



ASX Announcement

DATE: 1st December, 2021

## GOLDEN CROWN RC DRILLING

### Highlights

- ◆ Nine RC holes completed at Golden Crown (M37/475) for an advance of 860m.
- ◆ Best intercept of 3m @ 11.97 g/t Au (37-40m) in drill hole 21GCRC001, including **1m @ 33.61 g/t Au**. Additional assay results pending.
- ◆ Drilling targeted area comprising historical Golden Crown workings and open stopes.
- ◆ Historical battery production records (1899-1904) reported crushing grades of approximately 1 ounce/ton.

Mt Malcolm Mines NL (ASX:M2M or “the Company”) is pleased to provide an interim exploration update following completion of an RC drilling program at Golden Crown.



*Figure 1 RC rig drilling at the Golden Crown Prospect*

The Golden Crown workings were regarded as a significant historical gold producer at the turn of last century.

Table 1. Historical Production Records – Golden Crown Prospect

Mine Name	Imperial Tons	Ounces Produced	GML Lease ID (historical)	g/t Au	Time Period
Golden Crown & Midas United GM NL	1,534.0	1,404.24	756C, 637C, 970C & 781C	28.5	1901-1904
Golden Crown	299.0	322.04	756C	33.5	1899-1900

Source: *List of Cancelled Gold Mining Leases which have produced gold. Published by Western Australia Department of Mines, 1954*

The first batch of results from recent drilling at Golden Crown has returned significant intersections. Results from deeper holes remain outstanding, and will be released to the market once they have been received.

Results to date include:

- 21GCRC001 1m @ 0.54 g/t Au (19-20m)
- 21GCRC001 2m @ 0.59 g/t Au (32-34m)
- **21GCRC001 3m @ 11.97 g/t Au (37-40m) including 1m @ 33.61g/t Au (37-38m)**
- 21GCRC003 2m @ 0.92 g/t Au (19-21m)
- 21GCRC003 7m @ 0.34 g/t Au (25-31m)
- 21GCRC003 1m @ 0.66 g/t Au (62-63m)
- 21GCRC004 1m @ 1.22 g/t Au (12-13m)
- 21GCRC004 1m @ 0.94 g/t Au (14-15m)

Drilling intersected quartz veining and narrow chert horizons within intensely sheared, silicified, sericitic felsic volcanic sequence.

Hole collar details include the following:

Table 2. Golden Crown Prospect – RC drill hole collar location

Hole ID	Easting	Northing	Depth	AZI	DIP
21GCRC001	348949	6802970	50m	310°	60°
21GCRC002	348966	6802954	90m	310°	60°
21GCRC003	348920	6802940	80m	230°	60°
21GCRC004	348905	6802900	50m	310°	60°

### Next Steps

The Company is planning a second RC drill program to follow up the results generated from this initial drill program.

Other than the recent RC drilling results reported in this release, the information contained or referenced in this announcement was first released by the Company in its IPO Prospectus dated 2<sup>nd</sup> August 2021 “Mt Malcolm Mines NL ACN:646 466 435 Prospectus” as supplemented by a Supplementary Prospectus dated 19<sup>th</sup> August 2021 (Prospectus). Further details with respect to the exploration target and historic exploration results are referenced in this document. The Company is not aware of any new information or data that materially affects the information presented in this release.

**This announcement has been authorised by the Board of Mt Malcolm Mines NL.**

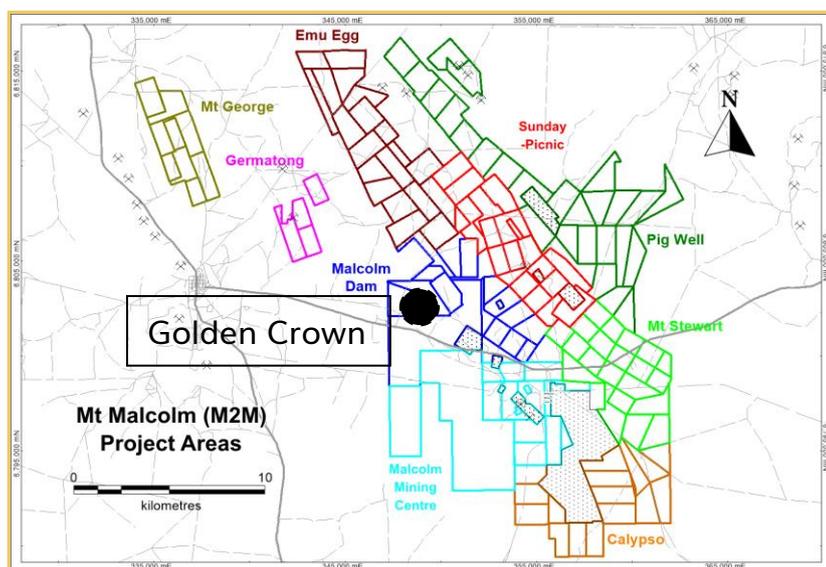
### **Competent Persons Statement**

*The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr. Paul Maher, a Competent Person and a full-time employee of the company who is a Member of The Australasian Institute of Mining and Metallurgy. Mr. Paul Maher has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity 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’. Mr. Paul Maher consents to the inclusion in the report of the matters based on the information compiled by him, in the form and context in which it appears.’ The Company is not aware of any new information or data that materially affects the information included in the above.*

### **About Mt Malcolm Mines NL:**

Mt Malcolm Mines NL is managed by competent and experienced industry professionals with a strong background in mineral exploration and administration of mineral assets. Additionally, the company has many professional associations with and access to some of the industry’s best corporate and mining resource consultants.

The projects and properties are in areas with a proven track history of exploration success and significant mining and production of gold and other minerals. The holdings are centred around the locale of Malcolm near Leonora WA. The Company believes that it’s prospects offer excellent potential for the discovery of new economic mineral deposits and within the next (2) two years intends to:



- ◆ Conduct regional geological mapping and geochemical sampling programs.
- ◆ Undertake focused and systematic exploration and scientific research programs.
- ◆ Aggressively seek exploration and development opportunities of other targets and quality projects that meet the Mt Malcolm Mines development objectives and where appropriate and if opportunities arise, examine the possibilities of joint ventures and other related business and commercial opportunities that will create value and wealth for all its shareholders.

The Mt Malcolm Gold Project has the potential to host economic gold mineralisation and opportunities exist to further enhance and build on the substantial exploration data assembled to date. The project represents a large-scale district gold play.

## APPENDIX A

### JORC CODE, 2012 EDITION – TABLE 1 REPORT – GOLDEN CROWN PROSPECT

#### SECTION 1 – Sample Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	Commentary
<i>Sampling techniques</i>	<p>Reverse Circulation (RC) drill samples were collected over 1 metre downhole intervals from beneath a cyclone attached to the rig. 3-4kg sub-samples splits were collected in pre-numbered calico bags for submission to the analytical laboratory. The remaining bulk residue is stored at the drill site. All the samples collected were dry with no wet samples.</p> <p>The sampling techniques and methodologies used are deemed appropriate and industry standard for this style of exploration.</p>
<i>Drilling techniques</i>	<p>Drilling techniques are conventional, industry standard methodologies utilising face-sampling hammers with bit shrouds. Drill bit sizes were typically 140-145mm.</p> <p>RC drilling was conducted by iDrilling Australia's Hydco 350 drill rig mounted on an 8x8 Atcross truck with a 600/700psi 1800cfm air compressor, plus auxiliary and booster air compressors as required. Drilling used down-hole face-sampling hammers. All metres were drilled dry, there were no wet samples. Holes were down-hole surveyed utilising an Axis Mining Technology's Champ Gyro (North Seeking) survey tool (ID #13561). The majority of holes only deviated slightly.</p>
<i>Drill sample recovery</i>	<p>Drilling utilised a cyclone splitter attached to the rig. The sample reject is collected in plastic bags and a 3-4kg sub-sample is collected in calico bags for submission to the assay laboratory. Following the sample collection the cyclone is flushed with compressed air at the end of each 6m drill rod. The sampling cyclone is thoroughly cleaned at the end of each rod. This process was maintained throughout the program. Recovery percentages were recorded.</p> <p>Collected samples are deemed reliable and representative of drilled material. No material discrepancy, that would impede a mineral resource estimate, was identified between the primary 1 metre RC samples and the split sub-samples.</p> <p>No indication of sample bias is evident nor has it been established. No relationship has been observed to exist between sample recovery and grade</p>
<i>Logging</i>	<p>All drill holes are geologically logged in their entirety at 1 metre intervals over its entire length. All drill hole data is either digitally or physically captured. Validated and standardisation are required prior to being uploaded to the Mt Malcolm data base. The level of logging detail is considered appropriate for exploration and to support appropriate mineral resource estimation, mining studies, and metallurgical studies.</p> <p>Qualitative logging includes classification and description of lithology, weathering, oxidation, colour, texture and grain size. Quantitative logging includes identification and percentages of mineralogy, sulphides, mineralisation and veining.</p>
<i>Sub-sampling techniques and sample preparation</i>	<p>Samples are collected at 1 metre intervals. Typically a 3-4kg sub-sample is collected from beneath the cyclone, via a stationary cone splitter. Sampling methodologies are consistent with industry standard. Sub-samples are collected from the drill sites at the end of each day and taken to a secure location, the remaining residue are retained on site in plastic bags. Samples were kept dry by the use of auxiliary and booster air compressors, no wet samples were encountered.</p>

Criteria	Commentary
	<p>Field duplicates, blanks and certified reference material (CRM) standards were periodically inserted into the sample batches at a ratio of approximately 1 CRM per 10 samples. Sub sampling and sample preparation techniques are considered to be acceptable. Results indicate reasonable and acceptable analytical repeatability. The QA/QC procedures implemented during the drill program are considered to be current industry standard practice.</p> <p>Sample size and collection methodologies are considered appropriate for this style of gold mineralisation and as an industry accepted method for evaluation of gold deposits in the Eastern Goldfields of Western Australia.</p>
<i>Quality of assay data and laboratory tests</i>	<p>Sample preparation and analysis was conducted by Jinning Pty Ltd's Kalgoorlie laboratory. Samples were dried, crushed and pulverised. The samples were assayed for gold only using the 50 gram Fire Assay technique with AAS finish (0.01ppm limit of detection). Field duplicates and Certified Reference material, standards and blanks are regularly inserted into the sample batch. The laboratory also includes standards and blanks as part of their internal QA/QC control, repeatability and standard results are within acceptable limits</p> <p>No geophysical tools were used to determine any element concentrations.</p>
<i>Verification of sampling and assaying</i>	<p>No adjustment or calibrations have been made to any of the assay data. Sampling and assay techniques are considered to be current industry standard practice.</p>
<i>Location of data points</i>	<p>All location points (hole collars) were recorded using a hand-held GPS instrument and reported to the MGA94 UTM zone 51 coordinate system, with a horizontal accuracy of ±3 metres.</p>
<i>Data spacing and distribution</i>	<p>The drill hole and sampling spacing is project specific; the drilling patterns employed in the past were dependent on previous drilling and/or geological interpretation/targeting depending on the nature and style of the mineralisation being tested. The sample spacing is considered close enough to identify significant zones of gold mineralisation. The drill programs are an ongoing follow up exploration exercise designed to identify areas of geological interest and to validate existing known mineralisation at the prospect. Closer spaced RC drilling on adjacent sections and follow up diamond drilling maybe required to further delineate the extent, size and geometry of some areas within identified zones of gold mineralisation.</p> <p>Drill spacing and drill techniques are considered to be sufficient to establish the degree of geological and grade continuity appropriate for any mineral resources and ore reserve estimation procedures and classifications applied. The mineralised system currently remains open and additional infill or deeper drilling would be required to close off and confirm the full extent of identified mineralisation, particularly at depth.</p> <p>Data acquired and processed is only being considered for exploration purposes.</p>
<i>Orientation of data in relation to geological structure</i>	<p>The sheared Mt Malcolm greenstone sequence is considered to be complex, and typified by a steeply dipping NNE to NE orientated stratigraphy. Stratigraphy is disrupted by the development of NW, NNW, NS, EW and NE trending faulted shear systems, which display a variety of fold styles ranging from open to isoclinal. The greenstone package in this area is considered to be overturned, dipping to the east.</p> <p>The chance of sample bias introduced by sample orientation is considered minimal. No orientation sampling bias has been identified in the data thus far. Drilling and sampling programs are planned in an attempt to obtain 'unbiased' sample data, with drill orientation generally orthogonal to the overall strike of the mineralisation.</p>

Criteria	Commentary
<i>Sample security</i>	Once samples are collected from the field, they are transported by Company personnel and securely stored in a locked yard at Leonora and/or transported to the analytical laboratory. Once received by the laboratory, samples are checked against the field manifest, sorted and prepared for assay. Samples were then processed and assayed under the supervision of the analytical laboratories. Once in the laboratories possession adequate sample security measures are assumed to be adopted.
<i>Audits or reviews</i>	<p>Sampling methodologies, assay techniques and QA/QC protocols used in the various historic drilling programs are not as thoroughly documented when compared to today's current standards. Reviews of the various available historical company reports regarding drilling and sampling techniques indicate that they were conducted to the industry standard practice of the day, however data was poorly validated and confidence levels are low with respect to collar co-ordinates, assay and logging techniques and sampling procedures.</p> <p>Further audits or reviews are not considered necessary at this particular exploration stage.</p>

## Section 2 – Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Commentary
<i>Mineral tenement and land tenure status</i>	<p>The Mt Malcom Project's tenements are located within the Shire of Leonora in the Mt Margret Mineral Field in the centre of the North Eastern Goldfields of Western Australia. The Golden Crown prospect is located on M37/475. The tenement is in in good standing, and there are no known impediments to obtaining licenses to operate in the area.</p> <p>The tenement is held by Mt Malcolm Gold Holdings Pty Ltd a wholly owned subsidiary of Mt Malcolm Mines NL. The tenements are managed and explored by Mt Malcolm Mines NL.</p> <p>Summary details of Native Title claims, registered Aboriginal sites, pastoral leases, private land, state government and third party royalties, and other details of all of the Company's tenements are disclosed in Annexure B "Solicitor's report on tenements" which was released by the company in its IPO Prospectus dated 2<sup>nd</sup> August 2021 "Mt Malcolm Mines NL CAN 646 466 435 Prospectus" as supplemented by a supplementary Prospectus dated 19<sup>th</sup> August 2021 (Prospectus). There has been no material changes to these details since .</p>

Criteria	Commentary
<p><i>Exploration done by other parties</i></p>	<p>The Golden Crown tenements have been explored and drilled by a number of exploration and mining companies over numerous years dating back to the early 1980s, the more active gold exploration companies included Chevron, North Limited, Jubilee Gold Mines and Melita Mining NL. All have contributed to various exploration programs utilising a wide variety of standard exploration techniques.</p> <p>Exploration activities by these companies covered all aspects of mineral exploration with a particular focus on gold. On ground activities include geophysics, geochemistry, geological mapping, drill programs (RAB, A/C and RC), sampling, structural interpretation and geological assessments.</p> <p>Historical reporting and descriptions of laboratory sample preparation, assay procedures and quality control protocols for the samples from the various drilling programs are variable in their descriptions and completeness.</p> <p>The drilling database has been assembled, interrogated and scrutinised to a satisfactory level however, in the majority of cases the data is historical and pre-dates JORC 2012 compliance. It has not been possible to fully verify the reliability and accuracy of portions of the data however no significant discrepancies have been identified to date. Historical exploration techniques and reported mineralisation are considered to have been conducted to the industry standards of the day.</p>
<p><i>Geology</i></p>	<p>The Project area is located 12km east of Leonora in the North Eastern Goldfields, which covers segments of the altered mafic basalt/felsic volcanoclastic/sedimentary sequences of the Malcolm Greenstone Belt. The Golden Crown sequence is positioned within the greenstones of the Kurnalpi Terrain. Local lithologies are characterized by linear trending steeply dipping structures and highly sheared stratigraphy.</p> <p>Rock outcrop is evident and the project area is located on a small hill. Structurally the area is intensely sheared and folded.</p> <p>Regionally, gold mineralization is associated with lithological contacts hosted by NW, NNW &amp; EW trending shear zones, often associated with quartz veining. There are several historical workings and open stopes evident at the Golden Crown prospect.</p>
<p><i>Drill hole Information</i></p>	<p>The location of drill hole collars is recorded in the company database and presented as part of the significant intersection tables in the body of this report. All hole depths refer to down hole depth in metres. Hole collars are quoted in UTM MGA94 Zone 51.</p> <p>Drill hole depths are measured from the collar (top) of the hole to the bottom (end) of the hole.</p>
<p><i>Data Aggregation methods</i></p>	<p>No averaging of the raw assay data was applied. Raw data was used to determine the location, width of gold intersections and anomalous gold trends. Geological assessment and interpretation were used to determine the relevance of the plotted intersections with respect to the sampled medium.</p> <p>When drill holes are quoted individual grades are reported as down hole 'length weighted' average grades. Intersections greater than or close to 0.5 g/t Au are regarded as significant or anomalous. Intersections &lt; 0.5g/t Au are regarded as indicative of potential mineralisation but are not viewed as anomalous nor considered to be significant however they are useful as a guide to potential mineralisation trends and relevant to any surrounding mineralisation halo.</p> <p>The significant intersections are tabled in the body of this report. No top cuts were applied to any assay values. There is no reporting of metal equivalent values.</p>

Criteria	Commentary
<i>Relationship between Mineralisation widths and intercept lengths</i>	<p>In general, drill hole orientations are planned to intersect orthogonal to mineralisation, however due to complex folding and/or structure, hole orientation may not necessarily be at an optimal angle to the strike of the greenstone sequence (NW-NNW) and the identified gold mineralisation. The majority of holes are orientated in a westerly direction. Since the greenstone sequence is generally steeply dipping east, drill intercepts are reported as downhole widths. As a result, the reported intersections do not necessarily represent true widths. Orientation and geometry of the anomalous zones has been primarily determined by interpretation of historical drilling.</p> <p>The maximum and minimum sample width within the reported mineralised zones is 1 metre. Quoted intersections are weighted averages.</p>
<i>Diagrams</i>	No "type example" plans or diagrams are included in the body of this announcement.
<i>Balanced Reporting</i>	Only gold results regarded as significant or anomalous are discussed and reported. Generally samples assaying > 0.5 g/t Au, which represents a low order mineable grade, is referred to in the table of significant intersections.
<i>Other Substantive exploration data</i>	<p>No other substantive data has been acquired that is considered necessary to report. The project area has been explored by several listed and reputable companies in the past, and results regarded as substantial, by those companies, have been reported in the past.</p> <p>All meaningful and material information is presented in this document. Further data collection will be reviewed and reported as and when considered material.</p>
<i>Further work</i>	<p>The potential to increase the existing zones of mineralisation is viewed as probable, however committing to further work does not guarantee that further delineation of the extent, size and geometry of some areas within identified zones of gold mineralisation will be the result.</p> <p>Planned future work at the Golden Crown project includes exploration RC drilling, database consolidation and potentially diamond drilling, on ground truthing, geophysical interpretation and geological investigation.</p>