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ASX Announcement

5th July 2024

Exceptional High-Grade Gold Intercepts Continue at Golden Crown



Mt Malcolm Mines NL (ASX: M2M or "the Company") is excited to announce unprecedented gold results from the recent Grade Control RC drilling campaign at the Golden Crown Prospect.

Highlights

- 14m @ 16.78 g/t Au from 4m, including 1m @ 111 g/t Au, and 6m @ 36.75 g/t Au in 24GCRC079.
- 9m @ 21.12 g/t Au from 12m, including 1m @ 65.66 g/t Au, and 4m @ 37.87 g/t Au in 24GCRC078.
- 9m @ 15.77 g/t Au from 9m, including 1m @ 50.16 g/t Au, and 5m @ 26.89 g/t Au in 24GCRC077.
- 4m @ 11.75 g/t Au from 4m, including 1m @ 32.82 g/t Au, and 2m @ 21.86 g/t Au in 24GCRC090.
- 4m @ 3.35 g/t Au from 8m, including 1m of 8.75 g/t Au in 24GCRC081.
- **1m** @ **6.69 g/t A**u from 5m, and 3m @ 1.9 g/t Au from 10m in 24GCRC075.
- Site preparation is ongoing for the bulk sampling program.
- Planning underway for follow-up drilling.

Managing Director Trevor Dixon said, "The grade control drilling results have significantly boosted our confidence in the upcoming bulk sampling and the overall mineralization at Golden Crown. This drilling campaign has not only confirmed high-grade mineralisation within the sampling area but also provided valuable insights into grade distribution. These results are crucial for delineating the bulk sampling grade and assisting in planning for future drilling."

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In June 2024, the Company completed a 522-metre RC drilling campaign at its Golden Crown Prospect (ASX release on 21st June, 2024). Eighteen (18) shallow grade control drillholes were placed along three designated lines spaced 5 metres apart within the bulk sampling area to support the upcoming bulk sampling exercise. The bulk sampling program targets a mineralized corridor measuring 50 metres in length and 15 metres in width, which was identified through the RC drilling campaign in February 2024.

The drill holes on the centre line were spaced 5 metres apart, while those on the outer lines were spaced 8 metres apart (see Figure 1 and 2). Depths of these drill holes ranged from 18 to 24 metres. Two additional exploration drill holes, of 72 metres, were drilled to investigate the northeastern extension of a previously identified eastern lode (ASX release on May 6, 2024) from drilling conducted in February 2024.

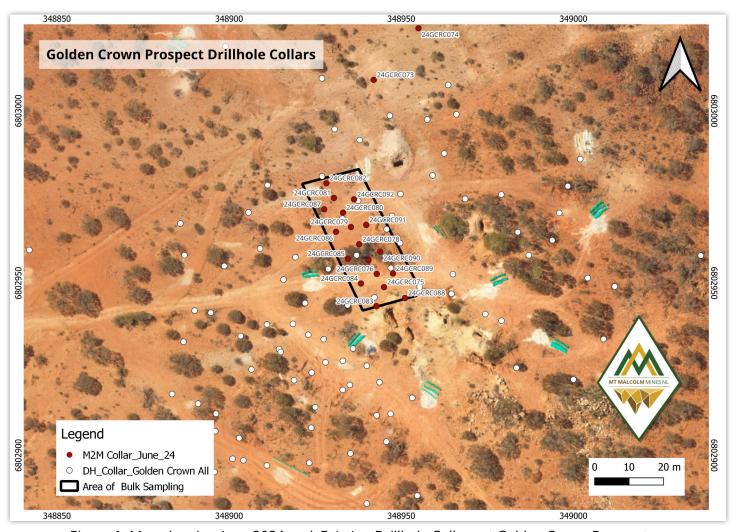


Figure 1: Map showing June 2024 and, Existing Drillhole Collars at Golden Crown Prospect.

Samples from these activities were analysed at SGS Kalgoorlie using the Fire Assay technique. The results yielded significant high-grade gold mineralisation consistent with or better than the findings of the February, 2024 RC drilling results.

Golden Crown Grade Control RC Results

Recent drilling results have yielded multiple high-grade intercepts across various drillholes (Table-1), confirming the findings of the February 2024 RC drilling campaign.

Drillhole 24GCRC079 reported an impressive intercept of 14 metres at 16.78 g/t Au starting from a depth of 4 metres, including 6 metres at 36.75 g/t Au and the highest ever received 1-metre intercept of 111 g/t Au.

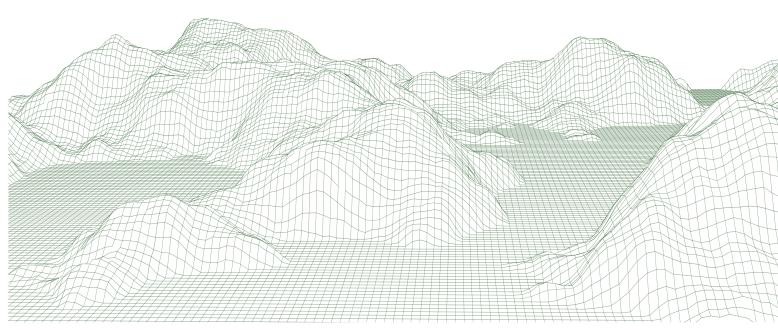
Similarly, 24GCRC078 yielded 9 metres at 21.12 g/t Au from a depth of 12 metres, including 1 metre at 65.66 g/t Au.

Drillhole 24GCRC077 intercepted 9 metres at 15.77 g/t Au from a depth of 9 metres, with a notable intercept of 1 metre at 50.16 g/t Au.

Furthermore, drillhole 24GCRC090 returned 4 metres at 11.75 g/t Au at a depth of 4 metres, including a high-grade interval of 1 metre at 32.82 g/t Au.

Table 1 lists significant intercepts >1 g/t Au, with internal sub-grade dilution not exceeding 1 metre.

The drilling results from the grade control drillholes have confirmed the presence of high-grade gold mineralization in the proposed area for bulk sampling and have enhanced confidence in the grade of the bulk sampling program.



Significant Intercepts >1 g/t Au from June 2024 RC Drilling

Hole ID	Easting (MGA)	Northing (MGA)	RL (m)	Azi	Hole Depth (m)	From (m)	To (m)	Interval	Grade (g/t Au)	Peak Value g/t (Au)
24GCRC075	348945	6802949	403	-90	18	2	3	1	4.3	
						5	6	1	6.69	
						10	13	3	1.9	
24GCRC076	348943	6802953	403	-90	18	2	15	13	1.96	5.04
24GCRC077	348941	6802957		-90	18	6	7	1	7.51	
						9	18	9	15.77	50.16
					Including	5m @ 26.89	g/t Au fro	m 10m		
24GCRC078	348938	6802961	403	-90	24	2	4	2	2.08	
						6	10	4	7.36	15.43
						12	21	9	21.12	65.66
					Including	4m @ 37.87	g/t Au fro	m 14m		
24GCRC079	348935	6802966	403	-90	18	0	1	1	1.5	
						4	18	14	16.78	111.00
					Including	6m @ 36.75	g/t Au fr	om 12 m		
24GCRC080	348933	6802970	403	-90	24	4	7	3	1.2	
						10	14	4	1.63	
						18	19	1	1.72	
						23	24	1	1.63	
24GCRC081	348931	6802975	402	-90	24	8	12	4	3.35	8.75
						15	16	1	2.41	
24GCRC082	348928	6802979	402	-90	24	9	11	2	1.99	
						13	16	3	2.34	4.63
						23	24	1	1.19	
24GCRC086	348931	6802965	402	-90	18	2	3	1	3.84	
24GCRC087	348928	6802971	402	-90	24	2	3	1	2.8	
						8	14	6	3.19	9.33
24GCRC089	348948	6802953	403	-90	24	0	1	1	6.11	
						9	12	3	2.64	4.78
						14	15	1	2.76	
						18	19	1	1.58	
24GCRC090	348944	6802959	403	-90	18	4	8	4	11.75	32.82
					_	2m @ 21.86	_			
				-90	18	10	11	1	1.17	
24GCRC091	348940	6802967	403	-90	18	12	13	1	1.97	

Table 1: Significant intercepts >1g/t Au Golden Crown Prospect, June 2024 drilling.

Notes:

- Easting and Northing coordinates are given in UTM MGA94 Z51.
- Depth, From, To and intervals are downhole metres.
- Dip is relative to horizontal, vertical in this campaign.
- Low cutoff grade of 1g/t Au applied for reporting purposes.
- No high cut applied to gold grades.
- Maximum of 1m of internal continuous sub-grade (<1g/t Au) material.
- The peak value represents the highest assay (one metre) in the overall intercept.

The high-grade results are showcased in drillholes 24GCRC079, 24GCRC078, and 24GCRC077 (Figure 3). One of the two 72-metre-deep exploration drillholes, 24GCRC073 testing the northern extensions of the eastern lode revealed a subtle 0.3 g/t Au anomaly at 36m in a 4m composite sample. Further investigation will include a 1-metre split sample analysis.

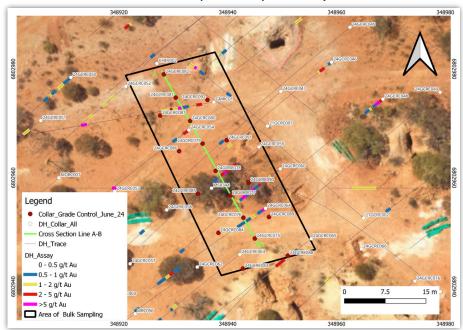


Figure 2: Map Showing Golden Crown Grade Control Drillhole Collars and Cross Section Line

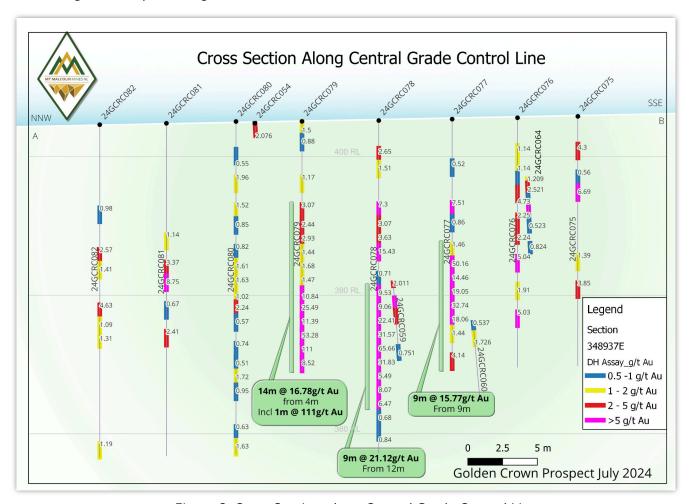


Figure 3: Cross Section along Central Grade Control Line.

In conclusion, these results confirm robust high-grade mineralization, with multiple drillholes reporting high-grade gold mineralisation, validating the project's potential for low-impact, small-scale mining operations. The Company remains focused on resource estimation and further development activities at Golden Crown, supported by these promising results.

About Golden Crown

The Golden Crown gold prospect, with its rich historical significance and recent promising results, has become the Company's focal point for resource estimation and project development. The February 2024 RC drilling program has delineated a well-defined mineralized area, providing a solid foundation for robust maiden Mineral Resource Estimates.

Historically, Golden Crown has proven to be a significant producer, yielding 1,720 oz between 1899 and 1904. The Golden Crown gold prospect features three shallow lodes that remain open along the down plunge (Figure 4), with deeper mineralization still unexplored. Notably, there are 17 intercepts greater than 5 g/t Au, including 7 intercepts greater than 10 g/t Au, 5 intercepts greater than 15 g/t Au, and 3 intercepts greater than 30 g/t Au. This high-grade near-surface deposit is well-suited for low-impact, small-scale mining operations.

The Company completed 2,772 metres of RC drilling in Q1 2024 at Golden Crown and assay results showcased significant intercepts including highest recorded intersection of 6m @ 24.46 g/t Au and broad high-grade zone of 10m @ 15.40 g/t Au in drillhole 24GCRC060 (Refer M2M ASX release 13th March 2024 and 6th May 2024). Other important high-grade intercepts include:

4m @ 3.29 g/t Au (20-24m) in 24GCRC032

4m @ 5.23 g/t Au (22-26m) in 24GCRC033

3m @ 6.88 g/t Au (0-3m) in 24GCRC048

4m @ 4.43 g/t Au (14-18m) in 24GCRC059

In a recent re-assay of the historic hole GMRC01, the results showed 19.46 g/t Au at 12-13m.

Overall, these findings confirm robust high-grade mineralization at Golden Crown, highlighting its potential for low-impact, small-scale mining operations

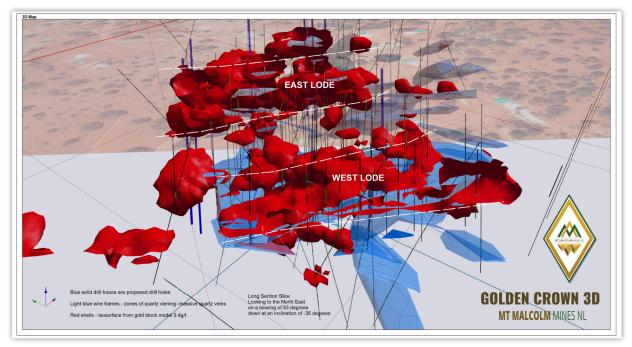


Figure 4: 3D view of Golden Crown gold mineralisation (isosurface 0.4 g/t Au).

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

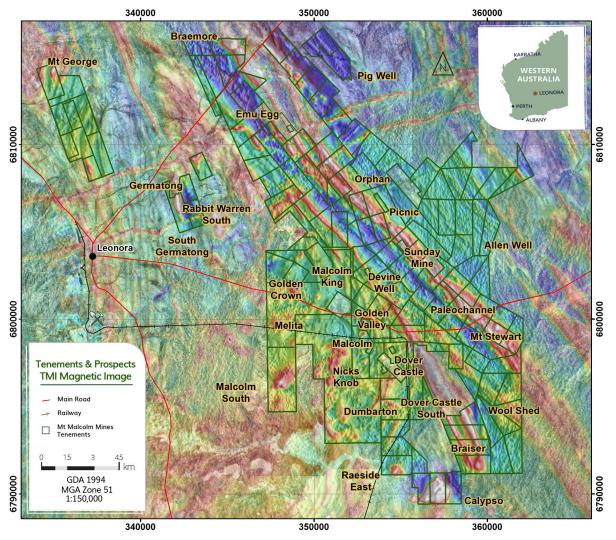
Some of the statements appearing in this announcement may be forward-looking statements. You should be aware that such statements are only predictions and are subject to inherent risks and uncertainties. Those risks and uncertainties include factors and risks specific to the industries in which Mt Malcolm Mines NL operates and proposes to operate as well as general economic conditions, prevailing exchange rates and interest rates and conditions in the financial markets, among other things. Actual events or results may differ materially from the events or results expressed or implied in any forward-looking statement. No forward-looking statement is a guarantee or representation as to future performance or any other future matters, which will be influenced by a number of factors and subject to various uncertainties and contingencies, many of which will be outside M2M's control. In relying on the above mentioned ASX announcement and pursuant to ASX Listing Rule 5.32.2, the Company confirms that it is not aware of any new information or data that materially affects the information included in the above-mentioned announcement.

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

For further information please contact: -

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Malcolm and Mt George Projects near Leonora

APPENDIX A JORC 2012 TABLE 1 Mt MALCOLM MINES NL (GOLDEN CROWN)

Section 1 - Sample Techniques and Data

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

Criteria	Commentary
Sampling techniques	Reverse Circulation (RC) drill samples from the current campaign collected by M2M over 1m downhole intervals from beneath a cyclone attached to the rig. Typically, 3-4kg subsamples were obtained via a stationary cone splitter attached to the underside of the cyclone. Sub-samples were collected in pre-numbered calico bags for submission to the analytical laboratory. For the exploration holes a mixed sampling approach was adopted for the analysis, wherein 1-metre subsamples were selected based on logging criteria. Following this selection process, the remaining portions of the drillhole were composite samples, usually 4 metres. Samples were collected from the respective green bags using a spear, ensuring an even representation of the entire composition. Where the weight of samples was higher in the range, systematic riffle splitting was carried out to bring the sample weight below 3kg. The sampling techniques and methodologies used are deemed appropriate and industry standard for this style of exploration.
Drilling techniques	RC drilling was carried out using conventional, industry standard methodologies utilising a face-sampling hammer with bit shrouds. Drill bit diametres were typically 140-145mm. RC drilling was conducted by iDrillings truck-mounted Hydco 350RC 8x8 Atcross drill rig with a 600/700psi 1800cfrm air compressor with auxiliary and booster air compressors (when required). All recovered samples were dry and there were no wet samples. Being shallow holes (Maximum depth of grade control drillholes is 24m), these were not surveyed down-hole.
Drill sample recovery	M2M sample collection utilised a stationary splitter attached to the underside of the rig's cyclone. A 3-4kg sub-sample was collected in calico bags for submission to the assay laboratory. The remaining sample is collected in plastic bags and stored on site for future reference. The cyclone and cone splitter were flushed with compressed air at the end of each 6m drill rod. This process was maintained throughout the program. Recovery percentages were recorded and are considered to be good. Part of the exploration drillhole was covered by compositing, usually 4 metres. Samples were composited from the respective green bags using a spear, ensuring a comprehensive representation of the entire composition. Collected samples are deemed reliable and representative of drilled material. No material discrepancy, that would impede a mineral resource estimate, exists between collected RC primary and sub-samples. No indication of sample bias is evident, nor has it been established. No relationship has been observed to exist between sample recovery and grade.
Logging	All drill holes are geologically logged in their entirety at 1m intervals to the end of the hole. 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 is appropriate to support mineral resource estimation, mining studies, and metallurgical studies. M2M's 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.
Sub-sampling techniques and sample preparation	M2M samples were collected at 1m down-hole intervals. Typically, a 3-4kg sub-sample split was obtained via a stationary cone splitter attached to the underside off the cyclone. Sampling methodologies are considered industry standard. Sub-samples were collected at the end of each day and transported to a secure location; the remaining residue (stored in plastic bags) are retained at a "bag farm" on site for future reference. Samples were kept dry by the use of auxiliary and booster compressors; no wet samples were encountered. Field duplicates, blanks and Certified Reference Material ("CRM") were periodically inserted into the M2M sample batches at a ratio of 1:55 and 1;33 and 1:75 respectively,. Sub sampling and sample preparation techniques are acceptable; results indicate reasonable and acceptable analytical repeatability. The QA/QC procedures implemented during the drill program is appropriate for this style of mineralisation and industry standard practice. Where the weight of samples were higher in the range systematic riffle splitting was carried out to bring the sample weight below 3kg. 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.
Quality of assay data and laboratory tests	Analysis of M2M samples from this campaign was conducted by SGS, Kalgoorlie. Samples were dried, crushed and totally pulverised (75um). Samples were assayed for gold only using classical Fire Assay technique with AES finish on a 50 g subsample (0.01ppm Au detection limit). 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. No geophysical tools were used to determine any element concentrations. Historical analysis (Au, As, Cu, Pb, Zn) conducted by North was by Genalysis Laboratory services. Gold only analysis by Jubilee was conducted by Leonora-Laverton Assay Laboratory Pty Ltd. Gold only analysis, fire assay, conducted by Melita sourced Australian Assay Laboratories Group.

APPENDIX A

JORC 2012 TABLE 1 Mt MALCOLM MINES NL (GOLDEN CROWN)

Section 1 - Sample Techniques and Data

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

Criteria	Commentary
Verification of sampling and assaying	There is always a risk with legacy data that sampling, or assay biases may exist between results from different drilling programs due to different sampling protocols, different laboratories, and different analytical techniques. Samples were dispatched to SGS laboratories in Kalgoorlie. Sample preparation included drying, crushing and pulverising. Analysis was via 50gram Fire Assay (AES). Standards, blanks and CRM results are within acceptable limits.
	No adjustment or calibration have been made to any of the assay data. Sampling and assay techniques are conducted at today's standard. In the past sampling and assaying were conducted to the standards of the day.
Location of data points	All GCRC drill hole collar location points were initially recorded by M2M using a handheld GPS and reported to datum GDA94 and UTM MGA94 zone 51 coordinate system, with horizontal accuracy to ±5m. January and February 2024 RC drill collars are recorded with a handheld GPS and recorded in the UTM MGA94 zone 51 coordinate system. Later, these collars were picked using DGPS. The collar locations of the grade control drillholes were determined using distance and bearing methods, based on previously established collars measured by DGPS. All historical drill collar data has been converted to MGA94 UTM zone 51. Several historical drill hole collars have been visually verified in the field and were used as control points in conjunction with aerial photo confirmation.
Data spacing and distribution	Drill spacing and 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. The mineralised systems remain open and additional infill or deeper drilling is required to close off and confirm the full extent of identified mineralisation, particularly at depth. Data acquired and processed is only being considered for exploration purposes.
	The sheared Malcolm greenstone sequence displays an NNE to NE lithological
Orientation of data in relation to geological structure	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, in some cases the greenstone sequence has been overturned. The main outcropping quartz vein at Golden Crown is coincident with the position of the rhyolite-rhyodacite contact. WNW-dipping shear zones (thrusts) crosscut the vein and the external shear zone foliation merged with laminations in the quartz. These sections of laminated quartz were the only mined portions of the reef. There is also a significant change in the orientation of thrust shears as they track across reactivated contacts. It is considered that minimal sample bias has been introduced by sample orientation. No orientation sampling bias has been identified in the data thus far. Drilling and sampling programs are conducted generally orthogonal to the strike of the mineralisation, to obtain unbiased drill sample data. The grade control drillholes from the recent campaign were drilled vertically. The regional geological structure is considered to be complex.
Sample security	M2M samples are collected from the field daily; they were securely stored in a locked yard at Leonora and will be transported to the analytical laboratory by a local contractor. 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. No sample security sample details are available for historical drilling and analysis.
Audits or reviews	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 industry standard practice of the day. In some cases, data is not well validated and confidence levels are low with respect to collar coordinates, assay and logging techniques and sampling procedures. Further audits or reviews are not considered necessary at this particular exploration stage.

Section 2 -Reporting of Exploration Results (Criteria listed in te preceding section also apply to this section.)

Criteria	Commentary
	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.
Mineral tenement and land tenure status	M37/475 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. 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%.
	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.
Exploration done by other parties	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.
	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.
	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 it appears that no serious problems have occurred. Historical exploration techniques and reported mineralisation was conducted to the industry standards of the day.
	The Project area is located 12km 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 characterized by linear trending steeply dipping structures and highly sheared stratigraphy.
Geology	Rock outcrop is evident, and the project area is located on a small hill. Structurally the area is intensely sheared and folded.
	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 and open stopes evident at the Golden Crown prospect. The sequence from footwall to hanging wall is dacite, rhyolite, rhyodacite, basalt and andesitic andesite. Gold lodes represented by shallowly northeast -plunging shoots are focussed along the hanging wall of the rhyolite unit with a repetition within the overlying rhyodacite.
Drill hole Information	The location of drill hole collars is recorded in the company database and presented as part of the significant intersections in the body of this report. All hole depths refer to down hole depth in metres. Hole collars are quoted in the MGA94 Zone51 co-ordinate system. Drill hole depths are measured down-hole from the collar (top) of the hole to the bottom (end) of the hole.
Data Aggregation methods	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.
	When drill holes are quoted individual grades are reported as down hole length weighted average grades. Only intersections greater than or close to 1.0g/t Au are regarded as significant and anomalous. Intersections > 0.5g/t Au are regarded as indicative of potential mineralisation; they are viewed as anomalous but not considered to be significant however they are useful as a guide to potential mineralisation trends and relevant to any surrounding mineralisation halo.
	Significant intersections (>1g/t Au) with no more than1m of internal dilution are in the body of this report. No top cuts were applied to any assay values. There is no reporting of metal equivalent values.

Section 2 -Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section.)

Criteria	Commentary
Relationship between Mineralisation widths and intercept lengths	In general, the drill hole orientation may not be at an optimal angle to the strike of the greenstone sequence (NW-NNW) and the identified gold mineralisation. The majority of drillholes from previous campaigns were oriented in a south-westerly direction at -60°/230°. However, the recent grade control drillholes were drilled vertically. Since the greenstone sequence is generally steeply dipping north northeast, drill intercepts are reported as downhole widths. As a result, the reported intersections do not necessarily represent true widths. Orientation and geometry of the mineralisation zones has been primarily determined by interpretation of historical drilling and geological modelling. The maximum and minimum sample width within the reported mineralised zones is 1m. Quoted intersections are length weighted averages.
Diagrams	The example diagrams and plans are included in the body of this announcement.
Balanced Reporting	Only gold results regarded as significant or anomalous are discussed and reported and significant intercepts from the February 2024 campaign were reported through M2M ASX release 13th March 2024 and 6th May 2024.
Other Substantive exploration data	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. All meaningful and material information is presented in this document. Further data collection will be reviewed and reported as and when considered material.
Further work	Conduct resource estimation using recent and historical drilling results. Comprehensive metallurgical studies, including gravity test work and cyanide leaching for different grind sizes. Waste rock characterization studies are planned to evaluate potential environmental impacts and implement sustainable waste management practices.