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17 August 2021

Soil Sampling Program for Gwesan Vanadium Project Commences

Protean Energy Ltd (ASX: POW, "Protean" or "the Company") is pleased to announce that its independent Korean geologist consultants, GeoGeny Consultants Group Inc (GeoGeny), has commenced the soil sampling program at its Gwesan Vanadium Project in South Korea further to the announcement on 14 July 2021.

The soil sampling program is designed to further investigate the mineralization potential of Gwesan 137 prospect.

Key points arising from the soil sampling plan prepared by GeoGeny is as follows:

- The mineralization of Gwesan Vanadium Project is a strata-bound black shale type embedded in the graphitic slate of Guryongsan formation, which comprises a dark grey phyllite, followed by the black slate (ore zone) and a black fine sandstone.
- The graphitic slate is repeated due to a combination of NE striking thrust and/or folded sequences with an overall dipping to northwest. The mineralization potential of Gwesan 137 prospect belongs to south-west part of Hansung orebody with general NE trending and remains open toward adjacent tenement of Gwesan 127.
- The soil sampling plan involves grid spacing at approximately 50m intervals along NE trending to check the continuity of strike direction, and at 5~10m intervals along the dip direction of the graphitic slate to identify the repeated mineralization potential (refer to Figure 1).
- The sampling intervals along dip direction are designed based on 10m spacing, but can be reduced to 5m spacing depending on the site condition and the width of mineralization potential expected in the field survey.
- Besides the grid sampling, the orebody samples will be taken at the historic site of the waste disposal and mined-out area near Gwesan 137 to confirm the mineral contents of historical orebodies.
- The sampling survey will be conducted by an experienced team utilising GPS, compass, hammers, mapping sheets, sampling sags and scintillometer etc.

The soil sampling program will be conducted based on industry standard practices, including sampling, assay methods, and appropriate quality assurance quality control (QAQC) measures. Approximately 500 samples including at least 10 % of QAQC samples will be collected in the process of sample preparation and submitted to an ISO accredited commercial laboratory in Australia if available, for multi-commodity analysis such as ICP or XRF methods.

The Company will provide updates when results are available.

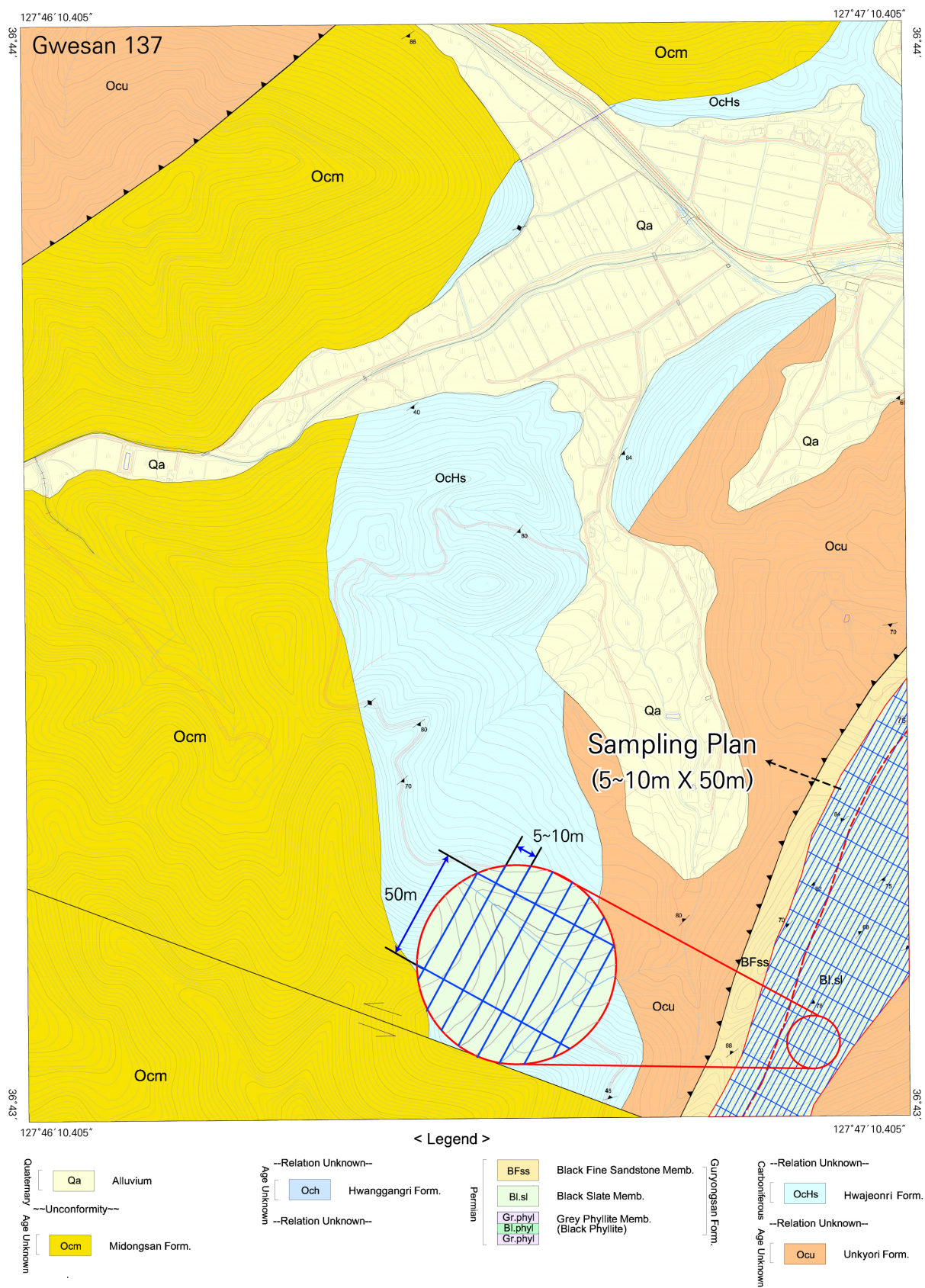


Figure 1. Sampling plan of Gwesan Vanadium Project

This announcement has been authorized for release by the Board of the Company.

For further information, see www.proteanenergy.com or phone: +61 8 6558 0886.

Tim Slate

Director and Joint Company Secretary

Competent Persons Statement – JORC Code 2012

The information in this announcement that relates to Exploration Results and other technical information complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code) and has been compiled under the supervision of Dr Hagsoo Kim, PhD (Geophysics), Professional Engineer of Korea (Geology and Geotechnics), Chairman of Korean Society of Earth and Exploration Geophysicists, CEO of GeoGeny Consultants Group Inc.

Dr Kim is a Member of the Australasian Institute of Mining and Metallurgy. He has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Dr Kim consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

Appendix 1 – JORC Table 1

The following Tables are provided to ensure compliance with the JORC Code (2012 Edition) requirements for the reporting of Exploration Results:

Section 1 Sampling Techniques and Data – Soil Sampling Program

(Criteria in this section applies to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i> 	<ul style="list-style-type: none"> This ASX Release dated 17 August 2021 reports on the commencement of Protean's soil sampling program at its Gwesan Vanadium Project. No new results are reported in this release. The mineralization of Gwesan Vanadium Project belongs to a strata-bound black shale type embedded in graphitic slate of Guryongsan formation. The soil sampling program of approximately 50m x 10m sample grid will be applied targeting the graphitic slate of Gwesan 137 prospect.
	<ul style="list-style-type: none"> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> 	<ul style="list-style-type: none"> Sampled at 50m interval along the general NE trending to check the continuity of strike direction, and at 5~10m intervals along dip direction of the graphitic slate to identify the repeated mineralization potential.
	<ul style="list-style-type: none"> <i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.</i> 	<ul style="list-style-type: none"> Sample grid of approximately 50 x 10 m spacing is considered appropriate for sampling the graphite unit that hosts the mineralization. Soil samples will be sieved to -1mm to generate a sample of ~250g for analysis in the process of sample preparation. Exploration results are based on industry standard practices, including sampling, assay methods, and appropriate quality assurance quality control (QAQC) measures.
Drilling techniques	<ul style="list-style-type: none"> <i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i> 	<ul style="list-style-type: none"> No drilling in the soil sampling program.
Drill sample recovery	<ul style="list-style-type: none"> <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> <i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i> 	<ul style="list-style-type: none"> No drilling in the soil sampling program.

Criteria	JORC Code explanation	Commentary
Logging	<ul style="list-style-type: none"> <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i> <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> No drilling in the soil sampling program. The type of material sampled will be recorded. Information includes sample colour, grain size, content of soil and the exposed rock in the area, if any. Presence and distribution of visible mineralisation seen in outcrop will be logged.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> No core in the soil sampling program. Soil samples will be sampled dry and split through a sieve and/or a riffle splitter at the sample storage facility of GeoGeny. The sample preparation techniques for soil sampling are considered adequate as per industry standard practice. To ensure representivity sampling will follow the same methodology at all times, with field duplicates taken and inserted. One field duplicate will be collected per 20 samples and submitted to laboratory for QAQC of assaying results which will be also reported. The 250g sample of soil sieved to -1mm is considered representative.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i> <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i> 	<ul style="list-style-type: none"> All samples will be sent to an ISO accredited commercial laboratory in Australia if available, for multi-commodity analysis of ICP or XRF methods. At least 10% of QAQC samples will be inserted into the soil samples for assay. These alternate between a CRM & blank and a field duplicate. CRM are purchased from an accredited source and are of similar material to the mineralisation being sampled. QAQC samples will be checked following receipt of each assay batch to confirm acceptable accuracy and precision.
Verification of sampling and assaying	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> All significant intersections will be reviewed and confirmed by two senior personnel of independent consultants. No twin holes in the soil sampling program. Primary data will be collected in the field and entered into MS Excel, which will be checked for consistency and for any transcription errors. No raw assay data will be adjusted.

Criteria	JORC Code explanation	Commentary
Location of data points	<ul style="list-style-type: none"> • <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> • All soil sample points will be recorded by hand-held GPS in the field survey. • The survey coordinates are UTM Zone 52 N (WGS 84 Datum). • A digital terrain model (DTM) for the topography is available at 5 m contour intervals, which is considered adequate for the soil sampling program.
Data spacing and distribution	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i> • <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> • Data spacing and distribution used to determine geological continuity is dependent on the deposit type and style under consideration. • The approximately 50m x 10m sample grid is considered adequate to identify geochemical trends of Gwesan 137 prospect. • No sample compositing will be applied to the soil sampling program.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> • <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i> 	<ul style="list-style-type: none"> • The deposit consists of NE striking tightly folded and/or thrust sequences with an overall dipping to the northwest. The mineralization is interbedded within graphitic slate of the Guryongsan formation. • Orientation of sampling along strike and dip direction is as unbiased as possible based on the dominating mineralised structures and interpretation of the deposit geometry.
Sample security	<ul style="list-style-type: none"> • <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> • All samples will be stored at a secure facility of GeoGeny and will be fully supervised from point of field collection to laboratory drop-off.
Audits or reviews	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> • Independent reviews will be undertaken by GeoGeny.

Section 2 Reporting of Exploration Results - Soil Sampling Program

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The Gwesan vanadium deposit is divided into four prospects; Dukpyung Anticline East Limb (DAEL), Dukpyung Anticline West Limb (DAWL), North and South. KV, a subsidiary of Protean, owns the granted mining right of Gwesan 137 covering 275 ha, which belongs to DAWL prospect.
	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> There are no known impediments to obtaining a licence to operate in the current project area of Gwesan 137.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> The tenement of Gwesan 137 (the project area) belongs to DAWL prospect of Gwesan vanadium deposit. The historical exploration for DAWL prospect contains diamond drilling, trench, adit, geological and radiometric survey compiled by KIER, KORES, SHK (current KV) and GeoGeny as follow: In 1970s, KIER drilled 88 diamond drillholes (13,163 m) for DAWL prospect targeting the uranium mineralization in the black slate of the Okcheon Belt, and the vanadium contents was not analysed. Natural gamma logging for the drill-holes was conducted to measure total CPS for thorium, potassium and uranium. The CPS was converted to eU₃O₈ grade. No wet chemistry assaying of this core was undertaken. Beside the drilling, KIER conducted trench program to confirm the surface extension of mineralization intersecting at the drilling. The mineralized zone of trenches was measured at 1 m intervals using an ALOKA Scintillation Survey meter. In 1977 KIER conducted test mining at 3 adits of Dukpyung orebody in DAWL prospect, and measured radioactivity using a scintillometer at 1 m intervals, analysed uranium content for channel sample. The drilling and trench data by KIER were included in the 'Construction of Database for the Og-cheon Uranium Exploration Results(I)' (2007, KIGAM). However, the historical cores of DAWL prospect were destroyed by KIGAM (the former KIER) in 2020. In 2010, KORES performed the geological mapping and radiometric survey to target DAWL and DAEL prospects using gamma-ray spectrometer (GR-320) and Scintillation Counter (Scintrex GR-135), produced the detailed mineralization map including the tenements of Gwesan 117, 118 and 127.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> • In 2012, SHK investigated the mineralization characteristics by regional geologic and radiometric survey using scintillometer (RS 125) and pXRF (handheld XRF), confirmed the uranium and vanadium mineralization zone in black slate of DAWL, DAEL and North prospects. • In 2021, GeoGeny conducted a preliminary exploration of Phase 1 and 2 to identify the vanadium potential of Gwesan deposit through the historical data review and a geological survey, confirmed that the mineralization potential of Protean's tenement (Gwesan 137) remains open toward north-east along the strike and that the main potential is located at the adjacent tenement (Gwesan 127).
Geology	<ul style="list-style-type: none"> • <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> • Gwesan vanadium deposit is well known in Korea since 1970s although the main target of this area used to be uranium in that time. • The geology of Gwesan deposit mainly comprises meta-sedimentary rocks with a general NE trending. The uranium/vanadium mineralization is hosted by black slate of the Guryongsan formation, which consists of a dark grey phyllite, followed by the black slate (ore zone) and a black fine sandstone. • The prospects of the deposit are divided into four regions controlled by two major sinistral strike-slip faults and Dukpyung Anticline. The black slate is repeated due to a combination of thrust/detachment faults and folding. • The DAWL prospect containing the project area of Gwesan 137 is known to the largest ore zones. The historical drilling by KIER has identified three orebodies of Dukpyung, Jungdaejon and Hansung in the DAWL prospect mainly located at Gwesan 127.

Criteria	JORC Code explanation	Commentary
Drill hole Information	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<ul style="list-style-type: none"> The historical exploration results have been summarized to the 'ASX Announcement of 5 May 2021'.
Data aggregation methods	<ul style="list-style-type: none"> 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. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> No aggregation methods will not used in the soil sampling program.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	<ul style="list-style-type: none"> Soil sampling will be conducted on approximately 50m x 10m grid aligned in a NE and NW orientation relative to the general NE strike of the graphitic slate of Gwesan 137 prospect.
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Refer to Figure 1 for the soil sampling plan map. The representative map and sections have been provided in Appendix 1 of the 'ASX Announcement of 5 May 2021'.

Criteria	JORC Code explanation	Commentary
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The exploration results will be reported once the soil sampling program is finalized.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The exploration results will be reported once the soil sampling program is finalized.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<ul style="list-style-type: none"> The main potential of Gwesan deposit is located at the tenement of Gwesan 127 To expand the exploration target to the main potential area, KV needs to progress discussions with the tenement holder of Gwesan 127.