



ASX Announcement

DATE: 11th January, 2022

FURTHER SHALLOW GOLD MINERALISATION CONFIRMED AT GOLDEN CROWN

Highlights

- ◆ Results for the Reverse Circulation (RC) drill holes completed at Golden Crown for a total advance of 860m have been received.
- ◆ Significant assays from the remaining five (5) RC holes at Golden Crown include:
 - 1m @ 7.06 g/t Au (34-35m) in 21GCRC007
 - 4m @ 2.99 g/t Au (28-32m) including 1m @ 5.78 g/t Au (29-30) in 21GCRC008.



Figure 1 RC rig drilling at the Golden Crown Prospect, looking west, Sons of Gwalia mullock dumps centre background behind rig

Mt Malcolm Mines NL (ASX:M2M or “the Company”) is pleased to provide an exploration update following receipt of the remaining assays and completion of an inaugural RC drilling program at Golden Crown (M37/475). Significant gold intercepts from the nine (9) RC holes for an advance of 860m are quoted.

Assay results for the RC drill program include:

- 21GCRC001 1m @ 0.54 g/t Au (19-20m) and 2m @ 0.59 g/t Au (32-34m)
- 21GCRC001 **3m @ 11.97 g/t Au (37-40m) including 1m @ 33.61 g/t Au (37-38m)**
- 21GCRC003 2m @ 0.92 g/t Au (19-21m) and 7m @ 0.34 g/t Au (25-31m) and 1m @ 0.66 g/t Au (62-63m)
- 21GCRC004 1m @ 1.22 g/t Au (12-13m) and 1m @ 0.94 g/t Au (14-15m)
- 21GCRC005 1m @ 3.07 g/t Au (17-18m)
- 21GCRC006 1m @ 0.34 g/t Au (41-42m) and 1m @ 0.25 g/t Au (44-45m)
- 21GCRC007 8m @ 0.51 g/t Au (20-28m) including 2m @ 0.92 g/t Au (23-25m) and 1m @ 0.45 g/t Au (30-31m) and **1m @ 7.06 g/t Au (34-35m)**
- 21GCRC008 1m @ 0.54 g/t Au (16-17m) and 2m @ 0.54 g/t Au (21-22m)
 - within 5m @ 0.44 g/t Au (19-24m)
- 21GCRC008 4m @ 2.99 g/t Au (28-32m) including **1m @ 5.78 g/t Au (29-30m)**
 - **within 10m @ 1.56 g/t Au (28-37m)**
- 21GCRC009 1m @ 1.16 g/t Au (16-17m) and 2m @ 2.61 g/t Au (21-23m) within 4m @ 1.46 g/t Au (20-24m)

Drillhole 21GCRC002 intersected an old stope over a downhole width of 2m, from (32-34m).

Managing Director, Trevor Dixon, said “*The Golden Crown Prospect is shaping up well with several high grade gold intersections received to date. Limited drilling has confirmed and identified high grade shallow gold mineralisation that remains open along strike and completely open at depth. The prospect is at an early exploration stage and warrants further follow-up RC drilling*”.

The Golden Crown workings are regarded as a significant historical gold producer, which includes more than 1,720 ounces produced at the turn of last century include:

Mine Name	Tons	Ounces Produced (oz)	GML Lease #	Au (g/t)	Time Period
Golden Crown and Midas United GM NL	1,534	1,404.2	756C, 637C, 970C & 781C	28.5	1901-1904
Golden Crown	299	322	756C	33.5	1899-1900

**Table 1 - List of Cancelled Gold Mining Leases which have produced gold - Department of Mines.
Reference Kelly (1954)**

Intersected lithologies comprise quartz veining, narrow chert horizons and minor sediments within a folded intensely sheared silicified sericitic felsic volcanic sequence. Minor pyritic-pyrrhotite sulphides

were encountered numerous times over several meters with two isolated metre intervals returning peak values of 15-20% massive sulphides (21GCRC006 and 21GCRC008).

Historically Chevron Exploration Corporation explored the Golden Crown area in the early 1980's following up a regional geophysical survey (WAMEX A9294 and A10208). The geophysical survey over the Golden Crown area was positive returning an anomalous IP halo. Follow up shallow drilling at the time (DH41-45) failed to explain the IP anomaly however the angled drill holes were shallow and ranged in depth from 63m-96m. The last hole on the section (Chevron drill hole DH45) intersected a sulphide rich horizon. Assays results from drillhole DH45 returned a maximum of 160ppm Cu and 234ppm Zn (54-56m) in felsic tuffs with minor pyritic mineralisation. The remainder of the hole averaged 6% pyritic sulphides (56-63m).

The IP anomaly has not been drill tested at depth, nor has the anomalous IP response been adequately explained. Mt Malcolm plan to follow up intersected sulphidic zones from the recent nine (9) RC holes with multi-element geochemical analysis. Additionally future drilling will include standard base metal analysis in sulphidic zones to complement down hole gold analysis.

Summary collar information and hole orientations for this round of RC drilling are tabulated below:

Hole ID	Easting GDA	Northing GDA	Hole Depth (metres)	Azimuth (degrees)	Dip (degrees)
21GCRC001	348949	6802970	50m	310°	-60°
21GCRC002	348966	6802954	90m	310°	-60°
21GCRC003	348920	6802940	80m	230°	-60°
21GCRC004	348905	6802900	50m	310°	-60°
21GCRC005	348980	6802940	130m	310°	-60°
21GCRC006	348997	6802970	130m	310°	-60°
21GCRC007	348934	6802926	100m	230°	-60°
21GCRC008	348949	6802913	100m	270°	-60°
21GCRC009	348933	6802879	130m	310°	-60°

Table 2 – Golden Crown drillhole particulars

Next Steps

The Company is planning a deeper follow up RC drilling targeting the strike and depth extensions of the veining system and anomalous gold intersections generated from the initial Golden Crown drill program together with an evaluation of the base metal potential.

The information contained or referenced in this announcement was first released by the Company in its IPO Prospectus dated 2nd August 2021 "Mt Malcolm Mines NL ACN:646 466 435 Prospectus" as supplemented by a Supplementary Prospectus dated 19th 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.

References

Chevron Exploration Corporation (1981) Annual Report. Mt Malcolm – Temporary Reserve 7046H, Mt Margaret Goldfield WA (A10208).

deRosario P.C. (1980) Chevron Exploration Corporation. Annual Report. Mt Malcolm – Temporary Reserve 7046H, Mt Margaret Goldfield WA (A9294).

Kelly L.F. (1954) List of cancelled gold mining leases which have produced gold. Mines Department of Western Australia.

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

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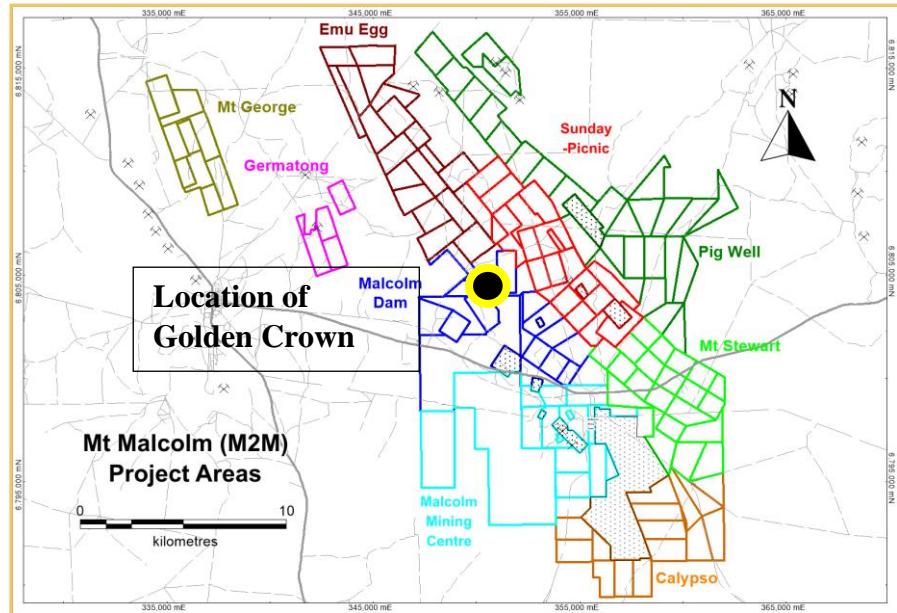
Competent Persons Statement

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 tenement holdings are centred around the abandoned locale of the old Malcolm townsite 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 2012 TABLE 1 - Mt MALCOLM MINES NL (GOLDEN CROWN PROSPECT)

SECTION 1 – Sample Techniques and Data

Criteria	Commentary
<i>Sampling techniques</i>	<p>Reverse Circulation (RC) drill samples were collected over 1m downhole intervals beneath a cyclone attached to the drill rig. Typically, 3-4kg sub-split samples were obtained. Sub-samples were collected in pre-numbered calico bags for submission to the analytical laboratory. The remaining bulk sample residue was stored at the drill site. All the samples were collected dry and no samples were wet.</p> <p>The sampling techniques and methodologies used are deemed appropriate and a industry standard for this style of exploration.</p>
<i>Drilling techniques</i>	<p>Drilling techniques are conventional Reverse Circulation (RC) industry standard methodologies utilising a face sampling hammers with bit shrouds. Drill bit sizes were typically 140-145mm in diameter.</p> <p>RC drilling was conducted by iDrilling's truck mounted Hydco 350RC 8x8 Atcross drill rig with a 600/700psi 1800cfm air compressor supported by auxiliary and booster air compressor's (when required).</p> <p>All metres were drilled dry, there were no wet samples. Holes were down hole surveyed utilising a Axis Mining Technology Champ Gyro probe #13561. Some of the holes deviated slightly.</p>
<i>Drill sample recovery</i>	<p>Drilling utilised a stationary cyclone splitter attached to the rig. The sample reject is collected in plastic bags and a 3-4kg sub-sample is collected at the drill site and stored 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 and deemed acceptable.</p> <p>Collected samples are considered reliable and representative of drilled material. No material discrepancy, that would impede a mineral resource estimate, exists between collected RC primary and 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 reported drill holes (21GCRC001-009) are geologically logged in their entirety at 1m intervals from the beginning to the end of the hole. All drill hole data is either digitally or physically captured. Validated and standardisation of data are required prior to being uploaded to the Mt Malcolm data base. The level of logging is detailed and considered appropriate for this stage of 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>

Criteria	Commentary
<i>Sub-sampling techniques and sample preparation</i>	<p>Samples are collected at 1m intervals. Typically, a 3-4kg split sub sample from beneath the cyclone via a stationary cone splitter. Sampling methodologies are consistent with the industry standard. Sub samples are collected each day, removed from site and taken to a secure location; the remaining residue (plastic bags) are retained on site. Samples were kept dry by the use of auxiliary and booster compressors; no wet samples were encountered.</p> <p>Field duplicates, blanks and certified standard material (CRM) were periodically inserted into the sample batches (approximately 1 in 10). Sub sampling and sample preparation techniques are considered to be acceptable. Assay results indicate reasonable and acceptable analytical repeatability. The QA/QC procedures implicated during the drill program are considered to be in line with today's 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>Analysis of sample was conducted by Jinning Laboratories in Kalgoorlie. Samples were dried, crushed and pulverised. The samples were assayed for gold only using a 50-gram Fire Assay technique with AAS finish with a 0.01ppm detection limit. Field duplicates and CRM's, standards and blanks are regularly inserted into the sample batch. The laboratory also included their own 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 conducted to today's standards.</p>
<i>Location of data points</i>	<p>All location points (hole collars) were recorded using a hand-held GPS and reported to the MGA94 UTM zone 51 coordinate system, with horizontal accuracy to ±3m.</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 program is a follow up/ongoing exploration exercise that was designed to identify areas of geological interest and to confirm existing known gold mineralisation at the prospect. Deeper and closer spaced RC drilling on surrounding cross 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 the drill technique is sufficient to establish the degree of geological and grade continuity appropriate for any mineral resources and ore reserve estimation procedures and classifications applied however the mineralised systems remain 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>Regionally the sheared Mt Malcolm greenstone sequence displays an NNE to NE lithological orientation with steeply dipping 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 generally young's westerly and dips east.</p>

Criteria	Commentary
	<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 conducted to obtain unbiased locations of drill sample data, generally orthogonal to the strike of the mineralisation.</p> <p>The regional geological structure is considered to be complex.</p>
<i>Sample security</i>	<p>Once samples are collected from the field they were 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.</p>
<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 best practice of the day however data is poorly validated and confidence levels are generally low regarding collar coordinates, 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	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 approximately 12km east of Leonora on M37/475. The tenement is in good standing.</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>The details of all Company tenements are disclosed in Annexure B "Solicitor's report on tenements" which was released by the company in its IPO Prospectus dated 2nd August 2021 "Mt Malcolm Mines NL CAN 646 466 435 Prospectus" as supplemented by a supplementary Prospectus dated 19th August 2021 (Prospectus).</p> <p>Gold production in Western Australia is subject to a state government royalty of 2.5%</p>

Criteria	Commentary
<p><i>Exploration done by other parties</i></p>	<p>The Golden Crown tenement has been explored and drilled by several exploration and mining companies over numerous years dating back to the early 1980s, more active gold exploration companies include, Chevron Exploration Corporation, 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 geophysical surveys, geochemical sampling, geological mapping, structural interpretation, drill programs (RAB, Aircore and RC), sampling, 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 predates JORC 2012 compliance. It has not been possible to fully verify the reliability and accuracy of portions of the data however it appears that no serious problems have occurred.</p> <p>Historical exploration techniques and reported mineralisation was conducted to the standards of the day.</p>
<p><i>Geology</i></p>	<p>The Golden Crown tenement is east of Leonora in the North Eastern Goldfields of WA covering segments of the altered mafic basalt/ felsic/ volcanoclastic and sedimentary sequences of the Malcolm Greenstone Belt. The greenstone sequence includes the felsic Golden Crown lithologies located within the Kurnalpi Terrain. Local lithologies are characterized by linear trending steeply dipping structures together within a highly sheared stratigraphy.</p> <p>Rock outcrop is evident and the project area is located on a small hill adjacent to the Mt Malcolm locality. Structurally the area is strongly sheared and intensely folded.</p> <p>Regionally gold mineralization is associated with lithological contacts hosted by NW, NNW & EW trending shear zones often associated with quartz veining. There are several old workings within the holding, a large three compartment shaft and open stopes/shafts are evident within the Golden Crown prospect.</p>
<p><i>Drill hole Information</i></p>	<p>The location of drill hole collars and hole details are recorded in the company database and presented as a table in the body of this report. All hole depths refer to total down hole depth in metres. Hole collar coordinates are quoted in MGA94 Zone51.</p> <p>Drill hole depths are measured from the surface 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 hole assays are quoted individual grades are reported as down hole length weighted average grades. Only intersections greater 0.25 g/t Au are regarded as anomalous and intersection less than 0.25g/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>

Criteria	Commentary
	<p>The significant intersections are tabled in the body of this report. Significant assay results when surrounded by a lower grade mineralised halo, greater than 0.25 g/t Au, are reported in the table of significant intersections within the body of this report.</p> <p>No top cuts were applied to any assay values. There is no reporting of metal equivalent values.</p>
<i>Relationship between Mineralisation widths and intercept lengths</i>	<p>In general, the drill hole orientation may not be at an optimal angle to the strike of the greenstone sequence and the identified gold mineralisation. However, the majority of holes are orientated in a westerly direction (230°-310°). Since the greenstone sequence is generally steeply dipping east, drill intercepts are reported as downhole widths. As a result, the reported intersections do not represent true widths. Orientation and geometry of the anomalous zones has been primarily determined by interpretation field observations and orientation of historical drilling.</p> <p>The maximum and minimum sample width within the reported mineralised zones is 1m. Quoted drill intersections are weighted averages.</p>
<i>Diagrams</i>	<p>No “type example” plans or diagrams are included in the body of this announcement.</p>
<i>Balanced Reporting</i>	<p>Only gold assay results regarded as significant and/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 however when surrounded by continuous lower order results > 0.25 g/t Au the mineralised envelope is quoted.</p>
<i>Other Substantive exploration data</i>	<p>Regarding the results reviewed no other substantive data is currently considered necessary. However, the project area has been explored by several listed companies in the past. Only 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 further exploration in the form of RC drilling, potentially diamond drilling, database consolidation, on ground truthing, geophysical interpretation and geological investigation.</p>