CRATER GOLD MINING

Crater Gold Mining Limited ABN 75 067 519 779

Registered Office and Postal Address

Level 4, 15-17 Young St
Sydney, NSW, 2000
Australia
Ph (02) 9241 4224
Fax (02) 9252 2335

4 August 2015

Australian Securities Exchange

Bonanza gold results from HGZ project

Highlights

- **Bonanza grade development sampling results up to 1,740 g/t Au**
- **Continuous zones of high grade development on strike**
- **Three high grade shoots delineated**
- **Modular process plant fabricated to lift production**
- **Gold production from development ongoing**

The Company is pleased to report that channel sampling of development on mineralised gold bearing structures has returned bonanza gold grades on at least three separate structures.

Drive	Sample Position @ Start + m	Channel Width m	Grade g/t Au	Refer to Fig
EV4 - West	8.60	0.3	1,740	2
NV1 - North	2.70	0.5	570	4
NV2 - North	1.45	0.3	518	1

Channel sampling of mineralised gold bearing structures in development drives has confirmed contiguous zones of high grade mineralisation along strike suitable for selective mining. To date, three distinct zones on the NV1, EV4 and JL have been targeted for stoping. Refer to Table 1 below.

Drive	Strike length m	Wtd Ave Channel Width (CW) M	Wtd Ave CW Grade g/t Au	Wtd Ave SW Grade (assume 0.6m minimum width) g/t Au
NV1 Nth	4.35	0.44	147.7	108.3
Including	2.20	0.50	245.5	204.6
EV4 East	7.40	0.31	221.6	116.9
Including	2.95	0.40	410.7	273.8
JL Nth	10.90	0.71	21.2	11.7
Including	5.00	0.42	52.5	37.1
NV2 ex EV2	3.63	0.37	140.9	86.1

Table 1 - Significant Sampling and Assay Results from Drive Development

Development is underway to prepare these high grade zones for stoping.

Russ Parker, Managing Director of CGN, stated "We are exceptionally pleased with the success of these sampling results. It enables the Company to move rapidly towards increasing

gold production. A modular process plant has been fabricated and will be shipped to site within the next two weeks. Underground development is underway to enable stoping of the indentified high grade shoots"

Discussion of Results

Geology and Mineralisation

Drive development on mineralised gold bearing structures has confirmed the interpretation made from diamond drilling carried out in 2014. Two prominent roughly north south trending structures, the NV1 Vein (North Vein 1) and the JL Vein (Jeremiah Lode) have been identified as the significant controlling structures within a known 20m to 25m wide north south trending zone. These structures are continuous over at least 50m of strike at this stage. Several East West trending structures, EV1 to EV5 (East Vein 1 – 5) have been shown to link the north south structures. A number of lesser developed NE – SW and NW – SE link structures have also been identified. Refer to Figures 1 to 4.

The confluence of each of these structures is favourable for increased mineralisation and significantly elevated gold values. This is particularly evident at the junction of EV4 with NV1 returning a bonanza grade of 1,740 g/t Au over a channel width of 0.3m. High gold grades have been found to persist for up to 10m from these junctions. As an example, the EV4 Vein returned a strike length of 7.4m with a weighted average grade of 221.6 g/t Au over a channel width of 0.31m. Refer to Figure 2 and Table 1.

The JL North has returned a weighted average grade of 52.5 g/t Au over a channel width of 0.42m for a strike length of 5.00m either side of the confluence with the EV2 Vein. Refer to Figure 3 and Table 1.

It is also common to encounter coarse visible free gold in these areas.

Mining and Production

Given the identification of discrete continuous zones of high grade strike length, development and stoping layouts have been established to exploit these shoots upwards to surface. It is significant that the high grade shoots so far identified correlate well with the diggings by artisanal miners exploiting the same structures from surface from 2005 to 2012. One such working has been encountered in development of the EVx-1 structure. Refer to Figure 1.
Drive development and limited trial stoping is being carried out with a combination of jack picking, where ground conditions allow, and drill and blast where the rock is more competent. This allows narrow self supporting excavations to be made. Excellent ground conditions have been encountered for this type of mining with little need for supplementary support.

Process Plant

During May 2015 the company contracted the fabrication of an expanded modular process plant incorporating a crusher, hammer mills, primary centrifugal gravity concentrators and table fore secondary concentration. The incorporation of the new process plant plus increased underground development rates will result in higher mining production We anticpate that the Company will be cashflow positive in the 4th quarter.

This plant has been assembled and inspected in the factory for engineering compliance. It is due to be shipped within two weeks.

Gold production

Gold production is on-going. An update announcement will be made in due course.

Competent Person Statement

The information contained in this report relating to exploration results and mineral resource estimate at Crater Mountain PNG is based on and fairly represents information and supporting documentation prepared by Mr Richard Johnson, PNG General Manager of Crater Gold Mining Limited. Mr Johnson is a Fellow of The Australasian Institute of Mining and Metallurgy and has the relevant experience in relation to the mineralisation being reported upon 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 Johnson consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

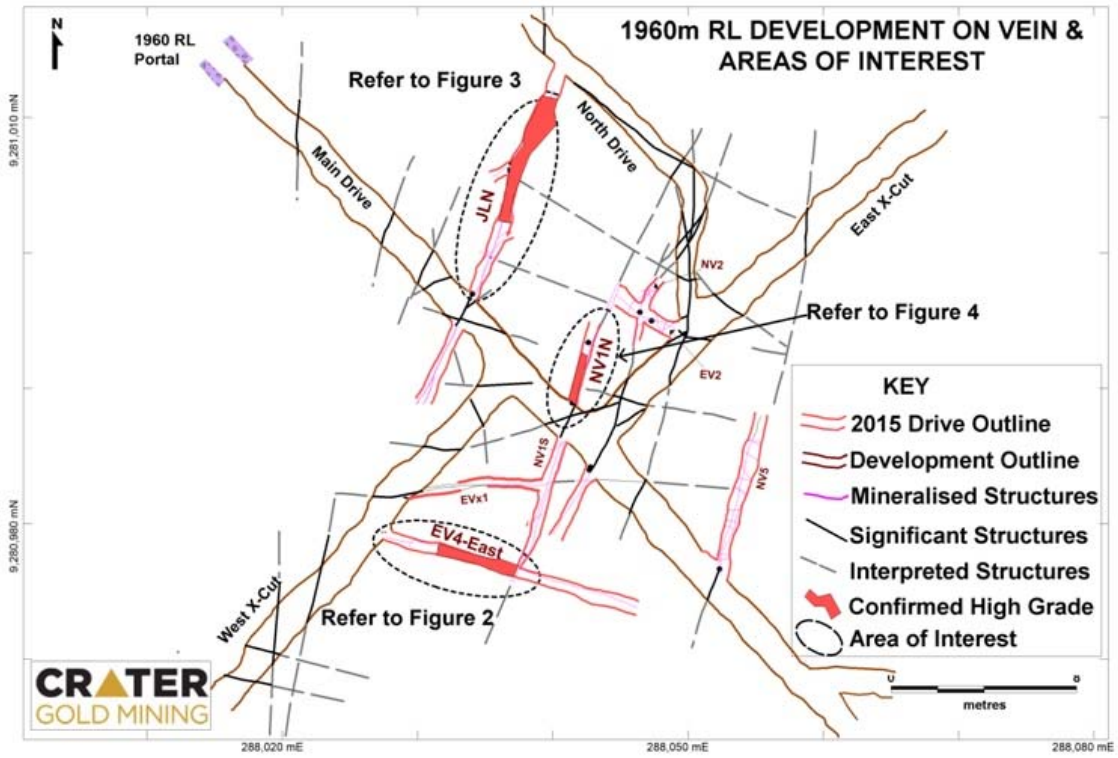

Figure 1 - High Grade Zone Drive Development on 1960 RL

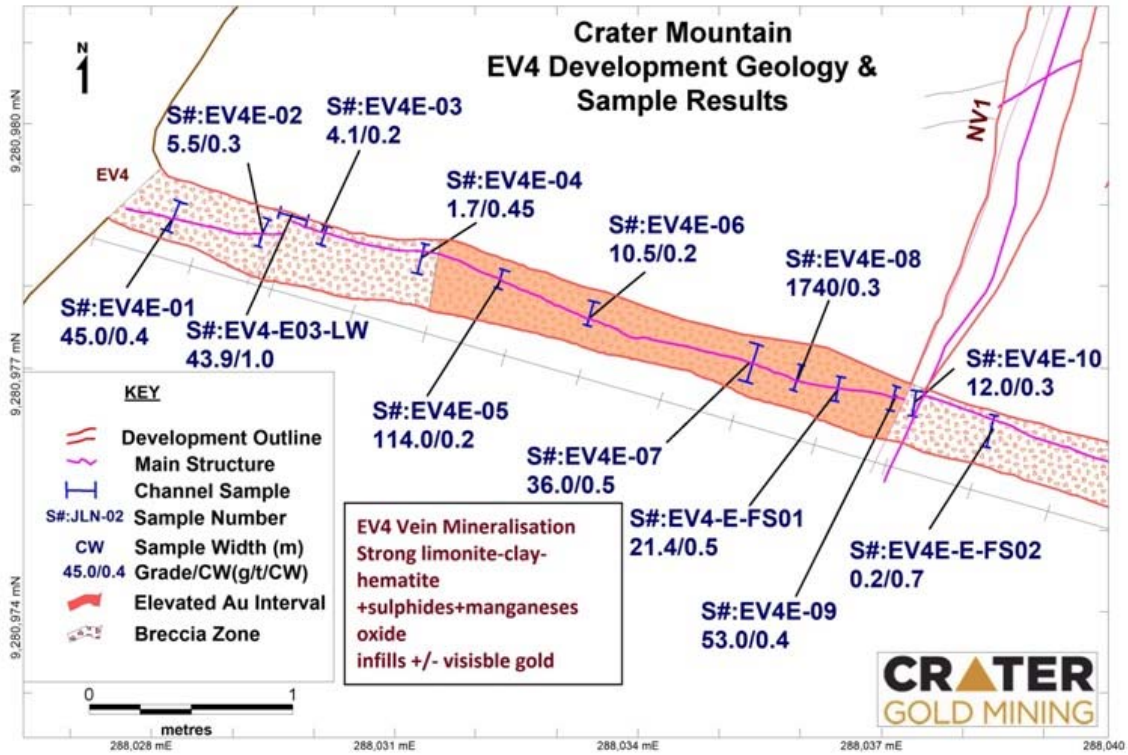

Figure 2 - EV4 – East. Channel Sampling Results

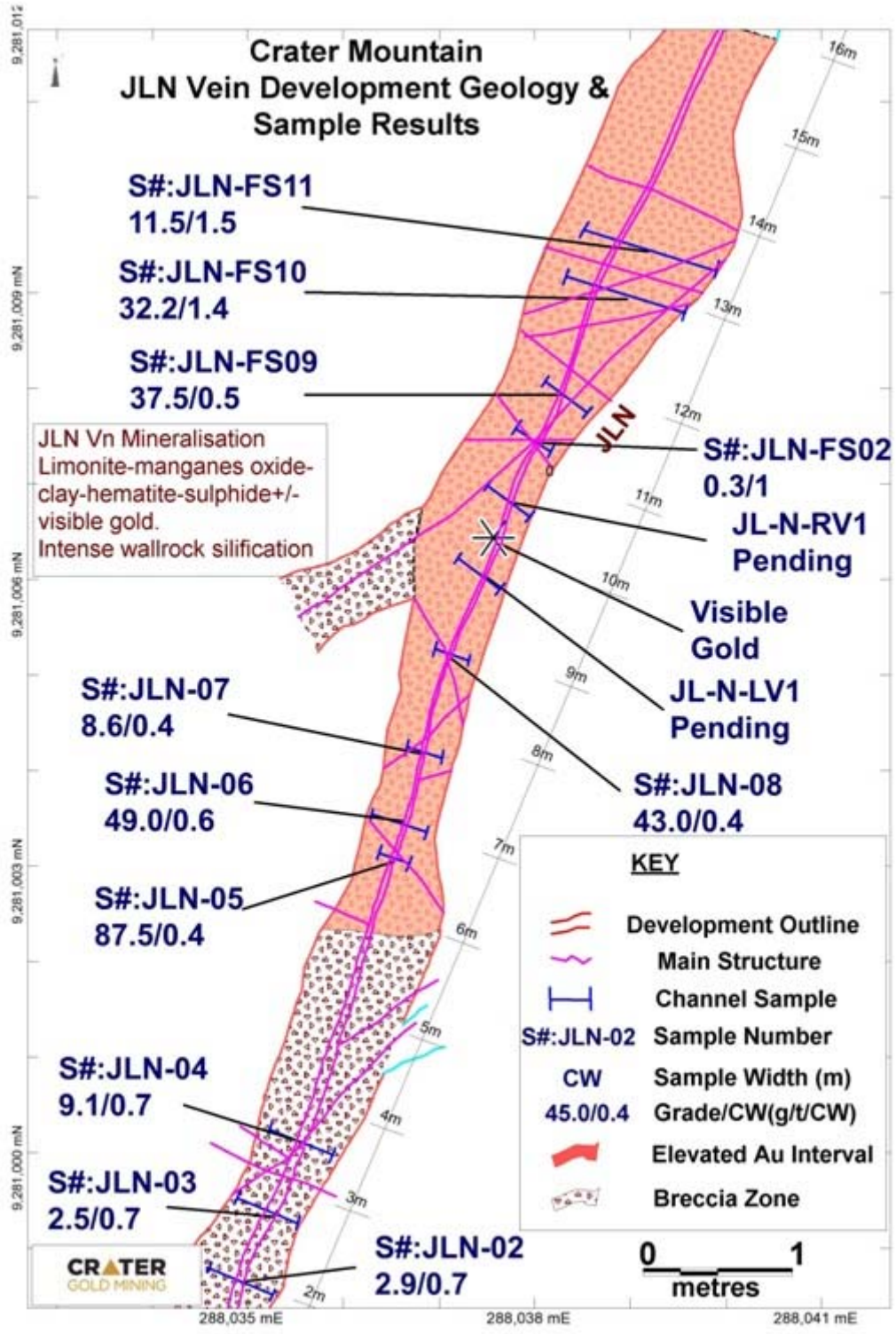

Figure 3 - JL – North Channel Sampling Results

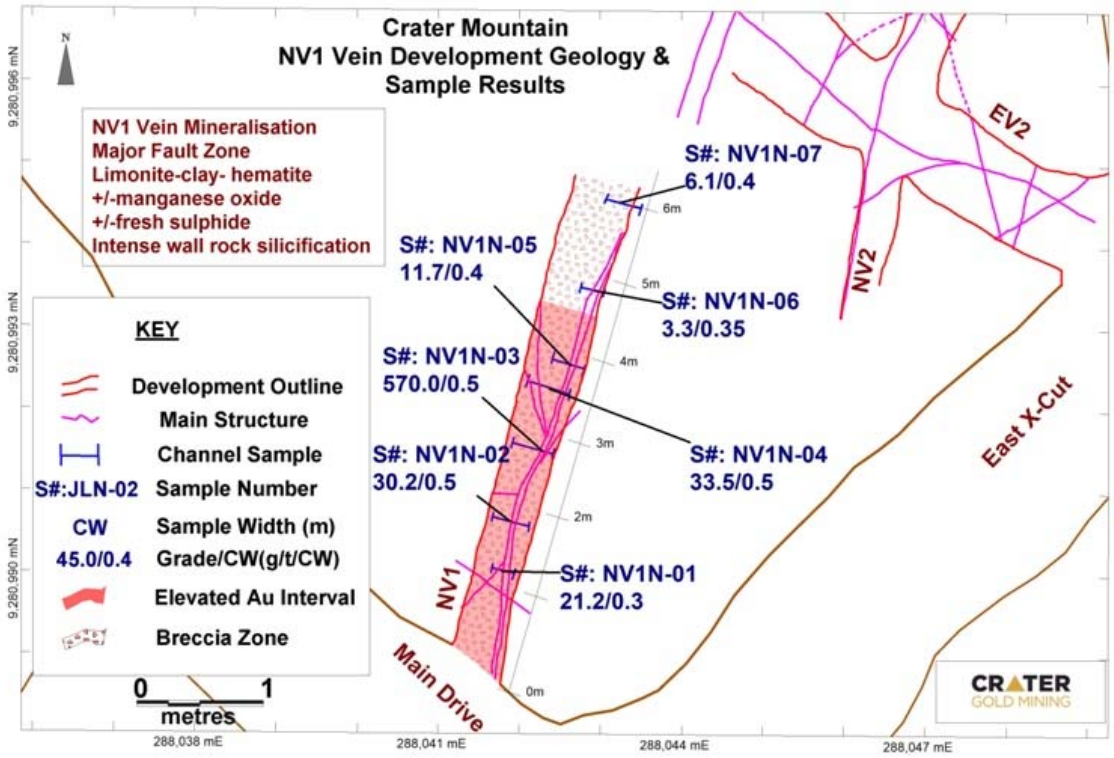

Figure 4 - NV1 – North Channel Sampling Results

APPENDIX 1

JORC CODE, 2012 EDITION – TABLE 1

Notes on data relating to Drilling at Crater Mountain High Grade Zone

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 (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.* • *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 (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.*	• *Diamond drilling is used to obtain core from which samples at intervals ranging from 0.5-2.0m in length are submitted for analysis using FAA505 methodology. A 50g charge is used for fire assay for analysis for gold.* • *All diamond drill core drilled by CGN has beens sampled in intervals based on geological logging. Previous diamond drilling was carried out with PQ, HQ and NQ diameter core and all core was cut with half core typically sent for sample preparation at SGS, Lae and pulps sent to SGS, Townsville for assay.* • *Current diamond drilling is with LTK48 core, 35mm diameter. Whole core is sampled and sent for preparation and assay. Whole core is used to ensure sufficient sample mass and representivity.* • *Underground exploration development is also carried out with drives and cross cuts. Face and sidewall channel samples are taken using moil and hammer to obtain samples of approximately 3kg. Channel widths vary from 0.20-2.0m depending on geology and face advance. Face channel samples are taken perpendicular to the mineralised structures which are generally subvertical..*

Criteria	JORC Code explanation	Commentary
	Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	
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.).*	• *Diamond drilling is currently carried out using an underground rig with LTK48 rods and standard tube core barrel. Core diameter is 35mm. The rig is also set up to drill from surface.* • *Historical drilling by CGN at the Nevera prospect has been by diamond drilling PQ, HQ and NQ diameter core using triple tube and core orientation with a Reflex ACT II device*
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.*	• *Core recovery is measured for the complete hole based on the driller's mark-up, checked during core mark-up in 1m intervals by the geologist. Drill core is measured to accurately quantify sample recovery.* • *Gold mineralisation at the CGN HGZ is typically concentrated in narrow oxidised structures. To ensure representative samples, whole core is sampled. Underground channel samples are taken at regular intervals across mineralised structures based on lithology.* • *This release relates to results from underground development channel samples taken at regular intervals on the face of development drives on mineralised structures. Samples are taken by hand held moil and hammer. It is not known whether a relationship exists between sample recovery and grade.*
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.*	• *A qualified geoscientist logs the geology of all holes in their entirety including geotechnical features. Drill core is geologically and routinely geotechnically logged to a level of detail considered to accurately support Mineral Resource estimation. The parameters logged include lithology with particular reference to veining, mineralogy, alteration, and grain size.* • *All core is photographed. Recent digital photos and scans of film photography are stored electronically. All of the holes with results mentioned in the release have been logged and photographed in their entirety.* • *A qualified geoscientist supervises all channel sampling and records parameters relating to location, lithology, veining, mineralogy, alteration and grain size.*
Sub-sampling techniques	• *If core, whether cut or sawn and whether quarter, half or all core*	• *For samples of core, whole core is taken and bagged.* • *Channel samples are bagged wet underground.*

Criteria	JORC Code explanation	Commentary
and sample preparation	*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.*	• *Samples were sent to SGS, Lae for sample preparation.Underground channel samples are now sent to Intertek,Lae for sample preparation and fire assay.* • *Whole samples dried in original calico bags at 105°C for 4+ hours in an Essa DO1 two cubic metre drying oven.* • *Dried samples crushed to 90 per cent passing 3 mm.* • *Crushed samples riffle split to collect 0.6 to 1.2 kilogram subsample.* • *Subsamples pulverised to 90 per cent passing 75 µm.* • *One sample in 20 wet sieved to check pulveriser performance to target standards.* • *One sample in ten selected randomly and resplit prior to pulverisation, with control samples processed either at Intertek, Lae or SGS Townsville.* • *Assaying at Intertek, Lae and SGS, Townsville is by FAA505 methodology*
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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been*	• *All samples are currently assayed at Intertek, Lae or SGS, Townsville. Intertek and SGS maintain robust internal QA/QC procedures (including the analysis of standards, repeats and blanks) which are monitored with the analytical data by CGN geologists.* • *Ore grade Certified Reference Material standards and blanks are introduced into the sample stream by the geologists. Blanks are also introduced after the sample preparation stage..* • *Based on the results of standard analysis, in addition to the internal QA/QC standards, repeats and blanks run by the laboratory, the laboratories are deemed to provide an acceptable level of accuracy and precision.*

Criteria	JORC Code explanation	Commentary
	established.	
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.*	• *Significant intersections are checked by the Senior Exploration Geologist.* • *Twinned holes are drilled to represent approximately 20% of the holes drilled or at least one twinned hole per section line. The core is not sampled but logged and kept as a permanent whole core record.* • *Original laboratory documents exist of primary data, along with laboratory verification procedures.* • *The Crater Mountain drilling and channel sampling database exists in electronic form. The assay data are imported directly into the database from digital results tables sent by the laboratory. The Senior Exploration Geologist manages the drill hole and channel sample assay database.* • *No adjustment has been made to assay data received from the 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.*	• *The initial datum 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 from the datum point is by theodolite with 20 second closure.* • *Grid is UTM WGS84*
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.*	• *Drilling at the HGZ is intended to identify the nature and style of mineralisation.* • *Underground development channel sampling is taken across the face of drive development on mineralised structures. Spacing between sample stations varies slightly according to the advance achieved in the development from day to day. Sample spacing varies between 0.5m and 2.0m. The spacing and distribution is sufficient to establish the degree of geological and grade continuity for Mineral Resource and Ore Reserve estimation procedures.* • *No sample compositing is applied* •
Orientation of data in relation to	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to*	• *At the HGZ a general north south trending zone of mineralisation is interpreted with north south and east west mineralised fractures.*

Criteria	JORC Code explanation	Commentary
geological structure	*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.*	• *Current drilling intersects this zone such that sampling of north south structures is considered unbiased.* • *Possible east west cross cutting structures will require drill testing from additional drill pads in due course.* • *Underground channel samples are taken across the mineralised structures perpendicular to the dip.*
Sample security	• *The measures taken to ensure sample security.*	• *For diamond drilling, whole core is collected in calico sample bags marked with a unique sample number which are tied at the top. Channel samples are similarly bagged and tied. Samples are transported to Intertek or SGS under direct company supervision or secure independent contractor.*
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• *No audits or reviews of sampling techniques and data were done.*

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 results are from drilling and underground channel sampling within Mining Lease ML510 located at Crater Mountain, Lufa District, Eastern Highlands Province PNG. ML510 is wholly owned by CGN and was granted in November 2014 for a term of 5 years. ML510 lies within but excised from EL1115 also wholly owned by CGN..*
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• *Four programs of diamond drilling were conducted at the Nevera Prospect from 1994, when EL 1115 was first granted with successive operators BHP Billiton Pty Limited (BHP), Macmin NL (Macmin) and Triple Plate Junction Plc (TPJ). CGN acquired control of EL1115*

Criteria	JORC Code explanation	Commentary
		in 2009
Geology	• *Deposit type, geological setting and style of mineralisation.*	• *The Crater Mountain Project lies within a typical large and complex New Guinea Orogen mineralised hydrothermal system. Mineralisation is associated with sub-volcanic magmatic activity related to the locally prominent Nevera Igneous Complex.* • *The mineralisation models identified to date are:* ▪ *Low sulphidation epithermal carbonate-base metal sulphide-gold Mixing Zone mineralisation* ▪ *High sulphidation high grade epithermal quartz-pyrite-gold mineralisation (High Grade Zone "HGZ") extending from surface to several hundred metres depth, comprising a series of sub-vertical fractures and associated near-vertical mineralised shoots.* ▪ *Deep porphyry copper-gold mineralisation.*
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 (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.*	• *Locations and orientation of the reported drill holes are tabulated below. Significant intercepts are reported in the table on pages 1 and 2 of the release.*

Hole	Depth (m)	GridE	GridN	RL (m)	Grid Azimuth	Dip
NEV004	200	287955.00	9280950.00	1962	74	-50
NEV009	458	287918.00	9281105.00	1930	135	-60
NEV022	282	287994.00	9281002.00	1942	85	-50
NEV026	306	287982.00	9281090.00	1968	148	-45
NEV034A	66.1	288002.60	9281003.30	1959	110	-24
NEV034B	83.8	288002.60	9281003.30	1959	110	-24
NEV035	80.2	288002.60	9281003.30	1959	110	-46
NEV036	82	288002.60	9281003.30	1959	85.5	-25
NEV037	63	288002.60	9281003.30	1959	85.5	-40
NEV038	93.5	288002.60	9281003.30	1959	85.5	-43
NEV039	85	288002.60	9281003.30	1959	131.5	-22
NEV040	83.7	288002.60	9281003.30	1959	131.5	-40
NEV041	80	288002.60	9281003.30	1959	110	-56
NEV042	82.6	288002.60	9281003.30	1959	78	-57

Criteria	JORC Code explanation	Commentary

NEV043	80.6	288002.60	9281003.30	1959	107.5	-56
NEV044	83.1	288002.60	9281003.30	1959	132	-52
NEV045	82.7	288002.60	9281003.30	1959	96	-13
NEV046	81.5	288002.60	9281003.30	1959	96	-39
NEV047	83.5	288002.60	9281003.30	1959	124	-13
NEV048	80.4	288002.60	9281003.30	1959	124	-36
NEV049	81.8	288002.60	9281003.30	1959	127.5	-51.3
NEV050	80.5	288002.60	9281003.32	1959	096	-45
NEV051	81.9	288002.60	9281003.32	1959	096	23
NEV052	80.6	288002.60	9281003.32	1959	124	18
NEV053	80.4	288030.12	9281026.91	1964	160	-22
NEV054	76.3	288030.12	9281026.91	1964	160	-45
NEV055	80.3	288030.12	9281026.91	1964	160	-59
NEV056	80.5	288030.12	9281026.91	1964	177	-23
NEV057	71.0	288030.12	9281026.91	1964	177	-47
NEV058	59.3	288030.12	9281026.91	1964	177	10
NEV059	60.3	288030.12	9281026.91	1964	160	9

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. 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*	• *Drill hole intercept grades are reported as down-hole length-weighted averages with any Drill hole intercept grades are reported as down-hole length-weighted averages with any non-recovered core within the reported intervals treated as no grade but included in the sample length. Significant intercepts are generally reported at a lower cut off of 2 g/t Au where intercepts are limited to 1.0m or less and to 1g/t for intercepts greater than 1.0m. No top cuts have been applied* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of lower grade results the procedure is to report the aggregate longer length of lower grade which includes a shorter length of higher grade.*

Criteria	JORC Code explanation	Commentary
	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.*	*As an example, in the body of the release Nev35 has an intercept reported as:* *29.0m at 3.39 g/t Au from 43.0m, including* *8.0m at 7.02 g/t Au from 43.0m,and* *3.0m at 6.79 g/t Au from 56.0m* • *Aggregate calculation of channel samples over a determined strike length is carried out using a weighted average method of the sample spacing and sample width or channel width, CW, with the grade or assay value of each sample.*
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').*	• *Drilling is carried out to understand the relationship between lithology, mineralisation widths and intercept lengths* • *Results are reported for down hole length, true width not known*
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.*	• *Appropriate plan views are presented in the release showing sample stations, sample numbers, channel widths, CW in m, and grade in g/t Au. .*
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.*	• *Only mineralised intersections regarded as highly anomalous, and therefore of economic interest, have been included in the results tables.* • *Low grade mineralisation is characterised by grades considered to be sub-economic. Such intervals are not reported in the results table.* • *The proportion of each hole represented by the reported intervals can be ascertained from the sum of the reported intervals divided by the hole depth.* • *Channel samples represented by the reported intervals are calculated using a weighted average method.*

Criteria	JORC Code 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.*	• *Other exploration data have been reported in prior CGN Releases. These relate to surface geochemistry, geological mapping, geophysical survey, trenching and drilling.*
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).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• *Future drilling is dependent on the outcome of the current programme.* • *Ongoing development of mineralised structures will be channel sampled systematically to determine possible lateral extensions of mineralisation*