	57.1	3	Marble						
GPD0003	57.1	60.1	3	Marble						
GPD0003	60.1	61.26	1.16	Marble						
GPD0003	61.26	62.26	1	Marble						
GPD0003	62.26	62.43	0.17	Sheared Graphitic Marble						
GPD0003	62.43	63.05	0.62	Limestone &Graphitic Marble						
GPD0003	63.05	64	0.95	Sheared Limestone						
GPD0003	64	64.78	0.78	Skarn (calcsilicate)						
GPD0003	64.78	65.18	0.4	Skarn (calcsilicate)	GPD0003-001	6.9	2.6	2.9	3.6	0.4

HoleID	From	To	Interval	Lithology	SampleID	TC%	S%	TCC%	TGC%	TOC%
GPD0003	65.18	66.22	1.04	Faulted Graphitic Marble	GPD0003-002	5.1	2.4	2.5	2.5	0.1
GPD0003	66.22	66.71	0.49	Faulted Skarn	GPD0003-003	7.7	1	3.2	3.6	0.9
GPD0003	66.71	67.64	0.93	Skarn & Limestone	GPD0003-004	3.6	2.4	2	1.2	0.4
GPD0003	67.64	68.31	0.67	Marly Skarn	GPD0003-005	3	1.1	1.9	0.7	0.4
GPD0003	68.31	69.31	1	Skarn (calcsilicate)	GPD0003-006	2.6	4.1	1.8	0.1	0.7
GPD0003	69.31	70	0.69	Faulted Skarn	GPD0003-008	AP	AP	AP	AP	AP
GPD0003	70	71	1	Faulted Graphitic Marble						
GPD0003	71	72	1	Pelite						
GPD0003	72	72.54	0.54	Pelite						
GPD0003	72.54	73.68	1.14	Skarn (calcsilicate)						
GPD0003	73.68	74.04	0.36	Pelite						
GPD0003	74.04	74.53	0.49	Fault						
GPD0003	74.53	74.7	0.17	Pelite						
GPD0003	74.7	76.56	1.86	Mafic Dyke						
GPD0004	0	1.5	1.5	Soil & Marl						
GPD0004	1.5	3.7	2.2	Marl						
GPD0004	3.7	4.45	0.75	Limestone						
GPD0004	4.45	5	0.55	Cavity						
GPD0004	5	6.97	1.97	Cavity						
GPD0004	6.97	7.73	0.76	Marble						
GPD0004	7.73	10.33	2.6	Marble						
GPD0004	10.33	12.27	1.94	Marble						
GPD0004	12.27	14.22	1.95	Marble						
GPD0004	14.22	15.22	1	Marble	GPD0004-001	7	1.1	2.8	4.2	<0.1
GPD0004	15.22	16.22	1	Graphitic Marble	GPD0004-002	9.1	1.1	3.2	5.9	<0.1
GPD0004	16.22	17.22	1	Graphitic Marble	GPD0004-003	8.2	1.7	2.9	5	0.3
GPD0004	17.22	18.22	1	Graphitic Marble	GPD0004-004	7.7	1.6	2.8	3.4	1.5
GPD0004	18.22	19.22	1	Graphitic Marble	GPD0004-005	8.9	2	3.5	4.7	0.7
GPD0004	19.22	20.23	1.01	Graphitic Marble	GPD0004-006	8.2	1.5	3	5.2	<0.1
GPD0004	20.23	20.97	0.74	Graphitic Marble	GPD0004-007	7.6	1.3	3.1	3.4	1.1
GPD0004	20.97	21.67	0.7	Graphitic Marble						
GPD0004	21.67	22.58	0.91	Skarn (calcsilicate)						
GPD0004	22.58	23.3	0.72	Skarn (calcsilicate)						
GPD0004	23.3	26.3	3	Skarn (calcsilicate)						

HoleID	From	To	Interval	Lithology	SampleID	TC%	S%	TCC%	TGC%	TOC%
GPD0004	26.3	27	0.7	Skarn (calcsilicate)						
GPD0004	27	28	1	Skarn (calcsilicate)						
GPD0004	28	29	1	Marly Marble						
GPD0004	29	29.97	0.97	Marly Skarn						
GPD0004	29.97	31.4	1.43	Pelite						
GPD0004	31.4	33.4	2	Pelite						
GPD0004	33.4	34.4	1	Pelite						
GPD0004	34.4	35.32	0.92	Pelite						
GPD0004	35.32	37.13	1.81	Skarn (calcsilicate)						
GPD0004	37.13	38.13	1	Skarn (calcsilicate)	GPD0004-008	6.3	2.2	3.9	1.8	0.6
GPD0004	38.13	39.05	0.92	Graphitic Marble	GPD0004-009	11.9	4.8	1.2	9.2	1.5
GPD0004	39.05	39.71	0.66	Graphitic Marble	GPD0004-010	13.7	2.6	1.2	11.9	0.6
GPD0004	39.71	40.77	1.06	Sheared Graphitic Marble						
GPD0004	40.77	41.77	1	Skarn (calcsilicate)						
GPD0004	41.77	42.77	1	Skarn (calcsilicate)						
GPD0004	42.77	43.77	1	Skarn (calcsilicate)						
GPD0004	43.77	44.89	1.12	Pelite						
GPD0004	44.89	45.14	0.25	Sheared Skarn						
GPD0004	45.14	45.42	0.28	Skarn (calcsilicate)						
GPD0004	45.42	45.88	0.46	Sheared Pelite						
GPD0004	45.88	47.02	1.14	Pelite						
GPD0004	47.02	50.11	3.09	Psammite						
GPD0004	50.11	50.51	0.4	Pelite						
GPD0004	50.51	52.17	1.66	Skarn (calcsilicate)						
GPD0004	52.17	52.68	0.51	Psammopelite						
GPD0004	52.68	53.27	0.59	Skarn (calcsilicate)						
GPD0004	53.27	53.69	0.42	Pelite						
GPD0004	53.69	54.36	0.67	Pelite						
GPD0004	54.36	55.9	1.54	Pelite						
GPD0004	55.9	58.3	2.4	Skarn (calcsilicate)						
GPD0004	58.3	58.61	0.31	Pelite						
GPD0004	58.61	59.44	0.83	Limestone						
GPD0004	59.44	60.55	1.11	Skarn (calcsilicate)						
GPD0004	60.55	61.5	0.95	Skarn (calcsilicate)						

HoleID	From	To	Interval	Lithology	SampleID	TC%	S%	TCC%	TGC%	TOC%
GPD0004	61.5	62.5	1	Skarn (calcsilicate)	GPD0004-012	4.4	0.5	0.4	4	<0.1
GPD0004	62.5	63	0.5	Sheared Graphitic Marble	GPD0004-013	1.5	1.9	<0.1	1.5	<0.1
GPD0004	63	63.69	0.69	Graphitic Marble						
GPD0004	63.69	65.5	1.81	Skarn & Limestone						
GPD0004	65.5	65.74	0.24	Skarn (calcsilicate)						
GPD0004	65.74	66.41	0.67	Limestone						
GPD0004	66.41	68.41	2	Marl						
GPD0004	68.41	69.37	0.96	Mafic Dyke						
GPD0004	69.37	69.57	0.2	Psammopelite						
GPD0005	0	0.65	0.65	Soil						
GPD0005	0.65	1.45	0.8	Lost Core (Soil)						
GPD0005	1.45	1.53	0.08	Marble						
GPD0005	1.53	2.28	0.75	Marble						
GPD0005	2.28	4.5	2.22	Marble						
GPD0005	4.5	6.42	1.92	Marble						
GPD0005	6.42	7.26	0.84	Marly Marble						
GPD0005	7.26	8.24	0.98	Marble						
GPD0005	8.24	9	0.76	Faulted Marble						
GPD0005	9	10.13	1.13	Marble						
GPD0005	10.13	10.95	0.82	Marly Marble						
GPD0005	10.95	13.95	3	Marble						
GPD0005	13.95	16.95	3	Marble						
GPD0005	16.95	19.95	3	Marble						
GPD0005	19.95	22.95	3	Marble						
GPD0005	22.95	25.02	2.07	Marble						
GPD0005	25.02	26.36	1.34	Marly Marble						
GPD0005	26.36	29.36	3	Marble						
GPD0005	29.36	32.36	3	Marble						
GPD0005	32.36	34.97	2.61	Marble						
GPD0005	34.97	35.97	1	Marble						
GPD0005	35.97	36.33	0.36	Skarn (calcsilicate)						
GPD0005	36.33	36.6	0.27	Skarn (calcsilicate)	GPD0005-026	AP	AP	AP	AP	AP
GPD0005	36.6	37.6	1	Graphitic Marble	GPD0005-027	AP	AP	AP	AP	AP
GPD0005	37.6	38.15	0.55	Marble	GPD0005-028	AP	AP	AP	AP	AP

HoleID	From	To	Interval	Lithology	SampleID	TC%	S%	TCC%	TGC%	TOC%
GPD0005	38.15	39.15	1	Skarn (calcsilicate)	GPD0005-001	8.2	2.1	1.8	5.8	0.6
GPD0005	39.15	40.56	1.41	Graphitic Marble	GPD0005-002	8.7	1.4	3.5	4.8	0.4
GPD0005	40.56	41.56	1	Graphitic Marble	GPD0005-003	7.9	1.5	2.8	4.5	0.6
GPD0005	41.56	42.58	1.02	Graphitic Marble	GPD0005-004	7.6	1.1	2.9	3.1	1.6
GPD0005	42.58	43.12	0.54	Graphitic Marble	GPD0005-029	AP	AP	AP	AP	AP
GPD0005	43.12	43.86	0.74	Skarn (calcsilicate)	GPD0005-030	AP	AP	AP	AP	AP
GPD0005	43.86	44.98	1.12	Graphitic Marble	GPD0005-031	AP	AP	AP	AP	AP
GPD0005	44.98	46	1.02	Graphitic Marble	GPD0005-033	AP	AP	AP	AP	AP
GPD0005	46	46.4	0.4	Skarn (calcsilicate)	GPD0005-034	AP	AP	AP	AP	AP
GPD0005	46.4	46.69	0.29	Sheared Skarn	GPD0005-035	AP	AP	AP	AP	AP
GPD0005	46.69	47.58	0.89	Sheared Skarn	GPD0005-036	AP	AP	AP	AP	AP
GPD0005	47.58	48.04	0.46	Skarn (calcsilicate)	GPD0005-037	AP	AP	AP	AP	AP
GPD0005	48.04	49.04	1	Skarn (calcsilicate)	GPD0005-038	AP	AP	AP	AP	AP
GPD0005	49.04	50.21	1.17	Skarn (calcsilicate)	GPD0005-005	5.8	2.3	2.2	1.8	1.8
GPD0005	50.21	51.55	1.34	Graphitic Marble	GPD0005-006	6.2	3.5	1.5	4.4	0.3
GPD0005	51.55	52.46	0.91	Graphitic Marble	GPD0005-007	6.8	4.4	1	5.8	<0.1
GPD0005	52.46	53.37	0.91	Graphitic Marble						
GPD0005	53.37	55.91	2.54	Skarn (calcsilicate)						
GPD0005	55.91	56.31	0.4	Graphitic Marble						
GPD0005	56.31	57.97	1.66	Marly Marble						
GPD0005	57.97	58.59	0.62	Graphitic Marble						
GPD0005	58.59	59.41	0.82	Skarn (calcsilicate)						
GPD0005	59.41	60.9	1.49	Skarn (calcsilicate)						
GPD0005	60.9	61.9	1	Skarn (calcsilicate)	GPD0005-008	10.7	5.2	0.8	9.9	<0.1
GPD0005	61.9	62.9	1	Graphitic Marble	GPD0005-009	11.8	3.6	2.1	9.4	0.3
GPD0005	62.9	63.9	1	Graphitic Marble	GPD0005-010	14.1	2.2	0.7	12.6	0.8
GPD0005	63.9	64.9	1	Graphitic Marble	GPD0005-012	16.8	3	0.9	14.9	1
GPD0005	64.9	66.08	1.18	Graphitic Marble	GPD0005-013	10.2	3.6	1.4	8.4	0.4
GPD0005	66.08	66.71	0.63	Graphitic Marble & Skarn	GPD0005-014	15.5	2.3	0.2	14.7	0.6
GPD0005	66.71	68.03	1.32	Graphitic Marble	GPD0005-015	5.7	3.7	<0.1	5.4	0.3
GPD0005	68.03	68.64	0.61	Graphitic Marble & Skarn	GPD0005-016	14.3	2	0.2	13.4	0.7
GPD0005	68.64	69.48	0.84	Graphitic Marble	GPD0005-017	1.1	2.5	0.2	0.8	0.1
GPD0005	69.48	70.3	0.82	Graphitic Marble & Skarn	GPD0005-018	15.3	1.7	0.1	14.2	1
GPD0005	70.3	71.4	1.1	Graphitic Marble	GPD0005-019	16.7	3.6	<0.1	16.4	0.3

HoleID	From	To	Interval	Lithology	SampleID	TC%	S%	TCC%	TGC%	TOC%
GPD0005	71.4	72.53	1.13	Graphitic Marble						
GPD0005	72.53	73.53	1	Skarn (calcsilicate)						
GPD0005	73.53	75.32	1.79	Skarn (calcsilicate)						
GPD0005	75.32	77.2	1.88	Skarn (calcsilicate)						
GPD0005	77.2	78.33	1.13	Skarn & Quartz veins						
GPD0005	78.33	80.35	2.02	Skarn (calcsilicate)						
GPD0005	80.35	82.18	1.83	Skarn (calcsilicate)						
GPD0005	82.18	83.18	1	Skarn (calcsilicate)	GPD0005-022	9.1	4.8	<0.1	9	<0.1
GPD0005	83.18	84.18	1	Graphitic Marble	GPD0005-024	9.7	3.1	1.6	7.6	0.5
GPD0005	84.18	84.9	0.72	Faulted Limestone	GPD0005-025	7.3	3.9	0.9	5.9	0.5
GPD0005	84.9	85.92	1.02	Graphitic Marble						
GPD0005	85.92	86.28	0.36	Skarn (calcsilicate)						
GPD0005	86.28	86.92	0.64	Pelite						
GPD0005	86.92	89	2.08	Pelite						
GPD0005	89	90.42	1.42	Skarn (calcsilicate)						
GPD0005	90.42	91.66	1.24	Pelite						
GPD0005	91.66	92.3	0.64	Psammopelite						
GPD0005	92.3	94.58	2.28	Skarn (calcsilicate)						
GPD0006	0	2	2	Soil & Lost Core						
GPD0006	2	2.1	0.1	Marly Marble						
GPD0006	2.1	3.71	1.61	Marble						
GPD0006	3.71	4.7	0.99	Marble & Lost Core						
GPD0006	4.7	5.2	0.5	Marble & Lost Core						
GPD0006	5.2	6	0.8	Marble						
GPD0006	6	7.86	1.86	Marble						
GPD0006	7.86	9.4	1.54	Marly Marble						
GPD0006	9.4	11	1.6	Marble						
GPD0006	11	13.6	2.6	Marly Marble						
GPD0006	13.6	15.8	2.2	Marble						
GPD0006	15.8	16.12	0.32	Marble						
GPD0006	16.12	17.95	1.83	Marly Marble						
GPD0006	17.95	19.39	1.44	Marly Marble						
GPD0006	19.39	19.85	0.46	Marly Marble						
GPD0006	19.85	20.78	0.93	Marly Marble						

HoleID	From	To	Interval	Lithology	SampleID	TC%	S%	TCC%	TGC%	TOC%
GPD0006	20.78	22.33	1.55	Marly Marble						
GPD0006	22.33	22.86	0.53	Marble						
GPD0006	22.86	24.79	1.93	Faulted Marble						
GPD0006	24.79	26.42	1.63	Marble						
GPD0006	26.42	28.15	1.73	Marly Marble						
GPD0006	28.15	30.35	2.2	Marly Marble						
GPD0006	30.35	31.87	1.52	Marly Marble						
GPD0006	31.87	32.67	0.8	Marble						
GPD0006	32.67	33.02	0.35	Marl						
GPD0006	33.02	34.08	1.06	Marble						
GPD0006	34.08	34.91	0.83	Skarn (calcsilicate)						
GPD0006	34.91	37.45	2.54	Marble						
GPD0006	37.45	40.45	3	Marly Marble						
GPD0006	40.45	41.9	1.45	Marble						
GPD0006	41.9	41.98	0.08	Cavity						
GPD0006	41.98	45	3.02	Marble						
GPD0006	45	48.35	3.35	Marble						
GPD0006	48.35	48.6	0.25	Skarn & Limestone	GPD0006-001	7.2	0.8	2.8	3.4	1
GPD0006	48.6	48.73	0.13	Sheared Marble	GPD0006-002	2.8	2	1.4	1.4	<0.1
GPD0006	48.73	49.69	0.96	Skarn (calcsilicate)	GPD0006-003	9.2	1.2	3.2	4.1	1.9
GPD0006	49.69	50.03	0.34	Graphitic Marble	GPD0006-004	0.8	1.5	0.7	<0.1	0.1
GPD0006	50.03	51.1	1.07	Skarn (calcsilicate)	GPD0006-005	1.4	1.8	1.1	0.1	0.2
GPD0006	51.1	51.62	0.52	Skarn (calcsilicate)	GPD0006-006	6.9	3.8	2.3	4.5	<0.1
GPD0006	51.62	51.98	0.36	Graphitic Marble						
GPD0006	51.98	52.58	0.6	Faulted Skarn						
GPD0006	52.58	53.35	0.77	Pelite						
GPD0006	53.35	54.48	1.13	Skarn (calcsilicate)						
GPD0006	54.48	55.08	0.6	Pelite						
GPD0006	55.08	55.82	0.74	Skarn (calcsilicate)						
GPD0006	55.82	57.36	1.54	Psammopelite						
GPD0006	57.36	60.36	3	Psammopelite						
GPD0006	60.36	63.36	3	Psammopelite						
GPD0006	63.36	64.39	1.03	Pelite						
GPD0006	64.39	64.71	0.32	Faulted Psammite						

HoleID	From	To	Interval	Lithology	SampleID	TC%	S%	TCC%	TGC%	TOC%
GPD0006	64.71	65.86	1.15	Psammopelite						
GPD0006	65.86	66.72	0.86	Psammopelite						
GPD0006	66.72	67.18	0.46	Pelite & Quartz Veins						
GPD0006	67.18	67.96	0.78	Pelite						
GPD0006	67.96	68.5	0.54	Psammopelite						
GPD0006	68.5	70.12	1.62	Pelite						

*AP refers to sample intervals for which analyses are still pending

Appendix 2: continued with XRF analyses.

Sample ID	Al %	As %	Ba %	Ca %	Cl%	Co %	Cr %	Cu %	Fe %	K%	Mg %	Mn %	Mo %	Na%	Nb %	Ni%	P%	Pb %	S%
GPD0001-001	4.800	<0.001	0.028	8.441	<0.001	0.003	0.010	0.018	8.947	1.344	1.074	0.078	0.006	0.794	0.004	0.017	0.070	0.002	5.234
GPD0001-002	4.758	<0.001	0.031	5.699	0.004	0.003	0.017	0.007	6.584	1.799	0.835	0.064	0.003	0.741	0.002	0.021	0.066	0.004	4.002
GPD0001-003	7.108	<0.001	0.027	7.866	<0.001	0.004	0.004	0.013	7.044	1.134	2.290	0.115	0.005	1.587	0.006	0.016	0.187	<0.001	3.905
GPD0001-004	5.394	<0.001	0.049	5.491	0.004	0.003	0.016	0.010	5.258	1.743	1.251	0.082	0.004	0.878	<0.001	0.012	0.073	<0.001	2.270
GPD0001-006	5.638	<0.001	0.060	8.199	0.004	0.004	0.013	0.022	7.707	1.554	0.586	0.101	<0.001	1.041	<0.001	0.008	0.073	<0.001	3.234
GPD0001-007	6.838	<0.001	0.027	5.833	0.023	0.005	0.004	0.006	10.291	0.652	3.578	0.199	<0.001	2.172	<0.001	0.005	0.154	<0.001	1.080
GPD0001-008	7.133	<0.001	0.010	3.405	0.010	0.005	0.003	0.005	10.832	0.398	3.690	0.210	<0.001	2.231	<0.001	0.004	0.158	<0.001	0.733
GPD0001-009	6.370	<0.001	0.063	4.750	0.003	0.004	0.008	0.027	8.783	2.268	1.510	0.122	<0.001	1.028	<0.001	0.008	0.071	0.003	3.863
GPD0001-010	7.842	<0.001	0.060	1.581	<0.001	0.004	0.005	0.014	7.988	3.238	0.664	0.091	0.003	1.089	0.006	0.006	0.033	0.003	4.723
GPD0001-011	7.249	<0.001	0.030	3.878	0.008	0.004	0.004	0.007	8.363	1.599	2.920	0.400	0.002	1.063	0.006	0.004	0.202	<0.001	2.165
GPD0001-012	8.292	<0.001	0.086	2.686	0.010	0.002	0.003	0.009	4.441	3.078	1.481	0.130	<0.001	1.856	0.004	0.004	0.106	0.002	1.607
GPD0001-013	9.305	<0.001	0.042	1.381	0.003	0.002	0.010	0.007	5.006	2.641	1.245	0.462	0.002	1.956	0.006	0.005	0.024	0.003	2.214
GPD0002-001	4.122	<0.001	0.034	17.158	0.005	0.001	0.005	0.004	2.337	1.548	3.269	0.080	<0.001	1.179	<0.001	0.004	0.065	0.002	0.606
GPD0002-002	3.799	<0.001	0.025	14.270	0.007	0.003	0.003	0.012	2.991	1.768	2.824	0.058	0.002	0.894	0.008	0.008	0.100	<0.001	1.384
GPD0002-003	3.384	<0.001	0.014	16.562	0.005	0.002	0.002	0.002	3.547	0.574	4.802	0.103	0.002	1.447	0.006	0.005	0.076	<0.001	0.179
GPD0002-004	2.968	<0.001	0.008	22.153	0.004	0.002	0.004	0.002	2.299	0.063	1.652	0.069	<0.001	0.043	0.004	0.008	0.068	<0.001	0.302
GPD0002-005	3.165	<0.001	0.016	14.274	0.006	0.005	0.005	0.017	5.627	0.657	6.333	0.109	<0.001	1.048	0.005	0.013	0.095	<0.001	1.304
GPD0002-006	5.264	<0.001	0.022	13.492	0.004	0.003	0.009	0.057	7.139	1.006	3.407	0.084	0.004	1.641	0.008	0.012	0.135	0.002	3.590
GPD0002-007	2.775	<0.001	0.042	19.977	0.004	0.002	0.003	0.018	3.932	1.084	3.046	0.102	<0.001	0.382	0.006	0.006	0.085	<0.001	1.832

Sample ID	Al %	As %	Ba %	Ca %	Cl%	Co %	Cr %	Cu %	Fe %	K%	Mg %	Mn %	Mo %	Na%	Nb %	Ni%	P%	Pb %	S%
GPD0002-008	3.976	<0.001	0.022	9.308	<0.001	0.002	0.006	0.004	3.706	2.010	2.028	0.064	0.003	0.256	0.011	0.008	0.093	<0.001	2.045
GPD0002-009	2.000	<0.001	0.015	21.011	0.006	<0.001	<0.001	0.002	2.729	0.983	4.344	0.144	<0.001	0.166	0.002	0.003	0.056	<0.001	1.421
GPD0002-010	1.818	<0.001	0.006	22.775	0.003	0.002	0.001	0.002	2.360	0.911	3.141	0.126	<0.001	0.279	0.005	0.003	0.058	<0.001	1.216
GPD0002-011	3.522	<0.001	0.017	15.498	0.002	0.002	0.006	<0.001	3.143	1.625	1.949	0.075	0.002	0.543	0.007	0.007	0.058	<0.001	1.679
GPD0002-012	2.466	<0.001	0.013	23.868	0.003	<0.001	0.001	0.002	2.471	1.098	1.983	0.086	<0.001	0.474	0.003	0.004	0.044	<0.001	1.323
GPD0002-013	3.400	<0.001	0.027	21.717	0.006	<0.001	0.003	0.002	3.682	1.606	2.344	0.090	<0.001	0.478	0.004	0.004	0.063	<0.001	1.455
GPD0002-014	2.846	<0.001	0.011	21.443	0.004	0.003	0.004	0.008	5.343	0.695	2.035	0.111	<0.001	0.569	0.003	0.003	0.075	<0.001	1.774
GPD0002-015	4.551	<0.001	0.073	12.370	0.002	0.002	0.019	0.014	5.500	1.621	1.155	0.071	0.003	0.683	0.006	0.021	0.070	<0.001	2.642
GPD0002-016	5.032	<0.001	0.084	6.164	0.002	0.003	0.010	0.021	7.230	2.524	1.117	0.044	<0.001	0.902	0.004	0.013	0.066	<0.001	3.720
GPD0002-017	6.665	<0.001	0.032	7.801	0.011	0.005	0.005	0.013	7.798	1.599	3.955	0.088	<0.001	1.749	0.003	0.010	0.129	<0.001	3.270
GPD0002-018	5.058	<0.001	0.059	4.208	0.006	0.003	0.013	0.020	7.806	2.704	0.832	0.040	0.005	1.133	0.007	0.019	0.052	<0.001	4.385
GPD0002-021	3.561	<0.001	0.036	11.801	0.002	0.001	0.012	0.015	6.367	1.644	0.692	0.086	0.004	0.346	0.002	0.019	0.043	<0.001	3.779
GPD0002-022	3.444	<0.001	0.027	12.169	<0.001	0.004	0.012	0.012	6.956	1.368	0.631	0.091	0.008	0.376	0.004	0.021	0.040	<0.001	4.390
GPD0002-023	3.773	<0.001	0.030	10.692	0.004	0.003	0.013	0.013	6.932	1.653	0.716	0.086	0.003	0.424	0.006	0.023	0.042	<0.001	4.143
GPD0002-024	3.938	<0.001	0.033	7.424	0.002	0.004	0.018	0.014	9.359	1.769	0.918	0.074	0.001	0.296	0.003	0.028	0.055	<0.001	5.419
GPD0002-026	4.880	<0.001	0.059	6.630	0.002	0.002	0.021	0.007	6.131	2.118	0.744	0.057	0.006	0.389	0.003	0.029	0.064	<0.001	3.222
GPD0002-027	5.855	<0.001	0.027	8.293	<0.001	0.003	0.017	0.010	5.675	0.721	1.242	0.125	0.004	0.453	0.005	0.007	0.075	<0.001	1.999
GPD0002-028	6.738	<0.001	0.042	5.997	<0.001	0.006	0.009	0.021	9.321	1.673	1.385	0.129	0.005	1.084	0.007	0.009	0.059	<0.001	5.024
GPD0002-029	8.593	<0.001	0.021	6.248	0.003	0.004	0.006	0.011	6.772	1.222	1.905	0.142	0.001	1.395	0.003	0.006	0.073	<0.001	3.097
GPD0002-030	8.565	<0.001	0.045	1.432	0.005	0.006	0.008	0.013	7.884	3.116	0.789	0.098	0.004	2.708	0.006	0.006	0.037	<0.001	4.141
GPD0003-001	4.247	<0.001	0.044	11.560	0.010	0.004	0.005	0.005	5.076	1.926	2.230	0.176	0.002	0.153	0.006	0.002	0.104	<0.001	2.515
GPD0003-002	4.366	<0.001	0.025	15.248	0.014	0.004	0.001	<0.001	4.969	2.095	2.233	0.193	<0.001	0.055	0.004	<0.001	0.324	<0.001	2.340
GPD0003-003	2.855	<0.001	0.021	20.679	0.014	0.001	<0.001	0.004	4.058	1.069	1.936	0.150	<0.001	0.096	0.001	<0.001	0.062	<0.001	1.118
GPD0003-004	4.518	<0.001	0.019	13.023	0.014	0.003	<0.001	0.007	6.815	1.216	3.111	0.202	<0.001	0.022	0.003	<0.001	0.191	<0.001	2.209
GPD0003-005	5.160	<0.001	0.042	11.654	0.011	0.004	0.003	0.006	7.081	1.111	3.669	0.143	<0.001	0.614	0.001	<0.001	0.120	<0.001	1.193
GPD0003-006	5.711	<0.001	0.022	9.124	0.008	0.006	0.007	0.004	7.607	2.400	2.468	0.204	<0.001	0.250	0.003	0.003	0.115	<0.001	4.374
GPD0004-001	2.436	<0.001	0.009	18.293	0.021	0.002	0.004	0.002	2.285	1.386	6.508	0.090	<0.001	0.096	0.004	<0.001	0.070	<0.001	1.125
GPD0004-002	2.749	<0.001	0.010	19.102	0.011	0.002	0.002	0.002	1.808	1.537	2.149	0.056	<0.001	0.118	0.002	<0.001	0.059	<0.001	1.134
GPD0004-003	3.198	<0.001	0.012	18.098	0.011	0.001	0.002	0.004	2.333	1.736	2.491	0.078	<0.001	0.165	0.005	0.002	0.070	<0.001	1.397

Sample ID	Al %	As %	Ba %	Ca %	Cl%	Co %	Cr %	Cu %	Fe %	K%	Mg %	Mn %	Mo %	Na%	Nb %	Ni%	P%	Pb %	S%
GPD0004-004	2.452	<0.001	0.008	20.176	0.013	0.001	<0.001	0.003	3.033	1.344	3.951	0.141	0.002	0.182	0.003	<0.001	0.088	<0.001	1.654
GPD0004-005	3.446	<0.001	0.017	15.260	0.012	0.002	0.003	<0.001	2.866	1.468	1.371	0.071	0.002	0.709	0.006	0.004	0.069	<0.001	1.644
GPD0004-006	3.083	<0.001	0.012	21.656	0.013	0.002	<0.001	0.002	2.754	1.608	1.967	0.079	0.002	0.423	0.005	<0.001	0.050	<0.001	1.533
GPD0004-007	2.947	<0.001	0.027	23.410	0.023	<0.001	0.002	0.006	3.730	1.215	1.849	0.103	<0.001	0.533	0.003	0.003	0.066	0.002	1.402
GPD0004-008	3.326	<0.001	0.012	22.560	0.015	0.005	0.004	0.007	4.917	0.882	2.283	0.128	<0.001	0.906	0.004	<0.001	0.069	<0.001	1.986
GPD0004-009	4.073	<0.001	0.027	7.550	0.012	0.003	0.016	0.013	7.703	1.553	0.731	0.069	0.005	0.034	0.006	0.018	0.040	<0.001	4.901
GPD0004-010	4.638	<0.001	0.034	7.542	0.012	0.004	0.016	0.014	6.081	1.495	1.015	0.084	0.003	0.801	0.003	0.013	0.060	0.002	2.468
GPD0004-012	8.226	<0.001	0.073	1.225	0.010	0.003	0.006	0.006	4.500	3.364	1.150	0.048	<0.001	2.481	<0.001	0.002	0.041	0.003	0.477
GPD0004-013	8.875	<0.001	0.074	1.066	0.009	0.003	0.007	0.010	4.963	3.979	0.973	0.065	0.002	1.958	0.001	0.002	0.038	0.002	1.716
GPD0005-001	3.681	<0.001	0.020	12.051	0.011	0.003	0.005	0.004	3.297	1.893	2.309	0.066	<0.001	0.218	0.006	0.005	0.075	<0.001	1.955
GPD0005-002	1.916	<0.001	0.007	21.397	0.013	0.001	0.001	0.003	2.848	0.790	3.681	0.132	<0.001	0.146	0.003	<0.001	0.058	<0.001	1.451
GPD0005-003	4.063	<0.001	0.020	15.507	0.013	<0.001	0.003	<0.001	2.838	1.890	1.969	0.072	<0.001	0.216	0.005	0.003	0.054	<0.001	1.594
GPD0005-004	2.476	<0.001	0.017	23.103	0.014	0.001	0.003	0.005	3.037	0.725	1.685	0.109	<0.001	0.390	0.003	<0.001	0.067	0.002	1.163
GPD0005-005	3.143	<0.001	0.005	20.629	0.018	0.004	0.004	0.013	6.085	0.342	2.384	0.107	<0.001	0.631	<0.001	<0.001	0.066	<0.001	2.012
GPD0005-006	5.273	<0.001	0.023	8.754	0.010	0.004	0.009	0.017	6.461	1.841	1.024	0.052	0.002	0.357	0.006	0.007	0.082	<0.001	3.444
GPD0005-007	5.615	<0.001	0.031	4.585	0.017	0.005	0.009	0.022	7.801	2.376	0.890	0.052	<0.001	0.190	0.009	0.009	0.079	0.002	4.469
GPD0005-008	4.794	<0.001	0.041	5.858	0.015	0.004	0.020	0.016	8.547	1.895	0.690	0.058	0.005	0.493	0.007	0.017	0.045	0.002	5.127
GPD0005-009	3.806	<0.001	0.042	11.018	0.012	0.002	0.013	0.007	5.786	1.813	0.623	0.090	<0.001	0.301	0.004	0.014	0.043	<0.001	3.568
GPD0005-010	4.449	<0.001	0.036	9.377	0.015	0.001	0.017	0.004	3.754	2.123	0.881	0.075	0.006	0.493	0.004	0.027	0.064	<0.001	2.055
GPD0005-012	5.066	<0.001	0.065	7.520	0.016	0.003	0.015	0.007	4.940	1.901	0.715	0.079	0.002	0.640	0.003	0.029	0.089	<0.001	2.684
GPD0005-013	6.033	<0.001	0.051	6.079	0.021	0.003	0.014	0.010	6.415	1.370	2.090	0.101	0.002	1.135	0.005	0.012	0.106	<0.001	3.434
GPD0005-014	5.992	<0.001	0.136	2.862	0.014	0.001	0.023	0.006	3.882	3.093	1.410	0.060	0.004	0.919	0.003	0.007	0.065	0.002	1.741
GPD0005-015	7.208	<0.001	0.037	6.062	0.013	0.002	0.017	0.013	6.432	1.875	2.578	0.115	<0.001	1.261	0.005	0.010	0.121	<0.001	3.573
GPD0005-016	5.183	<0.001	0.024	4.400	0.012	0.003	0.018	0.009	3.990	0.900	0.961	0.065	0.002	0.764	0.004	0.006	0.050	0.002	1.558
GPD0005-017	7.115	<0.001	0.027	8.142	0.015	0.002	0.015	0.012	5.472	1.160	3.712	0.162	<0.001	1.782	0.002	0.005	0.131	<0.001	2.292
GPD0005-018	6.035	<0.001	0.020	7.928	0.017	0.004	0.017	0.016	6.175	0.631	0.929	0.074	<0.001	0.145	0.002	0.008	0.080	0.003	1.758
GPD0005-019	5.533	<0.001	0.052	5.389	0.017	0.005	0.013	0.025	7.189	1.956	0.523	0.053	<0.001	0.747	0.004	0.006	0.072	<0.001	3.489
GPD0005-022	5.595	<0.001	0.022	4.758	0.014	0.005	0.010	0.023	9.135	1.518	2.294	0.164	<0.001	0.340	0.003	0.006	0.091	0.002	4.858
GPD0005-024	5.126	0.001	0.025	9.119	0.015	0.003	0.009	0.017	6.522	1.313	1.793	0.172	<0.001	0.545	0.003	0.005	0.057	<0.001	3.156

Sample ID	Al %	As %	Ba %	Ca %	Cl%	Co %	Cr %	Cu %	Fe %	K%	Mg %	Mn %	Mo %	Na%	Nb %	Ni%	P%	Pb %	S%
GPD0005-025	6.389	<0.001	0.041	6.179	0.014	0.004	0.008	0.019	8.125	1.898	2.422	0.190	<0.001	0.621	0.003	0.005	0.088	0.006	3.965
GPD0006-001	3.019	<0.001	0.005	19.340	0.013	0.001	0.003	<0.001	2.690	0.480	4.243	0.105	0.002	0.051	0.005	<0.001	0.083	0.141	0.843
GPD0006-002	5.302	<0.001	0.028	10.807	0.030	0.004	0.002	0.006	7.347	1.105	4.032	0.101	<0.001	0.578	0.002	<0.001	0.176	0.008	1.663
GPD0006-003	2.351	<0.001	0.009	23.300	0.034	0.001	0.002	0.007	4.715	0.312	3.591	0.193	<0.001	0.208	<0.001	<0.001	0.062	<0.001	0.641
GPD0006-004	6.767	<0.001	0.038	8.206	0.053	0.006	0.011	0.009	9.160	1.275	4.016	0.135	<0.001	1.600	<0.001	0.006	0.117	<0.001	0.942
GPD0006-005	6.097	<0.001	0.024	8.104	0.025	0.005	0.007	0.010	9.044	0.813	3.787	0.153	<0.001	1.423	0.002	0.002	0.143	0.002	1.342
GPD0006-006	4.635	<0.001	0.021	11.211	0.010	0.002	0.006	0.011	7.232	1.055	1.674	0.094	<0.001	1.011	0.003	0.007	0.092	0.008	3.781

Appendix 2: continued with XRF analyses.

Sample ID	Sb%	Si%	Sn %	Sr%	Ta%	Ti %	V%	W %	Zn %	Zr %
GPD0001-001	0.004	21.246	<0.001	<0.001	<0.001	0.551	0.094	0.002	<0.001	0.033
GPD0001-002	<0.001	21.505	<0.001	<0.001	<0.001	0.441	0.156	0.002	0.003	0.013
GPD0001-003	0.003	22.547	<0.001	0.002	<0.001	1.912	0.048	0.003	0.004	0.035
GPD0001-004	<0.001	23.593	<0.001	<0.001	<0.001	0.422	0.141	0.002	0.006	0.023
GPD0001-006	0.005	19.075	<0.001	<0.001	<0.001	0.463	0.096	0.004	0.015	0.012
GPD0001-007	0.002	22.415	<0.001	<0.001	<0.001	1.788	0.043	0.002	0.012	0.021
GPD0001-008	<0.001	23.524	<0.001	<0.001	<0.001	1.820	0.037	0.002	0.014	0.021
GPD0001-009	<0.001	20.314	<0.001	<0.001	<0.001	0.612	0.068	0.003	0.005	0.012
GPD0001-010	<0.001	25.276	<0.001	<0.001	<0.001	0.467	0.018	<0.001	0.002	0.030
GPD0001-011	<0.001	23.633	<0.001	<0.001	<0.001	1.977	0.036	0.002	0.006	0.030
GPD0001-012	0.002	28.002	<0.001	0.014	<0.001	0.922	0.020	<0.001	0.002	0.021
GPD0001-013	<0.001	26.225	<0.001	0.002	<0.001	0.619	0.011	<0.001	0.003	0.025
GPD0002-001	0.007	18.207	<0.001	0.014	<0.001	0.195	0.007	0.005	0.003	0.019
GPD0002-002	0.006	20.609	<0.001	0.006	<0.001	0.320	0.030	0.002	<0.001	0.069
GPD0002-003	0.002	21.719	<0.001	0.014	<0.001	0.246	0.028	0.005	0.006	0.049
GPD0002-004	<0.001	21.441	<0.001	<0.001	<0.001	0.215	0.036	0.002	<0.001	0.029
GPD0002-005	<0.001	22.625	<0.001	0.007	<0.001	0.267	0.034	0.002	0.007	0.045
GPD0002-006	<0.001	18.295	<0.001	0.015	<0.001	0.563	0.038	0.002	0.002	0.046

Sample ID	Sb%	Si%	Sn %	Sr%	Ta%	Ti %	V%	W %	Zn %	Zr %
GPD0002-007	0.006	16.418	<0.001	0.004	<0.001	0.269	0.021	0.003	0.002	0.028
GPD0002-008	<0.001	25.093	<0.001	<0.001	<0.001	0.321	0.036	0.002	<0.001	0.060
GPD0002-009	0.003	15.956	<0.001	<0.001	<0.001	0.156	0.011	0.006	<0.001	0.035
GPD0002-010	0.007	13.050	<0.001	<0.001	<0.001	0.124	0.020	0.007	<0.001	0.021
GPD0002-011	0.008	19.605	<0.001	<0.001	<0.001	0.285	0.024	0.004	<0.001	0.037
GPD0002-012	<0.001	13.743	<0.001	0.008	<0.001	0.206	0.024	0.004	<0.001	0.021
GPD0002-013	0.004	14.144	<0.001	0.011	<0.001	0.459	0.018	0.005	<0.001	0.023
GPD0002-014	0.006	13.677	<0.001	<0.001	<0.001	0.573	0.020	0.005	<0.001	0.015
GPD0002-015	0.008	19.791	<0.001	<0.001	<0.001	0.625	0.074	0.004	<0.001	0.030
GPD0002-016	<0.001	22.741	<0.001	<0.001	<0.001	0.779	0.118	0.003	<0.001	0.032
GPD0002-017	<0.001	20.964	<0.001	<0.001	<0.001	1.598	0.037	0.004	0.002	0.021
GPD0002-018	<0.001	23.743	<0.001	<0.001	<0.001	0.515	0.150	0.002	<0.001	0.040
GPD0002-021	0.003	20.198	<0.001	<0.001	<0.001	0.250	0.136	0.003	<0.001	0.020
GPD0002-022	<0.001	19.774	<0.001	<0.001	<0.001	0.214	0.152	0.003	<0.001	0.018
GPD0002-023	0.003	19.869	<0.001	<0.001	<0.001	0.260	0.160	0.004	0.003	0.019
GPD0002-024	0.003	19.700	<0.001	<0.001	<0.001	0.297	0.165	0.002	<0.001	0.019
GPD0002-026	<0.001	22.865	<0.001	<0.001	<0.001	0.293	0.190	0.005	0.002	0.016
GPD0002-027	0.002	22.909	<0.001	0.008	<0.001	0.537	0.138	<0.001	0.004	0.021
GPD0002-028	<0.001	20.396	<0.001	0.003	<0.001	0.608	0.045	0.004	0.002	0.022
GPD0002-029	0.004	21.481	<0.001	0.006	<0.001	0.825	0.022	0.002	0.003	0.024
GPD0002-030	<0.001	25.117	<0.001	0.003	<0.001	0.604	0.016	<0.001	0.002	0.031
GPD0003-001	0.002	19.301	<0.001	0.009	<0.001	0.670	0.030	0.002	0.002	0.035
GPD0003-002	0.003	15.681	<0.001	0.018	<0.001	1.392	0.024	0.006	0.002	0.031
GPD0003-003	0.007	12.960	<0.001	0.006	<0.001	0.306	0.017	0.007	<0.001	0.016
GPD0003-004	<0.001	16.685	<0.001	0.005	<0.001	1.130	0.019	0.002	0.005	0.019
GPD0003-005	0.006	17.070	<0.001	0.008	<0.001	1.215	0.028	0.002	0.005	0.016
GPD0003-006	0.002	18.255	<0.001	0.010	<0.001	1.318	0.032	0.005	0.007	0.021
GPD0004-001	0.010	16.002	<0.001	<0.001	<0.001	0.182	0.014	0.005	<0.001	0.030
GPD0004-002	<0.001	17.945	<0.001	<0.001	<0.001	0.170	0.020	0.006	<0.001	0.034

Sample ID	Sb%	Si%	Sn %	Sr%	Ta%	Ti %	V%	W %	Zn %	Zr %
GPD0004-003	0.006	18.692	<0.001	<0.001	<0.001	0.212	0.023	0.004	0.002	0.035
GPD0004-004	0.003	16.412	<0.001	<0.001	<0.001	0.165	0.016	0.005	<0.001	0.034
GPD0004-005	0.009	20.572	<0.001	<0.001	<0.001	0.250	0.028	0.005	<0.001	0.036
GPD0004-006	0.010	14.955	<0.001	0.004	<0.001	0.292	0.024	0.004	<0.001	0.026
GPD0004-007	0.007	13.034	<0.001	0.011	<0.001	0.353	0.023	0.005	<0.001	0.021
GPD0004-008	0.003	13.212	<0.001	<0.001	<0.001	0.626	0.021	0.003	<0.001	0.015
GPD0004-009	<0.001	20.972	<0.001	<0.001	<0.001	0.311	0.140	<0.001	0.002	0.027
GPD0004-010	0.007	21.455	<0.001	<0.001	<0.001	0.467	0.126	0.002	0.003	0.018
GPD0004-012	<0.001	26.927	<0.001	0.002	<0.001	0.631	0.012	<0.001	0.008	0.022
GPD0004-013	<0.001	27.705	0.002	0.003	<0.001	0.512	0.009	0.003	0.003	0.022
GPD0005-001	0.012	23.048	<0.001	<0.001	<0.001	0.282	0.034	<0.001	<0.001	0.048
GPD0005-002	0.005	14.947	0.004	<0.001	<0.001	0.140	0.018	<0.001	<0.001	0.026
GPD0005-003	0.012	19.376	<0.001	<0.001	<0.001	0.258	0.034	0.003	<0.001	0.046
GPD0005-004	0.003	14.131	<0.001	0.009	<0.001	0.323	0.018	0.007	<0.001	0.018
GPD0005-005	<0.001	14.317	<0.001	0.002	<0.001	0.548	0.021	0.005	<0.001	0.016
GPD0005-006	0.002	22.070	<0.001	<0.001	<0.001	0.724	0.069	0.004	<0.001	0.038
GPD0005-007	<0.001	23.176	<0.001	<0.001	<0.001	0.816	0.079	<0.001	0.002	0.036
GPD0005-008	<0.001	22.964	<0.001	<0.001	<0.001	0.411	0.164	0.002	0.002	0.027
GPD0005-009	0.004	20.938	<0.001	<0.001	<0.001	0.285	0.147	0.003	<0.001	0.020
GPD0005-010	<0.001	20.855	<0.001	<0.001	<0.001	0.273	0.184	<0.001	<0.001	0.014
GPD0005-012	<0.001	21.274	<0.001	<0.001	<0.001	0.337	0.154	0.002	<0.001	0.013
GPD0005-013	<0.001	22.919	<0.001	0.002	<0.001	1.112	0.107	0.002	0.005	0.021
GPD0005-014	<0.001	24.611	<0.001	0.003	<0.001	0.452	0.169	<0.001	0.003	0.038
GPD0005-015	<0.001	22.233	<0.001	0.004	<0.001	1.400	0.122	<0.001	0.004	0.025
GPD0005-016	0.003	26.576	<0.001	<0.001	<0.001	0.352	0.160	<0.001	0.006	0.020
GPD0005-017	0.002	23.353	0.003	0.005	<0.001	1.584	0.046	<0.001	0.012	0.020
GPD0005-018	0.002	21.833	<0.001	0.003	<0.001	0.472	0.127	0.002	0.017	0.019
GPD0005-019	0.002	20.792	<0.001	<0.001	<0.001	0.419	0.105	0.003	0.016	0.016
GPD0005-022	<0.001	20.389	0.002	<0.001	<0.001	0.799	0.083	<0.001	0.006	0.022

Sample ID	Sb%	Si%	Sn %	Sr%	Ta%	Ti %	V%	W %	Zn %	Zr %
GPD0005-024	0.004	19.518	<0.001	<0.001	<0.001	0.533	0.057	<0.001	0.003	0.015
GPD0005-025	0.002	20.048	<0.001	<0.001	<0.001	0.882	0.051	0.004	0.010	0.021
GPD0006-001	<0.001	13.253	<0.001	<0.001	<0.001	0.286	0.014	0.007	0.549	0.040
GPD0006-002	0.006	18.769	<0.001	0.004	<0.001	1.155	0.022	0.005	0.031	0.023
GPD0006-003	<0.001	10.786	<0.001	0.009	<0.001	0.289	0.026	0.007	0.002	0.011
GPD0006-004	0.004	21.353	<0.001	0.003	<0.001	1.479	0.039	0.003	0.006	0.016
GPD0006-005	0.005	20.433	<0.001	<0.001	<0.001	1.543	0.033	0.002	0.006	0.018
GPD0006-006	<0.001	18.808	<0.001	<0.001	<0.001	0.829	0.055	<0.001	0.011	0.026