

Economic Gold Grades Determined within Stockpiles

ASX Announcement

21st March, 2025



Mt Malcolm Mines NL (ASX: M2M) ("the Company") is pleased to provide an update on the preliminary evaluation of the grade and tonnage of existing stockpiles from the recent Golden Crown Bulk sampling program. The evaluation highlights encouraging gold grades demonstrating the economic value of the stockpiles.

Highlights:

- Approximately 2,400 WMT of stockpiled mineralised material estimated with an average grade of 3 g/t Au.
- A total of 48 grab samples were collected from five stockpiles to assist grade estimation.
- Stockpile grab sample grade reached up to 42.74 g/t Au showcasing the high grade nature of mineralisation.
- The current stockpile at Golden Crown consists of unprocessed mineralised material from the recent bulk sampling program.
- Stockpile material presents a near-term opportunity with potential for imminent cash flow.
- About 980 WMT mineralised materials tailings (after gravity recovery) are at the processing site, the sampling for grade determination has been carried out and the results are under review with economic grades expected.



Managing Director Trevor Dixon, said, "The stockpile sampling results have reinforced confidence in the high-grade mineralisation at Golden Crown. The estimated average grade of 3 g/t Au for the current stockpiles aligns with expectations and supports the objectives of the bulk sampling program.

These encouraging results collectively highlight the potential to expand the known mineralised zones and advance the prospect towards commercial-scale production."

Stockpile Evaluation

This stockpiled material comprises unprocessed (<10 g/t Au) mineralised material from the recently completed bulk sampling program. The program was designed to evaluate the metallurgical characteristics, mining parameters, grade distribution, and mineability of the Golden Crown prospect gold mineralisation.

The stockpiles have been estimated as approximately 2,442 WMT tonnes of mineralised material with an average grade of 3 g/t Au.

In November 2024, LPD, a reputable surveying company, conducted LiDAR surveys and its results (see aerial image as Figure 1) serve as the primary basis for the volume estimates of the stockpiles.



Figure 1. Aerial Image Showing Existing Stockpiles at Golden Crown as of November 2024.

The high-resolution survey results ensure reliable volume calculations, although some uncertainty is inherent in any survey approach. The volume estimates for E stockpile are indicative and derived from the site measurements as the quantity in the E stockpile have been added post survey.

A total of 48 grab samples were collected from five current stockpiles, with sampling points carefully and evenly distributed across each stockpile to ensure representative coverage.

The sampling program returned gold grades reaching up to **42.74 g/t Au** (Table 2), reinforcing confidence in the high-grade nature of mineralisation. These results align closely with grade expectations and demonstrate the presence of high-grade gold mineralised material at the prospect.

Stockpile Material Breakdown

The estimated 2,442 tonnes of mineralised material is the cumulative total of five current stockpiles, segregated on the basis of expected grades and physical characteristic of the mineralised material (see Table 1):

Table 1: Estimated Grade and Tonnage of Current Stockpiles at the Golden Crown Prospect.

Stockpile id	Stockpile Name	Volume from Lidar (m ³)	Considered SG*	Total Tonnes (WMT)	No of Grab Samples analysed	Average Gold Grade (g/t Au)
A	Min Waste	518	2	1,036	11	3.8
D	Purple Pile	18	2	36	8	1.7
B	Medium Grade	185	2	370	11	1.7
C	Crumble Pile	400	2	800	11	0.8
E	GMRC Pile	100**	2	200	7	10.0
Total		1,221	2	2,442		2.98 (Weighted)

*The specific gravity (SG) values used in table 1 are standard industry estimates for similar rock types and geological settings. These values have not been measured on-site for this specific stockpile; therefore, actual SG values may differ and affect the conversion of volumes to tonnage.

** The volume estimates for Stockpile E are indicative, as additional material was added post-survey. Further site measurements will be conducted to refine these estimates.

All assay values were considered in determining the average grade of the stockpiles, as both low and high values are part of the natural variability within the mineralisation.

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Picture 1, 2 and 3: Stockpiles at Golden Crown.

Sampling Methodology

Stockpile sampling at Golden Crown Prospect was conducted using a systematic approach designed to minimize bias and ensure representative sampling. A total of 48 grab samples (see Table 2) were collected from the five current stockpiles. Sampling points were evenly distributed across each stockpile to ensure comprehensive coverage. Each sample weighed between 2–2.5 kg. The surface layer was cleared away before sampling to avoid contamination, and material from deeper within the pile was collected for enhanced reliability. To improve representativeness, collected material was thoroughly mixed before bagging.

Assay Technique

The samples underwent Photon Assay technique for gold analysis, a non-destructive technique well-suited for coarse gold systems. Each sample tested used a 500g sample size, providing improved accuracy over smaller-sized Fire Assay tests. The samples were analysed at Intertek Maddington.

The positive sampling results enhance confidence in the mineralised system at Golden Crown and demonstrate the potential to expand known mineralised zones further. With the stockpile representing a substantial opportunity for near-term cash flow, these outcomes support the prospect's progression towards commercial-scale production.

Variables on the Estimates

The estimated tonnage and average grade are based on data obtained through grab sampling, which introduces inherent variability given the coarse nature of the gold mineralisation. While a sufficient number of samples were collected to improve coverage and reduce sampling bias, these results are considered as indicative only. The main variable for these estimates are:

- **Specific Gravity:** The specific gravity (SG) values used to calculate tonnage were derived from industry-standard estimates for comparable rock types. The direct on-site measurements will be carried out at the next stage of study. Therefore, actual SG values may vary, affecting tonnage calculations.
- **Grade Variability:** The coarse gold nature of mineralisation increases the potential for grade variability.

Given the preliminary nature of these stockpile estimates, they are subject to change following further drilling, sampling, and exploration activities.

The Company plans to conduct additional targeted sampling/drilling to confirm grade continuity and refine these estimates.

An estimated average grade of 3 g/t Au within the stockpile material represents a significant near-term opportunity for commercialisation. The Company is actively exploring options to monetise this asset.

Table 2: Assay Results of Grab Samples Collected from Golden Crown Stockpiles.

Stockpile ID	Stockpile Name	Sample No.	Easting (MGA Zone 51)	Northing (MGA Zone 51)	Au_g/t Au	Volume (m3)	Considered SG	Total Tonnes (WMT)	Stockpile Average g/t Au
A	Min Waste	M2MM43	348917	6802964	10.69	518	2	1036	3.8
	Min Waste	M2MM44	348916	6802970	0.64				
	Min Waste	M2MM45	348913	6802974	1.46				
	Min Waste	M2MM46	348906	6802974	0.53				
	Min Waste	M2MM47	348907	6802970	0.43				
	Min Waste	M2MM100	348918	6802962	9.63				
	Min Waste	M2MM101	348914	6802968	2.11				
	Min Waste	M2MM102	348910	6802974	0.6				
	Min Waste	M2MM103	348907	6802968	0.16				
	Min Waste	M2MM104	348911	6802964	12.93				
	Min Waste	M2MM105	348914	6802959	2.62				
D	Purple Pile	M2MM106	348908	6802959	0.21	18	2	36	1.7
	Purple Pile	M2MM107	348906	6802962	9.25				
	Purple Pile	M2MM108	348905	6802960	1.21				
	Purple Pile	M2MM58	348907	6802960	1.15				
	Purple Pile	M2MM59	348906	6802961	0.18				
	Purple Pile	M2MM60	348906	6802962	0.87				
	Purple Pile	M2MM61	348904	6802960	0.19				
	Purple Pile	M2MM62	348908	6802958	0.41				

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B	Medium Grade	M2MM109	348908	6802960	7.53	185	2	370	1.7
		M2MM110	348901	6802961	1.27				
		M2MM111	348902	6802964	1.05				
		M2MM112	348900	6802968	0.08				
		M2MM113	348898	6802969	1.03				
		M2MM114	348892	6802970	1.23				
		M2MM48	348895	6802962	1.3				
		M2MM49	348900	6802966	1.22				
		M2MM50	348898	6802967	1.71				
		M2MM51	348893	6802965	1.06				
		M2MM52	348899	6802955	1.51				

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C	Crumble Pile	M2MM115	348950	6802895	1.02	400	2	800	0.8
		M2MM116	348944	6802891	1.24				
		M2MM117	348939	6802891	1.56				
		M2MM118	348938	6802900	0.17				
		M2MM119	348944	6802897	0.2				
		M2MM120	348942	6802895	0.56				
		M2MM53	348949	6802898	1.09				
		M2MM54	348947	6802902	1.05				
		M2MM54	348947	6802902	1.05				
		M2MM55	348943	6802900	1.26				
		M2MM56	348943	6802892	0.57				
		M2MM57	348944	6802894	1.01				
E	GMRC Pile	M2MM129	348936	6802920	12.18	100	2	200	10
		M2MM130	348933	6802928	3				
		M2MM131	348935	6802929	1.76				
		M2MM132	348934	6802929	1.92				
		M2MM133	348937	6802927	42.74				
		M2MM134	348937	6802932	6.97				
		M2MM135	348934	6802928	1.02				
Total Tonnes (WMT)/Avg. Grade								2442	2.98

Tailings Evaluation

About 980 WMT tailings remaining after gravity recovery, are currently undergoing average grade determination. These tailings are derived from the gravity processing of bulk sampled mineralised material between September 2024 and February 2025. They represent remaining gravity processed material from Batch B1 to Batch B7 (see ASX release on 3rd March 2025 for batch description). The sampling assay results are under review, with indications suggesting high economic grade. The evaluation aims to support the commercial value of the tailings or potential for recovering additional gold through heap leach processing.

Bulk Sampling

The recently completed bulk sampling program at Golden Crown confirmed high-grade gold mineralisation, with gravity gold recovery reaching up to 22.4 g/t Au per processed WMT.

To date, the bulk sample processing has successfully delivered 337 ounces (10,503 g) of gold doré from 979 WMT (ASX Release 3 March 2025).

In addition to generating revenue, the program has provided critical geotechnical data for optimising pit slope stability and excavation planning. It has also demonstrated the efficiency of wet gravity separation as a cost-effective extraction method. Furthermore, the program has enhanced geological understanding, improved resource modelling and mine planning, and enabled a more targeted exploration approach, thereby reducing drilling costs and time.

The data collected has increased confidence and plays a key role in mitigating risks by validating grade continuity, refining processing strategies, and identifying potential metallurgical challenges. Overall, this program represents a significant step in advancing the Golden Crown Prospect towards future mining and processing decisions.

What's Next

- **Planned Drilling:** Upcoming drilling programs will focus on extending high-grade zones and defining additional mineable material.
- **Resource Modelling & Estimation:** Insights from bulk sampling and drilling results will be incorporated into an updated resource model for improved accuracy in resource estimation.
- **Stockpile Monetisation:** Evaluating cost-effective processing options to maximise returns from existing stockpiles.
- **Pathway to Production:** Advancing towards low-capital, staged mining operations to generate early cash flow while optimising long-term development.

The Company remains committed to advancing exploration, unlocking new mineralisation, and delivering long-term shareholder returns through strategic project execution.

About Golden Crown Prospect

The Golden Crown Prospect, part of the Company's Malcolm Project covering more than 200 km², is located between 10 km and 25 km east and northeast of Leonora in Western Australia. The region is known for its rich gold deposits and a history of mining operations, including the nearby Genesis Gwalia mine.

During the first quarter of 2024 Reverse Circulation (RC) drilling program successfully identified a 150m X 120m mineralisation corridor (Figure 2), confirming the presence of high-grade gold mineralisation ASX release 06 May 2024). The interpretation of the drilling results delineated two key shear-hosted lodes: the East and West Lode (Figure 3). These mineralised lodes are separated by a 20m zone of un-mineralised schistose felsic volcanic and volcanoclastic rocks.

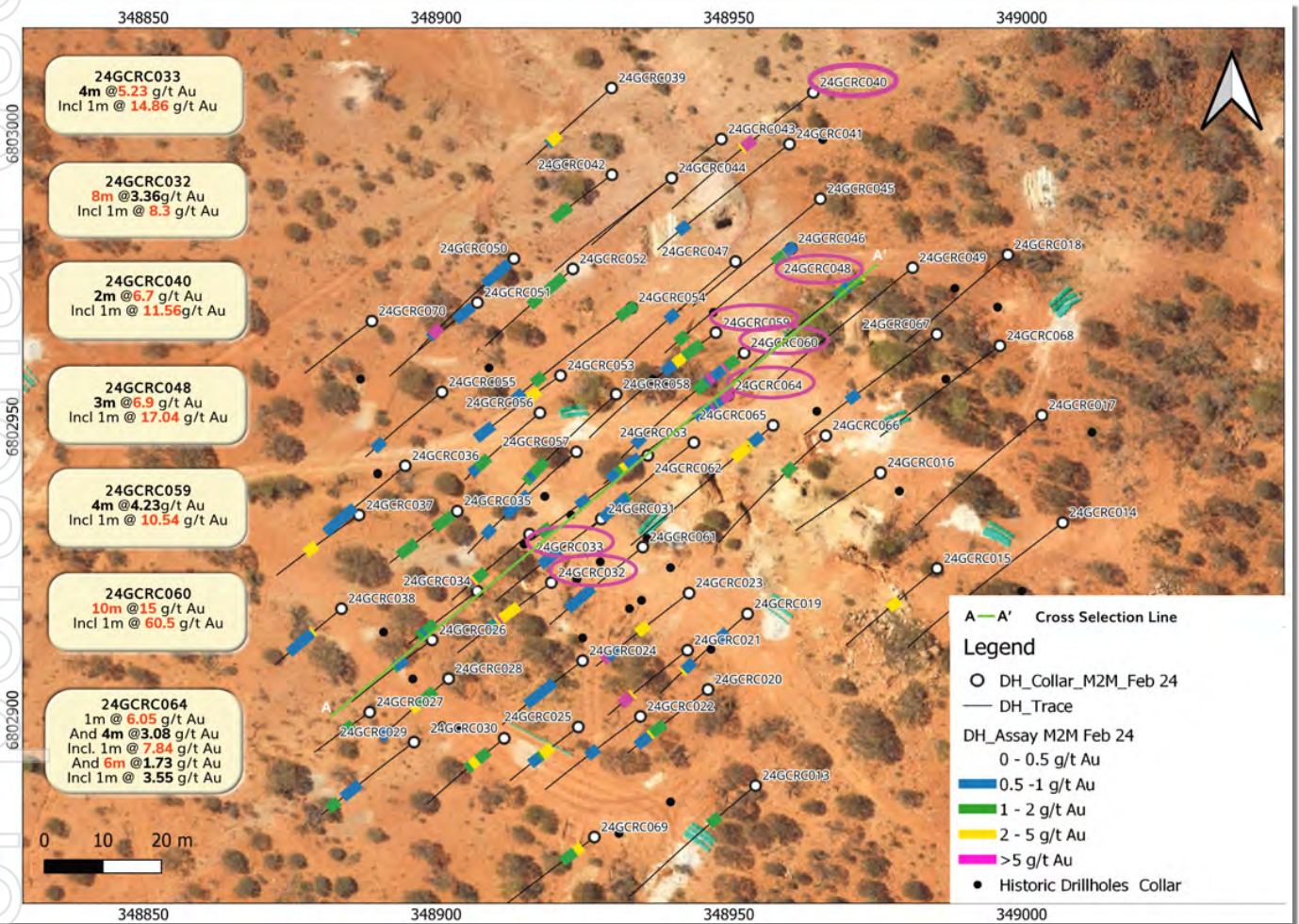


Figure 2: Golden Crown Aerial Image with drill collars and drill traces (ASX release 06 May 2024).

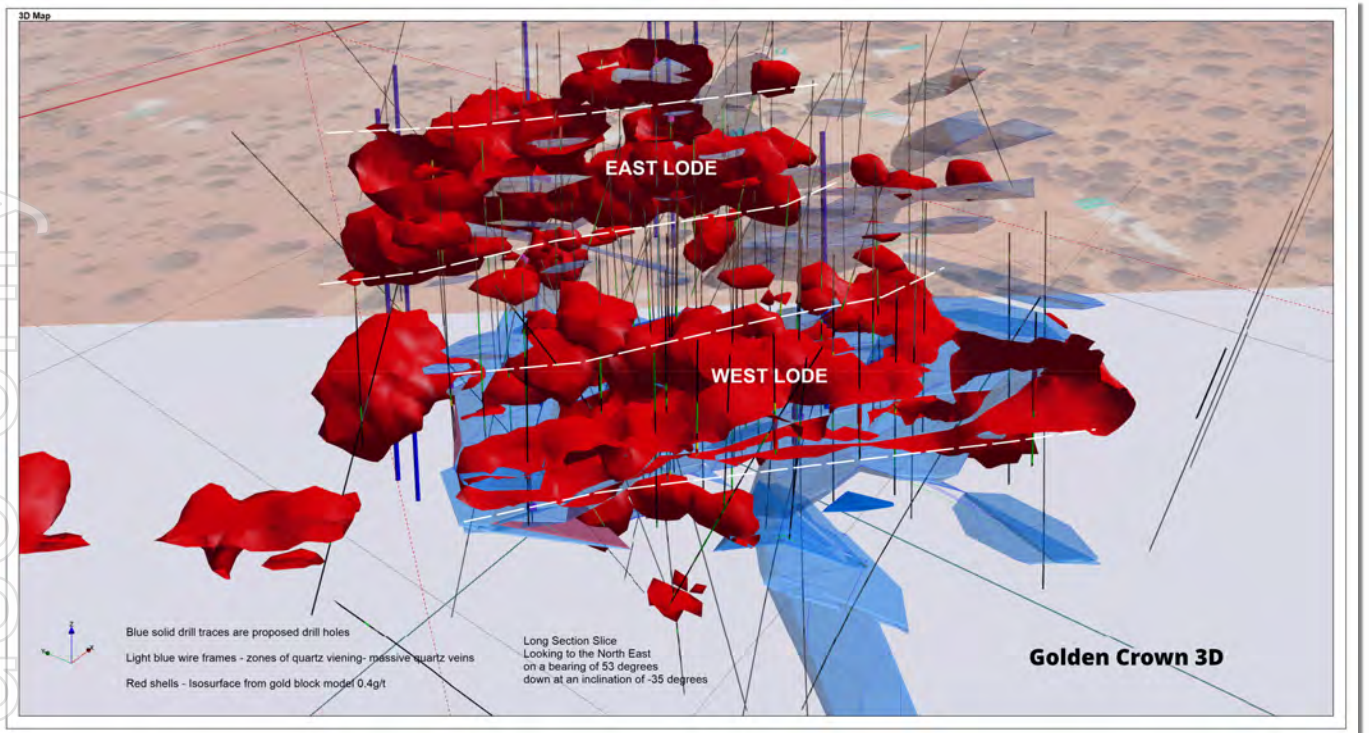


Figure 3: 3D view of Golden Crown gold mineralisation (iso-surface 0.4 g/t Au) Showing the West Lode and the East Lode.

Mineralisation remains open and warrants deeper drill testing in key high-grade zones, and for lateral extensions.

In the northwest of the drilled area, the intercepts from drillholes 24GCRC039 and 24GCRC040 suggest further extensions. The southeastern side of the mineralisation is also open, requiring additional drilling to confirm its extent.

Down plunge extensions are supported by intercepts from drillholes 21GCRC001 and 24GCRC064 indicating the mineralisation continues below the current drill depth.

These lodes align with structural controls, indicating a vein-hosted or structurally shear hosted deposit. Future exploration will target step-out drilling along both the NW and SE trends and deeper drill testing in down plunge of key high-grade zones.

Following the initial drilling, a 50m x 20m area (Figure 4) within the East Lode was chosen for bulk sampling due to its high-grade and shallow mineralisation. Subsequent grade control drilling over the eastern lode returned exceptionally high-grade intercepts (ASX release 5 July 2024) and supported the bulk sampling exercise.

Competent Person Statement

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources is based on information compiled by Mr. Vivek Sharma, a Competent Person and a full-time employee of the Company who is a Member of The Australasian Institute of Mining and Metallurgy. Mr. Vivek Sharma 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. Vivek Sharma 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.

Forward Looking Statements

Some of the statements appearing in this announcement may be forward-looking statements. These statements are forward-looking in nature and subject to inherent risks and uncertainties based on current assumptions and are subject to inherent risks and uncertainties. These include factors and risks specific to the industries in which Mt Malcolm Mines NL operates, as well as general economic conditions, prevailing exchange rates, interest rates, and financial market conditions.

Specifically, forward-looking statements regarding future plans for the bulk sampling program, resource estimations, and monetisation of stockpiled material are indicative only and subject to revision based on additional data, technical assessments, and market conditions.

Actual events or results may differ materially from those expressed or implied in any forward-looking statement. No forward-looking statement is a guarantee or representation of future performance or outcomes. In relying on this ASX announcement and pursuant to ASX Listing Rule 5.32.2, the Company confirms it is not aware of any new information or data that materially affects the information included herein.

Mt Malcolm Mines NL confirms that it is not aware of any new information or data that materially affects the information included in any original ASX announcement.

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

For further information please contact: -

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APPENDIX A
JORC 2012 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>A total of 48 random rock chip grab samples, each weighing between 2 kg to 2.5kg, were collected from across the existing mineralised materials (sub -grade) stockpile at the Golden Crown bulk sampling program.</p> <p>The samples were collected by a qualified geologist or on his supervision, ensuring proper sampling protocols were followed.</p> <p>Detailed sample information, including lithological descriptions and location, was recorded during the sampling process to maintain accurate data records.</p> <p>The samples were submitted to Intertek Minerals at Maddington. Gold analysis was conducted using the Chrysos Photon Assay technique (Au-PAAU002).</p> <p>Each sample, weighing approximately 2-2.5kg, was dried and crushed to <2mm at the laboratory. From this crushed material, a 500g sub-sample was obtained for gold analysis using the Chrysos Photon Assay method to ensure precise and reliable results. The sampling techniques and methodologies employed are considered appropriate and in line with industry standards for this type of exploration.</p>
<i>Drilling techniques</i>	Not applicable. Drilling is not being reported.
<i>Drill sample recovery</i>	Not applicable. Drilling is not being reported.
<i>Logging</i>	Qualitative field logging and photos of the rock-chip grab samples were taken and entered into M2M's database.
<i>Sub-sampling techniques and sample preparation</i>	<p>All samples were submitted to Intertek Minerals's certified analytical laboratory in Maddington, Perth for analysis. Each sample, weighing approximately 21-21.5 kg, was deemed an appropriate size for Photon Assay analysis.</p> <p>At Intertek, the samples were prepared by weighing, drying, and crushing the entire sample to achieve >70% passing 2mm. The crushed material was then jarred for PhotonAssay analysis.</p> <p>The selected sample sizes are considered suitable for the type of mineralisation present at the Golden Crown prospect.</p>
<i>Quality of assay data and laboratory tests</i>	<p>Sample preparation checks were carried out by the laboratory as part of its internal procedures.</p> <p>Intertek laboratory includes certified reference materials, blanks, and up to 10% replicates in each sample batch assayed. No company-provided standards were submitted to the laboratory.</p> <p>Inter-laboratory cross-check analysis programs have not been conducted at this stage. Additionally, no studies have been conducted on the repartition and size of the gold grains in the system at this stage.</p>

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APPENDIX A cont.
JORC 2012 TABLE 1 REPORT - GOLDEN CROWN PROSPECT

Criteria	Commentary
<i>Verification of sampling and assaying</i>	Field notebook was used to record primary data in the field. Primary data was then entered digitally and is stored in M2M's database. Data is visually checked and validated prior to import and additional validation is carried out upon entry to the database.
<i>Location of data points</i>	GDA94 datum and MGA zone 51 projection system is used. Hand-held GPS with accuracy of +/- 3 metres was used.
<i>Data spacing and distribution</i>	No Mineral Resources or Ore Reserves are being reported. Data acquired and processed is only being considered for exploration purposes.
<i>Orientation of data in relation to geological structure</i>	Not applicable - samples were collected from stockpiles
<i>Sample security</i>	The samples were assigned sample numbers and placed in calico bags then securely packed in sealed bags and transported to Intertek Maddington by a reliable transport agency. .
<i>Audits or reviews</i>	Further audits or reviews are not considered necessary at this particular exploration stage.

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 Golden Crown tenement (M37/475) is located within the Shire of Leonora in the Mt Margret Mineral Field in the centre of the North Eastern Goldfields of Western Australia. The tenement is in good standing.</p> <p>M37/475 is held by (96/96) 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). All gold production is subject to a Western Australian government royalty of 2.5%.</p>
<i>Exploration done by other parties</i>	<p>The Golden Crown tenement has been explored and drilled by a number of exploration and mining companies over numerous years dating back to the late 1980s, more active gold exploration companies include 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 included geophysics, geochemistry, geological mapping, drill programs (RAB, Aircore, 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 predates JORC 2012 compliance. It has not been possible to fully verify the reliability and accuracy of all portions of the data however the data has been verified to the best extent possible and meets current JORC reporting standards. Historical exploration was conducted to the industry standards of the day.</p>
<i>Geology</i>	<p>The Project area is located 12 km east of Leonora overlying altered mafic basalt/felsic volcanoclastic/sedimentary sequences of the Malcolm Greenstone Belt, including the Golden Crown sequence positioned within the greenstones of the Kurnalpi Terrain. Local lithologies are characterised 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. Regionally gold mineralisation is associated with lithological contacts hosted by NW, NNW & EW trending shear zones often associated with quartz veining. There are several old workings and open stopes evident at the Golden Crown prospect.</p> <p>The sequence from footwall to hanging wall is dacite, rhyolite, rhyodacite, basalt and andesitic andesite. Gold lodes represented by shallowly northwest-plunging shoots are focused along the hanging wall of the rhyolite unit with a repetition within the overlying rhyodacite.</p>

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Section 2 - Reporting of Exploration Results

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

Criteria	Commentary
<i>Drill hole Information</i>	Not applicable. Drilling is not being reported.
<i>Data Aggregation methods</i>	No aggregation has been applied. No top cutting of data or grades was undertaken in the reporting of these results. No metal equivalent used.
<i>Relationship between Mineralisation widths and intercept lengths</i>	No drill hole results are reported in this announcement. During the bulk sampling program, actual geometry of mineralisation zones will be established.
<i>Diagrams</i>	The example diagrams and plans are included in the body of this announcement. All results are provided in this report. The report is considered balanced and provided in context.
<i>Balanced Reporting</i>	The processed mineralised material and rock chip samples were collected from the mineralised zones of the bulk sampling area and all relevant information reported.
<i>Other Substantive exploration data</i>	Regarding the results reviewed, no other substantive data is currently considered necessary. The project area has been explored by several listed companies in the past, only results regarded as substantial, by those companies, have been reported. M2M drilling results were reported from time to time. All meaningful and material information is presented in this document. Further data collection will be reviewed and reported as and when considered material.
<i>Further work</i>	Conduct resource estimation using recent, historical drilling results and bulk sampling information. Comprehensive metallurgical studies, including gravity test work and cyanide leaching for different grind sizes. Waste rock characterisation studies to evaluate potential environmental impacts and implement sustainable waste management practices. Further exploratory drilling to extend the known mineralisation.