

# September 2019

## Quarterly Activities Report

### Highlights

- **Yule**
  - Identification of a large, moderate bedrock conductor (BYC1) at Balla Yule
  - BYC1 underlies anomalous Ni-Co geochemical results
- **Murchison**
  - **Cue Project**
    - Very Shallow high-grade mineralisation intersected at “The Patch”
      - **4m @ 7.5g/t from 7m including 1m @ 20.3g/t from 8m**
    - Light of Asia North Initial broad spaced RC program confirms presence of the gold mineralised structure 500m north of historic workings
  - **Cuddingwarra Project**
    - Geochemical program identifies new gold anomalies
- **Four Mile Well**
  - 1.6km anomalous gold trend delineated including 26ppb gold



Figure 1: Recent Balla Yule moving loop EM survey.



## Yule Project – 100% GSM

### Balla Yule Prospect

The Balla Yule prospect is a large elliptical dome feature (4.2 x 1.8 km) delineated by aeromagnetic data and is located approximately 1.8 kilometres north of the highly prospective Sholl Shear Zone (Figure 2). This feature is interpreted as an Archaean layered mafic-ultramafic intrusion (refer to ASX announcement dated 21<sup>st</sup> May 2019) of the type recognised elsewhere in the western and central parts of the North Pilbara Craton.

A Moving Loop Electro-Magnetic (MLEM) survey was planned across the mafic-ultramafic intrusion with the aim of identifying bedrock conductors that may indicate massive sulphide accumulations.

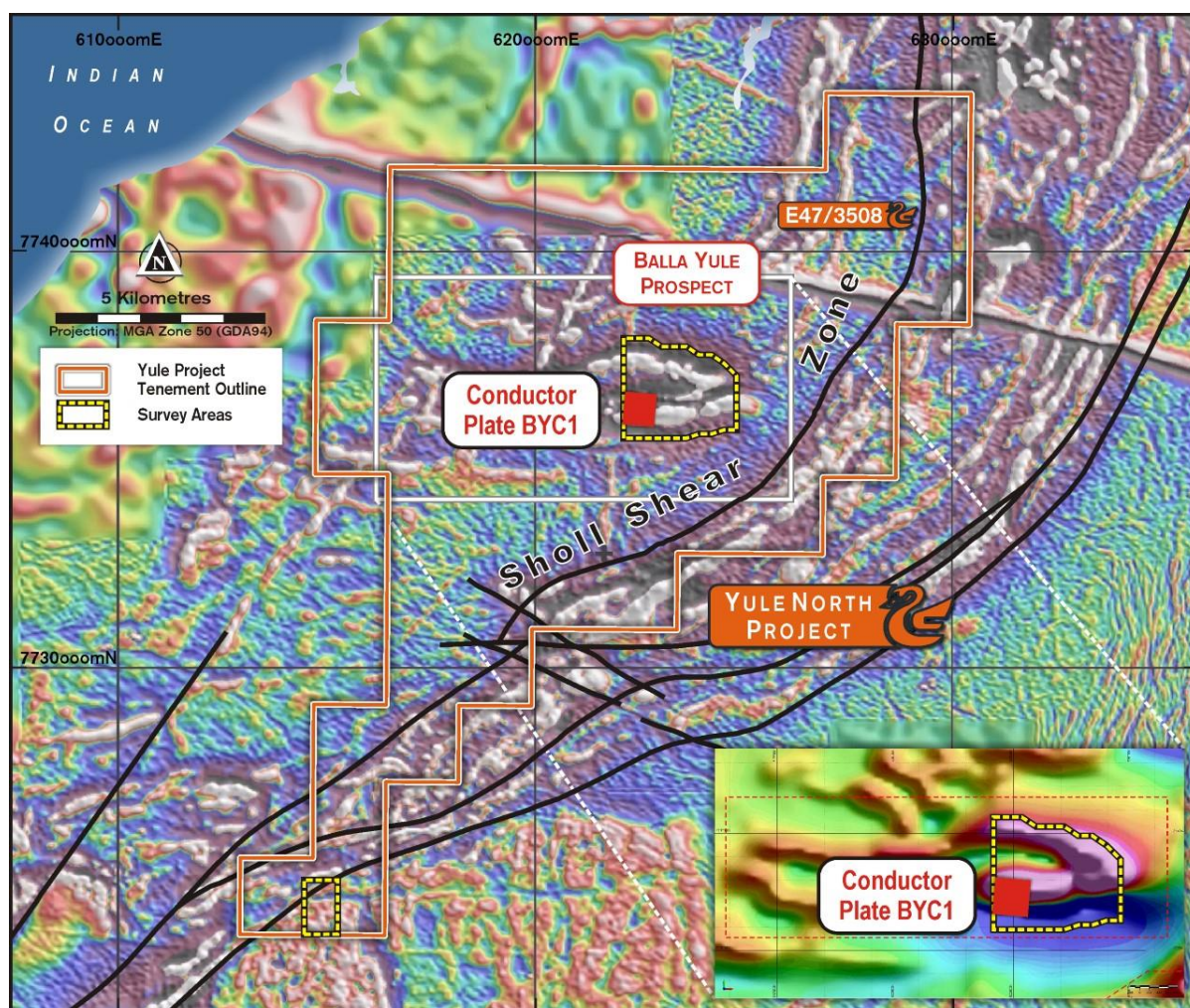


Figure 2: Yule North MLTEM survey areas (yellow outlines) with modelled BYC1 conductor plate (red) over RTP 1VD magnetic image.

MLEM surveying at the Balla Yule prospect successfully identified a discrete bedrock anomaly that has been modelled as a large (~750 m x 900 m), moderate conductance (~150-200 S) plate, dipping ~20-40 degrees to the north at a depth of ~130-150 m below surface. The conductor (**BYC1**) is coincident with a magnetic unit, interpreted as a mafic-ultramafic intrusion, and underlies anomalous Ni-Co geochemical results and Ni-Cu-Co sulphide petrological results from RC drill samples.

Conductor **BYC1** could represent the response of stringer, strongly disseminated and/or matrix Ni-Cu sulphides, part of a mafic-hosted layered titanomagnetite/vanadium sequence, or pyrrhotitic

metasediments (e.g. iron formation), although no metasedimentary units have been recognised in the immediate area to date.

### **Quarry Well Prospect**

Two untested, late time EM (Sirotem) anomalies were identified in an historical WMC report during the geophysical review of the Yule Project (refer to ASX announcement dated 26 June 2019).

The historical Sirotem anomalies were not detected with the new MLTEM survey. A review of the historical and new data indicates that they were likely artefacts associated with surficial magnetic material. Quarry Well is no longer considered an EM target but it should continue to be evaluated as a target for structurally related gold and/or base metal mineralisation.

## **Murchison – 100% GSM**

### **The Patch**

The Company drilled its first drillhole into the historic prospecting and mining area referred to locally as “The Patch”. This 200 x 1000 metre prospect contains the Volunteer group of historic workings, which is a collection of numerous small-scale prospecting shafts and shallow pits (refer to ASX announcement dated 2 August 2019).

A single vertical drillhole 19GSPARC0001 (98m EOH) was designed to follow up a previous exploder’s drillhole to the west (Figure 3) and to test for further high-grade quartz veins at depth. 19GSPARC0001 intersected several structures containing mineralised quartz veins with the best intersection of 4m @ 7.5g/t from 7m including 1m @ 20.3g/t from 8m.

Previous exploration has only partly tested the structural complexity of The Patch area and the Company will now use this latest drilling to help evaluate the shallow gold mineralised veins exploited in this area (Figure 3).

### **Light of Asia North**

The company completed follow up drilling of 13 RC drillholes for a total of 979 metres at the Light of Asia North Prospect to test for dip and strike extensions to the south of the Company’s high-grade intercept in 18GSLARC0006 (3m @ 20 g/t including 1m @ 56 g/t Au - refer to ASX announcement dated 25 January 2019).

The focussed program successfully delineated the Light of Asia gold mineralised structure 500 metres north of the main historic workings. The overall Light of Asia trend has now been extended to approximately 1 kilometre and remains open to the north. Drill logging and assay results confirmed the presence of the Light of Asia structure with anomalous gold results (2m @ 0.60 g/t including 1m @ 1.0g/t from 69m, (refer to ASX announcement dated 2 August 2019)), suggesting possible plunge or shoot constraints on the high-grade mineralisation reported from 18GSLARC0006. Further modelling and structural investigations are required in this prospect area.



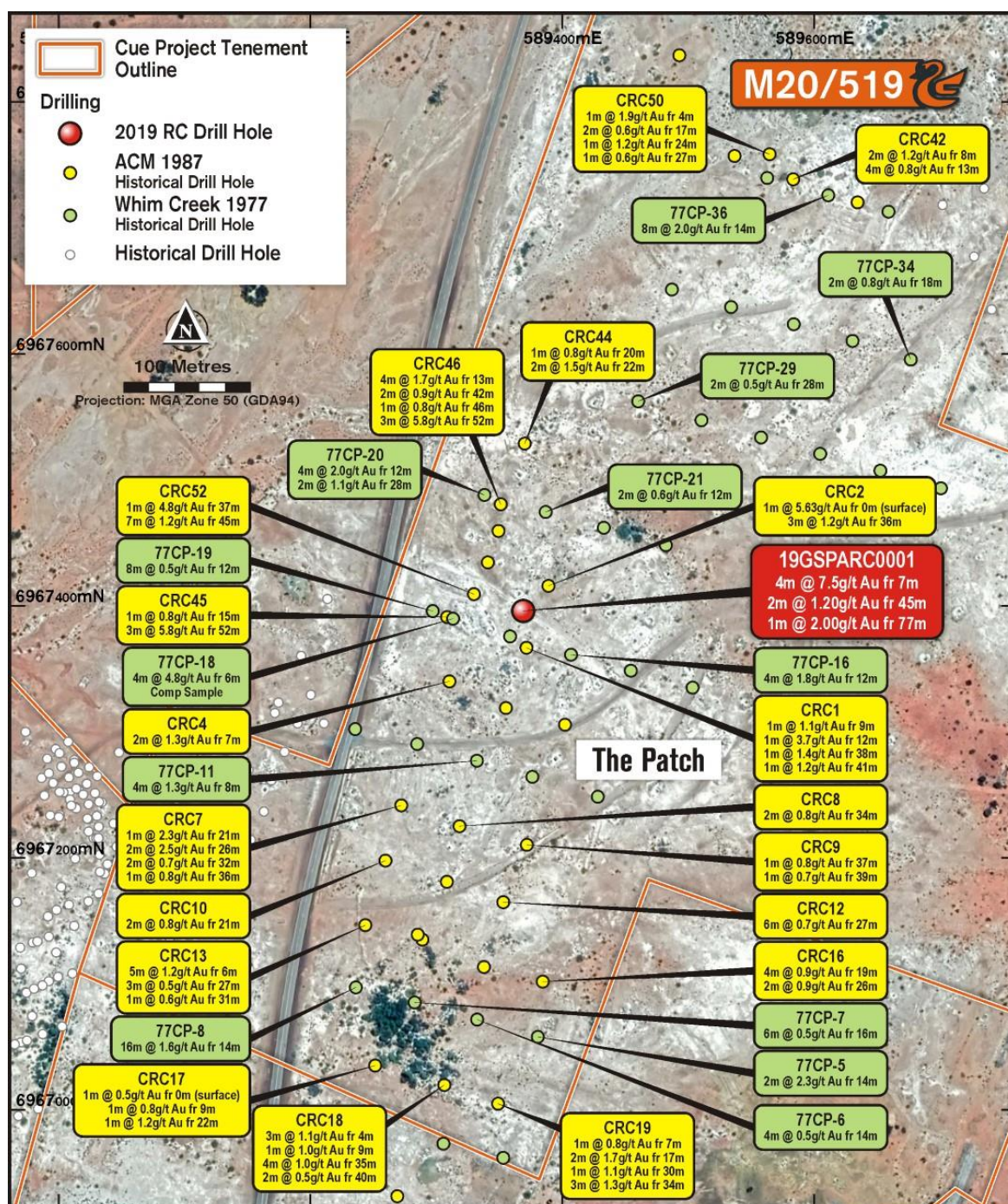


Figure 3: Location Plan of 19GSPARC0001 at The Patch prospect with previous drilling results

*N.B. Previous Explorers Whim Creek assay results are based on composite sample intervals*

## Cuddingwarra

The Company recently completed a geochemical sampling program at the Cuddingwarra project, (refer to previous ASX announcement dated 2 August 2019) which was designed to assess several untested geophysical targets.



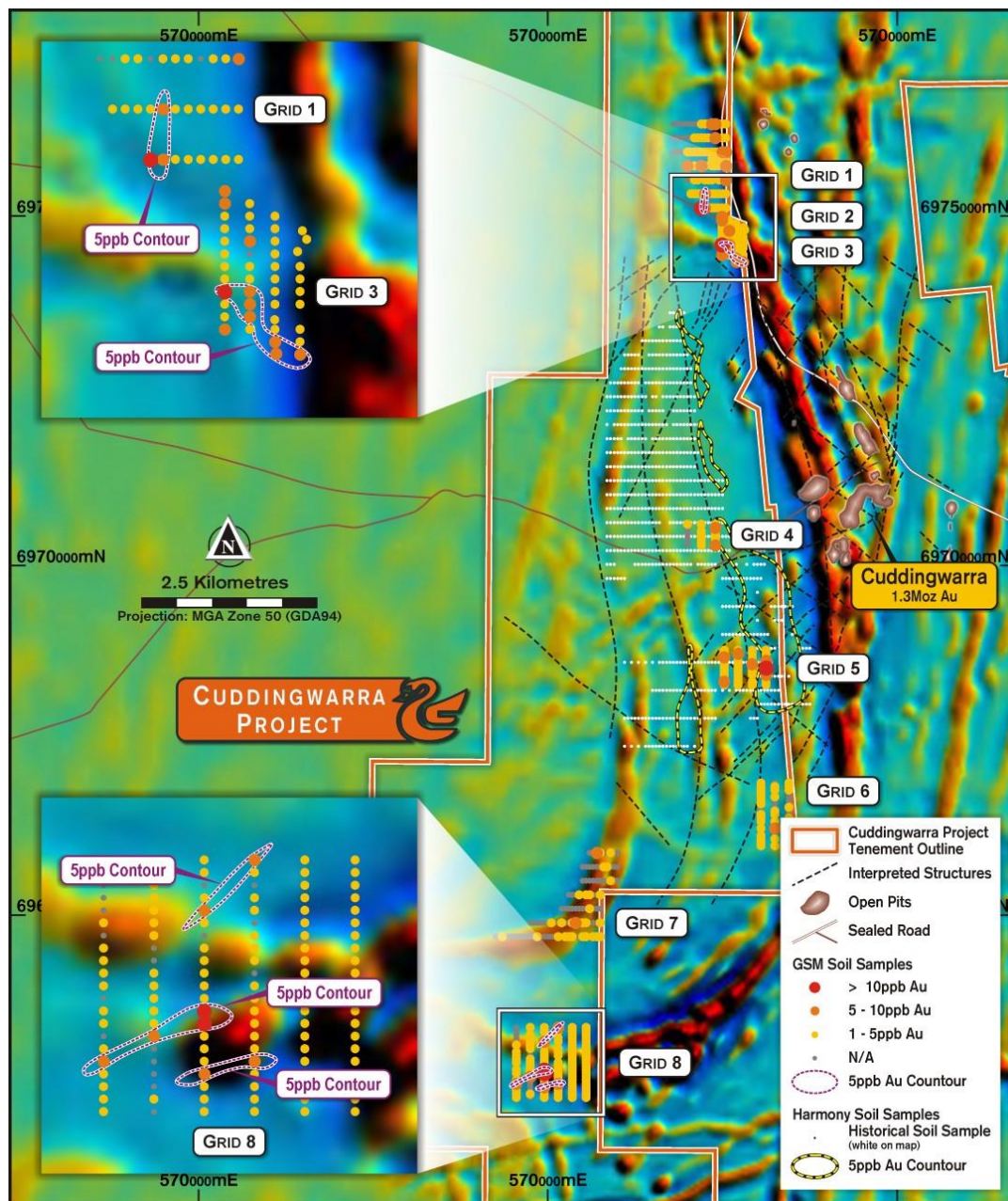


Figure 4: Location Plan of Cuddingwarra Geochemical Results over Total Magnetic Intensity

The program consisted of 500 soil samples collected over 8 discrete target areas on a provisional 200 x 50 metre pattern (Figure 4). The sampling technique employed mostly conventional soil sampling techniques based on the interpreted depth of cover. 4 grids produced consecutive gold assay results greater than 5ppb, 2 of which coincide with prospective interpreted structures outlined by aeromagnetic data. The anomalies on Grid 8 occur over demagnetised zones within a continuation of the same sequence and interpreted structural corridor hosting the Cuddingwarra open pits approximately 8 kilometres to the north. The Company's tenure contains a further 2 kilometres of this prospective corridor to the west of this newly defined soil anomalism.

The new gold in soil anomalies strongly support existing soil and bottom of hole gold anomalism defined by previous explorers which present potential drill targets in the near term.

## Four Mile Well – 100% GSM

The company's inaugural exploration program at the Four Mile Well project consisted of a geochemical survey (refer to previous ASX announcement dated 22 July 2019) that collected 263 samples over 2 target areas. The northern target area (Figure 5) consisted of 6 sample lines (157 samples on an 800 x 50 metre sample pattern). The grid pattern was designed to tie in with previous explorers' first pass sample grid utilizing the same sampling and assaying technique for consistency. The target geology consisted of interpreted mafic/ultramafic contacts and chert units with a coincident aero magnetic high anomaly.

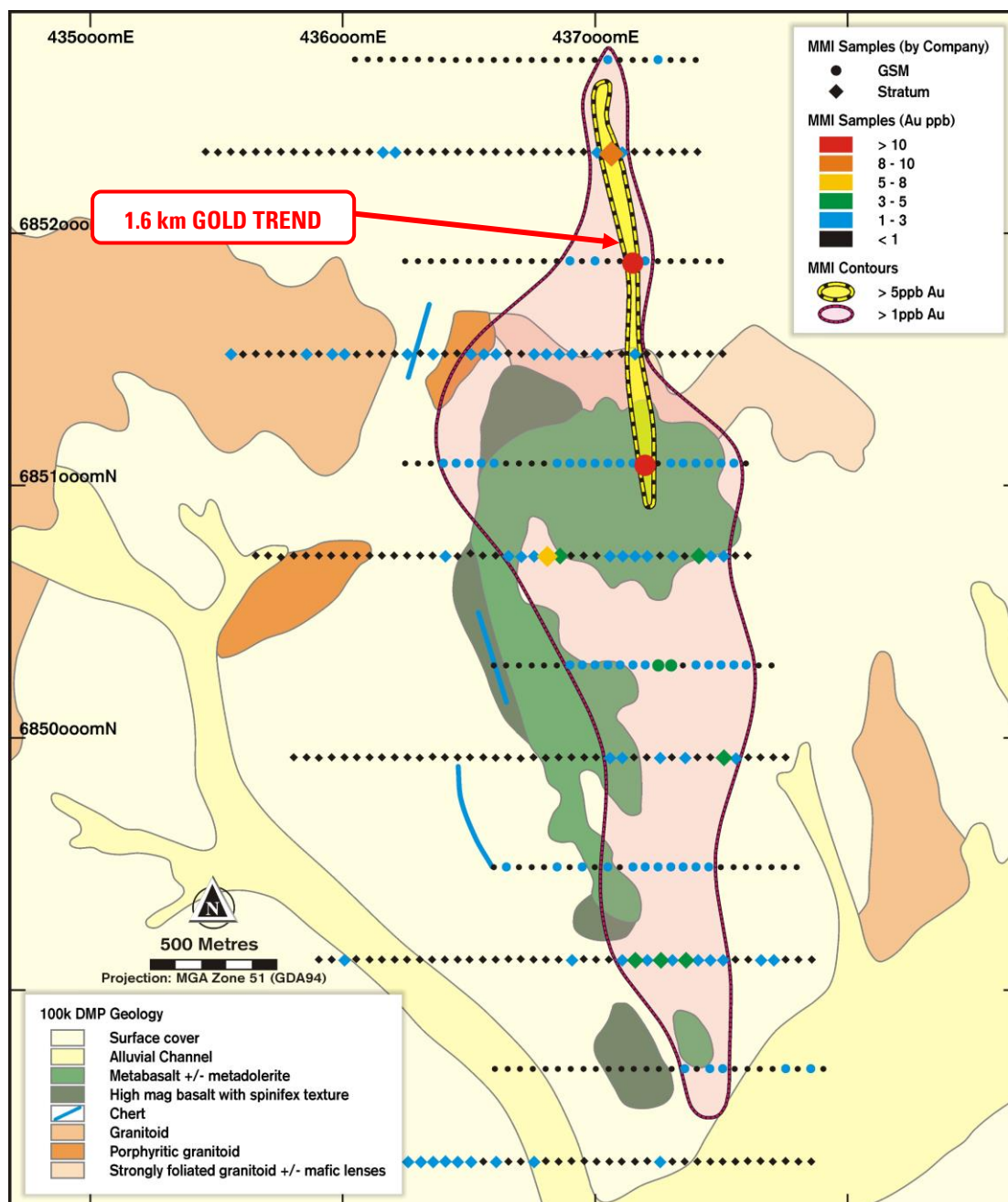


Figure 5: Location plan showing anomalous gold trend over GSWA 100k Surface Geology

The geochemical sampling technique employed used the mobile metal ion (MMI) technique which is designed to detect low level anomalism in situations where conventional geochemical techniques may be ineffective due to concealed bedrock under transported cover.



The sample data produced a low level +1ppb gold contour which approximately coincides with the mapped basalts in the area. The best results were two separate soil assays on lines 2 and 3, which produced anomalous **assay results of 18.4ppb & 25.6ppb gold** respectively and appear to coincide along trend with an anomalous soil result of 8.5ppb gold from the previous explorers' surveys. The spatial coherence of the anomalous values provides high confidence in a bedrock signal with the results appearing to define an approximate 1.6-kilometre north-northwest trending anomaly with no previous drill testing.

The southern area consisted of 3 north-south spaced sample lines on 50 metre centres that were also designed to follow up previous explorers first pass geochemical surveys that used a more conventional soil sampling technique. The best results appear to be related to a mapped tonalite with outcropping quartz veins and a strongly foliated granitoid unit containing mafic lenses. Several assay results on line 7 returned values greater than 5ppb gold with a **highest assay result of 51.8ppb**. These results are also consistent with previous explorers' results and reveal a coherent north-east trend.

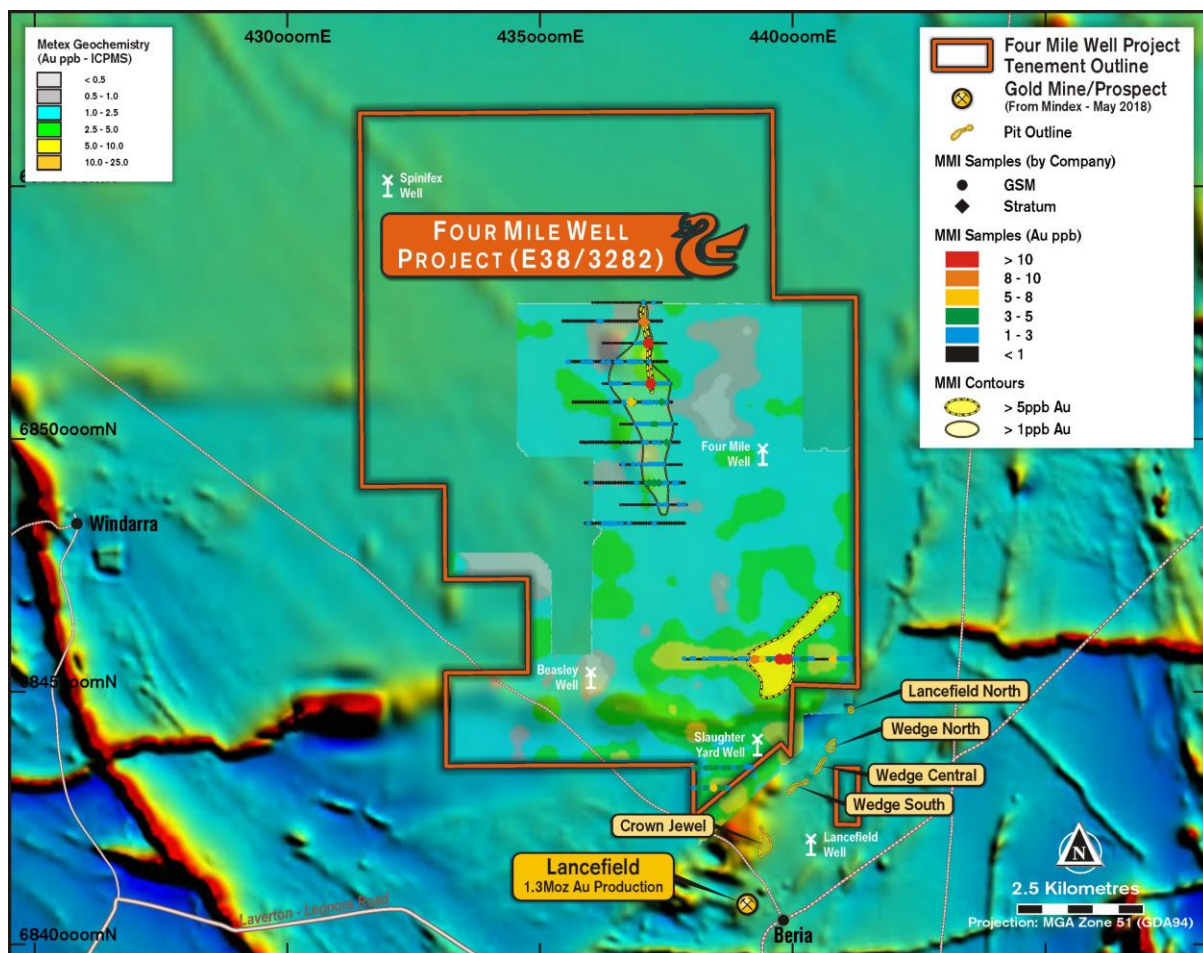


Figure 6: Project Location Plan Showing Geochemistry Over Open File Total Magnetic Intensity

## Planned December Quarter Activities

During the October 2019 Quarter, the Company will focus upon the following activities;

- Yule North Project – Fixed Loop EM survey at the Balla Yule Prospect
- Yule South Project – Aircore drill planning and approvals
- Four Mile Well – 60 hole Aircore drill program
- Cuddingwarra - Aircore drill planning and approvals

## For further information please contact:

- Mike Moore (Managing Director) on 08 6323 2384 / 0438 938 934
- Greg Hancock (Non-Executive Director) 08 6323 2384 / 0418 263 388



## About Golden State Mining

GSM is a Western Australian minerals exploration company listed on the Australian Securities Exchange (ASX: 'GSM'). The company's prime focus is the exploration and development of three highly prospective Western Australian gold project areas.

### MURCHISON

- Approximately 645km by road northeast of Perth
- 425km<sup>2</sup> of tenements including Cuddingwarra, Big Bell South & Cue
- Targeting large gold systems
- Proven Gold Region - produced over 7Moz of gold the past 126 years
- Day Dawn/Great Fingall mine (1.7Moz production) ~5km along trend
- Historic mines operated until around the 1920's exploiting high grade +15g/t gold shoots

### YULE

- 17 priority gold, base metal and rare earth element target areas identified
- Located between 35 km and 65 km southwest of Port Hedland in the northern Pilbara region of Western Australia
- Three granted exploration licences and one application for a total of 656 km<sup>2</sup> capture a significant portion of the Pilbara
- Archaean layered mafic-ultramafic intrusion Ni, Cu, Co, PGE, V & Ti targets at Yule North
- Balla Yule magnetic target trend near Sholl Shear Zone largely untested
- Targets identified from airborne geophysics at Yule South



### FOUR MILE WELL

- The Four Mile Well Project is located 9km to the north of the Laverton townsite in the Eastern Goldfields and consists of a single 38 block exploration licence (approximately 107 km<sup>2</sup>)
- The region is well endowed with a number of major gold and nickel deposits within close proximity to the Four Mile Well Project area
- Significant nickel sulphide deposits (Windarra and Mt Windarra) are located to the west of the project area and the 1.3Moz Lancefield gold deposit is located less than 1km to the south
- Geochemical programs by several previous explorers have produced gold anomalism that was never followed up or drill tested

## FORWARD LOOKING STATEMENTS

As a result of a variety of risks, uncertainties and other factors, actual events, trends and results may differ materially from any forward looking and other statements mentioned or implied herein not purporting to be of historical fact. In certain cases, forward-looking information may be identified by (without limitation) such terms as "anticipates", "believes", "should", "could", "estimates", "target", "likely", "plan", "expects", "may", "intend", "shall", "will", or "would". Any statements concerning mining reserves, resources and exploration results may also be forward looking in that they involve estimates based on assumptions. Forward looking statements are based on management's beliefs, opinions and estimates as of the respective dates they are made. The Company does not assume any obligation to update forward looking statements even where beliefs, opinions and estimates change or should do so given changed circumstances and developments.

## COMPETENT PERSONS STATEMENT

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Geoff Willetts who is a Member of the Australian Institute of Geoscientists (AIG). Geoff Willetts is the Exploration Manager, a full-time employee of Golden State Mining Limited (GSM) and holds shares and options in the Company.

Geoff Willetts has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity currently being undertaken 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". Geoff Willetts consents to the inclusion in this report of the matters based on his information in the form and context in which it appears. Information on previous explorers and historical results are summarised in the Independent Geologist's Report of the Golden State Mining Limited Prospectus dated 22 August 2018.



## APPENDIX 1 Summary of Mining Tenements

Table 1. As at 30 September 2019 the Company or its subsidiaries ("Group") had a 100% beneficial interest in the following tenements:

Number	Holder	Status
<b>Murchison Project</b>		
E 21/192	Lefroy Exploration Ltd <sup>4</sup>	Live
E 21/193	Lefroy Exploration Ltd <sup>4</sup>	Live
P 20/2256	Lefroy Exploration Ltd <sup>4</sup>	Live
P 20/2257	Lefroy Exploration Ltd <sup>4</sup>	Live
P 20/2258	Lefroy Exploration Ltd <sup>4</sup>	Live
P 20/2259	Lefroy Exploration Ltd <sup>4</sup>	Live
P 20/2260	Lefroy Exploration Ltd <sup>4</sup>	Live
P 20/2261	Lefroy Exploration Ltd <sup>4</sup>	Live
P 20/2262	Lefroy Exploration Ltd <sup>4</sup>	Live
P 20/2263	Lefroy Exploration Ltd <sup>4</sup>	Live
P 20/2264	Lefroy Exploration Ltd <sup>4</sup>	Live
P 20/2265	Lefroy Exploration Ltd <sup>4</sup>	Live
P 20/2266	Lefroy Exploration Ltd <sup>4</sup>	Live
P 20/2267	Lefroy Exploration Ltd <sup>4</sup>	Live
P 20/2268	Lefroy Exploration Ltd <sup>4</sup>	Live
P 20/2269	Lefroy Exploration Ltd <sup>4</sup>	Live
P 20/2272	Lefroy Exploration Ltd <sup>4</sup>	Live
P 20/2273	Lefroy Exploration Ltd <sup>4</sup>	Live
P 20/2274	Lefroy Exploration Ltd <sup>4</sup>	Live
P 20/2275	Lefroy Exploration Ltd <sup>4</sup>	Live
L 20/60	Western Mining Pty Ltd <sup>4</sup>	Live
L 20/61	Western Mining Pty Ltd <sup>4</sup>	Live
L 20/62	Western Mining Pty Ltd <sup>4</sup>	Live
L 20/66	Western Mining Pty Ltd <sup>4</sup>	Live
L 20/68	Western Mining Pty Ltd <sup>4</sup>	Live
L 20/69	Western Mining Pty Ltd <sup>4</sup>	Live
L 20/70	Western Mining Pty Ltd <sup>4</sup>	Live
L 20/78	Western Mining Pty Ltd <sup>4</sup>	Pending
M 20/61	Western Mining Pty Ltd <sup>4</sup>	Live
M 20/519	Western Mining Pty Ltd <sup>4</sup>	Live
M 20/520	Western Mining Pty Ltd <sup>4</sup>	Live
M 20/522	Western Mining Pty Ltd <sup>4</sup>	Live
M 20/523	Western Mining Pty Ltd <sup>4</sup>	Live
M 20/524	Western Mining Pty Ltd <sup>4</sup>	Live
M 20/525	Western Mining Pty Ltd <sup>4</sup>	Live
M 20/547	Western Mining Pty Ltd <sup>4</sup>	Pending
P 20/2027	Western Mining Pty Ltd <sup>4</sup>	Live
P 20/2118	Western Mining Pty Ltd <sup>4</sup>	Live

P 20/2160	Western Mining Pty Ltd <sup>4</sup>	Live
P 20/2162	Western Mining Pty Ltd <sup>4</sup>	Live
P 20/2174	Western Mining Pty Ltd <sup>4</sup>	Live
P 20/2213	Western Mining Pty Ltd <sup>4</sup>	Live
P 20/2214	Western Mining Pty Ltd <sup>4</sup>	Live
P 20/2223	Western Mining Pty Ltd <sup>4</sup>	Live
P 20/2276	Western Mining Pty Ltd <sup>4</sup>	Live
P 20/2319	Cue Consolidated Mining Pty Ltd <sup>2</sup>	Live
P 20/2320	Cue Consolidated Mining Pty Ltd <sup>2</sup>	Live
P 20/2321	Cue Consolidated Mining Pty Ltd <sup>2</sup>	Live
P 20/2322	Cue Consolidated Mining Pty Ltd <sup>2</sup>	Live
P 20/2323	Cue Consolidated Mining Pty Ltd <sup>2</sup>	Live
P 20/2324	Cue Consolidated Mining Pty Ltd <sup>2</sup>	Live
P 20/2325	Cue Consolidated Mining Pty Ltd <sup>2</sup>	Live
P 20/2330	Western Mining Pty Ltd <sup>4</sup>	Live
P 20/2335	Cue Consolidated Mining Pty Ltd <sup>2</sup>	Live
P 20/2336	Cue Consolidated Mining Pty Ltd <sup>2</sup>	Live
P 20/2342	Cue Consolidated Mining Pty Ltd <sup>2</sup>	Live
P 20/2343	Cue Consolidated Mining Pty Ltd <sup>2</sup>	Live
P 20/2344	Cue Consolidated Mining Pty Ltd <sup>2</sup>	Live
P 20/2345	Cue Consolidated Mining Pty Ltd <sup>2</sup>	Live
P 20/2346	Cue Consolidated Mining Pty Ltd <sup>2</sup>	Live
P 20/2349	Cue Consolidated Mining Pty Ltd <sup>2</sup>	Live
P 20/2368	Cue Consolidated Mining Pty Ltd <sup>2</sup>	Live
P 20/2369	Cue Consolidated Mining Pty Ltd <sup>2</sup>	Live
P 20/2370	Cue Consolidated Mining Pty Ltd <sup>2</sup>	Live
P 20/2371	Cue Consolidated Mining Pty Ltd <sup>2</sup>	Live
P 20/2372	Cue Consolidated Mining Pty Ltd <sup>2</sup>	Live
P 20/2373	Cue Consolidated Mining Pty Ltd <sup>2</sup>	Live
P 20/2374	Cue Consolidated Mining Pty Ltd <sup>2</sup>	Live
P 20/2382	Cue Consolidated Mining Pty Ltd <sup>2</sup>	Pending
P 21/756	Western Mining Pty Ltd <sup>4</sup>	Live
P 21/765	Cue Consolidated Mining Pty Ltd <sup>2</sup>	Live
P 21/766	Cue Consolidated Mining Pty Ltd <sup>2</sup>	Live
E 20/949	Cue Consolidated Mining Pty Ltd <sup>2,3</sup>	Pending
E 20/950	Cue Consolidated Mining Pty Ltd <sup>2,3</sup>	Pending
E 20/951	Cue Consolidated Mining Pty Ltd <sup>2,3</sup>	Pending



<b>Yule Project</b>		
E 47/3503	Crown Mining Pty Ltd <sup>2</sup>	Live
E 47/3507	Crown Mining Pty Ltd <sup>2</sup>	Live
E 47/3508	Crown Mining Pty Ltd <sup>2</sup>	Live
E 45/5570	Crown Mining Pty Ltd <sup>2,3</sup>	Pending
<b>Four Mile Well Project</b>		
E 38/3282	Crown Mining Pty Ltd <sup>2</sup>	Live

## Notes:

1. Acquired during the quarter; Held in trust for Cue Consolidated Mining Pty Ltd pending transfer.
2. 100% subsidiary of GSM.
3. Applied for during the quarter.
4. Held in trust for Cue Consolidated Mining Pty Ltd pending transfer.
5. Granted during reporting period.

The following tenement was withdrawn during the reporting period, M 20/548.