



GOLD MOUNTAIN LIMITED

ASX:GMN

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ASX RELEASE

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30 October 2018

QUARTERLY ACTIVITIES REPORT

FOR THE QUARTER ENDED 30 SEPTEMBER 2018

Gold Mountain Limited, (ASX: GMN) advises its activities during the July-September 2018 quarter.

HIGHLIGHTS

- Encouraging results for rock chip samples for Mongai Creek, returning maximum results of 0.15 g/t Au, 0.27% Cu and 0.1% Mo.
- Petrographic report for eight samples from Mongai Creek received, confirming the expected diagnostics of porphyry Cu/Au mineralisation, hydrothermal alteration, porphyritic texture, and primary mineralogical compositions within several of the samples.
- Helicopter-assisted drill programme initiated at Mongai Creek; one hole (MCD001) completed in the reporting period.
- Visible copper and molybdenite mineralisation observed in first hole MCD001; plus diagnostic characteristics of porphyry copper-gold system identified.
- Bulk test-pit sampling plant successfully commissioned at Crown Ridge.



DETAILED ACTIVITIES

Mongai Creek Exploration

During the quarter, the Company announced¹ the results for 35 rock samples and petrology studies from its Mongai Creek Project (Figure 1).

A total of 22 samples from outcrop returned maximum results of 0.15 g/t Au, 0.27% Cu and 0.1% Mo. Thirteen creek float samples returned maximum results of 0.44 g/t Au, 0.6% Cu and 150 ppm Mo. Results are shown thematically and in context of the interpreted geology in Figure 1.

This area has never before been sampled and these are the first laboratory analytical results for the area. These exploration results support the various observations of coarse and angular gold, panned from outcrop and from river sediment². The mineralised outcrops are contained within an elliptical rim structure of ~1.6 km x ~1.2 km. Drainage sheds from both sides of the narrow elliptical rim (Figure 1). The mineralisation is hosted in porphyritic diorite that is overprinted by late stage phyllic (quartz-sericite-pyrite) alteration. Inspection of artisanal workings confirmed that gold is shedding from the altered intrusive rocks in the hills flanking the drainage.

These results are encouraging as they fit in the general interpretation of the current geological system and confirm the presence of mineralising fluids in it.

Full results for all samples are shown in

¹ First reported in ASX Announcement of 28 August 2018: 'Encouraging Results for Rock Chip Samples and Petrology Study At Mongai Creek'. Competent Person: Mr Douglas Smith. Download [here](#)

² First reported in ASX Announcement of 13 June 2018: 'Exploration Results Show Strong Indications for Potentially Large Porphyry Gold-Copper System'. Competent Person: Mr Douglas Smith. Download [here](#).



Table 1. Photos for samples 41733 and 41735 are shown in Figure 2 and Figure 3 respectively.

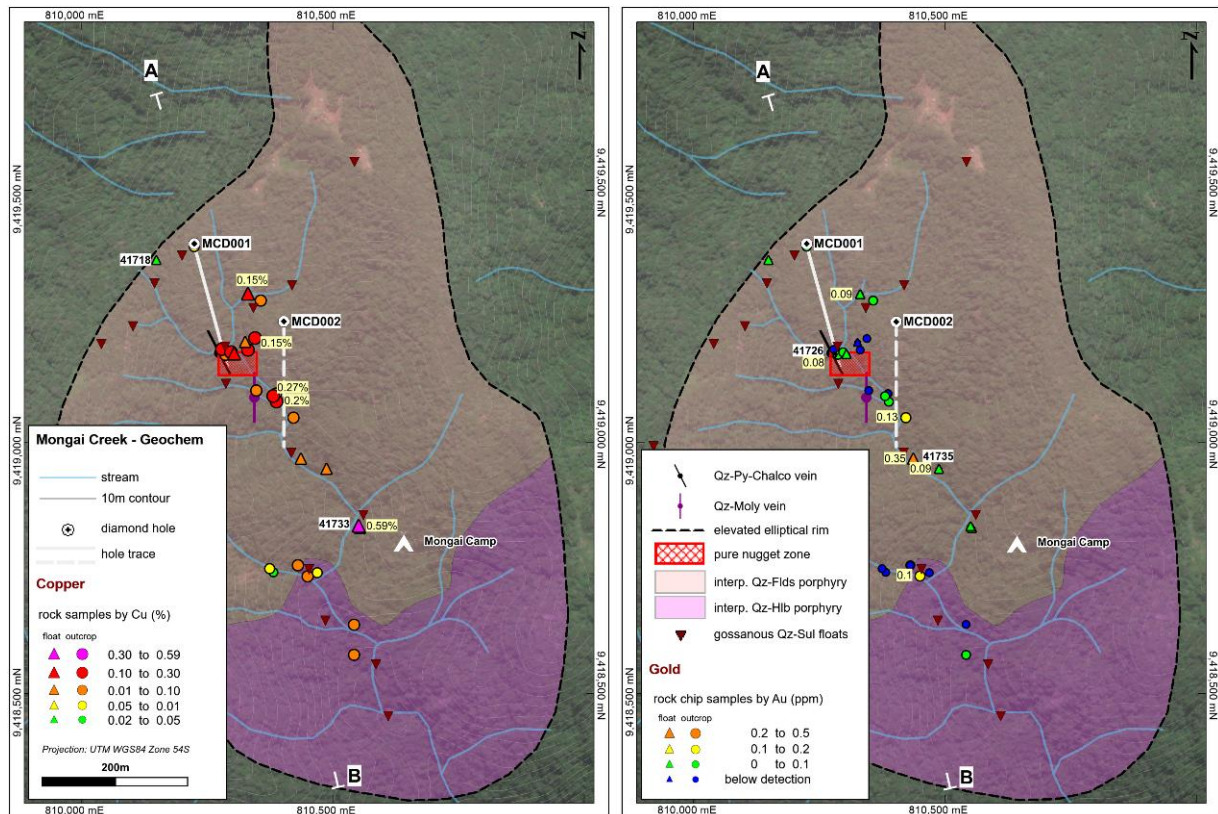


Figure 1 Results of 35 rock samples, and geological interpretation at Mongai Creek. Section line A-B shown (see Figure 5)



Figure 2. Porphyritic hornblende microdiorite float sample 41733: 0.59% Cu, 0.05 g/t Au. The rock has good preservation of primary porphyry texture and early, localised effects of potassic alteration are manifest in development of minor patchy biotite and actinolite, accompanied by minor magnetite, pyrite and trace chalcopyrite (pencil for scale).



Table 1 Results for rock samples from Mongai Creek

Sample No.	Type	Easting	Northing	ME-MS41 Au ppm	Au-SCR22AA Au ppm	Au-AA26D Au ppm	ME-MS41 Cu ppm	ME-MS41 Mo ppm	ME-MS41 Ag ppm
41701	Outcrop	810542	9418580	0.03			500	1.45	0.09
41702	Outcrop	810542	9418640	<0.02			178.5	1.1	0.07
41703	Outcrop	810387	9419099	<0.02			326	3.3	0.19
41704	Outcrop	810287	9419176	0.08	0.11	0.12	988	951	1.77
41705	Outcrop	810331	9419186	<0.02			1480	20.3	0.26
41706	Outcrop	810345	9419209	<0.02			1510	47.6	0.56
41707	Outcrop	810469	9418743	<0.02			92.1	4.04	0.07
41708	Outcrop	810422	9419051	0.13	0.11	0.09	148.5	45.4	0.59
41709	Outcrop	810388	9419083	0.02			1990	20.2	0.54
41710	Outcrop	810381	9419094	0.03	0.06	0.09	2730	16.15	1.06
41711	Outcrop	810348	9419105	<0.02			709	61.8	0.19
41712	Outcrop	810348	9419105	<0.02			449	353	0.24
41713	Outcrop	810450	9418736	0.1			148	117	3.12
41714	Outcrop	810431	9418758	0.02			156.5	4.46	0.1
41715	Outcrop	810431	9418758	<0.02			201	4.24	0.09
41716	Outcrop	810382	9418744	<0.02			22	2.05	0.03
41717	Outcrop	810375	9418751	<0.02			50.8	10.8	0.05
41718	Floater	810149	9419363	0.04	0.05	0.06	40.1	24.5	0.32
41719	Outcrop	810225	9419391	0.04	0.07	0.07	56.3	4	0.35
41720	Float	810331	9419295	0.09	0.04	0.04	659	146	0.08
41721	Float	810331	9419295	0.03	0.03	0.03	928	77.5	0.25
41722	Float	810331	9419295	0.02	0.06	0.09	1540	64.6	0.07
41723	Float	810331	9419295	0.04	0.18	0.06	1500	43.2	0.05
41724	Outcrop	810357	9419284	<0.02	0.04	0.06	722	3.35	0.37
41725	Outcrop	810357	9419284	0.04	0.04	0.04	664	3.95	0.08
41726	Outcrop	810279	9419187	<0.02			1150	4.36	0.21
41727	Outcrop	810297	9419181	0.05	0.15	0.05	1150	159	1.66
41728	Outcrop	810297	9419181	0.05	0.06	0.07	1260	324	1.32
41729	Float	810326	9419200	<0.02			288	16.3	0.21
41730	Float	810304	9419176	0.02			1420	60	0.91
41731	Float	810554	9418830	0.06			288	11.65	1.45
41732	Float	810551	9418834	0.02			85.9	53.4	0.57
41733	Float	810551	9418834	0.03	0.04	0.03	5910	34.3	0.84
41734	Float	810488	9418948	0.09	0.12	0.13	116	93.9	0.72
41735	Float	810437	9418968	0.35	0.39	0.44	227	51	1.04



Figure 3 Silica flooded diorite float sample 41735: 0.44 g/t Au, 227 ppm Cu. Large (up to 10mm long) pyrite cubes. Note several partial dodecahedral and cubic vugs left after leaching has removed sulphides (pencil for scale).

During the reporting period July-September 2018, results of petrographic analyses have been received for eight rock samples from outcrop and float³. The work, undertaken by consultant Dr. Paul Ashley, confirmed the presence of chalcopyrite (CuFeS_2) and covellite (CuS), and provided important context for the geological framework and paragenesis at Mongai Creek. Some samples exhibited diagnostic potassic alteration of K-feldspar, hydrothermal biotite, magnetite and actinolite. Sulphide mineralisation is both disseminated and in vein-hosted in most samples (e.g. Figure 4).

The petrographic report concludes: *“The characteristics of mineralisation and hydrothermal alteration, as well as the commonly porphyritic texture and primary mineralogical compositions of several of the samples, show that the sample suite has some analogies to porphyry Cu/Au systems.”*

These results are encouraging as they fit in the general interpretation of the current geological system and confirm the presence of mineralising fluids in it.

³ First reported in ASX Announcement of 28 August 2018: ‘Encouraging Results for Rock Chip Samples and Petrology Study at Mongai Creek’. Competent Person: Mr Douglas Smith. Download [here](#)

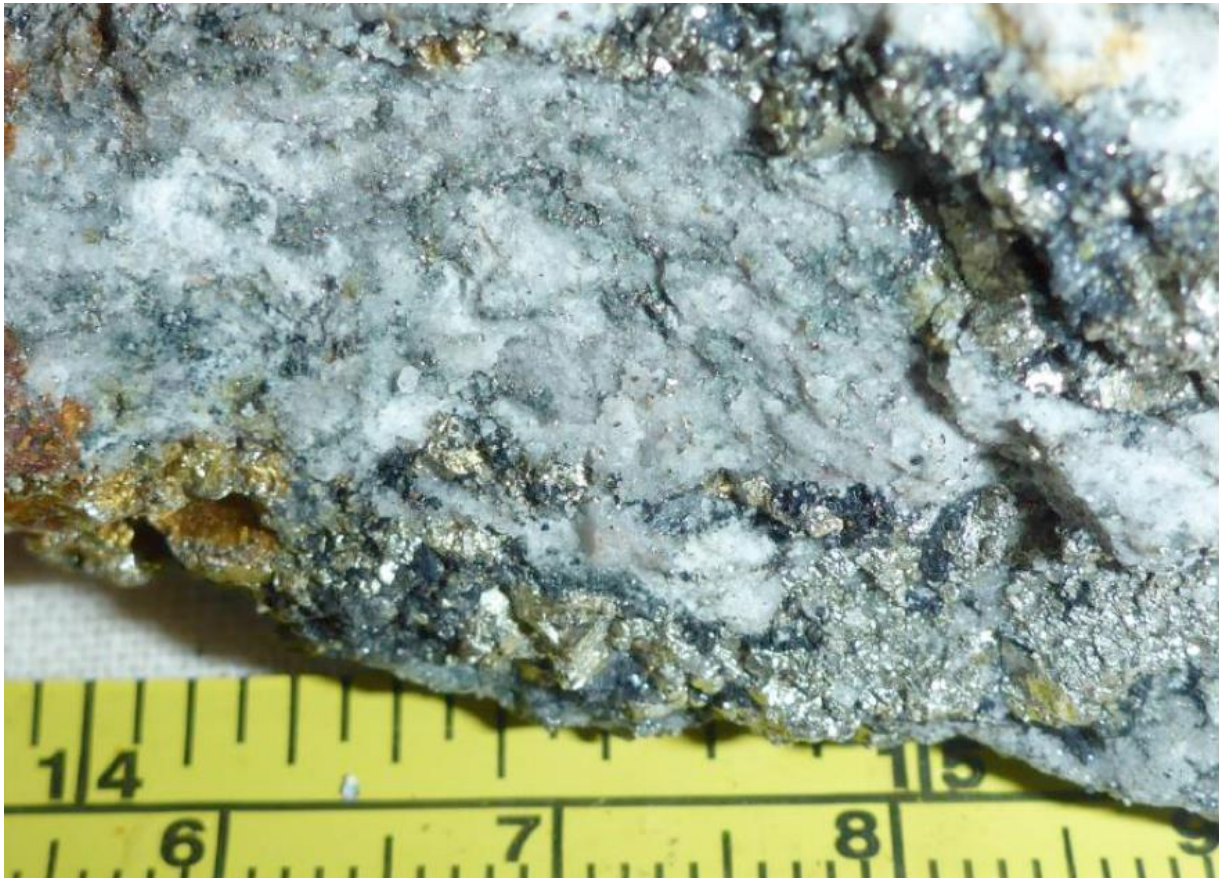


Figure 4. Sample MCP2 - The rock contains minor disseminated magnetite, perhaps as part of the interpreted potassic alteration, and magnetite is a locally significant component of veins where it occurs as irregular to locally sub-radiating and bladed texture aggregates up to 1.5 mm across, associated with pyrite. Minor disseminated pyrite occurs throughout the rock, in part related to potassic alteration and there are also substantial amounts in aggregates up to 4 mm long in veinlike masses. Pyrite appears to be paragenetically later than magnetite, with the latter partly replaced by bladed (specular) hematite. Chalcopyrite aggregates up to 0.6 mm across are also associated with pyrite, as well as occurring discretely, with slight rimming of chalcopyrite by supergene covellite. No particulate gold was observed.

During the reporting period July-September 2018, diamond drilling of maiden drill hole MCD001 was completed at a depth of 521 m⁴. This hole was collared on the rim of the interpreted circular structure and was drilled towards the centre of the interpreted mineralised system, with the end-of-hole being roughly directly below the mapped and sampled outcropping mineralisation at surface (Figure 1).

Diagnostic characteristics of a porphyry Cu-Au mineralisation are present throughout the hole (Figure 5). The drill core shows extensive development of stock-worked and sheeted quartz-pyrite veins within porphyritic diorite. Minor chalcopyrite and covellite are present in some veins (Figs 6 – 9). The drill rig was mobilised to a second drill location to test a potentially higher-grade part of the mineralised system.

⁴ First reported in ASX Announcement of 28 August 2018: 'Encouraging Results for Rock Chip Samples and Petrology Study at Mongai Creek'. Competent Person: Mr Douglas Smith. Download [here](#)

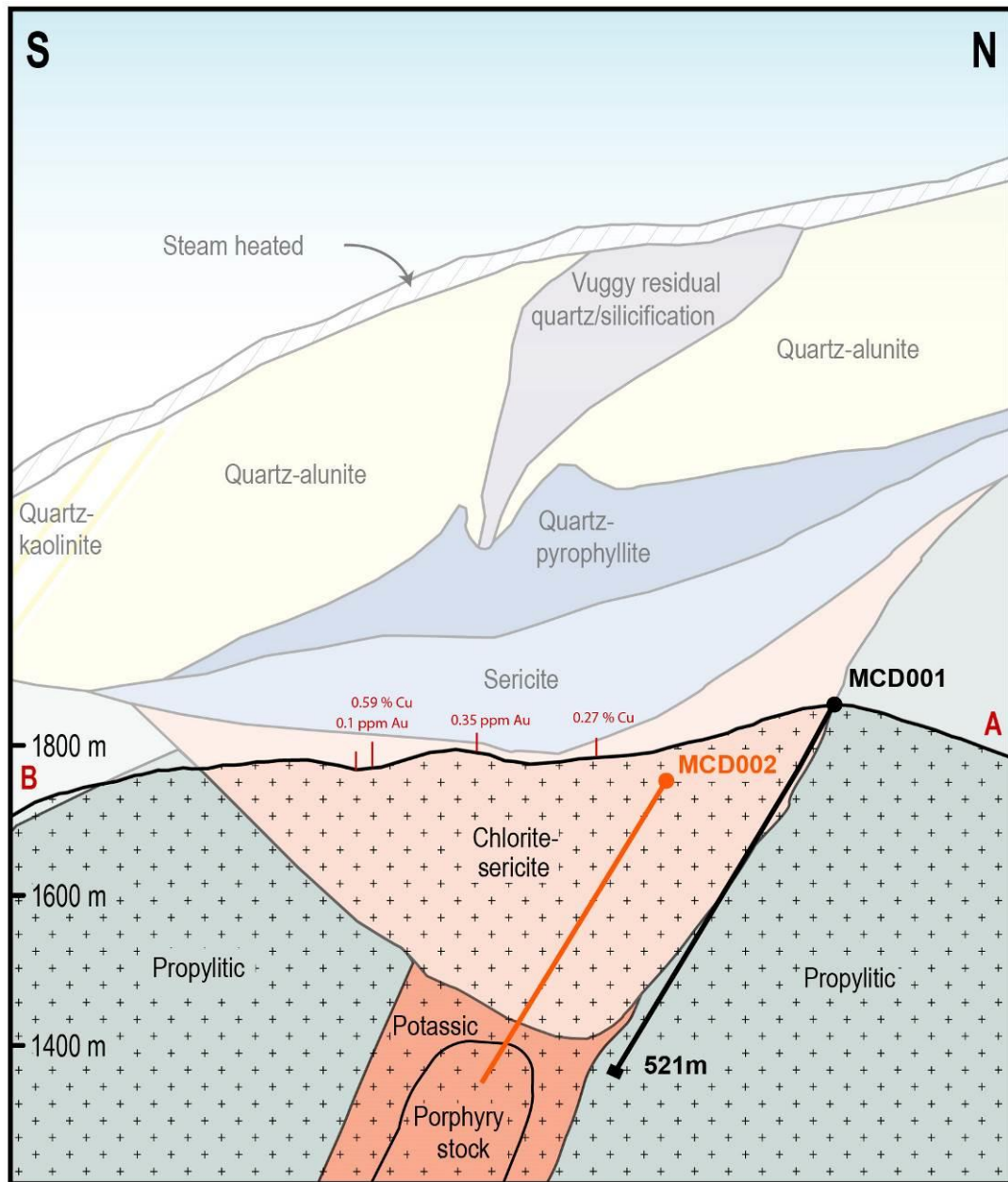


Figure 5 Conceptual cross section for MCD001, showing the various alteration assemblages encountered in the hole with respect to the theoretical locations of low grade cores and potential ore zones. Surface sampling results reported in this announcement shown. Next planned hole MCD002 shown as orange trace.



Figure 6. MCD001 - 124.7 metres down-hole. Quartz-sulphide veins in porphyritic diorite

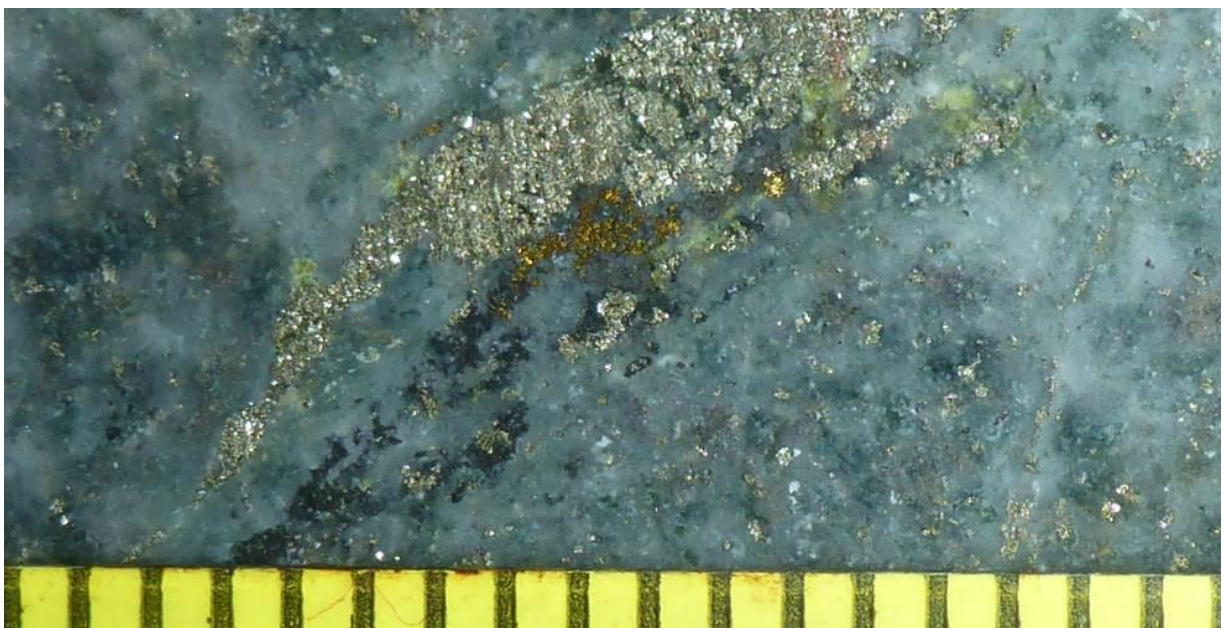


Figure 7. MCD001 - 212.7 metres downhole. Chalcopyrite (CuFeS_2) and pyrite in altered porphyritic diorite. Black covellite (CuS) extends from the chalcopyrite downwards on LHS (Scale: millimetres)



Figure 8. MCD001 - 273.7 metres downhole. Quartz -pyrite-chalcopyrite vein in altered diorite



Figure 9. MCD001 - 317.6 metres downhole. Mosaic brecciated diorite with quartz-pyrite cement

Table 2. Details for Diamond drill hole MCD001

Hole ID	Easting WGS64 Zone 54S	Northing WGS64 Zone 54S	RL (m)	Azimuth (mag) deg	Inclination (deg)	Final Depth	Target
MCD001	810225	9419395	1860	165	-60	512	Test NW-SE, NE-SW, possible dilatational jog and porphyry mineralisation



Crown Ridge Exploration

Details of the diamond drilling program at Crown Ridge, drilled between October 2017 and June 2018, were presented during the July-September 2018 reporting period⁵. This drilling program had the following aims:

- Determine the stratigraphy of the Timun Conglomerate unit, and to define important contacts to guide future exploration of a hard-rock epithermal target.
- Target conceptual high-grade gold mineralisation within structurally-controlled quartz-pyrite veins around the rim of the interpreted volcanic crater
- Obtain samples for petrological studies of any alteration or mineralisation zones within the drill core

Of the 19 diamond core drill holes (totalling 3761.8m), assay results were reported for three drill holes only to date (CRD001, CRD004, CRD005). Sampling was not undertaken on those intervals of the drill core that were interpreted to be unprospective on the basis of the geological core logging. A full listing of assay results received to date was presented in the ASX announcement.

During the reporting period of July to September 2018, details of the first ten 1 x 1 m pits from the pitting program were presented⁶. Assay results were variable, with a best result of 410 mg/m³ between 2.0–2.5 m depth in pit CRP006, within a 3.0-m interval that averaged 235 mg/m³. All other intervals returned grades of below 100 mg/m³.

A purpose-built, mobile bulk sampling plant for testing the nugget-bearing gold and platinum unit was delivered to Crown Ridge, and successfully commissioned⁷. The plant was commissioned to improve processing capacity and speed for future bulk samples from the Crown Ridge project.

Sak Creek Exploration

No new results are reported in the reporting period from the Sak Creek prospect.

⁵ First reported in ASX Announcement of 12 July 2018: 'Crown Ridge Prospect Results Update'. Competent Person: Mr Douglas Smith. Download [here](#); and in in ASX Announcement of 13 July 2018: 'Addendum to ASX Announcement 12 July 2018 Crown Ridge Prospect Results Update'. Competent Person: Mr Douglas Smith. Download [here](#)

⁶ First reported in ASX Announcement of 12 July 2018: 'Crown Ridge Prospect Results Update'. Competent Person: Mr Douglas Smith. Download [here](#)

⁷ First reported in ASX Announcement of 24 July 2018: 'PNG Exploration Programme Forges Ahead'. Competent Person: Mr Douglas Smith. Download [here](#)



PLANNED EXPLORATION OCT-DEC 2018 PERIOD

Mongai Creek

The Company is planning an extensive soil sampling programme, to cover the entire catchment basin at Mongai Creek. The aim of the programme is to combine the information from multi-element geochemistry data with the information derived from the first two diamond drill holes to produce a comprehensive 3D geological and alteration model to aid with future drill targeting. Further field mapping will also feed into this model.

The soil sampling may be followed up with either infill soil geochemical sampling, trenching, or both and will subsequently be followed by further diamond drilling.

Soil sampling is planned to commence in the October-December 2019 quarter, with first results available in the January-March 2019 quarter. The Company aims to generate drilling targets by the end of the April-June 2019 quarter.

Crown Ridge

Exploration at the Crown Ridge prospect has shifted to the identification of a potential hard-rock epithermal source for the free gold and platinum in soil that has been produced by the testing plants. By re-interpreting the currently available data (geophysics, diamond drilling, previous ridge-and-spur soil sampling, visible gold in angular quartz float in the creeks, and results from pitting), the Company now believes such a hard-rock source is likely to occur within a specific area within the catchment basin.

The exploration strategy therefore includes a grid-based soil geochemical sampling programme that will allow for accurate targeting after gridding of the results. The soil sampling may be followed up with either infill soil geochemical sampling, trenching, or both and will subsequently be followed by further diamond drilling.

Soil sampling is planned to commence in the October-December 2019 quarter, with first results available in the January-March 2019 quarter. The Company aims to generate drilling targets by the end of the April-June 2019 quarter.



Pitting and bulk sample processing using the new bulk sampling plant will continue; however, its focus is now on the creeks and an active 'wash' layer uncovered immediately below and adjacent to these creeks. These areas are very rich in gold and would be logistically easier to mine using a gravity recovery plant. Besides a further series of 1 x 1 m pits, the Company is planning several 5 x 5 m pits in the area to get more precise information on potential mining grades.

Sak Creek

The Company is planning an initial field exploration programme and in the next quarter will commission the construction of several helipads and a fly camp to support initial mapping and float sampling of the creeks where visible gold is reported from the creeks and from outcrop.

Exploration is planned to commence in the October-December 2018 quarter, with first results of mapping and float sampling to be reported in the January-March 2019 quarter.

HEALTH, SAFETY AND COMMUNITY ENGAGEMENT

Gold Mountain maintains a clean safety record and actively promotes strong health and safety policies.

The Company maintains an open dialogue with surrounding tribes and is providing community support by building and maintaining infrastructure, installation of a first aid post, and providing emergency relief. The labour force is sourced from the local community.

CORPORATE

The cash position of the company as of 30 September 2018 is \$1.36 million. The Company is fully funded for the next round of exploration activities. However, project financing discussions have commenced with a number of potential funding counterparties in anticipation of future exploration success.

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REPORTING IN COMPLIANCE WITH ASX LISTING RULES AND IN ACCORDANCE 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 the relevant market announcement. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified.

Where the Company has re-issued information in this quarterly report that has previously been issued with the written consent of the Competent Person, it has made reference to the original report name, the name of the Competent Person responsible for the original report, and the date and reference of the location of the original source public report for public access.

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ABOUT GOLD MOUNTAIN

Gold Mountain holds substantial areas within the fertile Au/Cu-endowed Papuan Mobile Belt that includes world-class mines (Figure 10). Most of the areas within the Exploration Licences (ELs) have never been explored using modern technology. Multiple targets have been identified within the licence area of approximately 2,000 km² (Figure 11). Current exploration focus is on three main prospects:

- Crown Ridge – field programmes have identified part of the catchment area where the source of abundant fine and coarse gold is likely to occur; current exploration working up to hard-rock drilling targets, expected to be of high-grade epithermal nature.
- Mongai Creek – discovery of outcropping porphyry Cu-Au style mineralisation, mapping and stream sampling indicate that there is good potential for a large-tonnage deposit in this area. Initial drilling identified the existence of porphyry-style mineralisation. Results from the drilling and surface geochemical sampling programmes, now underway, will allow the company to better target future drilling.
- Sak Creek – early-stage exploration identified strongly mineralised float samples from an interpreted potential low-sulphidation epithermal gold system; ridge-and-spur soil sampling has narrowed the target area down, and follow-up field activities are being planned.

Large areas remain to be assessed.

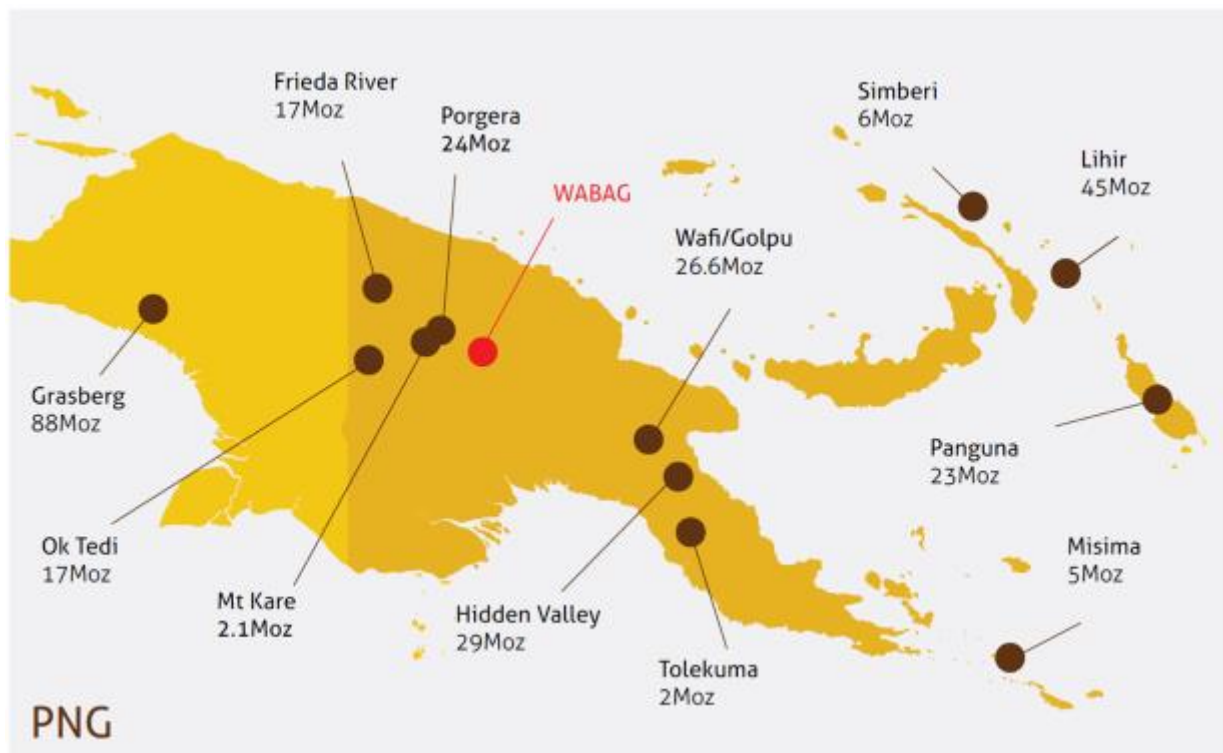


Figure 10. Location of the Wabag Project relative to major world class gold mines in Papua New Guinea

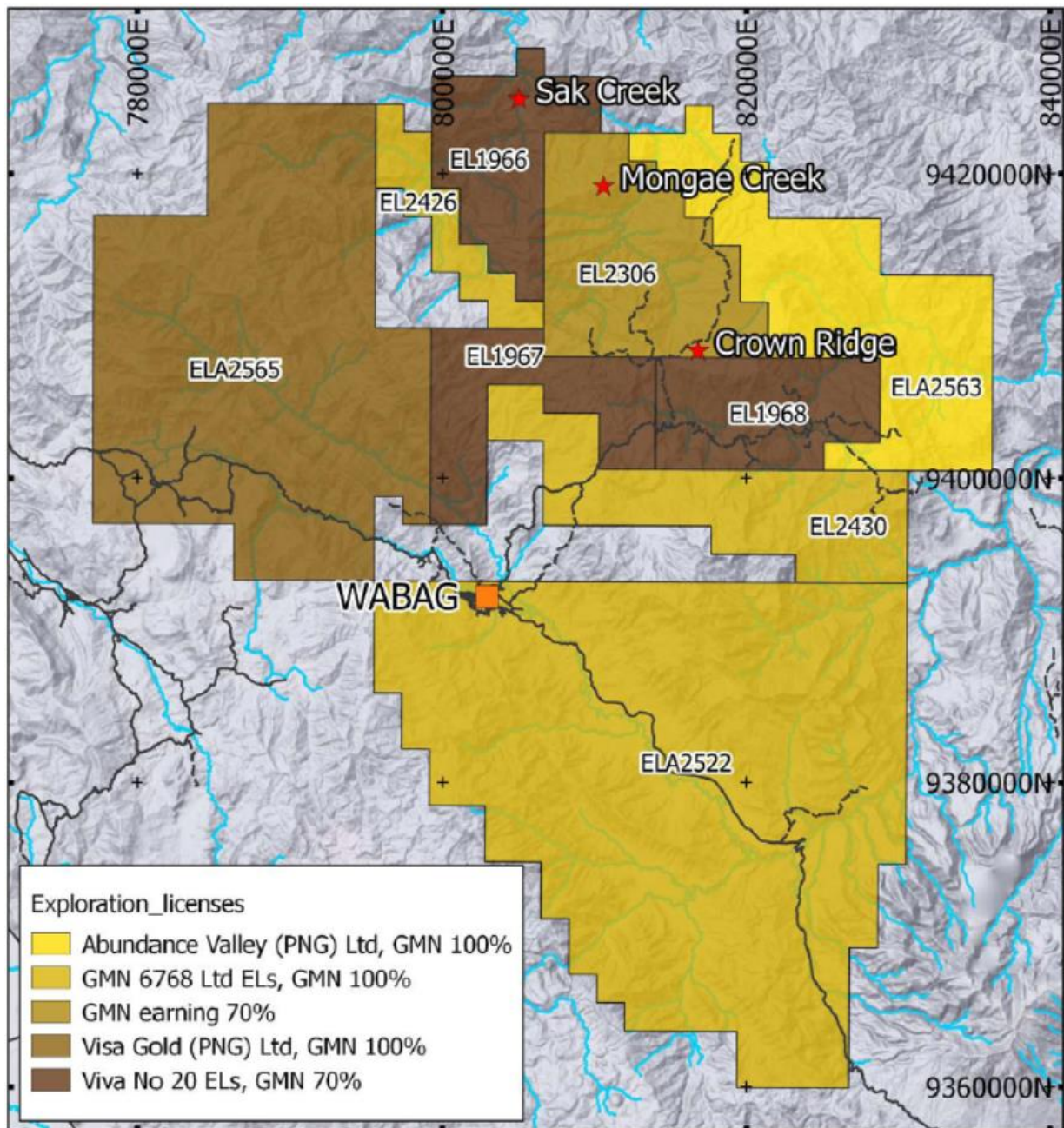


Figure 11. GMN exploration licences cover substantial areas within the fertile, Au/Cu-endowed Papuan Mobile Belt that includes world-class mines