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

29 April 2014

Australian Securities Exchange

High Grade Gold Drilling Results - High Grade Zone (HGZ) Crater Mountain PNG

Highlights

- Excellent high grade gold results continue
- Zone of very high grade mineralisation continues to depth below exploration adit level
- Drilling confirms a broad mineralised zone hosting narrow high grade structures over a strike currently of approximately 60m and down dip of approximately 90m
- 40 tpd gravity processing plant on site in the coming week

Significant Drilling Intercepts

Interval (m)	grade (g/t)	depth (m)	Section Diagram	Reason for Interval Significance
New Results				
NEV34a			110 Deg Section	
1.0	20.90	14.50		A new structure outside the interpreted mineralised zone
20.0	0.81	42.00		Zone of mineralisation confirming depth extension
Nev35			110 Deg Section	
0.5	10.10	27.00		A new structure outside the interpreted mineralised zone
29.0	3.39	43.00		Zone of mineralisation confirming depth extension
including				
2.0	4.30	43.00		
2.5	16.53	47.00		Correlates with underground development
0.5	24.70	56.50		Correlates with underground development
Nev36			85 Deg Section	
0.5	14.80	15.50		A new structure outside the interpreted mineralised zone
4.0	6.20	27.00		Zone of mineralisation confirming depth extension
1.5	34.96	49.00		Further confirmation of high grade and in HGZ planned mining zone
9.0	2.72	65.00		Indication of possible width extension of mineralised zone

Interval (m)	grade (g/t)	depth (m)	Section Diagram	Reason for Interval Significance
Historical Result NEV 22				
4.0	8.90	44.00		Good correlation with NEV036
4.0	51.00	74.00		
including				
2.0	98.20	74.00		Good correlation with NEV036
6.0	3.16	118.00		Confirmation of depth continuity

Table 1 - Drilling intercepts

Crater Gold Mining Ltd (ASX: CGN, "Crater Gold") (the Company) is pleased to announce the initial results from its diamond drilling programme at its 100%-owned High Grade Zone (HGZ) project at Crater Mountain, PNG. The High Grade Zone project (HGZ) is earmarked to commence gold production subject to the outcome of a mining lease application

The key outcome of the results received to date is that they highlight the very strong correlation with the geology and grades encountered directly 40m above in the underground development. Further excellent results are all in the planned mining zone. Drilling confirms a broad mineralised zone hosting narrow high grade structures over a strike currently of approximately 60m and down dip of approximately 90m.

Managing Director Greg Starr said "We are very encouraged by these ongoing HGZ results because we see strong correlation between results returned in the underground development and the drill holes. This gives us confidence that the high grade structures, although narrow, are so far showing continuity to depth which will facilitate more detailed modelling and mine planning."

Drilling Programme

CGN commenced diamond drilling at the HGZ in early March 2014, using an underground drill rig whose primary function will be to follow extensions of identified ore structures. The current drilling program incorporates a series of angle holes targeting below the underground workings of the exploration adit. The initial drilling is from the surface and the rig will then move underground to drill from specially prepared drill platforms.

Because it is primarily an underground scout drilling tool, the rig is smaller and lighter than the surface drill rigs previously used by the Company, with considerably less depth penetration and smaller core diameter making continuous full core recovery a constant challenge.

The drilling program is designed to confirm immediate strike and dip continuity of narrow high grade structures encountered within a coherent zone in the underground exploration development (refer to the plan in Figure 1 and the sections in Figures 2, 3 and 4 which show the drill hole positions relative to the underground development).

Discussion of Results

To date, 8 holes have been drilled along 3 section lines from a single drill pad at surface, for a total of 632m amounting to approximately 30% of the current programme (refer to the plan in Figure 1 and the sections in Figures 2, 3 & 4). The drilling sequence has been to drill 2 holes on each section line at shallow inclinations before returning to the centre section line to test the structures at greater depth. Drilling commenced on the 110° section line. Results have been received for NEV034a, NEV035 and NEV036, which show good correlation with

the geology and grades encountered in the underground development directly above the target area.

NEV034a was the first hole drilled in the programme. With the crews still undergoing familiarisation with the rig and ground conditions, core recovery over the 20.0m wide mineralised section from 42m was relatively poor, averaging 78.3% with two 1.0m sections only recording 30% recovery. Consequently a twin hole, NEV034b, was later drilled and assay results are awaited for this hole (Figure 2). Core recovery has improved significantly with experience and improved use of drilling muds, generally recording greater than 90% (NEV035 achieved 95% and NEV036 achieved 89% over the mineralised sections respectively). Experience in the underground development is that the gold bearing structures are narrow, oxidised and soft with a high risk of core loss during drilling and hence the potential of underestimation of gold content.

NEV034a (Figure 2 - Section drawn at 110°) recorded a high grade intersection of 1.0m at 20.9 g/t Au from 14.5m; this is a new structure that was previously unmapped. Because of the above noted poor core recovery in the main 20.0m mineralised section from 42m the hole was later re-drilled with NEV034b and assay results are expected shortly.

NEV035 returned a broad zone of 29m at 3.39 g/t Au from 43m which included two high grade sections, being 2.5m at 16.53 g/t Au from 47m and 0.5m at 24.7 g/t Au from 56.5m. These two zones show excellent correlation with the development some 40m directly above (refer to Figure 2).

Three holes have been completed on the 085° section line, with results received for NEV036. Results are awaited for NEV038 (drilled as a twin to NEV037). The results from NEV036 contain three distinct mineralised zones that show strong correlation with the underground development and NEV022, a historical hole which intersected the mineralisation some 80m below the adit development, confirming the depth continuity of the high grade structures (refer to Figure 3).

As drilling progresses on dip and strike, the data will be carefully assessed to determine when it can be modelled to delineate measured, indicated and inferred resources.

Mining Lease Application Process

The company continues to progress its Mining Lease Application process in consultation with the Papua New Guinea (PNG) Minerals Resources Authority (MRA) and the Department of Environment and Conservation (DEC). The Mining Lease application covers an area of 1.6km^2 and the commencement of mining will all be underground.

The very high grades of coarse free gold mineralisation (ASX Release 19 November 2013 “Bonanza gold grades intersected at High Grade Zone”) in these structures will support a small, highly selective narrow vein mining operation requiring simple mining infrastructure and recovery of gold by gravity separation without the need for complex processing technology. Mining will be carried out underground by hand held mining methods at a rate of approximately 1,000 tonnes per month.

The HGZ was previously mined at high grades (several ounces per tonne interpreted from the volume of ore extracted and gold produced) at surface and in shallow shafts by local miners, with an estimated 15,000 ounces extracted between 2005 and early 2013.

In preparation for processing and interim bulk sampling a 40 tpd gravity processing plant has been procured and has arrived. Rail tracks and mine cars to handle the rock from underground have also arrived. Both the plant and the rail equipment will be transported to site in the coming weeks.

Data from current drilling and underground development to delineate high grade structures will be modelled to facilitate estimation of resources, and with mine planning the estimation of reserves.

For further information contact:

Greg Starr
Managing Director
P +61 2 9241 4224

or visit the CGN website www.cratergold.com.au

Competent Person Statement

The information contained in this report relating to exploration results, exploration target and the estimated mineral resource at Crater Mountain PNG is based on information compiled by Mr P Macnab, Non-Executive Director of Crater Gold Mining Limited. Mr Macnab is a Fellow of The Australian Institute of Geoscientists 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 Macnab consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

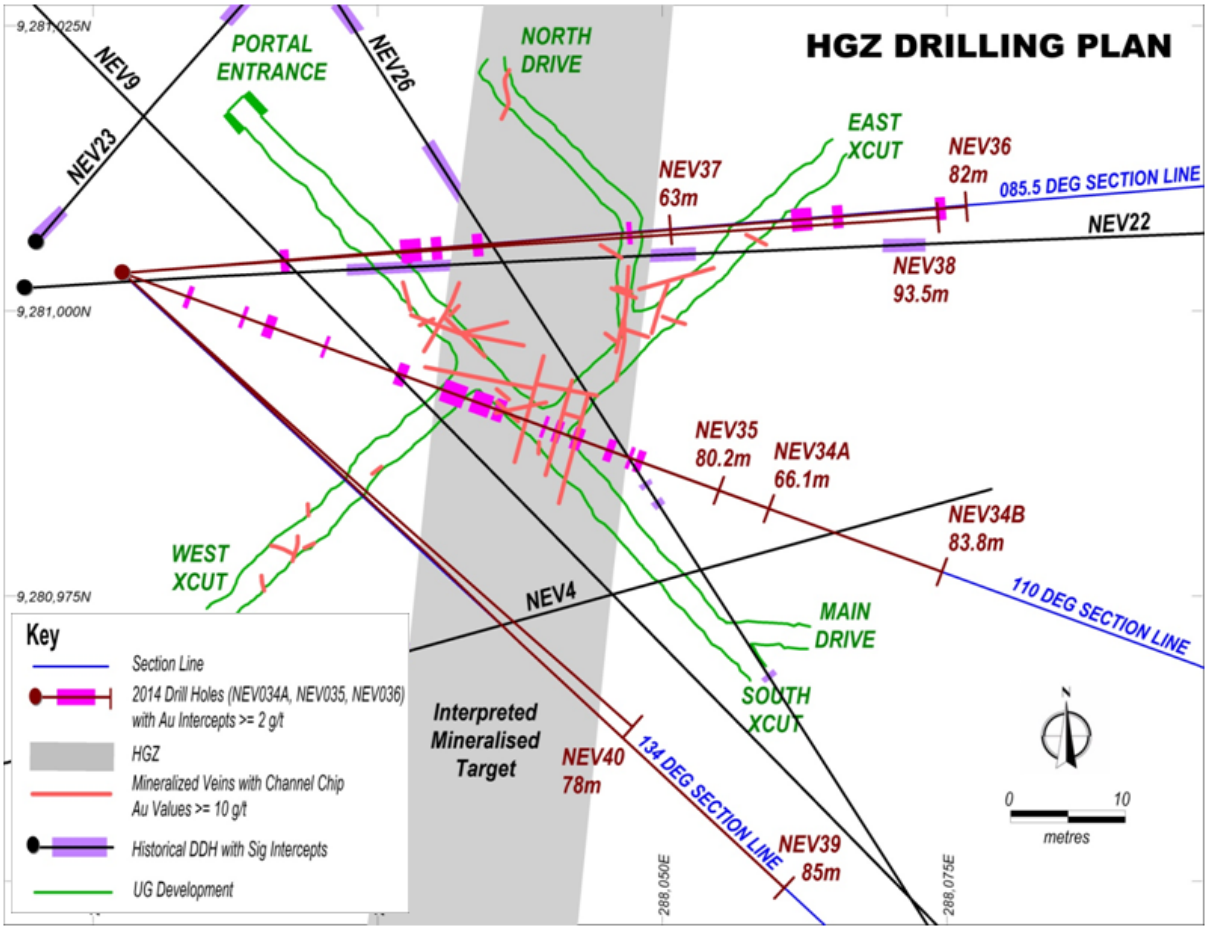

Figure 1 Plan of Current Drill Hole Traces and Historic Drill Holes

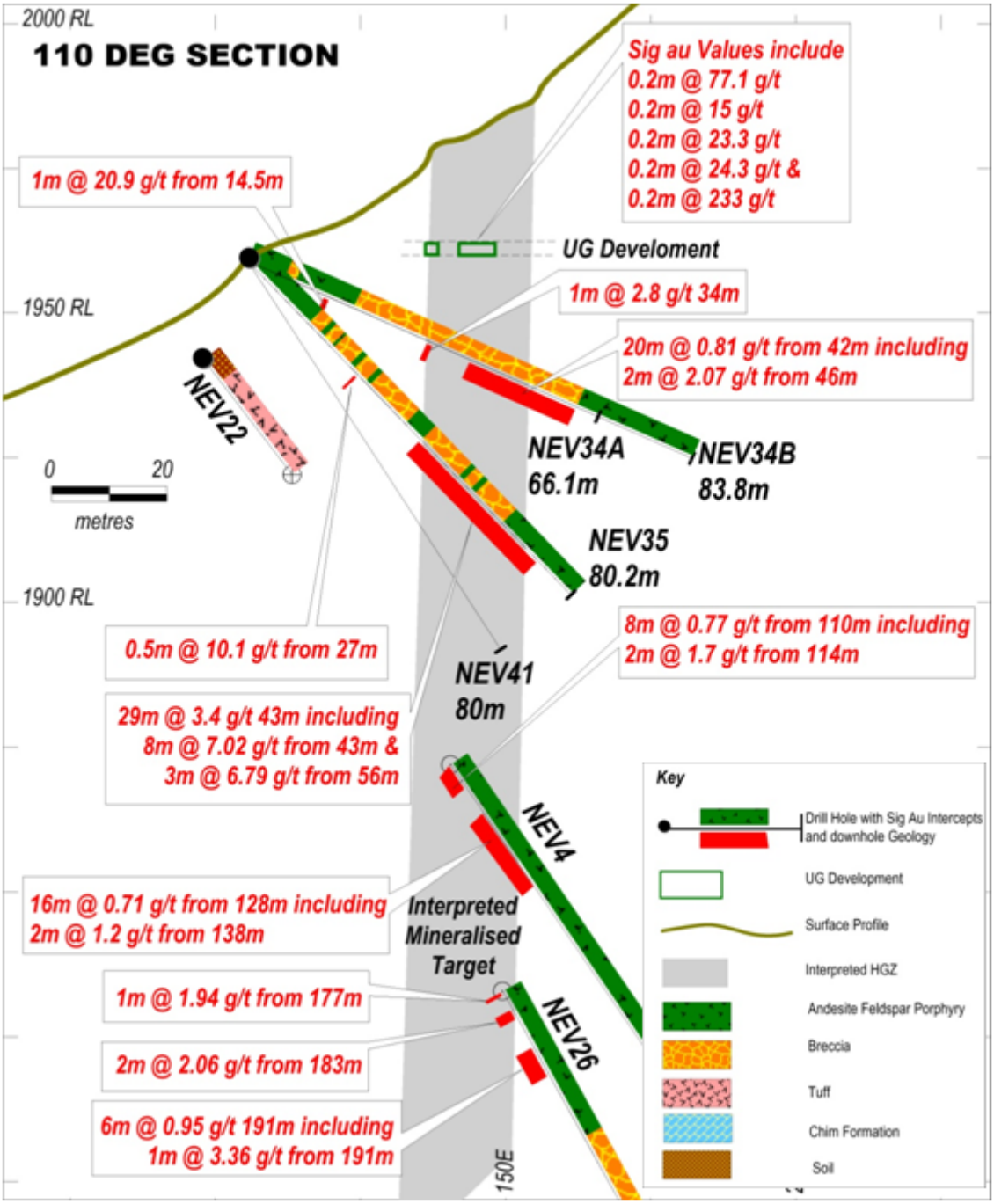

Figure 2. Section of Drill Holes and Intercepts on 110° Bearing

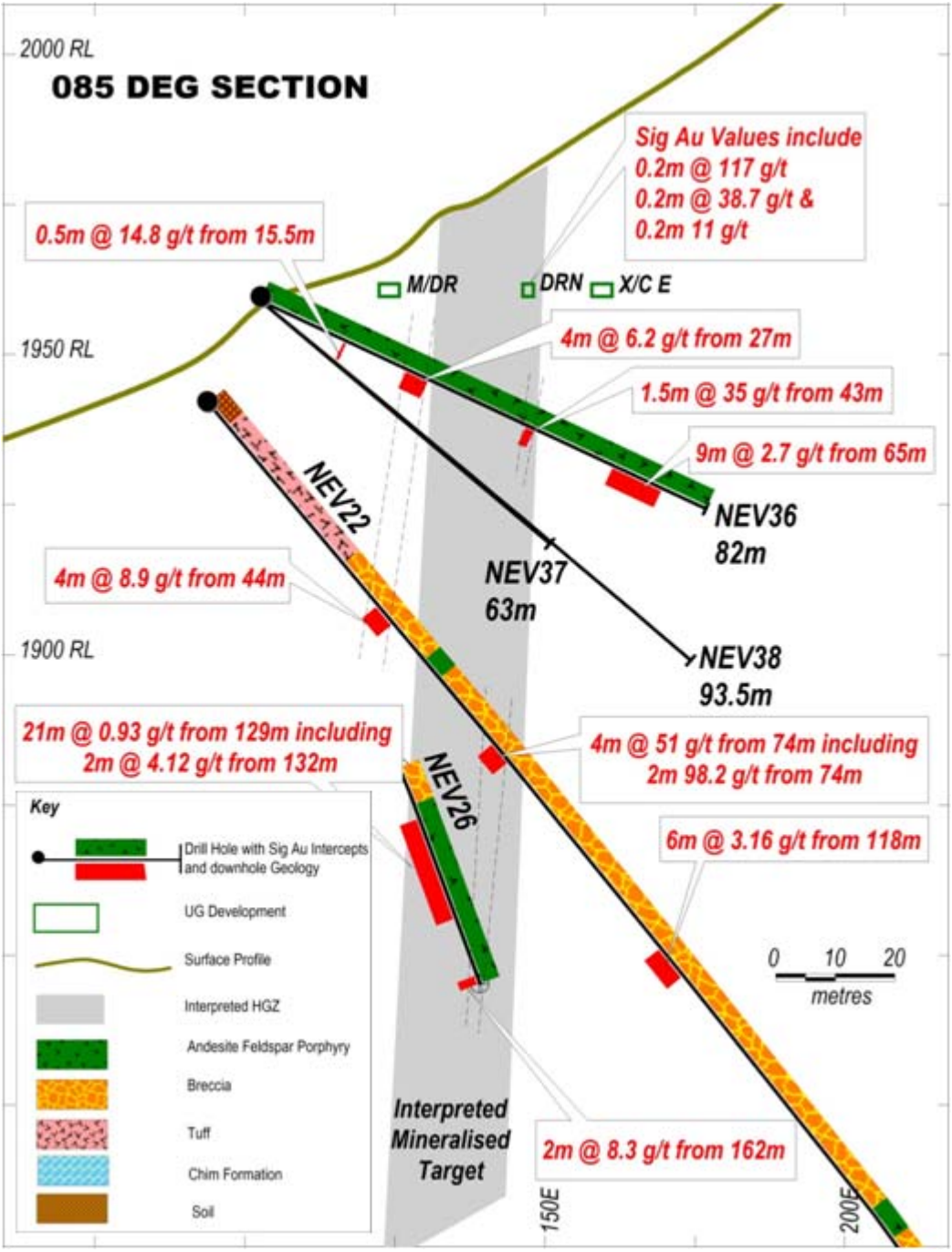

Figure 3. Section of Drill Holes and Intercepts on 85° Bearing

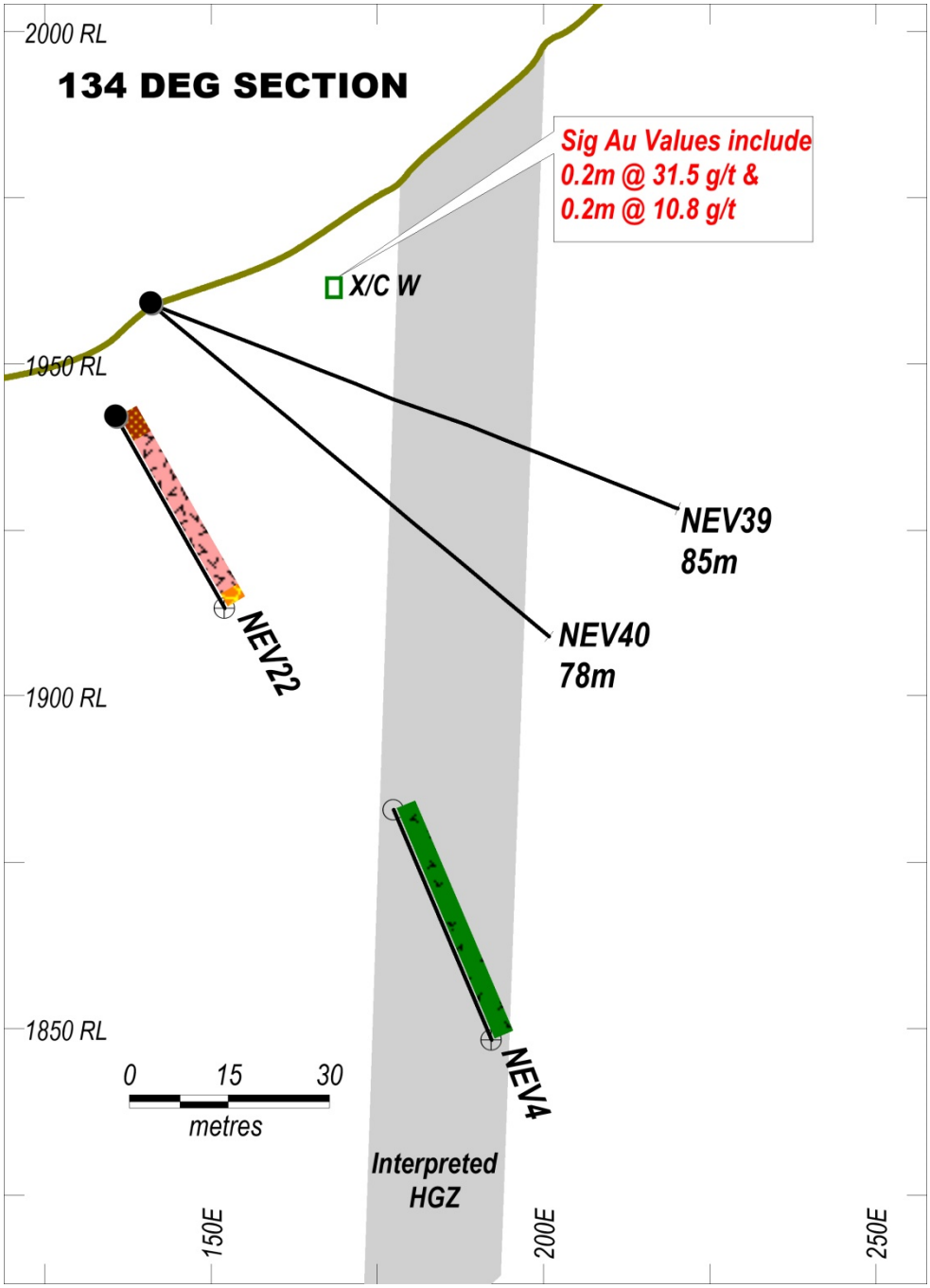

Figure 4. Section of Drill Holes and Intercepts on 134° Bearing

1 JORC CODE, 2012 EDITION – TABLE 1

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

1.1 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 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 (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.*	• *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 is 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 lengths vary from 0.20-2.0m depending on geology.*
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary*	• *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.*

	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).	• *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 recoveryis 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.* • *This release relates to result from the first three holes in the current programme. 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.*
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.*	• *For samples of core, whole core is taken and bagged.* • *Channel samples are bagged wet underground.* • *Samples are sent to SGS, Lae for sample preparation.* • *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 using a Rocklabs Boyd Mark III jaw crusher.* • *Crushed samples riffle split to collect 0.6 to 1.2 kilogram subsample.* • *Subsamples pulverised to 90 per cent passing 75 µm, for approximately three minutes in either of two Essa LM2-P pulverisers with B2000 bowl sets.* • *One sample in 20 wet sieved to check pulveriser performance to target standards.*

	• *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.*	• *One sample in ten selected randomly and resplit prior to pulverisation, with control samples shipped as part of the batch to SGS Townsville.* • *Prepared assay pulps placed in wire-top bags, with several included in a heat-sealed plastic bag in a shipping box, sealed with packaging and SGS security tape.* • *Up to three shipping boxes placed in a labelled, security sealed and numbered poly-weave sack and shipped to SGS Townsville by DHL Express.* • *Assaying at SGS, Townsville is by FAA505 methodology fire assay for gold*
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.*	• *All samples are currently assayed at SGS, Townsville. SGS maintains 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 by SGS after the sample preparation stage in Lae before shipment to Townsville.* • *Based on the results of standard analysis, in addition to the internal QA/QC standards, repeats and blanks run by the laboratory, the laboratory is deemed to provide an acceptable level of accuracy and precision.*
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.*	• *Signficant 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 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.*	• *Current drilling at the HGZ is intended to identify the nature and style of mineralisation.*
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.*	• *Not applicable at this stage*
Sample security	• *The measures taken to ensure sample security.*	• *For diamond drilling, whole core is collected in calico sample bagsmarked with a unique sample number which are tied at the top. Samples are transported to SGS, Lae under direct company supervision or secure independent contractor.*
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	•

1.2 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 Exploration Licence EL1115 located at Crater Mountain, Lufa District, Eastern Highlands Province PNG. EL1115 is wholly owned by CGN and is due for renewal in September 2014.*
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 in 2008*
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 mineralization* • *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 mineralized shoots.* • *Deep porphyry copper-gold mineralization.*

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 drillholes are tabulated below. Significant intercepts are reported in Table 1 in the body of the release.* •
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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• *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.* *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*

Hole	Depth (m)	GridE	GridN	RL	Grid Azimuth	Dip
NEV004	200	287955	9280950	1962	74	-50
NEV009	458	287918	9281105	1930	135	-60
NEV022	282	287994	9281002	1942	85	-50
NEV026	306	287982	9281090	1968	148	-45
NEV034A	66.1	288002.6	9281003.3	1959	110	-24
NEV034B	83.8	288002.6	9281003.3	1959	110	-24
NEV035	80.2	288002.6	9281003.3	1959	110	-46
NEV036	82	288002.6	9281003.3	1959	85.5	-25
NEV037	63	288002.6	9281003.3	1959	85.5	-40
NEV038	93.5	288002.6	9281003.3	1959	85.5	-43
NEV039	85	288002.6	9281003.3	1959	131.5	-22
NEV040	78	288002.6	9281003.3	1959	131.5	-40

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').*	• *Current drilling is being 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 plans and section views are presented in the release.*
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.*
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 (eg tests for lateral*	• *The planned scope of the drilling programme is depicted on a plan and sections in the release showing testing depth extensions.*

	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.*

Appendix

Mineralisation Sampling and Core Recovery

Mapping and sampling of the gold bearing structures in the underground development confirmed that coarse free gold is largely confined to narrow (<0.2m wide) oxidised structures within an intensely brecciated zone. High grade gold, up to 847g/t is found in the presence of hematite - limonite oxidation in narrow veins with residual vuggy silica alteration.

Three sets of high grade structures have been identified in underground development. Two of these sets of structures trend roughly NS and EW with a third shallow dipping set which are interpreted as link structures. Bonanza grades are typically found sat the junction of these sets of structures. (ASX Release 19 November 2013 “Bonanza gold grades intersected at High Grade Zone”) Current drilling is broadly on an easterly azimuth from 85° to 130°. Consequently the EW trending and shallow dipping link structures are less likely to be intersected in the current programme as these structures are sub-parallel to the general azimuth of the drill holes.

An ongoing drilling programme will be undertaken from selected surface and underground drill pads planned to target these structures

Logging of the drill core confirms this style of mineralisation in very narrow veins. However, drilling is being carried out with LTK48 standard tube gear which produces 35mm core. Owing to the fractured nature of the breccia and also that the mineralised structures are for the most part very narrow, it was decided to sample whole core. Cutting of 35mm core would result in significant loss of sample, particularly in friable ground, thus reducing the mass of sample and representivity for sampling purposes. All core is logged in detail and photographed before sampling. Regular twinned holes are planned in the programme to effectively retain a permanent whole core reference across the zones.