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***Crater Gold Mining Limited ABN 75 067 519 779***

# QUARTERLY ACTIVITIES REPORT

**For the period ended 30 June 2017**

***About Crater Gold Mining Limited***

***(ASX CODE: CGN)***

*Crater Gold Mining Limited ("CGN" or the "Company") is focussed on exploration of its highly prospective Crater Mountain Gold Project in PNG, which includes two gold resources and evidence of potential copper-gold porphyry mineralisation.*

***Crater Gold Mining Limited***

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***Russ Parker***
***Managing Director***

## Key Points

### CRATER MOUNTAIN GOLD PROJECT, PNG (100%)

- Development activities at Nevera Gold Mine were largely on hold pending outcome of Corporate Review
- Corporate Review included high-level review of Nevera Prospect geological data by experienced career geologist, Mr Dorian L. (Dusty) Nicol
- Due diligence review of Nevera Gold Mine led by Mr Robert Usher, mining engineer and former Executive General Manager of PanAust Asia
- Advanced discussions to purchase the first of two drill rigs the Company plans to acquire in line with new strategy to aggressively re-invigorate exploration

### CORPORATE

- Corporate Review continued during the Quarter and resulted in the announcement made subsequently on 24 July 2017 concerning the injection of approximately $14.2-16.2M in new capital and transformation of the Company
- Valuation of PNG assets was concluded to address the underlying reason for the Disclaimer of Conclusion on the Company's 31 December 2016 Financial Statements

## DEVELOPMENTS DURING THE QUARTER

**Crater Mountain Gold Project, PNG (100% CGN)**

*Nevera Prospect*

Mr Dorian L. (Dusty) Nicol undertook a high-level review of Nevera Prospect exploration data during the Quarter. Mr Nicol is a career geologist with over 40-years' experience in discovery and resource development. He has worked extensively in Papua New Guinea for Esso Minerals and Rennison Gold Fields, including on Crater Mountain and Kainantu gold projects. It is proposed that Mr Nicol join the board of the Company on completion of the proposed Entitlement Offer (see announcement of 24 July 2017) to provide senior guidance for a re-invigorated physical exploration program.

During the Quarter, CGN identified a 2002 Atlas Copco Diamec 252 drill rig ("**Diamec Drill Rig**") and entered into discussions with a view to purchase it in line with the plan to acquire two drill rigs to have based at Crater Mountain to aggressively re-invigorate physical exploration activities there. The Diamec 252 Drill Rig is the smaller of the two drill rigs the Company plans to buy. It is likely to be able to drill diamond core holes of up to approximately 300 metres in length. Due to its compact size, it will also fit in the two adits the company has developed at the Nevera Gold Mine and will initially be used to drill the lateral and at depth extensions of the High Grade Zone mineralisation, including in the approximately 300 metres between the HGZ and Mixing Zone mineralisation areas that has not yet been drill-tested. Assuming the purchase can be finalised, the Company targets having the Diamec 252 Drill Rig available to the Company at Crater Mountain at the end of August 2017.

*Nevera Gold Mine*

Development activities at the Nevera Gold Mine were largely on hold during the Quarter pending the outcome of the previously announced Corporate Review. As at the end of the Quarter the second adit at the 1930 level had been developed for approximately 27 metres and is estimated to require an additional 130 metres of development to reach the zone of mineralisation with the appropriate target grades for production ore.

As part of the Corporate Review, a team from Azarga Resources Group visited Nevera Gold Mine to conduct a due diligence review. The team was led by Mr Robert Usher. Mr Usher is a mining engineer with more than 25-years' experience. He was Executive General Manager of PanAust Asia from 2006 to 2014 and has significant gold production experience including in PNG with Placer Dome at its Porgera operation from 1993 to 1999. It is proposed that Mr Usher join the board of the Company on completion of the proposed Entitlement Offer (see announcement of 24 July 2017) to provide senior guidance with respect to development activities at Nevera Gold Mine. The work being supervised by Mr Usher at this time includes the completion of metallurgical test-work and detailed mine planning. If results are successful, it is anticipated the Company would be able to provide more definition around the deliverables and targets for the development of sustainable commercial gold production.

**Corporate**

*Corporate Review*

The Company continued with the Corporate Review which had been launched in the prior quarter. The objective of the Corporate Review is to restructure the Company's debt profile and best position the company to advance its existing projects and review new acquisition opportunities. Activities during the Quarter included engaging with third parties for a detailed review of the Company's projects, strategy and options to attract new funding to eliminate material debt.

The Corporate Review was completed after the end of the Quarter and resulted in the announcement made on 24 July 2017 concerning the injection of approximately $14.2-16.2M in new capital and transformation of the Company.

*Valuation of PNG assets*

In order to address the underlying reason for the Disclaimer of Conclusion on the Company's 31 December 2016 Financial Statements, an independent valuation of the Company's projects in PNG was commissioned. The valuation process was completed during the Quarter and announced on 15 June 2017. The conclusion was that the preferred market value of the PNY assets was estimated at $8,000,000, which if recognised as at 31 December 2016, would have resulted in an impairment of non-current assets by $15,343,249.

## COMPETENT PERSONS STATEMENT

*Presentation of technical data and Competent Persons review*

Resource estimates contained in this report were previously announced in the Company's ASX news releases of:

- 21-12-11 Initial Resource Estimate (This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012). The Company confirms that it is not aware of any new information or data that materially affects the information included in that announcement, and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.
- 14-11-16 titled 'Maiden JORC Gold Resource at HGZ Project, Crater Mountain, PNG'.

Such resource estimates are subject to the relevant assumptions, qualifications and procedures described in the relevant ASX news releases.

To date, the Company has only announced estimates of Inferred Mineral Resources. Nothing in this report or prior announcements by the Company constitutes presentation of Mineral Reserves. As such, economic analysis cannot be applied based on the date contained.

The information contained in this report relating to exploration results and mineral resource estimates is based on and fairly represents information and supporting documentation prepared by Mr Dorian L. (Dusty) Nicol or prepared by appropriately qualified external technical experts and reviewed by him. Mr Nicol has agreed to join the board of the Company on completion of the Entitlement Offer (see announcement of 24 July 2016). Mr Nicol 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 Nicol consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The Company has an 'exploration target' of 'multi-million ounces' for the epithermal gold resources at the Nevera Prospect at Crater Mountain Project. A targeting exercise was carried out by Mining Associates ("MA") for the Nevera prospect using a simple 10x10x10m block model informed by 5 m bench channel samples (not including rock chips) and a Nearest Neighbour ("NN") estimation technique with a limited search range. The NN method was chosen so that no averaging of the grades occurred although there is a risk that estimates can be over selective. As the initial target is highly selective narrow underground mining, this is an acceptable approach. An initial examination of the composited data shows two natural breaks in Au grade distribution. one at about 0.4 g/tAu and a second at about 10 g/tAu. MA suggests that these represent low grade and high mineralisation events respectively. The block model was informed using a 100m spherical search so that no assumption was made of the direction and trend of mineralisation. Informing samples consisted of 2,766 5 m downhole composites and 1,479 5 m bench samples. No domain selection was used, but no blocks above the topography were estimated. Volume covered is about 700 m long, 700 m wide and 100 m to 350 m deep (variable with topography). This is certainly suitable for both selective mining and a bulk open pit. A bulk density of 2.5 t/m3 was used for reporting, the grade tonnage plot using cut-off grades from 1 to 20 g/t Au was reported. The target for Nevera prospect bulk open pit mining using a cut-off grade 1 g/t Au is 24 Mt @ 2.7 g/t Au for 2Moz of contained Au. The target for the HGZ only for selective underground mining using a cut-off grade 10g/t is 60-100koz @ 13-30 g/t. The exploration targets are conceptual in nature as there has been insufficient exploration to define them as Mineral Resources. It is uncertain if further exploration will result in the determination of a Mineral Resource under the JORC Code 2012. The exploration targets are not being reported as part of any Mineral Resource.

*No new information or data*

This report contains references to exploration results and Mineral Resource estimates, all of which have been cross-referenced to previous announcements made by the Company. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant announcements and in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

**Schedule of Crater Gold Mining Limited tenements:**

| Particulars | Project Name | Registered Holder | % Owned | Status | Expiry | Area ($Km^2$) |
|---|---|---|---|---|---|---|
| EPM 8795 | Croydon | CGN | 100 | Granted | 6/09/2016 | 19.2 |
| | | | | | | |
| EPM 13775 | Wallabadah | CGN | 100 | Granted | 5/03/2017 | 32 |
| EPM 16002 | Foote Creek | CGN | 100 | Granted Renewal lodged | 30/01/2013 | 28.8 |
| EPM 18616 | Black Mountain | CGN | 100 | Granted | 18/06/2018 | 96 |
| EL 1115 | Crater Mountain | Anomaly Ltd [1] | 100 | Granted | 25/09/16 | 41 |
| EL 2203 | Ubaigubi | Anomaly Ltd [1] | 100 | Granted | 10/09/17 | 88 |
| EL 2249 | Crater Mountain | Anomaly Ltd [1] | 100 | Renewal lodged | 11/11/15 | 10 |
| EL 2318 | South Crater | Anomaly Ltd [1] | 100 | Granted | 10/09/17 | 20 |
| EL 2334 | Crater Mountain | Anomaly Ltd [1] | 100 | Granted | 21/05/17 | 68 |
| EL 2335 | Crater Mountain | Anomaly Ltd [1] | 100 | Granted | 22/05/17 | 78 |
| | | | | | | |
| EL 2180 | Wapolu | CGN | 100 | Granted | 27/06/17 | 67 |

1 Anomaly Limited is CGN's 100% owned PNG subsidiary

## APPENDIX 1 TO QUARTERLY REVIEW OF OPERATIONS AS AT 30 JUNE 2017

### About Crater Mountain Gold Project

The Company's flagship Crater Mountain Project is located in the Eastern Highlands of PNG near the eastern end of the New Guinea Orogen geological province, which lies along the northern edge of the Australian continental plate and occupies the mountainous backbone of the island of New Guinea. The New Guinea Orogen hosts a number of world-class gold and copper-gold deposits including the world's largest copper-gold mine at Grasberg in Indonesia's Papua Province, and Ok Tedi, Frieda River, Yandera, Wafi-Golpu, Porgera and Hidden Valley in PNG. All of these deposits share a common geological mode of formation in large mineralised hydrothermal systems underlying variably eroded volcanic complexes from mid-Miocene to recent in age.

Exploration by the Company at Crater Mountain has so far focused principally at the northern end of the large Nevera Prospect, one of four prospects identified within the Company's 308 square kilometre licence package.

The results of mechanical benching and diamond drilling conducted by the Company around the end of a prominent ridge at the northern end of the Nevera Prospect indicate that the Prospect lies within a typical large and complex New Guinea Orogen mineralised hydrothermal system, with excellent potential to host a number of deposits within its bounds. Mineralisation is associated with sub-volcanic magmatic activity related to the locally-prominent Nevera Igneous Complex, and four different types of mineralisation have been identified:

- The relatively shallow Mixing Zone lying 150m to 300m below the northern end of the Prospect ridge, which comprises low-sulphidation epithermal carbonate-base metal sulphide-gold mixing zone mineralisation in excess of 600m long by 250m wide by 150m thick (with similarities to the Hidden Valley deposit in the nearby Morobe Goldfield). A maiden Inferred Resource of 24Mt at 1.0 g/t Au using a 0.5 g/t Au cut-off for 790,000 ounces has been estimated for the Mixing Zone; this includes 9.4Mt at 1.46 g/t using a 1.0 g/t Au cut-off for 440,000 ounces *(*ASX Release 24 November 2011: *Crater Mt – Initial Resource Estimate*). This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported. The Company is not aware of any new information or data that materially affects the information contained in that ASX release. All material assumptions and technical parameters underpinning the resource estimate continue to apply and have not materially changed. The Inferred Resource is open laterally and to depth, following down a possible steep plunge to the northeast.
- The High Grade Zone is a high grade high-sulphidation epithermal quartz-pyrite-gold mineralisation, extending from surface to several hundred metres depth (possibly in excess of 500m). The High Grade Zone has a maiden Inferred Resource containing 17,100oz of gold at 11.9g/t (ASX Release 14 November 2016: *Maiden JORC Gold Resource at HGZ Project, Crater Mountain, PNG*).
- A large porphyry copper-gold system identified by drilling at +800m depth below the northern end of the ridge ("Golpu" type from Wafi-Golpu in the Morobe Goldfield).
- A possible lead-zinc related quartz-carbonate-base metal sulphide-gold stockwork vein and breccia feeder zone (for the Mixing Zone mineralisation) at the margin of the deep intrusion (+600m) which is causing intense baking and fracturing of the sub-volcanic basement shales underlying the Mixing Zone (Porgera "Waruwari" type).

**MINERALISATION AT THE NORTHERN END OF NEVERA PROSPECT**

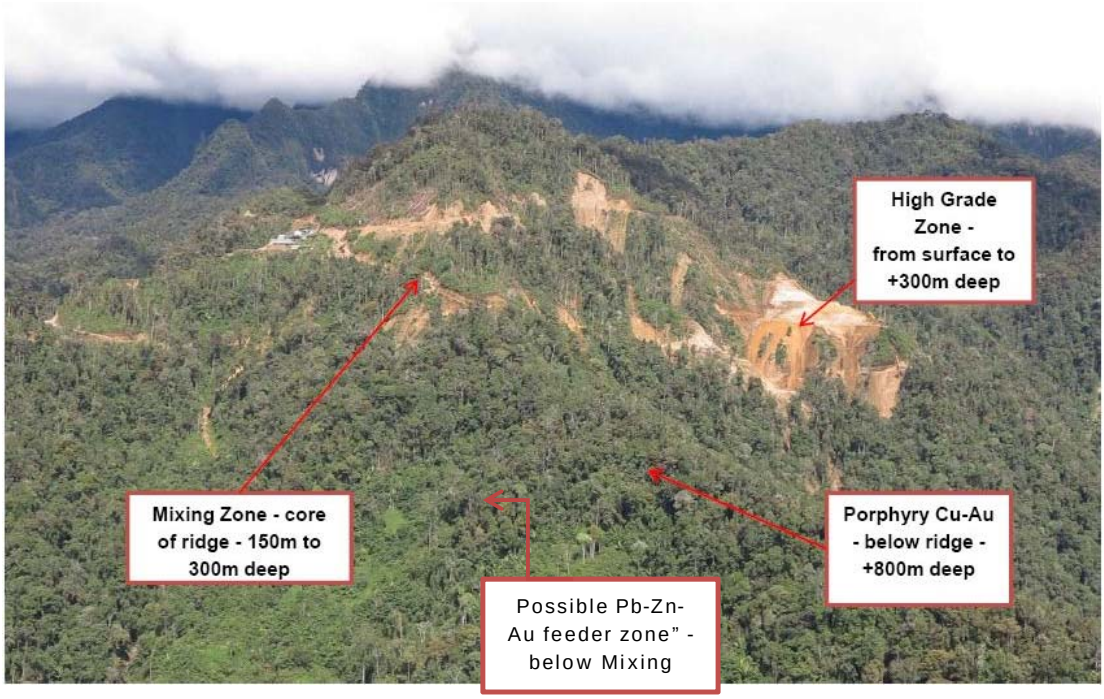


*Figure 1 - Nevera Prospect*

Under its current strategy, the Company aims for a transformational increase in Crater Mountain Project gold Resources via an aggressively re-invigorated exploration program.

The Company intends to purchase two drill-rigs to be permanently based at Crater Mountain and ramp drilling activity up to in excess of 10,000 cumulative linear metres per year.

Key exploration targets include:

- Increase in mineral inventory at the High-Grade Zone at the Nevera Prospect.
- Test the South Artisanal Works approximately 430 metres to the south of HGZ for potential as a second HGZ-style high-grade epithermal gold zone.
- Drill the approximately 300 metre area between the HGZ and Mixing Zone Inferred Resource with the potential for continuous mineralisation.
- Multiple longer drill-holes to properly test known targets for porphyry copper-gold mineralisation, starting with the area approximately 600 metres to the south of Mixing Zone and High Grade Zone.
- First drill-testing of the three prospective non-Nevera prospects, starting with Nimi, which has a similar geological setting to Nevera and historical rock chip samples with high gold content.

Subject to metallurgical testing and detailed mine planning, development at Nevara Gold Mine (at HGZ) is likely be resumed to create a modest and sustainable commercial gold operation to partly self-fund the expanded exploration activities described above. Nevera Gold Mine, has an existing plant capable of producing 200-250oz of payable gold per month (based on existing plant equipment capacities, assuming 600 tonnes of ore processed per month with a feed grade of 18-21g/t and a processing recovery of 50-60%). Subject to conformational studies it is likely that the plant will be relocated to a lower level with the aim to complete the development of a new adit at the 1,930 level to access the highest grade N1 and L1 veins within the HGZ Resource.