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15th February 2019

Australian Securities Exchange

GOLD IN SAMPLING ABOVE HGZ MINE, CRATER MOUNTAIN, PNG

- **Gold in scree material above HGZ mine**
- **Potential to increase HGZ mine gold production**
- **Gold recovery under investigation**

The Company (Crater Gold Mining Limited, ASX: CGN) is pleased to announce the results of scree sampling undertaken above the High Grade Zone mine (HGZ mine) at Crater Mountain in PNG.

The current HGZ mine is based on selective mining of narrow high-grade veins, commencing from the 1960m RL level. Above this level the surface contains scree composed of weathered bedrock, waste rock material derived from artisanal workings and boulders and rubble derived from benching work. In addition, tephra covers most of the area, either in part or fully.

Check panning of the scree material has revealed the presence of visible, fine to very fine, gold grains with occasional small gold nuggets. This is interpreted to have resulted from surface supergene weathering of gold mineralisation. It was therefore decided that the extent and grade of the gold in the surface scree should be investigated as it could potentially offer increased gold production for the HGZ mine. Eleven (11) short horizontal trenches for a total of 173.5m and excavated at 5m intervals upslope from 1960m RL were planned to investigate this possibility.

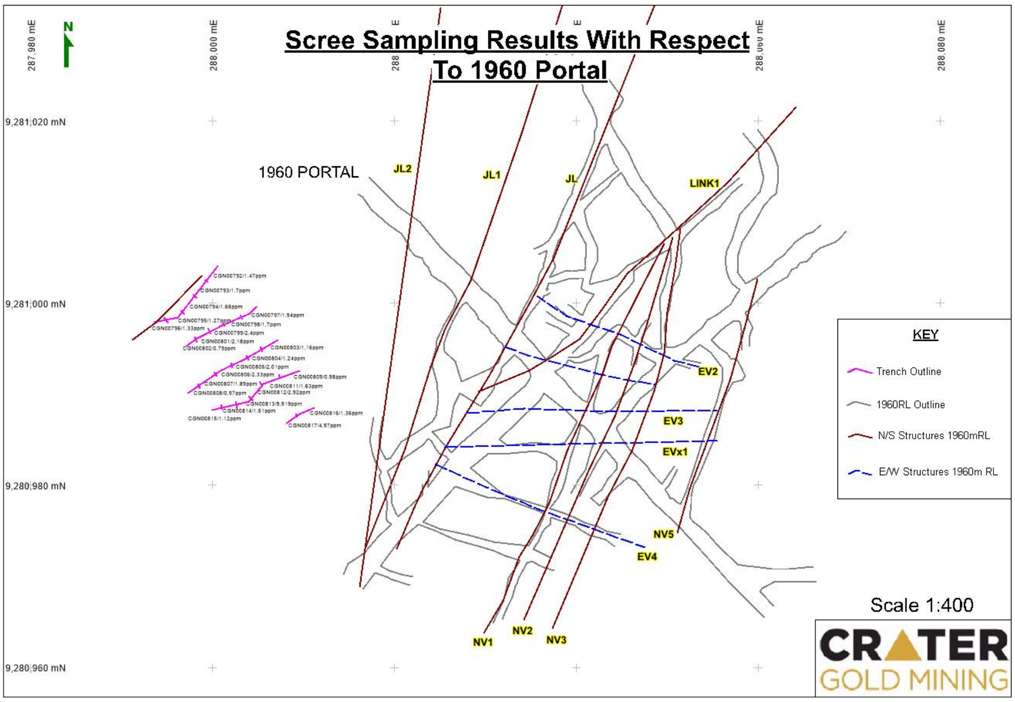

FIGURE 1: *Scree Sample Trench Locations Above the 1960m RL Development Level*

Due to the presence within the scree of surface boulders, rubble and tephra combined with the steep topography, much of the potential area could not be accessed for trench sampling. This resulted in the excavation of only 5 trenches for a total length of 44.0m (Figures 1 and 2). Initially 99, 0.5m interval, channel samples were collected but were later composited into 24, mainly 2.0m interval samples, to reduce assay costs.

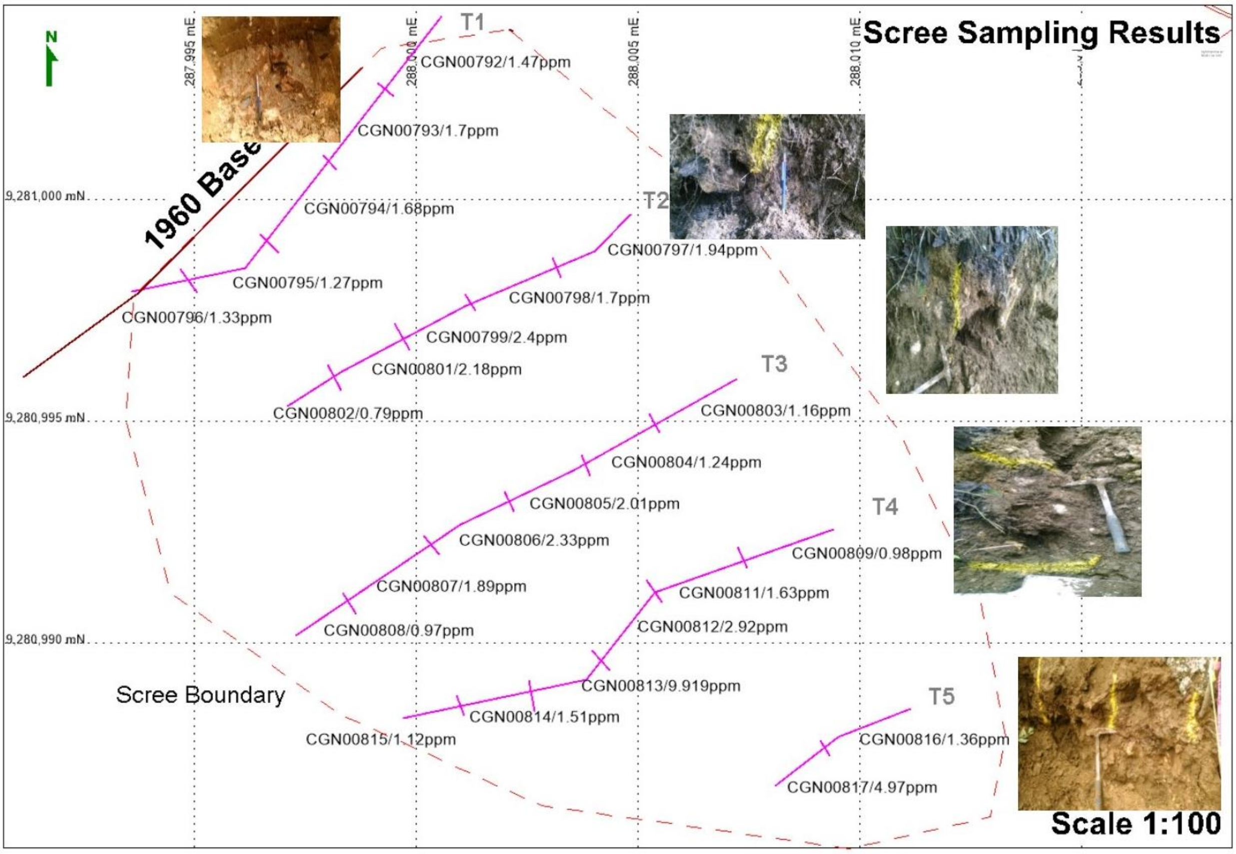

FIGURE 2: *Scree Sample Trenches, Sample Numbers and Gold Assay Results (ppm)*

The 24 channel samples were submitted for gold fire assay (FA50). Assay results are encouraging with values ranging from 0.79 g/t Au up to 9.19 g/t Au (Table 1), indicating that gold is widely spread throughout the scree. A sample ledger with channel sample details and geological descriptions is appended to Table 1 at the rear of the text. Grades for the trenches are as follows (Figure 2):

- Trench 1 (1960m RL): 9.5m @ 1.50 g/t Au
- Trench 2 (1965m RL): 9.0m @ 1.91 g/t Au
- Trench 3 (1970m RL): 11.0m @ 1.66 g/t Au
- Trench 4 (1975m RL): 11.0m @ 3.05 g/t Au
- Trench 5 (1980m RL): 3.5m @ 2.91 g/t Au

17 of the 24 samples were collected from tephra dominant cover material, indicating that the gold mineralised zone can be detected through the tephra cover.

Procedures for the recovery of the contained gold are now under investigation.

Sample ID	Trench	Sample Width (m)	Weight (kg)	Au (ppm)
CGN000792	1	2	3	1.47
CGN000793	1	2	3	1.70
CGN000794	1	2	3	1.68
CGN000795	1	2	3	1.27
CGN000796	1	1.5	3	1.33
CGN000797	2	2	3	1.94
CGN000798	2	2	3	1.70
CGN000799	2	2	3	2.40
CGN000800		STD HIGH	0	16.1
CGN000801	2	2	3	2.18
CGN000802	2	1	3	0.79
CGN000803	3	2	3	1.16
CGN000804	3	2	3	1.24
CGN000805	3	2	3	2.01
CGN000806	3	2	3	2.33
CGN000807	3	2	3	1.89
CGN000808	3	1	3	0.97
CGN000809	4	2	3	0.98
CGN000810		BLANK	2.5	0.008
CGN000811	4	2	3	1.63
CGN000812	4	2	3	2.92
CGN000813	4	2	3	9.19
CGN000814	4	2	3	1.51
CGN000815	4	1	3	1.12
CGN000816	5	2	3	1.36
CGN000817	5	1.5	3	4.97

TABLE 1: Summary of Trench Gold Assay Results

Crater Gold Mining Managing Director Russ Parker said

"The scree directly above the HGZ mine has the potential to add easily recoverable gold to the HGZ mine. The Company is currently undertaking technical studies and evaluating appropriate gold recovery methods to incorporate into the HGZ mine ".

Mr Russ Parker
Managing Director

The information contained in this report relating to exploration activities is based on and fairly represents information and supporting documentation prepared by appropriately qualified company personnel and reviewed by Ken Chapple, who is an Associate Member of The Australasian Institute of Mining and Metallurgy and a Fellow of the Australian Institute of Geoscientists. Mr Chapple has sufficient experience relevant to the style of mineralisation and type of deposit involved to qualify as a Competent Person as defined in the 2012 JORC Code. Mr Chapple is an independent principal geological consultant with KCICD Pty Ltd and consents to the inclusion in the report of matters based on his information in the form and context in which it appears.

Forward Looking Statements: This Announcement contains certain forward looking statements. The words 'anticipate', 'believe', 'expect', "optimism", 'project', 'forecast', 'estimate', 'likely', 'intend', 'should', 'could', 'may', 'target', 'plan' and other similar expressions are intended to identify forward looking statements. Forward-looking statements are subject to risk factors associated with the Company's business, many of which are beyond the control of the Company. It is believed that the expectations reflected in these statements are reasonable but they may be affected by a variety of variables and changes in underlying assumptions which could cause actual results or trends to differ materially from those expressed or implied in such statements. There can be no assurance that actual outcomes will not differ materially from these statements. You should therefore not place undue reliance on forward-looking statements.

JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard mea surement 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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (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.*	• **This TABLE 1 Report is provided to describe the sampling work and assay results obtained from trench sampling undertaken from an area of scree above the 1960m RL HGZ mine development.** • Sampling of the scree involved channel sampling of five excavated trenches. • The five trenches were excavated at 5m RL intervals commencing from 1960m RL and extending up to 1980m RL. • Trenches varied in length from 3.5m to 11.0m. • Channel samples were initially collected over 0.5m lengths for a total of 99 samples. Subsequently, to reduce sample numbers, samples were composited mainly into 2m intervals (19 x 2m, 2 x 1.5m and 3 x 1.0m - see Table 2 and appended Sample Ledger for details). • Samples were chipped by hammer and bagged. All composite weights were 3 kg and are considered to be representative of the intervals specified. • Samples were dispatched to Intertek in Lae for gold fire assay (FA50). No other elements were assayed for. • No drilling has been undertaken in the scree sampled area to date.
Drilling techniques	• *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).*	• No drilling undertaken to date
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.*	• No drilling undertaken to date

Criteria	JORC Code explanation	Commentary
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• All scree channel samples have been geologically logged and described and entered into the Sample Ledger (appended). • Sample lengths and geological descriptions are recorded. • One photograph per trench was taken and is displayed on Figure 2.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Care was taken during sampling, to guard against numbering errors and all samples were checked at the completion of each sampling sub-stage. • As the gold can at times be “spotty”, there can be no guarantee that sample size is always appropriate to the gold grain size present. However, the presence or absence of gold is the critical factor and not only the magnitude of the assay results.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• The sample preparation procedure and gold assay technique via FA50 employed by the Intertek Laboratory located in Lae, PNG, is considered appropriate for the evaluation undertaken. • No data in relation to internal QA/QC work undertaken by the Intertek Assay Laboratory has been reviewed . • Due to the small batch (24 samples) only two samples were submitted with the samples for quality control checks and consisted of 1 standard (high gold value) and 1 blank. This is considered to be an appropriate amount for the purpose given the low sample number. Assayed grades for both check samples are considered to be acceptable.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• No verification of the results either by independent or alternative company personnel has been undertaken. • Updating of the sample ledgers is undertaken on a regular basis and validation of them is undertaken every week to identify any discrepancies. The sample ledger for the program is appended to Table 1 at the rear of the report text.

Criteria	JORC Code explanation	Commentary
		• No adjustment has been made to assay data received from the Intertek Assay Laboratory.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Initial project datum within the UTM WGS84 Grid at Crater Mountain was established using a single station differential GPS (DGPS) at two points. The mean of readings taken over 3 days was accepted as datum. Survey points reported for the scree sample sites are listed in the Table 3 Sample Ledger and are obtained with reference to the datum using a theodolite with 20 second closure. Tape and compass was used to locate sample points from the datums. This is considered to have provided acceptable topographic control. • All sample grid co-ordinates are provided in the Sample Ledger and are plotted on Figures 1 and 2.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Sample spacing not sufficient to establish geological and grade continuity due, in part, to surface cover of the prospective geology, structure and mineralization.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Determination of the orientation of controlling structures requires further channel sampling. No bias introduced by sampling undertaken to date.
Sample security	• *The measures taken to ensure sample security.*	• After collection, samples were secured at the Company field camp prior to dispatch. • Samples then either back-loaded by helicopter to the Intertek Laboratory in Lae or taken by Company vehicle to Goroka under direct Company supervision or via secure independent contractor. • The Company Office in Goroka has 24 hour security.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews of sampling techniques and data have been undertaken.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The HGZ Project area is located within ML510. Tenure of ML510 is current to 4th November 2019. Therefore, the work reported here has been undertaken under secure PNG tenement licence.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Drilling previously undertaken in the Project area by BHP Billiton Pty Ltd, Macmin NL and Triple Plate Junction Plc.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The gold mineralisation in the surface scree present as fine to very fine grains that has resulted from supergene enrichment of the narrow high sulphidation-high grade epithermal quartz-pyrite-gold style veins and associated near-vertical mineralised gold bearing shoots.

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:*
	  o *easting and northing of the drill hole collar*
	  o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  o *dip and azimuth of the hole*
	  o *down hole length and interception depth*
	  o *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.*
		• No drilling has been undertaken on the steep scree slopes at HGZ.

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.* • *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.*	• No averaging or use of minimum/maximum cut-off Au grades have been applied to any of the SAW data. • Samples have only been assayed for gold.

Criteria	JORC Code explanation	Commentary
	• *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Not relevant as no drilling of the scree has been undertaken to date.
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.*	• Maps of sample locations provided as Figures 1 and 2.
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 results reported or displayed on maps.
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.*	• No other exploration results exist for the scree area.
Further work	• *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.*	• Procedures for sluicing the slopes above 1960m RL and recovery of the contained gold via gravity separation are now under investigation.

Sample Ledger for the Scree Sampling with Sample Numbers, Locations, Gold Assay Results and Geology

Sample ID	Sample Date	Location	E_WGS84	N_WGS84	RL (m)	From (m)	To (m)	Length (m)	Au (ppm)	ITS REF #	Date Dispatch	CGM REF #	DATE RECEIVED	GELOGICAL DESCRIPTION & COMMENTS
CGN00792	12/03/2018	T1	287999.9	9281003.3	1960	0	2	2	1.47	CGN 18-004	26/10/2018	CGN 18-004	21/11/2018	Waste from artisenals workings settling at the base of the cliff. More consolidated in nature
CGN00793	12/03/2018	T1	287998.6	9281001.7	1960	2	4	2	1.70	CGN 18-004	26/10/2018	CGN 18-004	21/11/2018	Waste from artisenals workings settling at the base of the cliff. More consolidated in nature
CGN00794	12/03/2018	T1	287997.3	9280999.9	1960	4	6	2	1.68	CGN 18-004	26/10/2018	CGN 18-004	21/11/2018	Waste from artisenals workings settling at the base of the cliff. More consolidated in nature
CGN00795	12/03/2018	T1	287995.8	9280998.5	1960	6	8	2	1.27	CGN 18-004	26/10/2018	CGN 18-004	21/11/2018	Waste from artisenals workings settling at the base of the cliff. More consolidated in nature
CGN00796	12/03/2018	T1	287994.1	9280998.1	1960	8	9.5	1.5	1.33	CGN 18-004	26/10/2018	CGN 18-004	21/11/2018	Waste from artisenals workings settling at the base of the cliff. More consolidated in nature
CGN00797	13/03/2018	T2	288004.0	9280998.8	1965	0	2	2	1.94	CGN 18-004	26/10/2018	CGN 18-004	21/11/2018	Humic and tephra cover materials
CGN00798	13/03/2018	T2	288002.2	9280998.2	1965	2	4	2	1.70	CGN 18-004	26/10/2018	CGN 18-004	21/11/2018	Humic and tephra cover materials
CGN00799	13/03/2018	T2	288000.5	9280997.4	1965	4	6	2	2.40	CGN 18-004	26/10/2018	CGN 18-004	21/11/2018	Humic and tephra cover materials
CGN00800	**STD HIGH**													
CGN00801	13/03/2018	T2	287998.9	9280996.6	1965	6	8	2	2.18	CGN 18-004	26/10/2018	CGN 18-004	21/11/2018	Humic and tephra cover materials
CGN00802	13/03/2018	T2	287997.6	9280995.8	1965	8	9	1	0.79	CGN 18-004	26/10/2018	CGN 18-004	21/11/2018	Humic and tephra cover materials
CGN00803	13/03/2018	T3	288006.2	9280995.4	1970	0	2	2	1.16	CGN 18-004	26/10/2018	CGN 18-004	21/11/2018	Humic and tephra cover materials
CGN00804	13/03/2018	T3	288004.6	9280994.5	1970	2	4	2	1.24	CGN 18-004	26/10/2018	CGN 18-004	21/11/2018	Humic and tephra cover materials
CGN00805	13/03/2018	T3	288003.0	9280993.7	1970	4	6	2	2.01	CGN 18-004	26/10/2018	CGN 18-004	21/11/2018	Humic and tephra cover materials
CGN00806	13/03/2018	T3	288001	9280992.7	1970	6	8	2	2.33	CGN 18-004	26/10/2018	CGN 18-004	21/11/2018	Humic and tephra cover materials
CGN00807	13/03/2018	T3	287999.3	9280991.6	1970	8	10	2	1.89	CGN 18-004	26/10/2018	CGN 18-004	21/11/2018	Humic and tephra cover materials
CGN00808	13/03/2018	T3	287997.9	9280990.7	1970	10	11	1	0.97	CGN 18-004	26/10/2018	CGN 18-004	21/11/2018	Humic and tephra cover materials
CGN00809	14/03/2018	T4	288008.3	9280992.3	1975	0	2	2	0.98	CGN 18-004	26/10/2018	CGN 18-004	21/11/2018	Humic and tephra cover materials
CGN00810	**BLANK-SHALE**													
CGN00811	14/03/2018	T4	288006.3	9280991.8	1975	2	4	2	1.63	CGN 18-004	26/10/2018	CGN 18-004	21/11/2018	Humic and tephra cover materials
CGN00812	14/03/2018	T4	288604.7	9280990.4	1975	4	6	2	2.92	CGN 18-004	26/10/2018	CGN 18-004	21/11/2018	Humic and tephra cover materials
CGN00813	14/03/2018	T4	288003.5	9280989.2	1975	6	8	2	9.19	CGN 18-004	26/10/2018	CGN 18-004	21/11/2018	Humic and tephra cover materials
CGN00814	14/03/2018	T4	288001.8	9280988.8	1975	8	10	2	1.51	CGN 18-004	26/10/2018	CGN 18-004	21/11/2018	Humic and tephra cover materials
CGN00815	14/03/2018	T4	288000.4	9280988.4	1975	10	11	1	1.12	CGN 18-004	26/10/2018	CGN 18-004	21/11/2018	Humic and tephra cover materials
CGN00816	14/03/2018	T5	288010.1	9280988.2	1980	0	2	2	1.36	CGN 18-004	26/10/2018	CGN 18-004	21/11/2018	Unconsolidated waste materals more proximal to the local workings, fine to few boulders brownish-reddish
CGN00817	14/03/2018	T5	288008.7	9280987.2	1980	2	3.5	1.5	4.97	CGN 18-004	26/10/2018	CGN 18-004	21/11/2018	Unconsolidated waste materals more proximal to the local workings, fine to few boulders brownish-reddish