

9th September 2019

Market Release

## SIGNIFICANT GOLD EXPLORATION TARGET DEFINED AT CLONCURRY

- Significant Exploration Target has been defined within Ausmex Cloncurry gold tenements, including granted Mining Leases.
- The Exploration Target highlights the potential for Ausmex to develop a multi-pit gold mining hub at Cloncurry, targeting ore processing via third party CIP processing facilities.
- The Exploration Targets have been the basis for the current resource definition drilling program at the Mt Freda Complex, with drilling on site continuing to target additional high-grade surface gold mineralisation, progressing towards a combined Maiden JORC Resource estimate by late November 2019.
- The Exploration Target has been defined over the following Ausmex Cloncurry Gold projects:
  - Gilded Rose High Grade Gold Mine (Granted Mining Leases)
  - Mt Freda Open Cut Gold Mine (Granted Mining Leases)
  - Evening Star and Canteen (Granted Mining Leases)
  - Golden Mile Mining Lease application (Falcon, Shamrock, Comstock and northern extensions)
  - Little Duke extensions (Golden Mile EPM15923)
  - Mt Freda western extensions (EPM14163)
  - Carpet-King Brown and additional historic high-grade gold mines within EPM14163.

**Ausmex Mining Group (ASX: AMG) (“Ausmex” or “The Company”)** is pleased to announce the definition of a combined gold exploration target defined over the Cloncurry Gold tenement suite including the following range :

| Commodity | Tonnage Range           | Grade Range (Au g/t ) |
|-----------|-------------------------|-----------------------|
| Gold (Au) | 19,000,000 - 30,000,000 | 1.7 - 3.4             |

**Table 1.** Ausmex Cloncurry Gold Exploration Target.

*The potential quantity and grade of the Exploration Target is conceptual in nature and therefore is an approximation. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource. The Exploration Target has been prepared and reported in accordance with the 2012 edition of the JORC Code.*

For personal use only

## The Exploration Target<sup>1</sup>.

| Method                  | Project              | Location                 | Lower Tonnage Range | Upper Tonnage Range | Lower Au g/t | Upper Au g/t | Cut off Au g/t |
|-------------------------|----------------------|--------------------------|---------------------|---------------------|--------------|--------------|----------------|
| Drill tested            | Gilded Rose          | Granted Mining Lease     | 1,000,000           | 5,000,000           | 2            | 3.6          | 0.5            |
|                         | Mt Freda             | Granted Mining Lease     | 3,503,500           | 5,000,000           | 2            | 4            | 0.5            |
|                         | Falcon               | Mining Lease application | 287,000             | 500,000             | 2            | 4            | 0.5            |
|                         | Shamrock             | Mining Lease application | 573,000             | 819,000             | 2            | 4            | 0.5            |
|                         | Comstock             | Mining Lease application | 478,000             | 683,000             | 2            | 4            | 0.5            |
|                         | Little Duke          | EPM15923 (Golden Mile)   | 1,365,000           | 1,950,000           | 1.5          | 4            | 0.5            |
|                         | Mt Scheelite         | EPM14163                 | 819,000             | 1,170,000           | 1.5          | 2.5          | 0.5            |
|                         | Canteen-Evening Star | Granted Mining Lease     | 1,529,000           | 2,184,000           | 0.5          | 1.2          | 0.2            |
|                         | Carpet - King Brown  | EPM14163                 | 2,047,000           | 2,925,000           | 1.5          | 2.5          | 0.5            |
| Conceptual field tested | Rocket extension     | Mining Lease application | 383,000             | 546,000             | 2            | 3.5          | 0.2            |
|                         | Mt Freda west ext.   | EPM14163                 | 4,095,000           | 5,850,000           | 2            | 4            | 0.2            |
|                         | Little Duke ext.     | EPM15923 (Golden Mile)   | 1,228,500           | 1,755,000           | 1.5          | 2.5          | 0.2            |
|                         | Tiger                | EPM14163                 | 205,000             | 293,000             | 1.5          | 3.5          | 0.2            |
|                         | Golden Hill          | EPM14163                 | 205,000             | 293,000             | 1.5          | 3.5          | 0.2            |
|                         | Nugget Hill          | EPM14163                 | 205,000             | 293,000             | 1.5          | 3.5          | 0.2            |
|                         | Jiyer                | EPM14163                 | 205,000             | 293,000             | 1.5          | 3.5          | 0.2            |
|                         | Adder                | EPM14163                 | 205,000             | 293,000             | 1.5          | 3.5          | 0.2            |
| Llomas                  | EPM14163             | 205,000                  | 293,000             | 1.5                 | 3.5          | 0.2          |                |
| <b>Combined Total</b>   |                      |                          | <b>19,000,000</b>   | <b>30,000,000</b>   | <b>1.7</b>   | <b>3.4</b>   |                |

**Table 2.** Cloncurry Gold Exploration Target<sup>1</sup> project definition

<sup>1</sup>*The potential quantity and grade of the Exploration Target is conceptual in nature and therefore is an approximation. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource. The Exploration Target has been prepared and reported in accordance with the 2012 edition of the JORC Code).*

The Exploration Target is based on the current geological understanding of the geometry of mineralised zones at these prospects. This understanding has been developed through exploration drilling completed to date, regional geological mapping and sampling, and historic mining activity at Gilded Rose, Mt Freda, Evening Star & Canteen pits, combined with an understanding of the host stratigraphic sequences.

This Exploration Target has utilised data from both historic drilling, completed predominantly at Mt Freda and Gilded Rose and from drilling completed by Ausmex since 2017 as well as the Golden Mile. To date Ausmex have completed more than 19,000 m of combined reverse circulation and diamond drilling across these prospects.

Reverse circulation and diamond core drilling are currently progressing across these prospects to test and better define this Exploration Target.

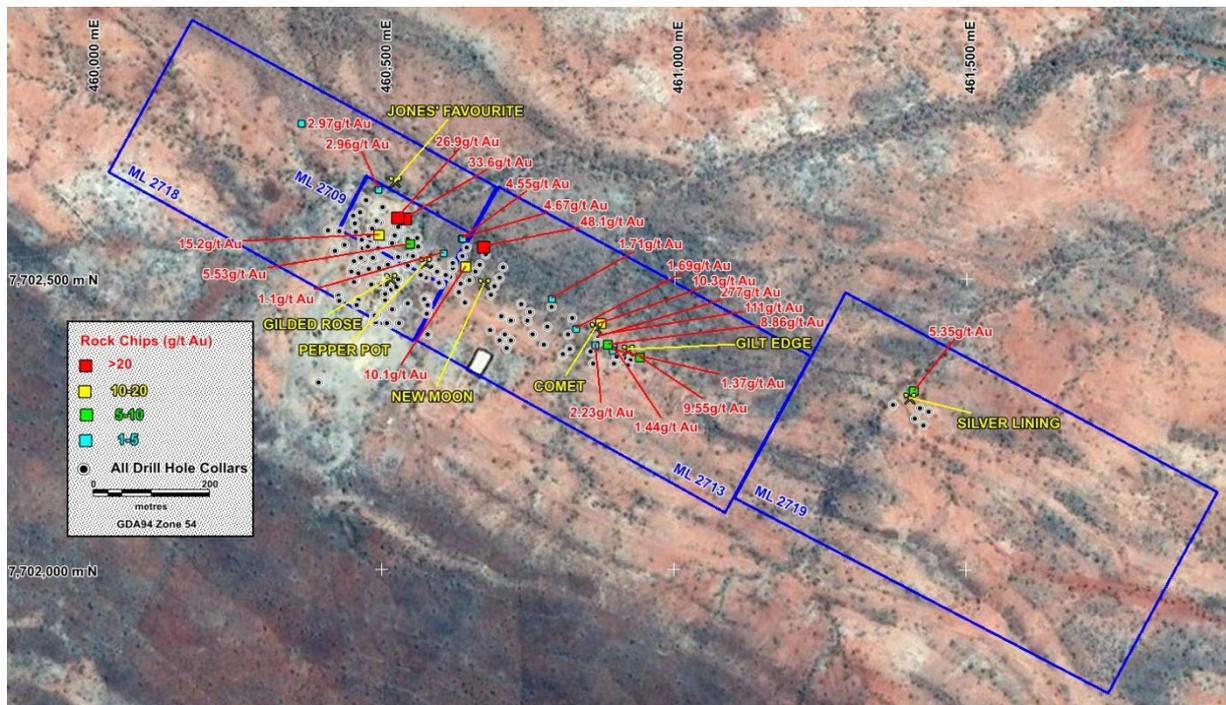
The Exploration Target, being conceptual in nature, takes no account of geological complexity, possible mining methods, or metallurgical recovery factors. The Exploration Target was estimated in order to provide an assessment of the possible scale of exploration within the Cloncurry gold tenement suite including Mt Freda Complex and the Golden Mile, Gilded Rose, Evening Star and Canteen, as well as multiple historic high-grade mines within EPM14163.

| Project                 | Total in Database | DD | RC  | RC/DD | PERC | RAB | Other |
|-------------------------|-------------------|----|-----|-------|------|-----|-------|
| <b>Mt Freda Complex</b> | 393               | 47 | 296 | 21    | 11   | 14  | 4     |
| <b>Gilded Rose</b>      | 125               | 16 | 102 | 3     | 2    |     | 2     |
| <b>Evening Star</b>     | 57                | 4  | 53  |       |      |     |       |
| <b>TOTAL</b>            | 575               | 67 | 451 | 24    | 13   | 14  | 6     |

**Table 3.** Total drill hole numbers in the current Cloncurry Gold tenement suite database including a combination of historic and recent drilling.

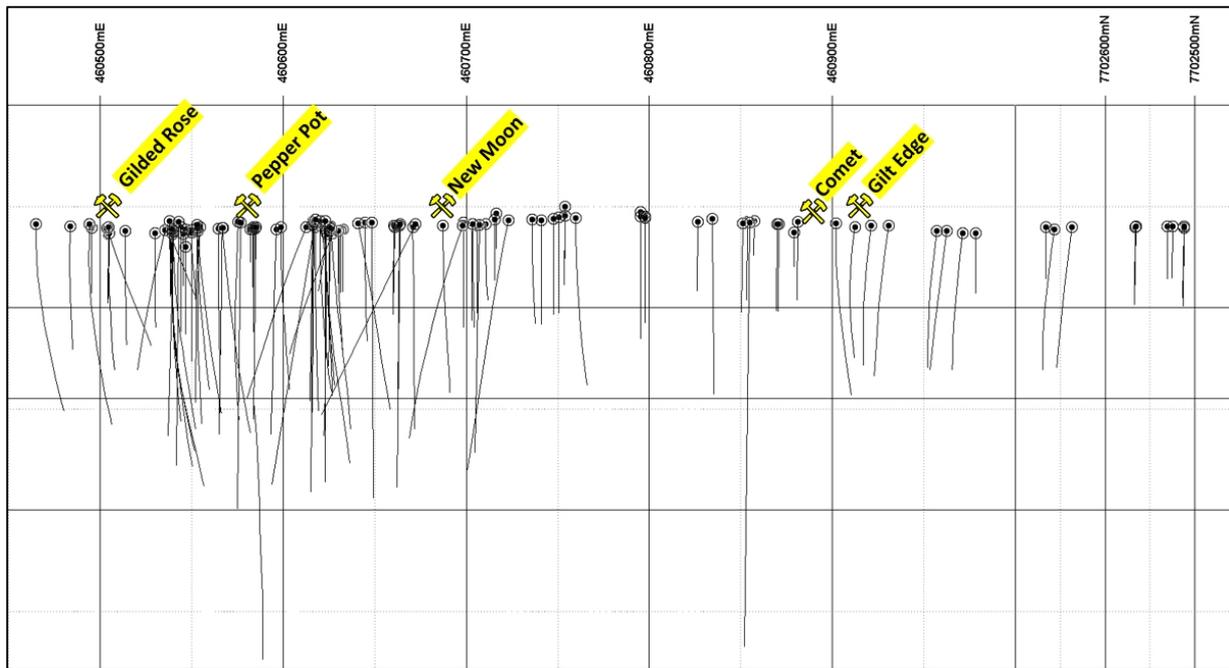
**Project Summaries:**

**Gilded Rose Gold Mine – Granted Mining Leases ML2709, ML2713, ML2718, & ML2719.**

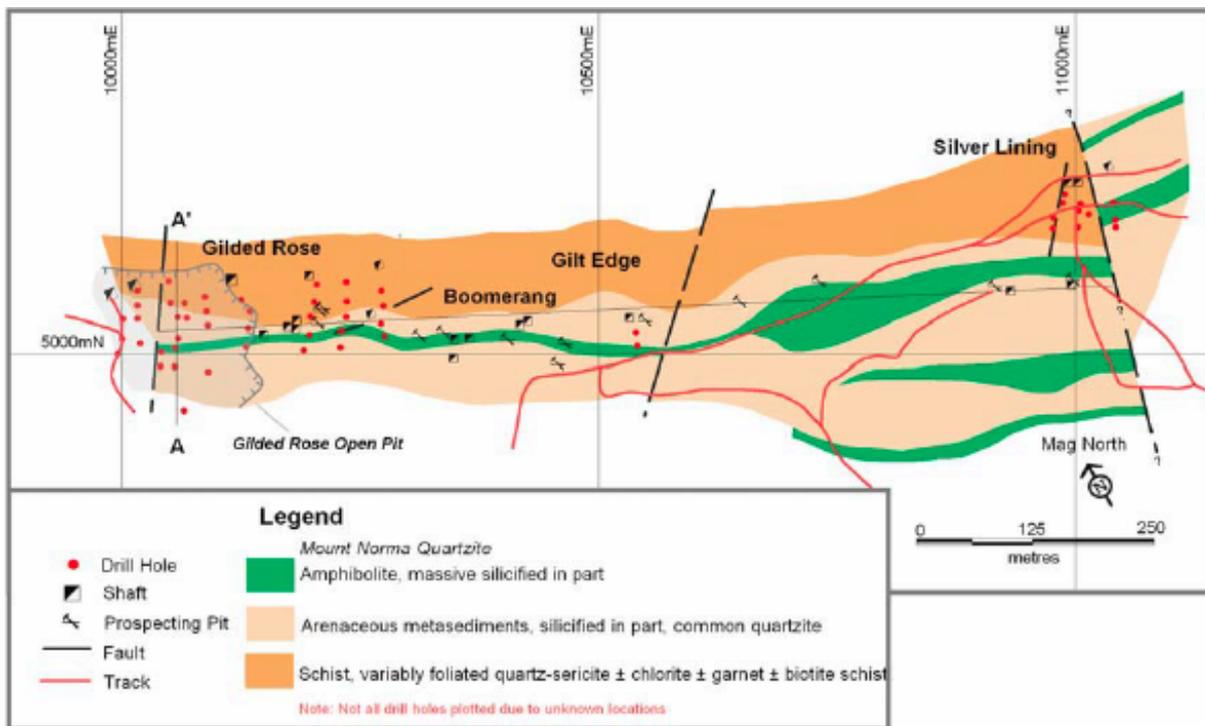


**Figure 1.** Gilded Rose tenement location plan, including historic high-grade gold mine locations and previous drill holes with surface high grade out crop samples up to 277 g/t gold

along a projected 1.5 km Exploration Target strike length. (Refer ASX release 19<sup>th</sup> June 2017 for details)



**Figure 2.** Gilded Rose historic drill hole long section.



**Figure 3:** Gilded Rose, Gilt Edge and Silver Lining simplified geological setting. Source, Coffee Mining Nov. 2006 (Refer ASX release by QMC 29<sup>th</sup> November 2007).

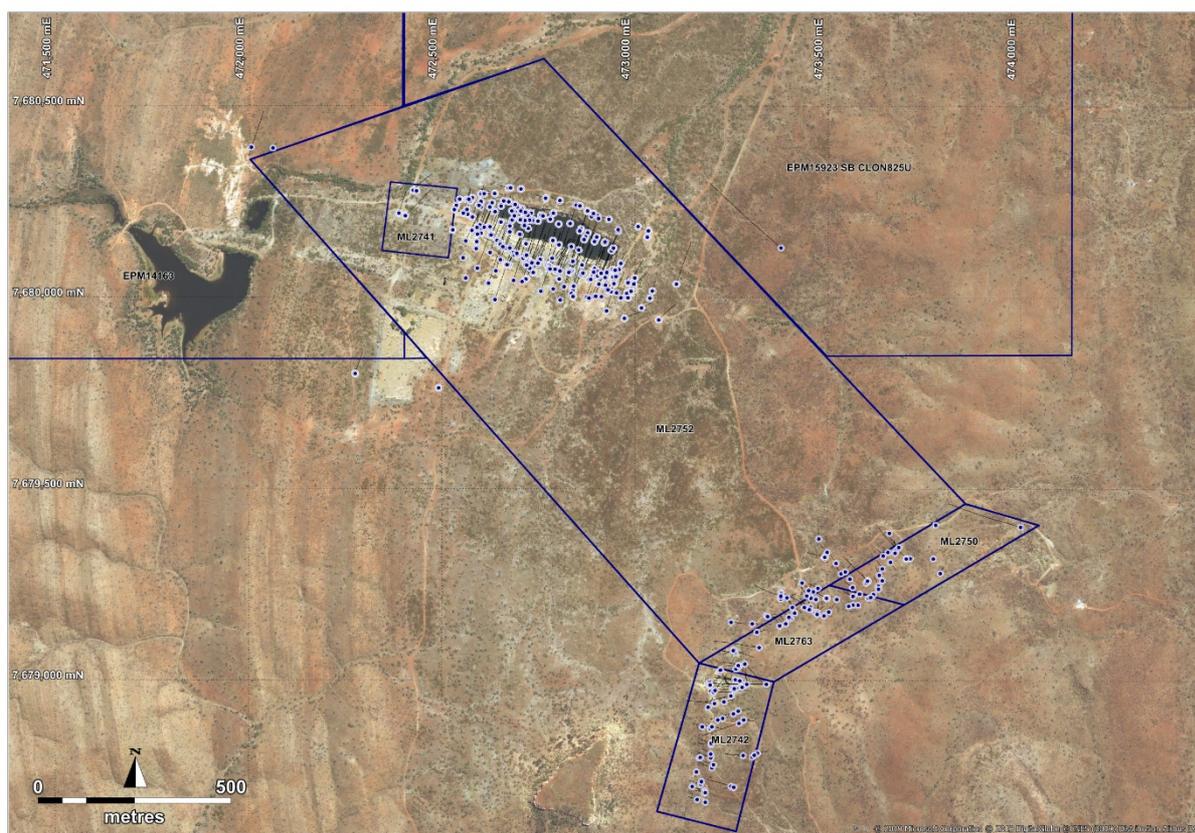
The Gilded Rose tenement suite consists of four (4) granted mining leases covering an area of 64 Ha. Gold was discovered at the Gilded Rose in 1882 and mining continued until 1940. During

that period an estimated 4,109 t of ore grading 42 g/t Au was extracted (173.8 kg). The gold is associated with the Gilded Rose Reef and sub parallel reefs within an interbedded sequence of sericite-chlorite-garnet schists, hornblende schist and quartzite, close to a band of amphibolite. The quartz reefs (veins) usually strike east-southeast in conformity with the surrounding schist and dip 75° south. The quartz veins are narrow, with an average width of 0.5 m, but can vary from micro veinlets to massive veins up to 10 m wide. Individual veins have short strike lengths of less than 45 m within a system with an overall strike length of approximately 1,500 m.

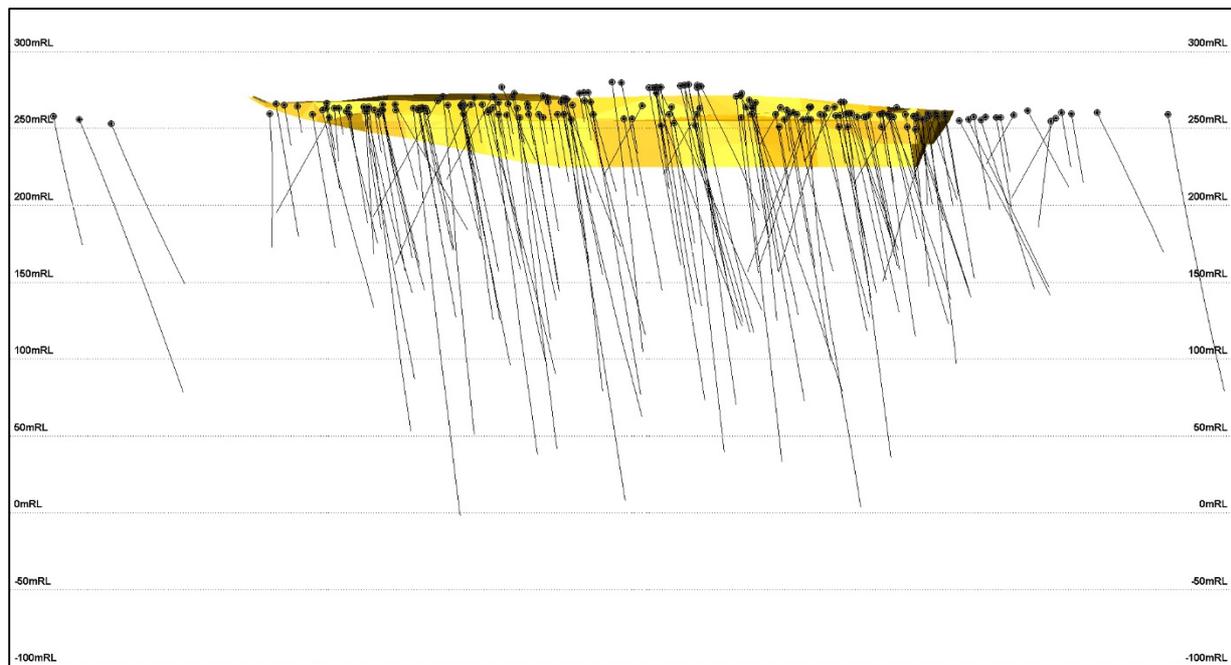
The gold is hosted in four main gold bearing reefs and several less continuous reefs in footwall metasediments that were believed to be barren. The footwall metasediments have not been adequately tested by drilling and there is a possibility of discovering more reefs in repeat structures along the 1.5 km length of the Gilded Rose-Silver Lining group of mines.

The combination of historical tonnages, exploration potential and historic grade estimates completed by Queensland Mining Corporation (QMC) have been used as the technical reference for the Gilded Rose Exploration Target stated above in Table 2.

#### Mt Freda - Granted Mining ML2741, ML2752



**Figure 4.** Mt Freda and Evening Star Mining Lease tenement plan and historic drill hole locations. Note the granted Mt Freda Mining Leases adjoin both EPM14163 and EPM15923, (The Golden Mile).



**Figure 5.** Mt Freda Historic Drill hole Long section

The Mt Freda gold project consists of two granted MLs covering an area of 120 ha and located at the southern boundary of EPM14163. The Mt Freda gold mine produced gold up until 1991 from an open cut operation 400 m long and 60 m deep. Mineralisation is open along strike and at depth and further drilling is planned.

The mine is hosted in steeply west dipping, north striking interbedded amphibolite and meta-sediments of the Toole Creek Volcanics, which form the uppermost member of the Middle Proterozoic Soldiers Cap Group. Gold is hosted in pyritic quartz and carbonate breccia and veins along an east trending structure. The mineralisation transects the local geology. The mineralisation is described as variably composed of pyritic fault breccias, massive quartz and carbonate veining, and vuggy jaspers with coarse-grained sulphides, 5 -15 m wide. The deposit has been interpreted as a possible gold-rich end member of the structurally controlled iron oxide Cu-Co-Au style deposit. The ore is noticeably Fe-Ca-Mg rich, with high gold with sub economic cobalt grades.

The mine was worked intermittently since its discovery in 1880 until 1940. During that period, with an historical estimate of ~ 732 t of ore mined yielding 5.48 kg gold (1176 oz) . Before 1938, underground mining targeted the high-grade oxide zones, which extended to a depth of 50-60 m, while open cut mining was carried out between 1938 and 1940.

Diversified Mineral Resources NL (DMR) bought the Mt Freda mine in 1987 and soon after began mining and construction of a CIL plant. Open cut mining started in 1987 and around 120,000 Oz of oxide ore averaging 4 g/t Au was processed before the mine closed in 1991.

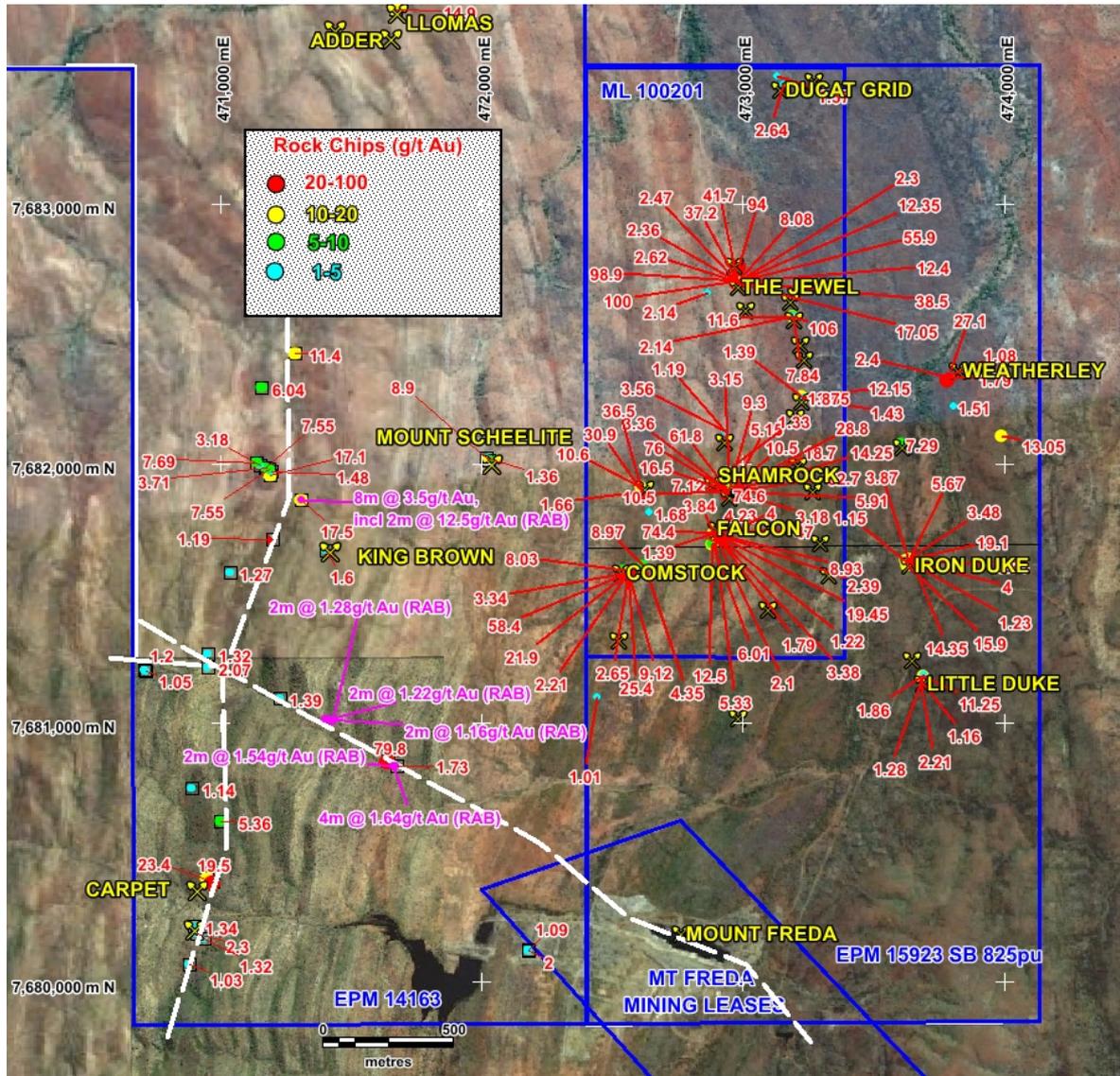
Drilling indicates that what was previously interpreted to be a series of shears with quartz-carbonate veining was now showing good continuity along strike. Mineralisation is characterised by quartz veining, brecciation, and the presence of sulphides. The depth of oxidation appears to be up to a 270 m depth from surface.

In 2011 Hellman & Schofield Pty Ltd completed historical estimates of the Mt Freda project for Queensland Mining Corporation (QMC).

Based on a combination of historical mining records, geological interpretations, and previous historical exploration drilling including more recent exploration drilling completed by QMC in 2010, and Ausmex from 2017- 2019, Mt Freda have been estimated as shown in Table 2 above.

The Exploration Target for Mt Freda builds on the previous historic estimates and assumes exploration success in infill drilling the deep resource to the full strike and down-dip extent.

### Mt Freda West Conceptual Target

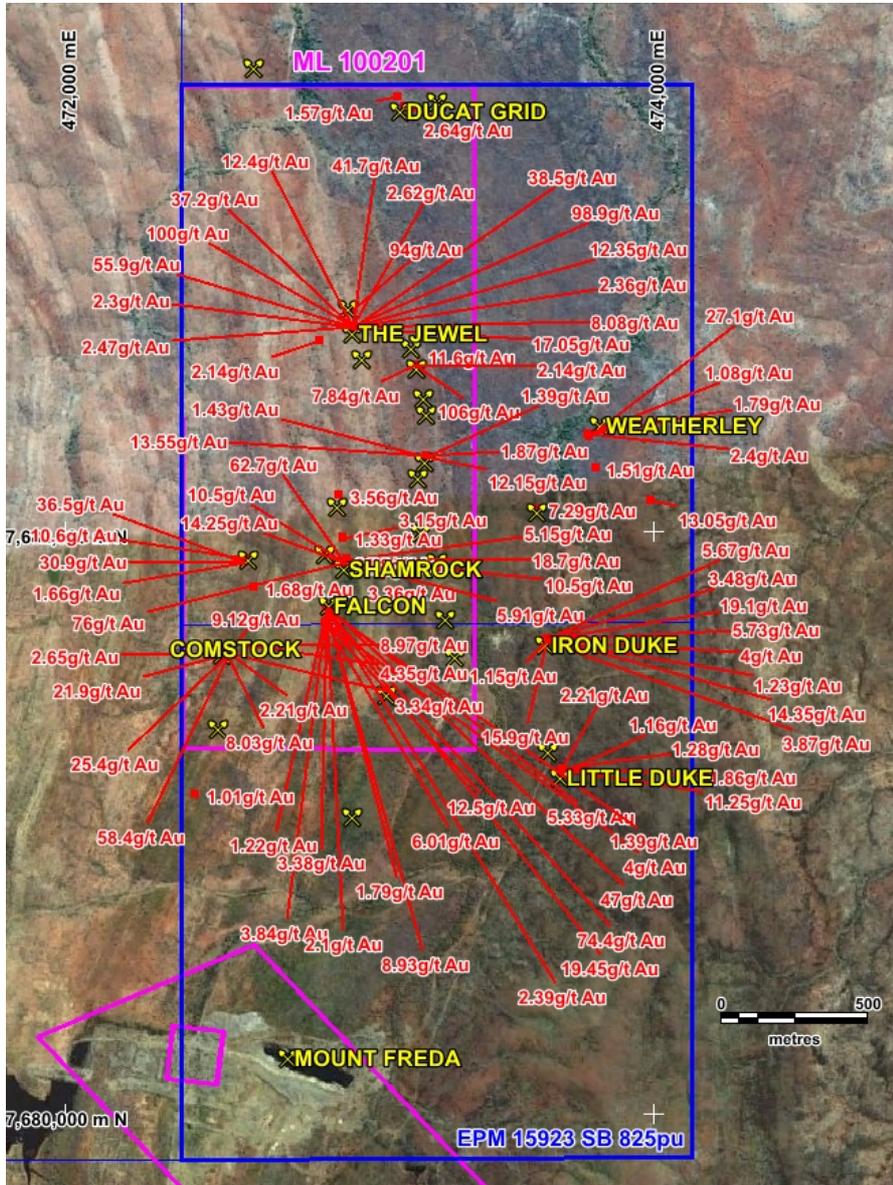


**Figure 6.** Mt Freda West Exploration Target extending into EPM14163 that correlates with high grade out cropping gold, RAB shallow drilling results and conductive SAM geophysical targets. (Refer ASX releases 16<sup>th</sup> May 2018 & 14<sup>th</sup> June 2018).

The Mt Freda West conceptual exploration target is based on out cropping gold mineralisation that correlates with a 2 km Sub Audio Magnetics (SAM) geophysical anomalism to the west of the Mt Freda deposit. The strong conductivity anomalism occurs along strike of the mineralisation at Mt Freda, and current interpretation suggests this geophysical anomalism

may be an analogous to Mt Freda and represent a significant strike extension to the deposit. The Exploration Target occurs over a 2 km strike length, as described in Figure 6 above. To determine the Exploration Target, this strike extent is combined with similar parameters to the Mt Freda Exploration Target, as outlined in Table 2. This target is conceptual and relies on significant exploration success. The geophysical anomalies are currently being drill tested.

**Golden Mile and ML100201**



**Figure 7.** Golden Mile Field exploration results indicating the extent of high-grade gold surface mineralisation currently being drill tested for the current Exploration Target. (Refer ASX releases 16<sup>th</sup> May 2018 & 14<sup>th</sup> June 2018).

**Golden Mile – Drill tested Comstock, Falcon, and Shamrock**

The Exploration Target for Comstock, Falcon and Shamrock has been based on the extrapolation of exploration drilling to date completed by Ausmex, combined with current

For personal use only

geophysical anomalies and outcropping surface mineralisation results and geological interpretations that indicate potential continuity, with significant drilling intersections highlighted in Figure 7 above and Figure 8 below.

The Exploration Target for these prospects therefore relies on successful extension of the currently defined mineralisation both along strike and down-dip, as described in Table 2. The Exploration Target also assumes that similar and consistent Au grades are encountered for both strike and down-dip extensions.

### **Comstock**

The Comstock prospect comprises historic shafts and underground workings targeting an east dipping quartz-carbonate vein along the contact of meta-sediments (pelite/psammite) and amphibolite units. Reconnaissance mapping suggests a system of multiple narrow quartz lodes over a strike length of up to 350 m.

The deposit is thought to splay to the south with the more western of the two structures believed to continue along the same strike orientation as that of the existing workings. Drilling completed by Ausmex in 2018 \* 2019 targeted the gold-bearing alteration zone, the more easterly limb of the splayed structure. Separate workings and outcropping/sub-cropping quartz veins indicate that the eastern limb continues 200-350 m to the south-southeast. The structure dips steeply between 75°-85° east.

Drilling by Ausmex has tested the Comstock structure over a strike length of approximately 200 m. Drilling indicates the mineralised zone is between 4 to 8 metres wide.

Reverse circulation drilling is currently underway to infill and extend the drilling completed by Ausmex during 2018.

### **Falcon**

The Falcon lode is located at the contact between meta-sediments and amphibolite, with aplite and tourmaline-rich pegmatite located within mullock material surrounding costeans and workings. The mapped lode and workings extend along a strike of 350 m trending north south and steeply dipping to the west. At the northern end, the lode is reportedly faulted.

Historical workings at the Falcon Prospect comprise a series shafts up to 24 m metres deep with drives at the 14 m level, and a series of small open cuts and costeans. Historic records indicate that there was a long-term mining camp and a 10-head battery located at Falcon.

The first phase of reverse circulation drilling completed by Ausmex during 2018 targeted old workings and established the presence of two sub-parallel structures beneath these workings. Drilling confirmed the structures to be steeply west dipping. A second phase of drilling completed during 2018 extended the strike length of the Falcon structure to the north.

Outcropping quartz veining, breccia, and gossan has been identified to the north of main Falcon workings, indicating possible strike extensions. At Falcon North, the structure runs parallel to the main Shamrock structure, which is located 30-40 m to the east.

Falcon has been drill-tested by Ausmex over approximately 350 m of strike length. Current interpretation suggests that the mineralised zone has a thickness of between 4 to 7 metres wide.

Reverse circulation drilling is currently underway to infill and extend the drilling completed by Ausmex during 2018.

### **Shamrock**

The main feature at Shamrock is a N-S trending open cut working, which appears to have been developed to exploit a pair of roughly parallel vein structures. Within this open cut is a historical mine shaft of approximately 30 m depth. There are numerous other workings in the area, seemingly following other N-S trending structures.

The main Shamrock structure is expressed as a brecciated quartz vein hosted in amphibolite. The vein strikes north south and is near vertical dipping, with the dip observed to vary between steep east to steep west. A secondary parallel structure is located 5 m east. Both structures have been intercepted in drilling completed by Ausmex.

The Shamrock structure has been drill-tested by Ausmex over a strike length of approximately 300 m. Drilling indicates that the mineralised zone is between 7 to 15 metres wide.

Reverse circulation and diamond drilling are currently underway to infill and extend the drilling completed by Ausmex during 2018.

### **Golden Mile Conceptual**

The assumption underlying the Golden Mile Conceptual Exploration Target is that mineralisation of similar tenor and extent to that defined at Comstock, Falcon, and Shamrock can be defined at a series of other Golden Mile prospects. Numerous prospects within the Golden Mile were drill-tested during 2018 & 2019, with encouraging Au intersections obtained in areas such as Little Duke and Mt Scheelite that have not currently been tested along strike or down-dip. Potential also remains at prospects such as Rocket & Ducat, where discrete geophysical anomalism (conductivity) requires drill testing. Other prospects such as Golden Relish to the north of Shamrock have not been drill tested to date, despite the presence of significant historic workings. The currently untested Golden Mile targets have a combined strike length of over eight kilometres; therefore, it is reasonable to assume that analogies to Comstock, Falcon, and Shamrock can be identified through further exploration. Parameters used to determine the Golden Mile conceptual target are outlined in Table 2. Refer Figure 6, 7 & 8.

### **Evening Star and Canteen – Granted Mining Leases ML2742, ML2763 & ML2750**

The Evening Star (ML2742 & ML2763) and Canteen mine of Evening Star North (ML2750) are within 15 km of the Mt Norma copper oxide processing operations. The Evening Star mine has

not been systematically explored, despite more than ~1,400 t of oxide copper ore having been mined in recent years. Potential exists to find more copper ore at the mine and along the southerly strike limb where several old shafts are present. As well, there is the possibility of discovering extra resources at the Canteen mine, particularly along strike where drilling has only tested 300 m of the potential 800 m mineralised strike.

The northern end of the Evening Star mine was worked on a small-scale in the 1880s. During the early 1980s, approximately 1,000 t of ore averaging 4.3% Cu was mined and sold to Mt Isa Mines before DMR bought the Evening Star project in 1987 and mined 380 t of oxide ore averaging 3.9% Cu and 1.2 g/t Au, which was sold to Mt Isa Mines.

The Evening star appears to be an IOCG system. Exploration in 2008 by QMC and 2017-2019 by Ausmex indicate that there is north-trending shear that contains a mineralised zone traceable for >800 m to the tenement boundary. The presence of K feldspar, amphibole, magnetite and sericite is typical of IOCG systems. Channel sampling across the shear showed that gold and cobalt were present together with copper and gold, and that a zone of low-grade uranium is present nearby. Historical drill hole results announced in 2008 by QMC as well as recent drilling by Ausmex indicate that grade and thickness of copper & gold mineralisation may improve with depth.

Recent Geophysical surveys by Ausmex and independent interpretation by Emeritus Professor Ken Collerson support the potential for the Evening Star – Canteen project to host IOCG style mineralisation, including gold.

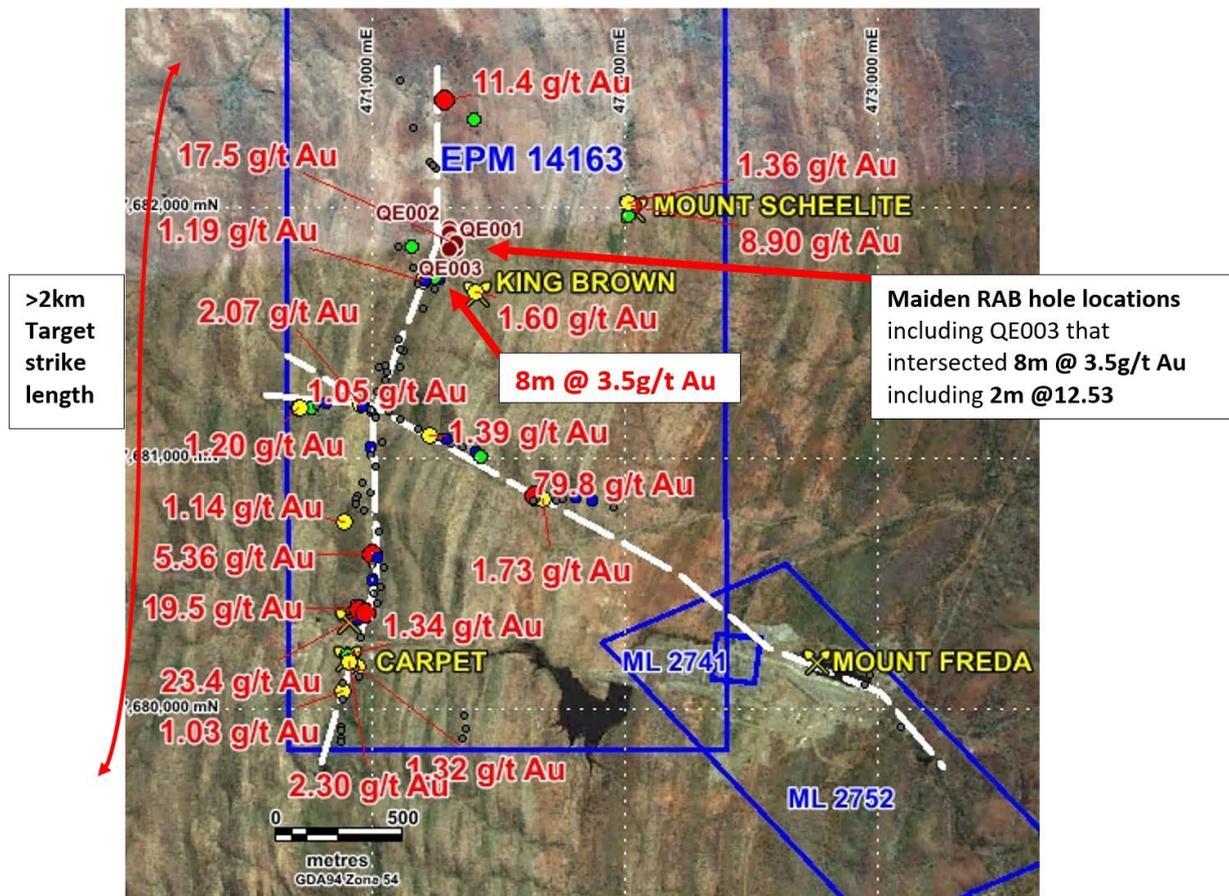
The gold, copper and zones are open to the south and down dip.

Based on historical mining records and previous historical drilling including a 24 RC hole drill hole program completed by QMC in 2008, as well as recent drilling by Ausmex at both Evening Star and Drillers camp, the current exploration target for gold only at Evening Star is shown above in Table 2.

### **EPM14163 Conceptual Exploration Targets**

**EPM14163** covers an area of 17<sup>2</sup> km, and host to an extensive 10 km long gold and copper mineralised system, as described in figures 8 & 9 below. Multiple historic gold prospects with similar mineralisation styles, tenor and surface expression to the Golden Mile prospects have been identified along the 10 km mineralised zone. Initial field work sampling and drilling has produced high grade gold intersections at the Carpet and King Brown. The Carpet and King Brown host surface mineralisation and a conceptual exploration target that strikes over a 2 km outcropping zone. Additional mapping and sampling identified an additional six historic mines as listed in Table 2, all with a minimum surface expression strike length greater than 150 m each, with mineralisation widths ranging from 5 – 15 metres wide at surface. Exploration target<sup>1</sup> values for each project are detailed in table 2 above.

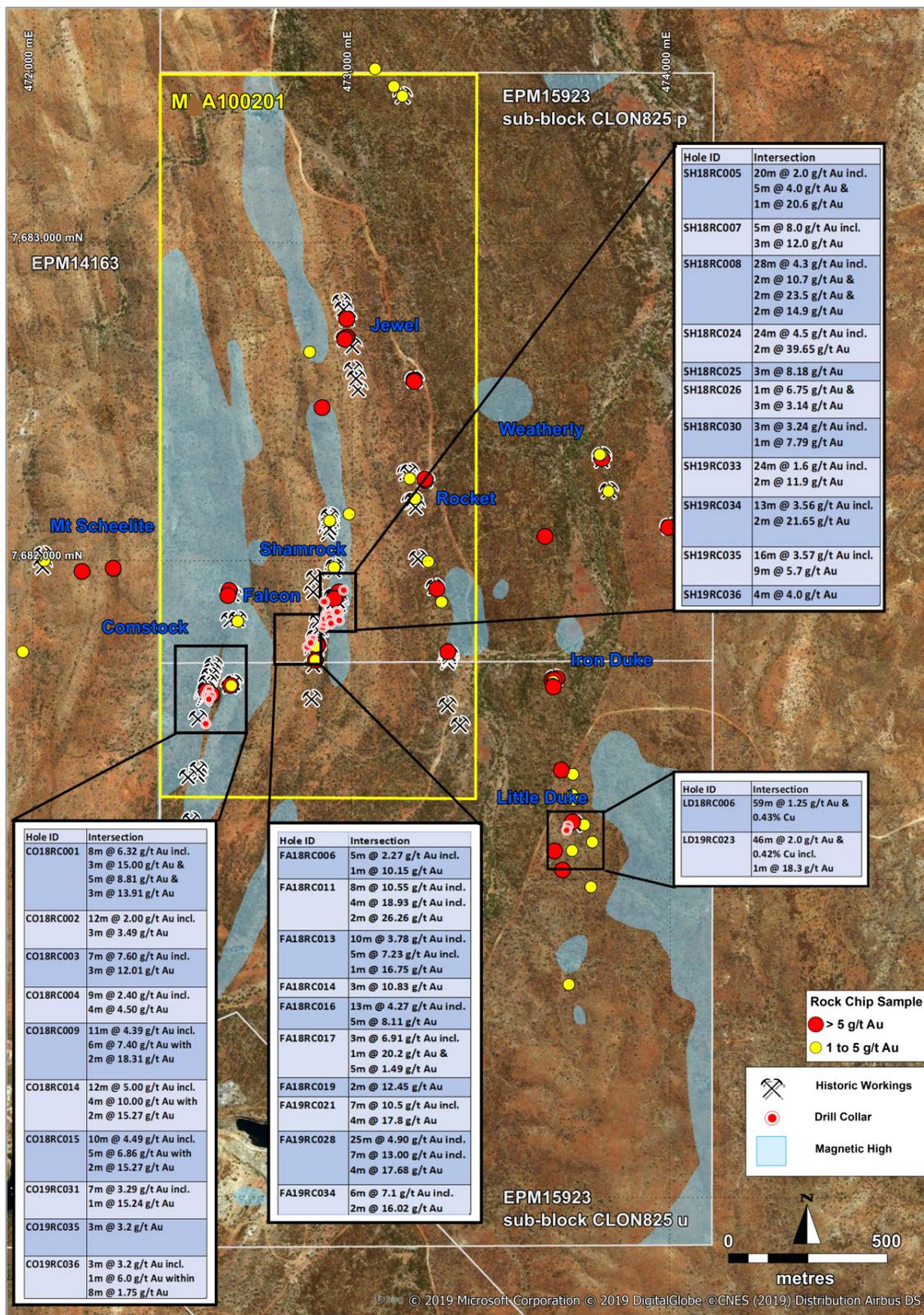
For personal use only



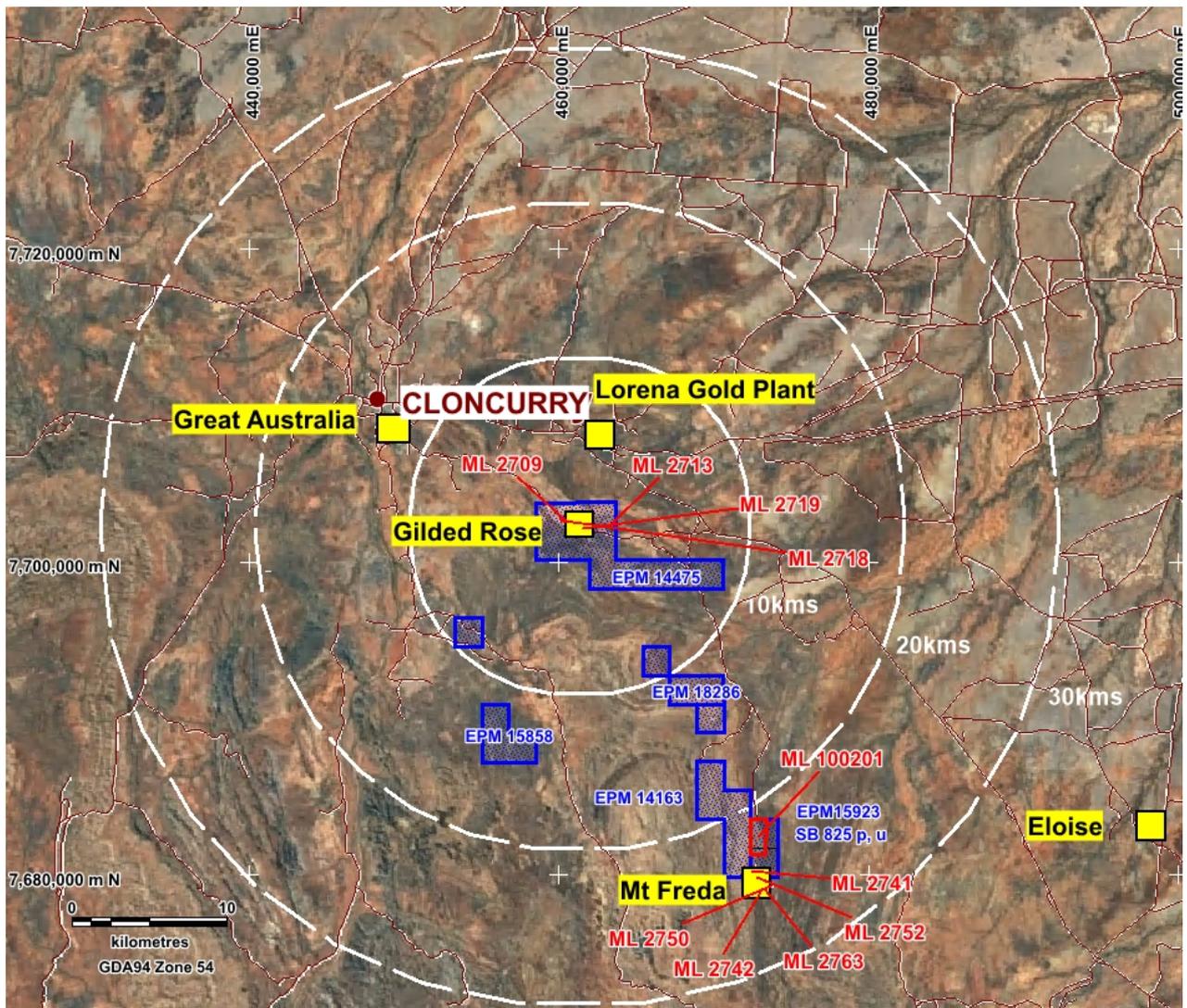
**Figure 8.** High grade gold mineralisation within EPM14163 south including Carpet, King Brown and Mt Freda West Extensions (Refer ASX Release 16<sup>th</sup> May 2018)



For personal use only



**Figure 8. Golden Mile and ML100201 Location plan with significant exploration results to date.** (Refer ASX releases 12<sup>th</sup> July 2017, 30<sup>th</sup> August 2018, 10<sup>th</sup> September 2018, 8<sup>th</sup> & 26<sup>th</sup> October 2018, 9<sup>th</sup>, 15<sup>th</sup> & 23<sup>rd</sup> November 2018, 1<sup>st</sup>, 11<sup>th</sup> & 29<sup>th</sup> July, & 12<sup>th</sup> August 2019 for results).



**Figure 9.** Ausmex Cloncurry Gold tenement location plan, indicating the close proximity of both Mt Freda ML2752 and the Golden Mile ML100201 projects, as well as the Gilded Rose Gold Mine to two, third party Gold CIP processing facilities at Lorena and the Great Australia, with a combined capacity of > 1 Mtpa.

### Further Work

The company has currently an extensive back log of drill holes assays generated from current drilling that includes multiple exploration targets identified to date. The company is continuing to drill test the current exploration targets within the current drilling program at Cloncurry, with drilling continuing until the end of 2019 field season in North Queensland (mid-December weather permitting).

## **Previously Reported Information**

*The information in this report that references previously reported exploration results is extracted from the Company's ASX market announcements released on the date noted in the body of the text where that reference appears. The previous market announcements are available to view on the Company's website or on the ASX website ([www.asx.com.au](http://www.asx.com.au)). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.*

## **Forward Looking Statements**

*The materials may include forward looking statements. Forward looking statements inherently involve subjective judgement, and analysis and are subject to significant uncertainties, risks, and contingencies, many of which are outside the control of, and may be unknown to, the company.*

*Actual results and developments may vary materially from that expressed in these materials. The types of uncertainties which are relevant to the company may include, but are not limited to, commodity prices, political uncertainty, changes to the regulatory framework which applies to the business of the company and general economic conditions. Given these uncertainties, readers are cautioned not to place undue reliance on forward looking statements.*

*Any forward-looking statements in these materials speak only at the date of issue. Subject to any continuing obligations under applicable law or relevant stock exchange listing rules, the company does not undertake any obligation to publicly update or revise any of the forward-looking statements, changes in events, conditions or circumstances on which any statement is base*

## **Competent Person Statement**

*Statements contained in this report relating to exploration results and potential are based on information compiled by Mr. Matthew Morgan, who is a member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr. Morgan is the Managing Director of Ausmex Mining Group Limited and Geologist whom has sufficient relevant experience in relation to the mineralization styles being reported on to qualify as a Competent Person as defined in the Australian Code for Reporting of Identified Mineral resources and Ore reserves (JORC Code 2012). Mr. Morgan consents to the use of this information in this report in the form and context in which it appears.*