

QUARTERLY ACTIVITIES REPORT
For the period ended 30 September 2022**About Crater Gold Mining Ltd**
ASX CODE: CGN

Crater Gold Mining Limited (“Crater Gold” or the “Company”) is focussed on the exploration of its highly prospective Crater Mountain Gold Project in Papua New Guinea (PNG), which includes two gold resources and evidence of potential copper-gold porphyry mineralisation. The Company is also exploring at the A2 Polymetallic and Golden Gate Graphite and Gold projects at Croydon in Queensland, Australia.

Capital Structure

Share Price: \$0.017
Market Cap: \$21.06m
Shares on Issue: 1,239,027,862

Board of Directors

Sam Chan
Non-Executive Chairman

Russ Parker
Managing Director

Thomas Fermanis
Deputy Chairman

Lawrence Lee
Non-Executive Director

Desmond Sun
Non-Executive Director

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CORPORATE

On 9 July 2021, the Company requested a voluntary suspension of its securities pending an announcement in respect of a material acquisition (**the Acquisition**). The Company announced on 16 September 2022 that, following comprehensive consideration, the Board of the Company had decided not to proceed with the Acquisition.

The Board is in the process of considering alternative strategies and has made submissions to ASX seeking ASX’s confirmation that if the Company implements its proposed alternative strategies (which largely involve continued exploration of the Company’s existing assets), that the suspension of trading in the Company’s securities will be lifted.

If ASX’s confirmation is provided, details regarding the Company’s proposed strategies will be announced in due course.

DEVELOPMENTS DURING THE QUARTER**CROYDON PROJECTS, NORTH QUEENSLAND****Summary**

- **HEM survey over 5 EPM’s in QLD targeting Gold, Graphite & Polymetallics completed**
- **EPM 28600 application at Croydon targeting gold and graphite**

On 28 July 2022, the Company announced that it had completed a helicopter borne Electro-Magnetic Survey (HEM), combined with aeromagnetic surveying, over all 5 of its Queensland based tenements at Croydon (**Figure 1**) (refer ASX announcement released 13 May 2022 titled “Aerial Electromagnetic Survey (HEM) to be

undertaken over North Queensland Croydon Tenements” and ASX announcement released 28 July 2022 titled “Survey completed – North Queensland Tenements”). Preliminary results have been received for the Company’s Croydon EPMs 8795 and 18616 targeting gold and graphite. The full results for all tenements are expected in November.

The Company holds five Exploration Permits Mining (EPM) in the Croydon region of North Queensland for a combined area of 227.2 km² (**Figure 1**).

ELECTROMAGNETIC SURVEY – NORTH QUEENSLAND CROYDON TENEMENTS

Currently, there is strong renewed interest in the Croydon area, particularly for gold, as evidenced by the many small to medium sized exploration companies who have taken up, or applied for, tenements covering most of the Croydon Goldfield and some of its surroundings. Recorded gold production from the Croydon Goldfield has been almost one million ounces. This is considered to offer considerable encouragement as modern day examination of similar worldwide occurrences of this size has often resulted in the discovery of previously unrecognised significant world class +one million ounce hard rock gold deposits.

HEM SURVEYING

HEM surveying is considered to be the optimum technical choice for evaluating the potential of the Croydon tenements as the technique has achieved outstanding success both in Australia and world-wide. The survey targeted graphite mineralisation, gold bearing quartz reef mineralisation and polymetallic mineralisation, and is capable of penetrating up to several hundred metres below ground surface. Survey flight lines were orientated E-W with a N-S line spacing of 400m with 200m infill line spacing where better anomaly definition was required.

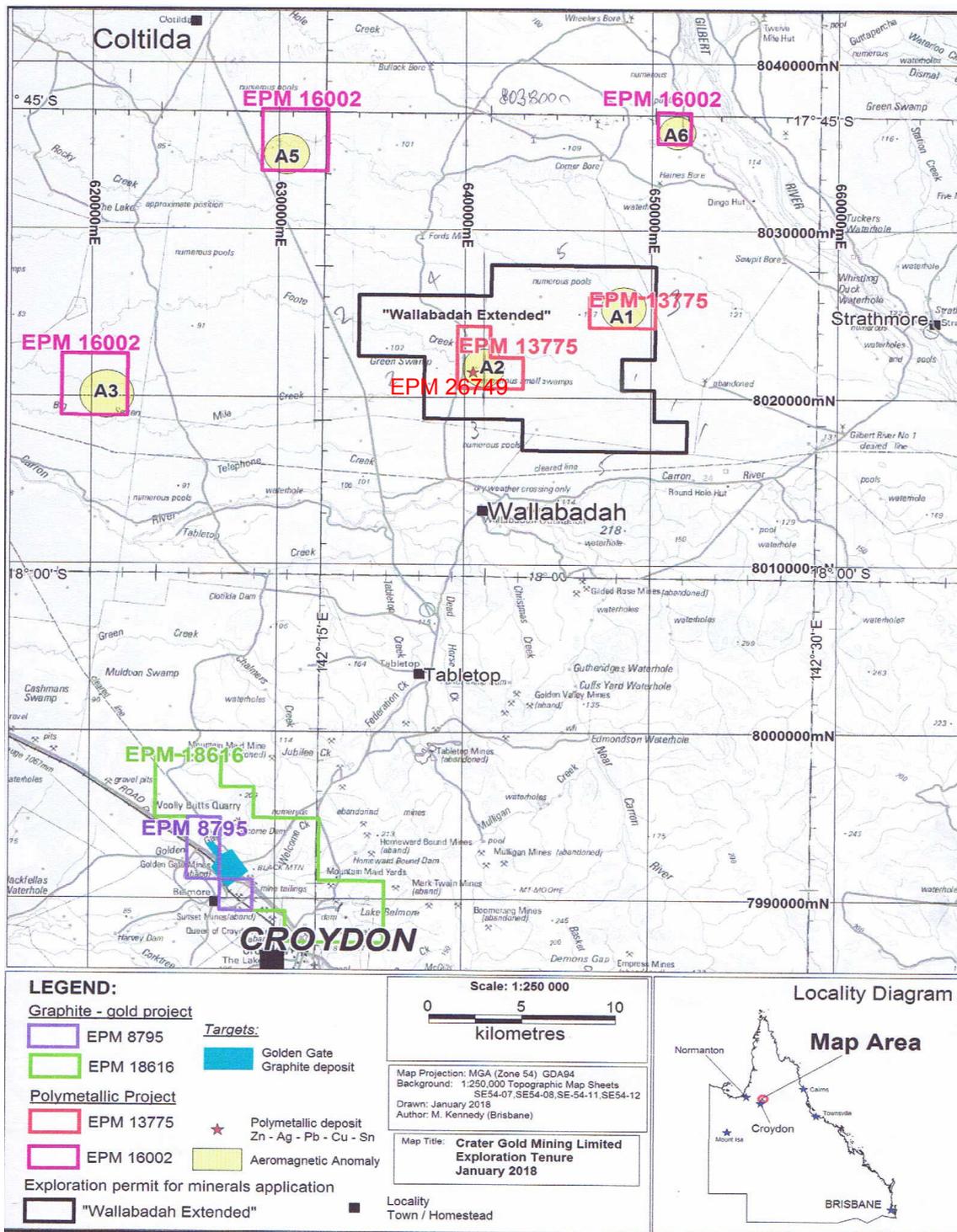


Figure 1: EPMs 8795, 18616, 13775, 16002, Wallabadah Extended EPM 26749 and Aeromagnetic Anomalies A1, A2, A3, A5 and A6.

Detection of gold bearing quartz reefs by the EM technique is dependent on there being a reasonable presence of sulphides associated with the gold mineralisation. However, detection of auriferous quartz reefs, even if they are low in sulphide content, will be enhanced by the fact that the Croydon Goldfield Au occurrences are usually closely associated with graphite mineralisation which provides an excellent EM response. Polymetallic mineralisation, where identified to date at Anomaly A2, is accompanied by pyrrhotite which also provides an excellent EM response.

To the Company's knowledge, detailed aerial EM surveying had not previously been conducted over the Company's EPMs or surrounding regions. However, some ground EM

surveying was undertaken in the 1930's to late 1980's and this identified numerous strong EM anomalies within EPM 8795 and along the western margin of EPM 18616 (**Figure 5**).

1. HEM SURVEY OF EPMs 8795 AND 18616

Survey flight lines in EPMs 8795 and 18616 were orientated E-W with a N-S line spacing of 400m. Infill lines at 200m spacing were undertaken where better anomaly definition was required (**Figure 2**). The 400m spaced lines involved a total of 177 line km of data acquisition within the two tenements. A total of 124.5 line km of 200m spaced infill lines were flown to better define anomalous areas.

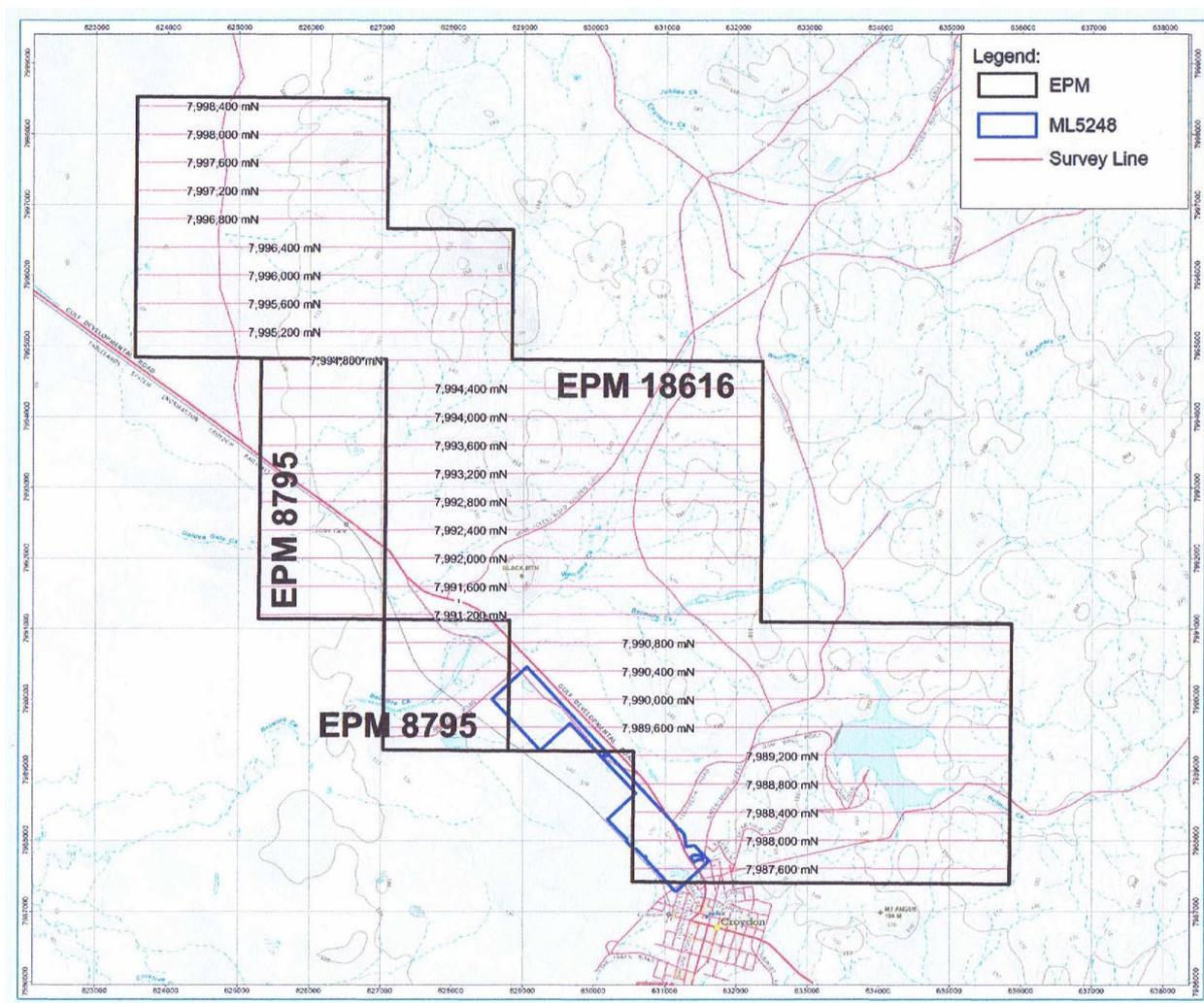


Figure 2: 400m spaced E-W flight lines, EPMs 8795 & 18616

GOLD TARGETS

There are around 60 old gold workings shown on **Figure 3**, within the Company's EPMS 8795 and 18616, but there are many more that exist that are not included. The gold deposits are contained within two main trends, one trending NW-SE along the eastern margin of EPM 18616 with the other trending through EPM 8795 and the western margin of EPM 18616. The latter trend has been the more productive, accounting for more than 50% of the gold produced to date from the Croydon Goldfield.

Of particular interest is the identification of possible extensions of the Golden Gate quartz reef system (western side trend). The old-time miners mainly worked the gold occurrences that were evident from quartz scree at ground surface and did very little sub-surface exploration. As many of the gold occurrences in the Croydon Goldfield did not crop out, they were often only discovered by persistent "blind" sinking of shafts.

It is considered likely that further review of the historical exploration and drilling data, combined with the EM results from the HEM survey from other areas within EPMS 8795 and 18616, will identify more gold prospects that warrant drilling and evaluation in addition to the Sunset North Prospect identified to date within EPM 8795. The Company is fortunate in that it has access to old archived reports and maps covering previous company exploration and Au mining activities in the Croydon area.

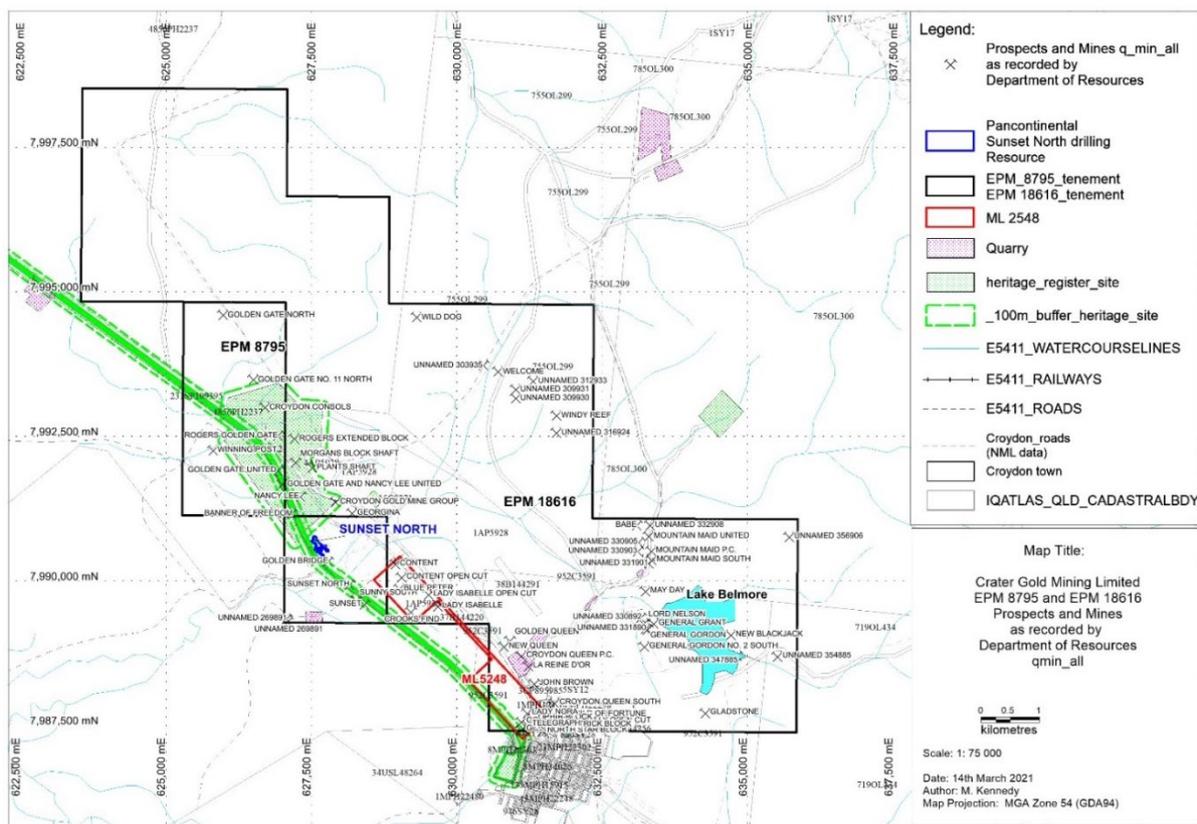


Figure 3: Location of some 60 old gold workings within EPMS 8795 and 18616. Many more exist but are not shown here.

GRAPHITE TARGETS

Graphite is an excellent conductor and generates strong EM anomalies. Significant EM anomalies within the area now covered by EPMs 8795 and 18616, have been identified in a NW-SE trending zone by previous old EM ground based surveys conducted in the 1930's to late 1980's (**Figure 4**). This zone has a strike extent of at least 12km, only around 2km of which is partly located within the restricted activities area of the Golden Gate Mining and Town Complex Heritage Area (**Figures 3, 4**).

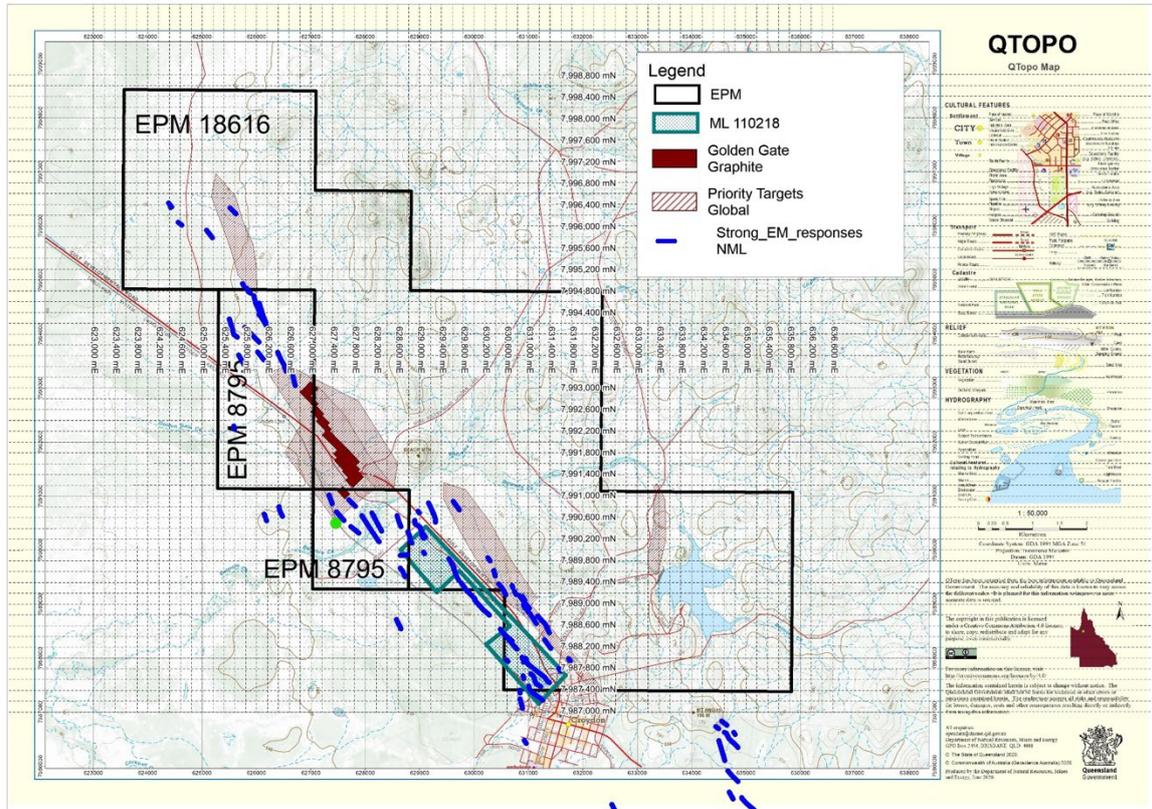


Figure 4: Location of previous (1930's – late 1980's) EM anomalies, EPMs 8795 and 18616

Previous exploration for graphite was undertaken by Central Coast Exploration NL and Pancontinental at Golden Gate within EPM 18616 which resulted in the discovery of extensive graphite mineralisation. Drill intercepts indicate the mineralisation has a north-westerly strike and a shallow easterly dip. Approximately two thirds of the graphite mineralisation at Golden Gate is now located within the Heritage and Buffer Zone which restricts exploration activities that would impact on the protected area. Specific permission is required to undertake exploration or mining activities within the Zones and comply with the conditions set.

The source of many of the previous EM anomalies is not known but it is expected that they will encompass a mixture of sources.

HEM SURVEY OF EPMs 13775 AND 26749 TARGETING POLYMETALLICS

Survey flight lines were orientated E-W with a N-S line spacing of 400m. Infill lines at a spacing of 200m spacing were undertaken where better anomaly definition was required. The 400m spaced E-W flight survey lines for EPMs 13775 and 26749 are shown on **Figure 5**. The 400m spaced lines involved a total of 346 line km of data acquisition. A total of 16.0 line km of 200m spaced infill lines were flown to better define anomalous areas.

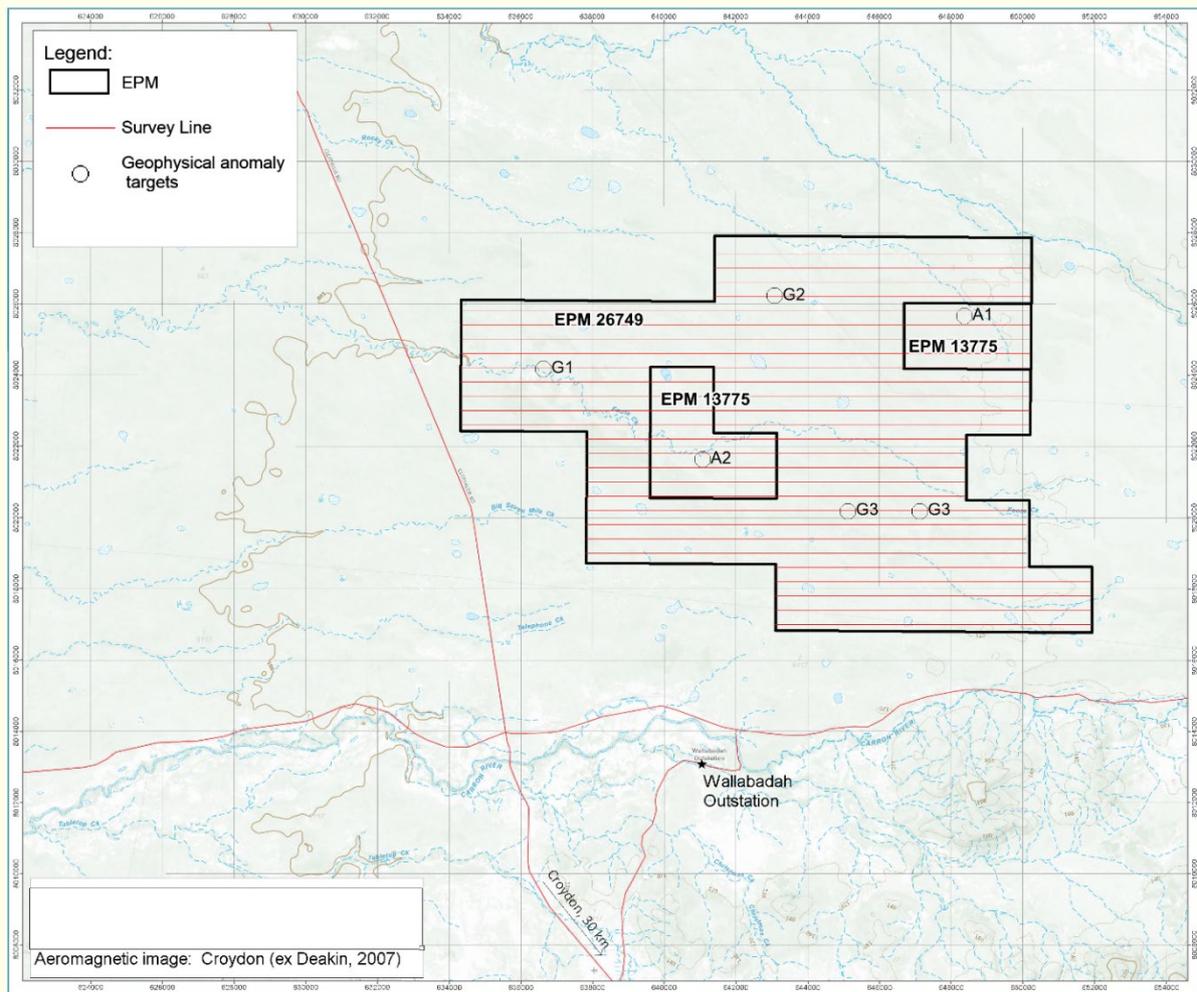


Figure 5: 400m spaced E-W flight lines, Aeromagnetic Anomalies A1, A2 and Residual Gravity Anomalies G1, G2 and G3, EPMs 13775 & 26749

The targets in these 2 EPMs are polymetallics which would be expected to generate strong EM anomalism due to their expected high sulphide content, especially pyrrhotite. Widespread sulphide mineralisation was previously discovered in drilling by the Company at Anomaly A2 in EPM 13775 (*refer to ASX Announcement released on 28 February 2012 titled "Polymetallic-tin massive sulphide drill intercepts show potential for discovery of significant mineral deposits at Croydon, Qld"*). It is hoped that the HEM survey will define extensions of the known mineralisation at Anomaly A2 and generate new priority drill targets. It is also hoped that priority targets will also be identified in the Anomaly A1 area. In addition, if as interpreted, the prominent NW-SE and WNW-ESE trending faults within both tenements are hosting polymetallic mineralisation feeder zones to the Anomaly A1 and A2 mineralisation (**Figure 6**), it is hoped that identification of new priority targets will be identified.

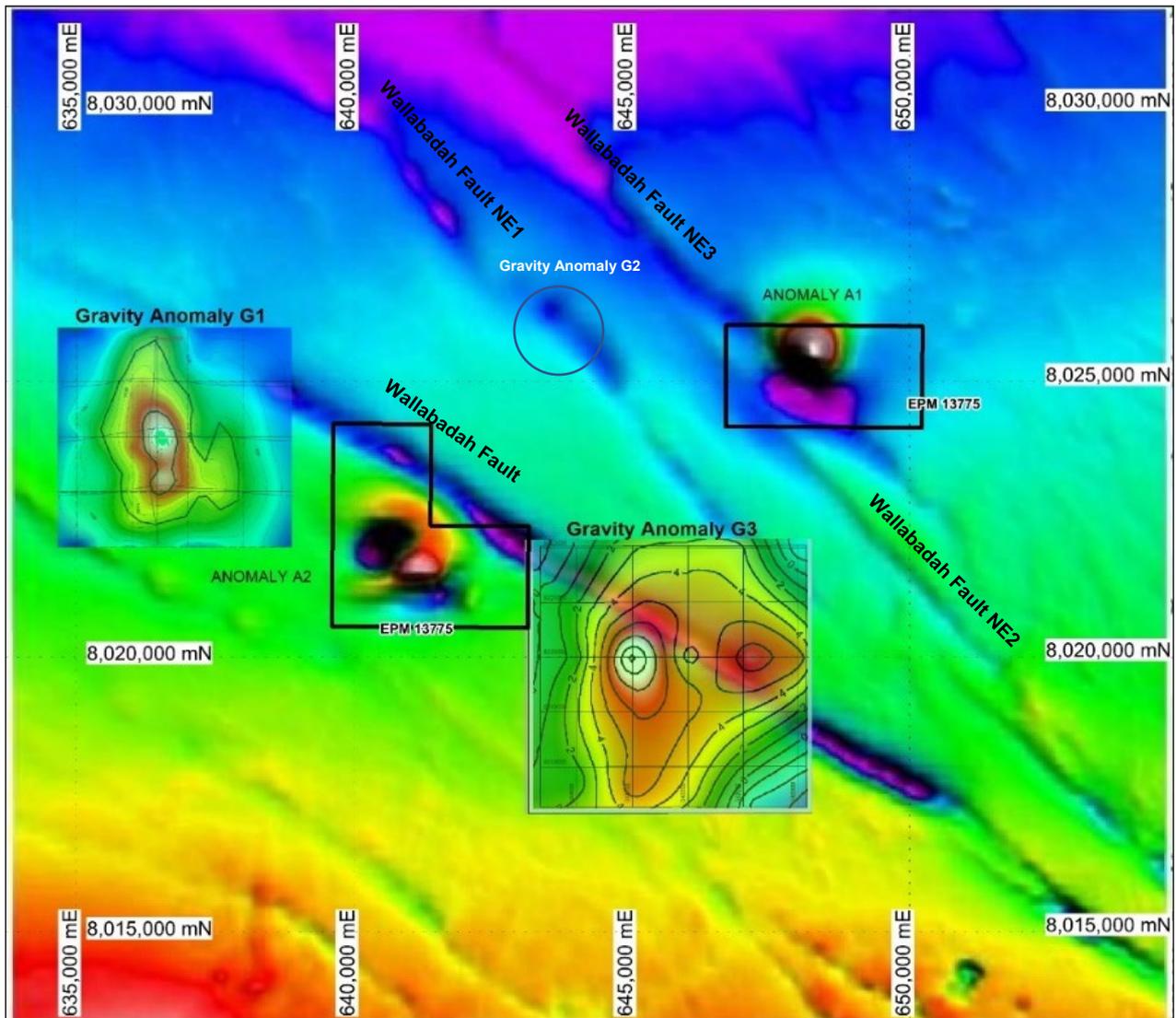


Figure 6: Wallabadah NW-SE and WNW-ESE faults, Anomalies A1 and A2 and Residual Gravity Anomalies G1, G2 and G3 overlain on an aeromagnetic scene, EPMs 13775 and 26749.

HEM SURVEY OF EPM 16002

There are three aeromagnetic anomalies, A5, A6 and A3 located within EPM 16002. All three of these were included in the HEM survey.

Survey flight lines were orientated E-W with a N-S line spacing of 400m. The 400m spaced E-W flight survey lines for the three separate blocks of EPM 16002 are shown on **Figures 7, 8 and 9**. The 400m spaced lines for all three aeromagnetic anomalies involved a total of 7.25 line km of data acquisition. A total of 18.0 line km of 200m spaced infill lines were flown to better define anomalous areas.

Anomaly A5

Aeromagnetic Anomaly A5, was ranked by geophysical consultant, Roger Deakin, as the most prospective aeromagnetic anomaly after Anomaly A2 and is located about 17km NW of Anomaly A2 (**Figure 7**). This aeromagnetic anomaly is a small discrete, almost circular low, approximately 30 nT in amplitude, 800m in diameter and located in the central western side of the encompassing EPM block (**Figures 7, 8**). It occurs immediately SW of a larger anomaly complex that is elongated NW-SE, is about 20km in length and about 10km in width. It was initially investigated by Spatiotemporal Geochemical Hydrocarbon (SGH) soil sampling. This

indicated co-incident polymetallic-silver-copper anomalism which was partly overlapped by gold anomalism all of which directly overlies the central part of the main (western) aeromagnetic low which is a reversed magnetic high feature (refer to ASX Announcement released on 12 June 2018 titled “Gold and Silver-Copper-Polymetallic Anomalies Identified from SGH Soil Sampling at the A5 Anomaly Prospect, North Qld”). This has provided encouragement as the intersected A2 polymetallic mineralisation is also associated with a magnetic low which is a reversed magnetic high.

Figure 8 shows the 4 sub-block tenement area of EPM 16002 that covers Anomaly A5 and the 400m spaced E-W flight survey lines. The 400m spaced lines for Anomaly A5 involved a total of 36.25 line km of data acquisition. A total of 9.0 line km of 200m spaced infill lines were flown to better define anomalous areas.

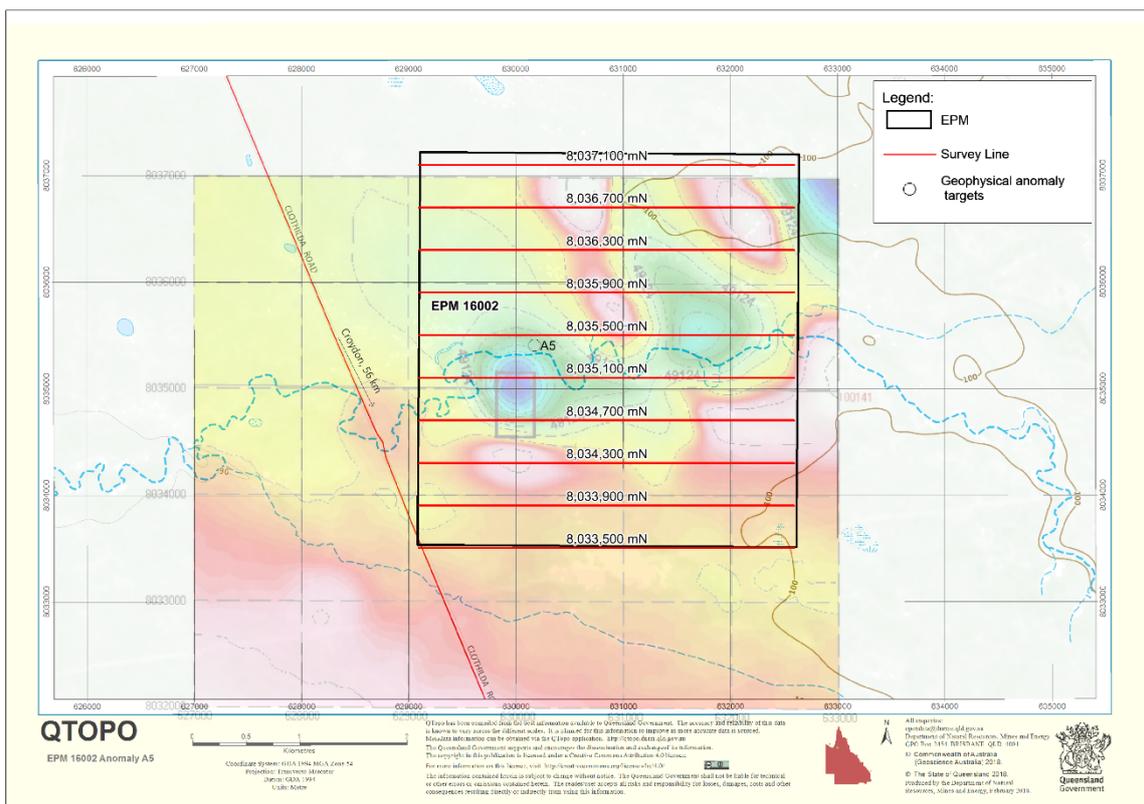


Figure 7: 400m spaced E-W flight lines, Aeromagnetic Anomaly A5, EPM 16002

Anomaly A6

Aeromagnetic Anomaly A6 is located about 18km NE of Anomaly A2 (**Figure 6**). It consists of a N-S elongated low and a sub-circular, but spatially complex, high (**Figure 8**). The anomalous high is immediately east of the low and the overall anomaly complex has affinities to Anomaly 2.

Figure 8 shows the 1 sub-block tenement area of EPM 16002 that covers Anomaly A6 and the 400m spaced E-W flight survey lines. The 400m spaced lines for Anomaly A6 involved a total of 35.0 line km of data acquisition. A total of 9.0 line km of 200m spaced infill lines were flown to better define anomalous areas.

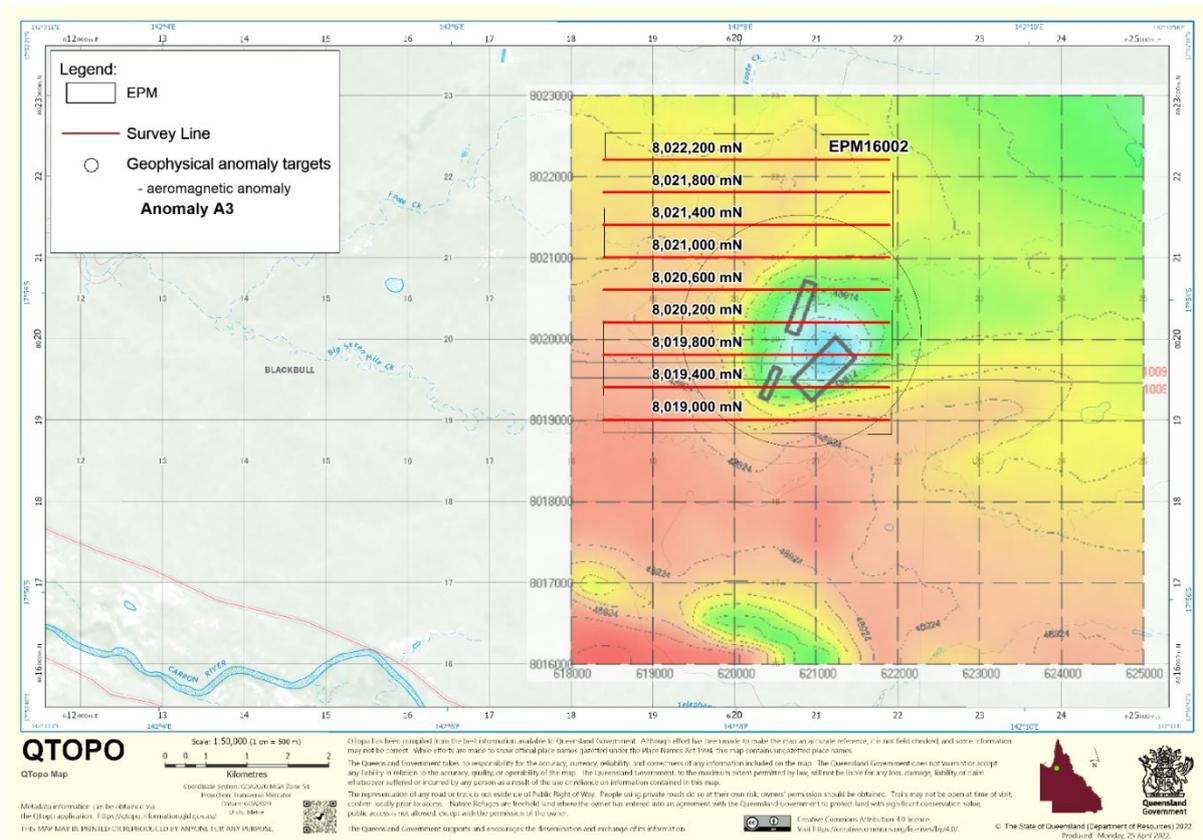


Figure 9: Aeromagnetic Anomaly A3 with 400m spaced E-W Survey lines shown in red, EPM 16002 (the rectangular shapes are associated with magnetic data modelling).

EPM 2860 APPLICATION AT CROYDON

The Company announced that it applied for 3 additional sub-blocks at Croydon in North Queensland. The Exploration Permit for Minerals (EPM) 2860 application consolidates the Company's tenement position at Croydon.

EPM 2860 adjoins the Company's current Croydon tenement, EPM 18616. The Company also holds EPM 8795 at Croydon (**Figure 10** shows the location of EPM 2860 relative to the Company's existing EPMs 18616 and 8795). Combined, they constitute the Croydon Golden Gate Graphite Prospect and the Sunset North Gold Prospect.

In the meantime, the Company remains focused on the renewal process of ML510 and is working closely with the Mineral Resources Authority (MRA) to secure a new ten (10) year mining license, in addition to working in parallel for the renewal and grant of exploration licenses at the Company's Crater Mountain Gold Project.

STATUTORY COMPLIANCE AND REPORTING

For the status on all tenements, please refer to the tenement schedule.

POST QUARTER EVENTS

- **Drilling program at Croydon to commence in November 2022**
- **Preliminary HEM results received for Croydon EPM's 8795 & 18616 targeting Gold & Graphite**

DRILLING PROGRAM TO TEST HIGH PRIORITY TARGETS IDENTIFIED BY THE RECENT HEM SURVEY

On 10 October 2022, the Company announced it signed an agreement with Eagle Drilling NQ Pty Ltd to commence a drilling program at the Company's Croydon Projects in North Queensland.

The recently completed Helicopter Electromagnetic Survey (**HEM**) program (*refer ASX announcement released 5 October 2022 titled "Preliminary HEM results identify high priority targets at the Croydon Project, Nth Qld*) identified a number of high priority targets. A number of these targets will be tested with an initial program of RC drilling. The details of the drilling program will be announced closer to the start date of the drilling. The Company will drill a number of these targets with an initial RC drilling program and follow up early next year with a combination of diamond and RC drilling.

PRELIMINARY HEM RESULTS IDENTIFY HIGH PRIORITY TARGETS AT THE CROYDON PROJECT, NORTH QUEENSLAND

HIGHLIGHTS

- **Preliminary results have been received from initial assessment of data from the Helicopter Electromagnetic Survey (HEM) flown over the Croydon gold-graphite Project (EPMs 8795, 18616) in North Queensland.**
- **A large number of high priority, strong linear, anomalies have been identified. Additional more localised discrete, moderate to weak, anomalies have also been identified.**
- **All anomalies are considered to be of significant exploration interest.**

The Company announced preliminary results from the recently completed XCITE Helicopter Electromagnetic and Magnetic Survey (**HEM**) flown over its gold-graphite tenements, EPMs 8795 and 18616 (*refer ASX announcement released 5 October 2022 titled "Preliminary HEM results identify high priority targets at the Croydon Project, Nth QLD"*). Preliminary plots presented here are as follows (see **Figure 14** for locations within the tenements):

Figure 11: Early channel – CH10BZ

Figure 12: Mid channel – CH15BZ

Figure 13: Late channel – CH20BZ

There are numerous strong anomalies defined, together with additional moderate to weak strength anomalies. The red stars on the figures indicate the strongest /higher priority anomalies, with the black stars indicating the additional moderate to weak anomalies.

A strong cluster of high priority anomalies are defined in the Golden Gate Graphite Project area. Graphite is particularly conductive and commonly well defined in HEM surveys as is the case here. Many of the anomalies are represented as extensive linear type conductive units with a well-defined easterly dip. There is also possible evidence for the presence of more localised thicker fold-type/pipe-like conductors.

More detailed analysis will be available when the final interpretation report is received. While the levelled data from NRG has been received by the Company's consultant geophysicist, due to the large amount of anomalous data obtained, the final report is now not expected to be available until November.

Preliminary results are not yet available for the polymetallic tenements (EPMs 13775, 16002 and 26749). The results for these tenements are not now expected until November.

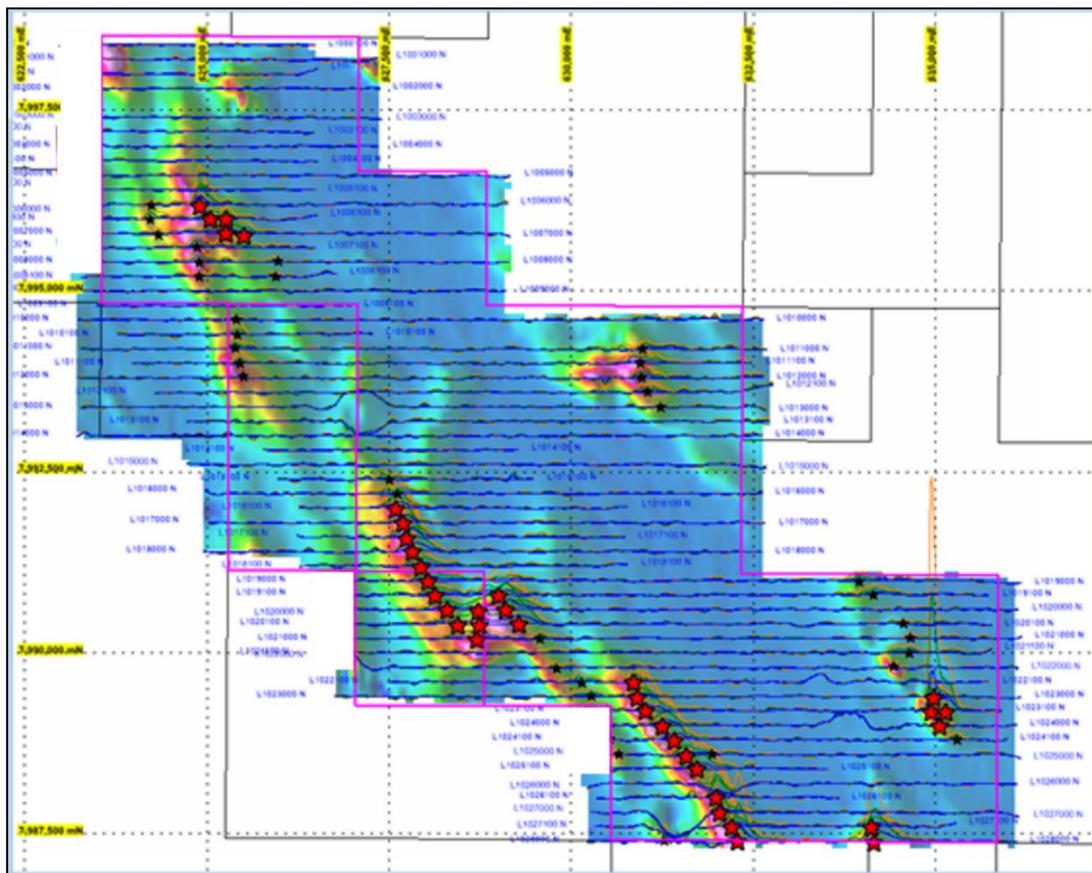


Figure 11 - XCITE Preliminary Imagery – Early Channels CH10BZ with Stacked Profiling and Anomalism

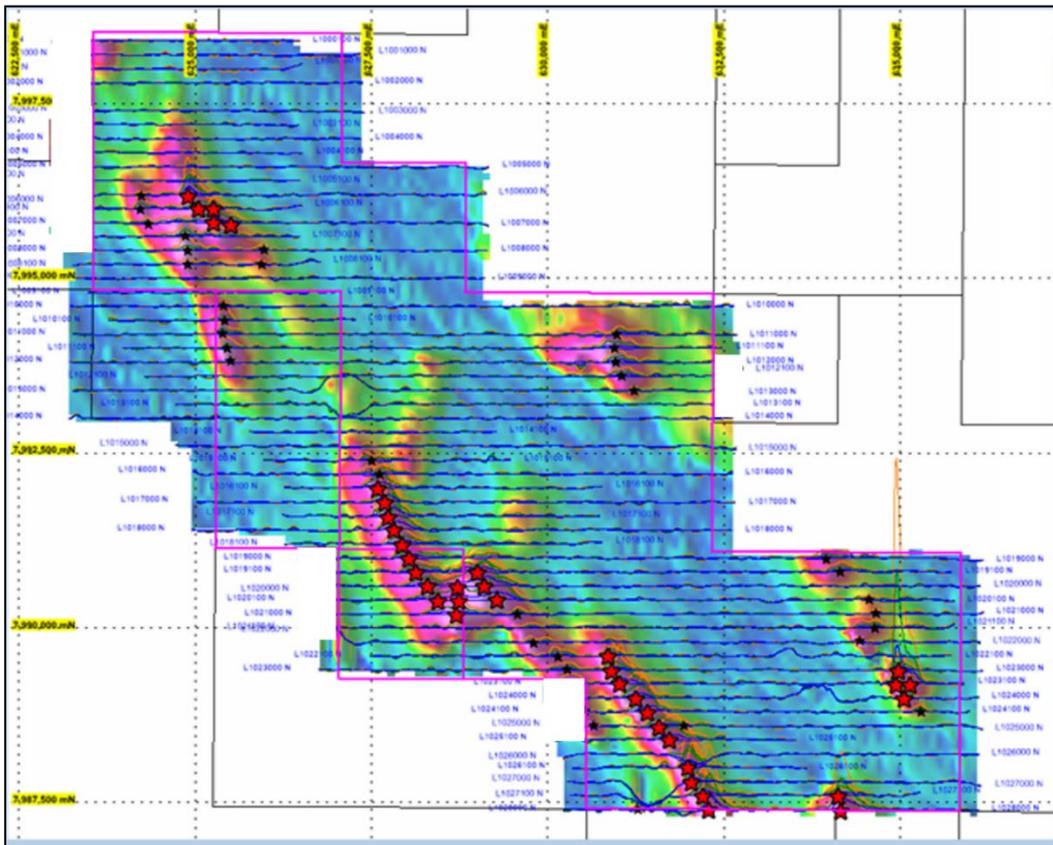


Figure 12 - XCITE Preliminary Imagery – Mid Channels CH15BZ with Stacked Profiling and Anomalism

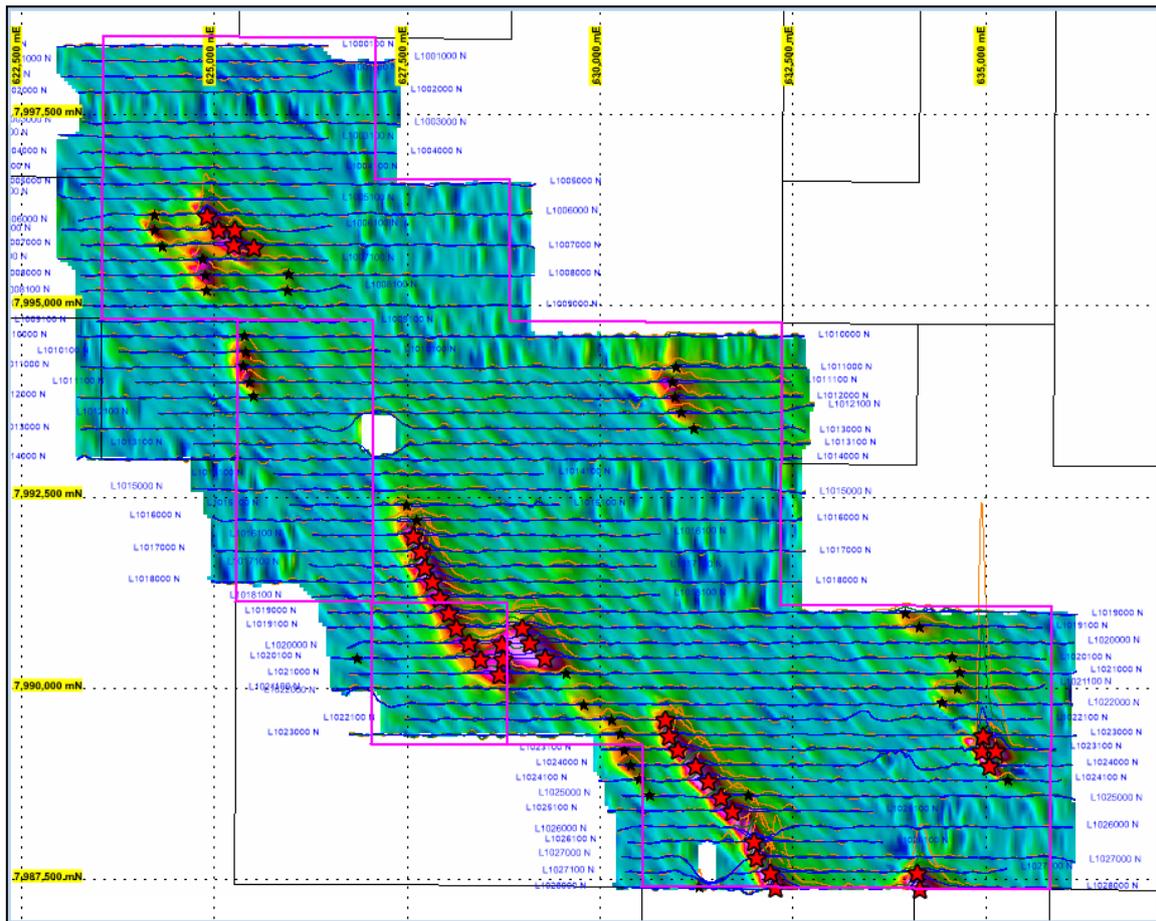


Figure 13 - XCITE Preliminary Imagery – Late Channels CH20BZ with Stacked Profiling and Anomalism

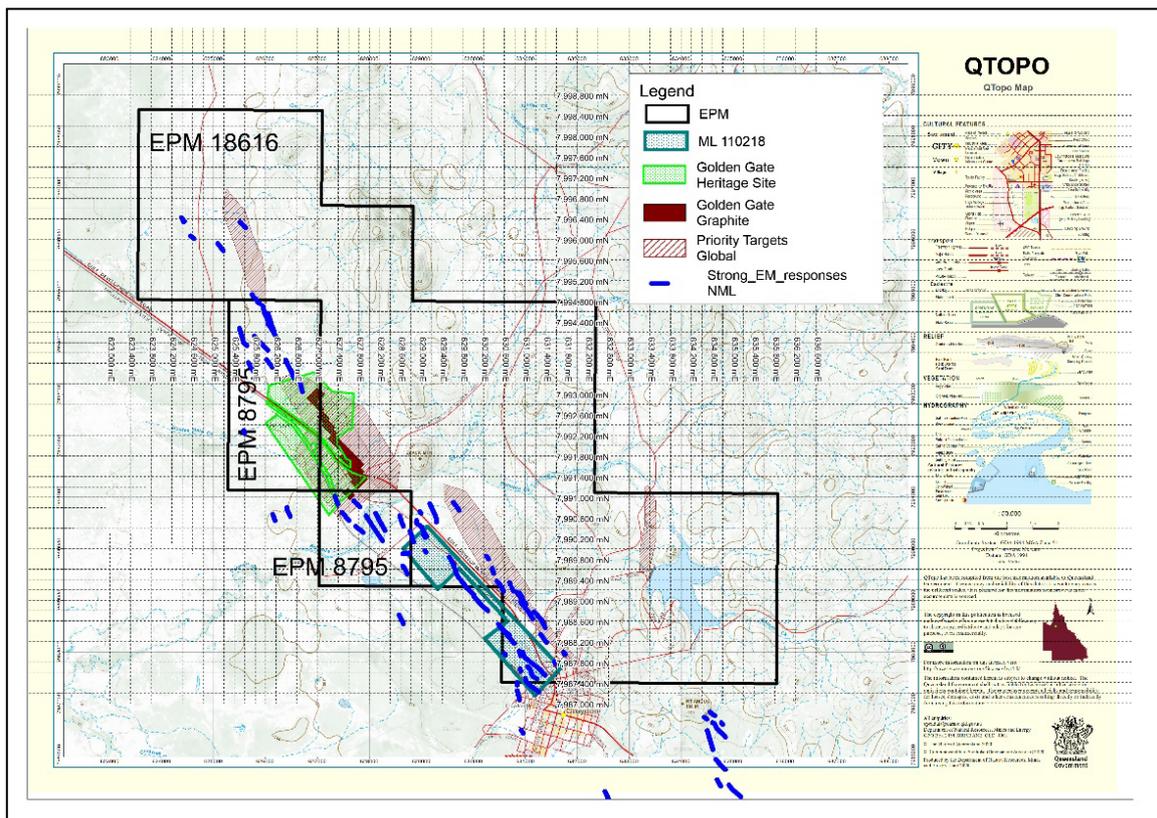


Figure 14 Area covered by Figures 12, 13 and 14

FINANCE AND ACTIVITIES

During the quarter, the Company spent \$198,000 on exploration and development activities.

There were no production activities or costs in the quarter, with the mine on care and maintenance from COVID-19 shutdown.

As outlined in the attached Appendix 5B (section 6) during the quarter approximately \$91,000 in payments was made to related parties and their associates for director salaries and superannuation.

This Quarterly Activities Report has been authorised for release by the Board of Crater Gold Mining Ltd.

For further information contact:
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 Managing Director
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 Email: info@cratergold.com.au

COMPETENT PERSON STATEMENT

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

Forward Looking Statements

This Announcement may contain forward looking statements. The words 'anticipate', 'believe', 'expect', 'project', 'forecast', 'estimate', 'likely', 'intend', 'should', 'could', 'may', 'target', 'plan' and other similar expressions are intended to identify forward- looking statements. Forward-looking statements are subject to risk factors associated with the Company's business, many of which are beyond the control of the Company. It is believed that the expectations reflected in these statements are reasonable at the time made but they may be affected by a variety of variables and changes in underlying assumptions which could cause actual results or trends to differ materially from those expressed or implied in such statements. You should therefore not place undue reliance on forward-looking statements.

Schedule of Crater Gold Mining Limited tenements:

Particulars	Project Name	Registered Holder	% Owned	Status	Expiry	Area (Km ²)
EPM 8795	Croydon	CGN	100	Renewal lodged	6/09/2022	9.6
EPM 13775	Wallabadah	CGN	100	Granted	5/03/2023	16
EPM 16002	Foote Creek	CGN	100	Granted	30/01/2024	28.8
EPM 18616	Black Mountain	CGN	100	Granted	18/06/2023	57.6
EPM 26749	Wallabadah Extended	CGN	100	Granted	11/04/2024	115.2
EPM 28600	Black Mt Extended	CGN	100	Application Lodged	N/A	9.6
EL 1115	Crater Mountain	Anomaly Ltd ¹	100	Renewal lodged	25/09/2018	41
ELA 2643	Crater Mountain	Anomaly Ltd ¹	100	Application lodged	Oct 2019	68
ELA 2644	Crater Mountain	Anomaly Ltd ¹	100	Application lodged	Oct 2019	78
ML 510	Crater Mountain	Anomaly Ltd ¹	100	Renewal lodged	4/11/2019	1.58

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

Apart from the application for EPM 28600, there were no other tenements acquired or disposed of during the quarter.

The Company has no Farm-in or Farm-out arrangements.