



MT MALCOLM MINES NL

ACN: 646 466 435
ASX: M2M

ASX Announcement

PLANS IN PLACE TO MOVE ON CONSTANCE LODS DISCOVERY

7th February 2023



Highlights

Confirmation of mineralisation controls through several significant high-grade mineralised intersections from the Constance Lodes, including peak results of:

- | | |
|-------------|--|
| 22CALDD0009 | 0.74m @ 18.89 g/t Au (229.0-229.74m) within a broader mineralised zone returning 2.0m @ 7.39 g/t Au (229.0-231.0m) and
0.26m @ 13.46 g/t Au (268.69-268.95m) and
0.30m @ 12.87 g/t Au (274.75-275.05m) within a broader mineralised zone returning 18.04m @ 1.23 g/t Au (267.87-285.91m). |
| 22CALDD0012 | 0.83m @ 6.01 g/t Au (312.88-313.71m) within a broader mineralised zone returning 1.26m @ 4.58 g/t Au (312.88-314.14m) and
0.45m @ 7.41 g/t Au (341.54-341.99m) and 0.46m @ 14.21 g/t Au (343.90-344.36m) within a broader mineralised zone returning 9.70m @ 2.30 g/t Au (339.30-349.00m). |

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Introduction

Mt Malcolm Mines NL ("ASX:M2M" or "the Company") is pleased to provide an exploration update on the latest round of assay results received from diamond drill holes 22CALDD0005, 0009, 0010 and 0012, including significant insights from the next round of geological modeling

Management Comment

"Recognition of the geological controls and understanding the differences between the historical T2 mineralisation and T3 Constance Lodes now provides the framework for infill drilling and subsequent advancement toward the next important milestone at Calypso – the definition of a maiden mineral resource.

Mineralisation to date has been encountered from surface to depth - a key component in any potential progression following on from the resource would be to plan to take full advantage of newly assessed near-surface potential to develop a staged plan from open pit mining through to underground operations.

A key focus is to rapidly advance towards a cash-generating position whilst improving our ability to efficiently target the larger exploration prizes for the longer-term sustainability of M2M."

~ Managing Director, Trevor Dixon



New Targeting Implications

These results, in conjunction with those within the ASX:M2M 17th January 2023 announcement, have confirmed interpretation of multiple north-dipping lodes within a southwesterly-plunging porphyry corridor between the T2 and T3 geophysical targets. This new discovery zone and geometry of mineralisation at T3 represent the Constance Lodes that contrast from the historically-defined mineralization at shallower levels coinciding with T2. Holes 22CALDD0011 and 22CALDD0012 were key to defining repetition in the Constance Lodes as they were drilled sub-parallel to the porphyry mineralised envelope that provided maximum opportunity for lode intersection and also providing an insight into understanding the change in lode geometry between T2 and T3.

In consideration of these latest holes, the updated geological model now demonstrates a close spatial relationship between a near-orthogonal change in bedding orientation, the porphyry corridor and a diagnostic sequence comprising polymictic conglomerates, tuffs and other volcanoclastic units. As introduced in a previous announcement (ASX:M2M 11th October 2022), this juxtaposition of geological features most likely represents a deep-seated tectonic suture zone that has focused deposition of volcanic detritus and both magmatic and hydrothermal fluids over a long and protracted period of activation.

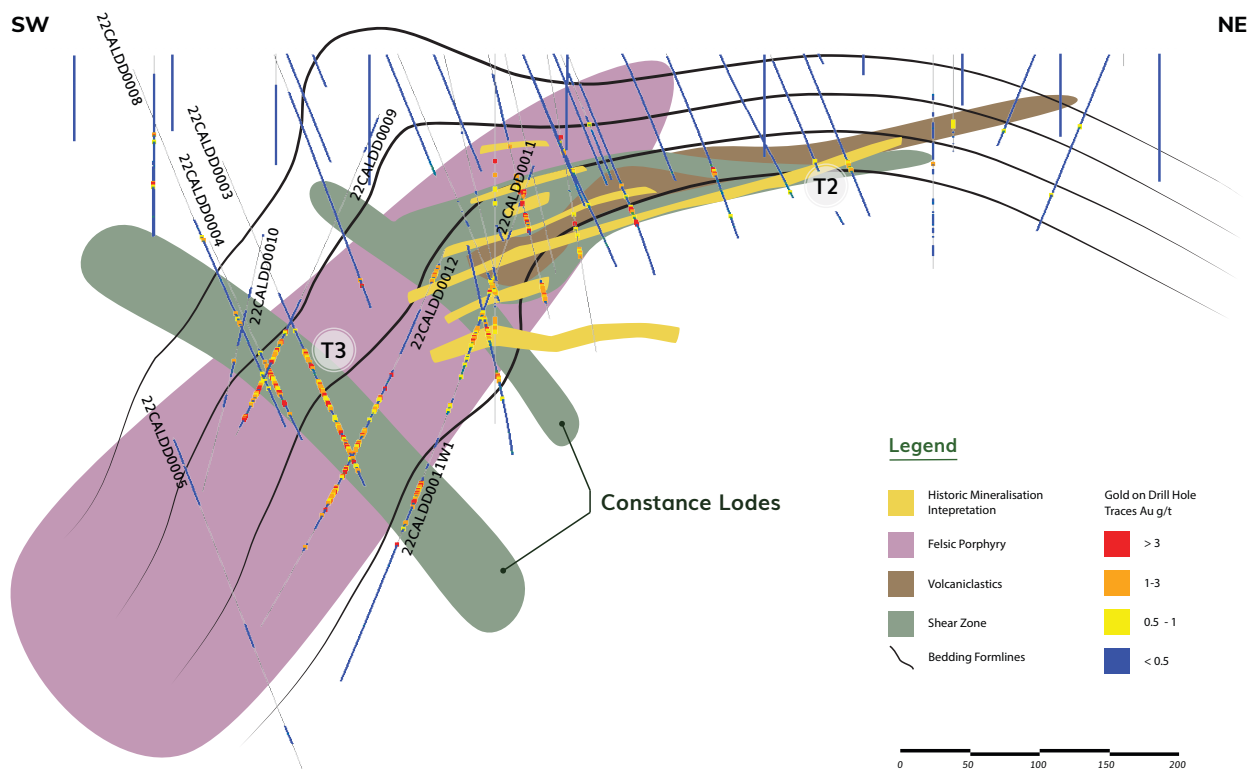


FIGURE 1

Schematic longitudinal section from T2 to T3 targets showing critical geological elements emphasising the differences between historic mineralization and Constance Lodes

In terms of the differences in lode geometry between the two zones, mineralisation over T2 is hosted by shear zones focused along contacts between volcaniclastic and magnetic siltstone/sandstone units that dip shallowly to the south. This lode orientation differs from historically defined shallowly west-dipping lodes and as a result opens-up new targeting opportunities near surface; particularly towards the poorly-tested north of the prospect where mineralisation is expected to daylight, albeit under shallow sand cover. Conversely, the deeper Constance Lodes are hosted within shear zones that dip moderately to the north within steeply dipping sediments. In drilling the latest diamond program it was discovered the shear zone dips steeper than previously modeled and in conjunction with the new interpretation of a plunging porphyry-magnetite zone rather than a planar NE-trending corridor resulted in a couple of holes – particularly 22CALDD0010 – falling outside of the mineralisation envelope. Within the Constance Lodes, mineralisation is concentrated along porphyry-magnetic sediment contacts rather than influenced by volcaniclastic distribution as in the shallower, historic mineralisation. Future targeting of a polymictic conglomerate intercepting the porphyry/tectonic corridor at depth as noted within 22CALDD0005 (ASX:M2M 17th January 2023), indicates the potential for not only additional mineralisation sites on lithological contacts but a substantially-larger prize within its brecciated interior as diagnostic of the multi-million ounce Wallaby deposit.

This second phase of diamond drilling at the Calypso Constance Lodes was completed in mid-December 2022 for a total project advance to date of eleven (11) HQ diamond holes for 3,636 metres of HQ core.

Holes 22CALDD0005 (602.9m), 22CALDD0009 (315.2m), 22CALDD0010 (357.2m) and 22CALDD0012 (475.6m) targeted the T3 geophysical anomaly and SW plunging magnetic corridor at depth.

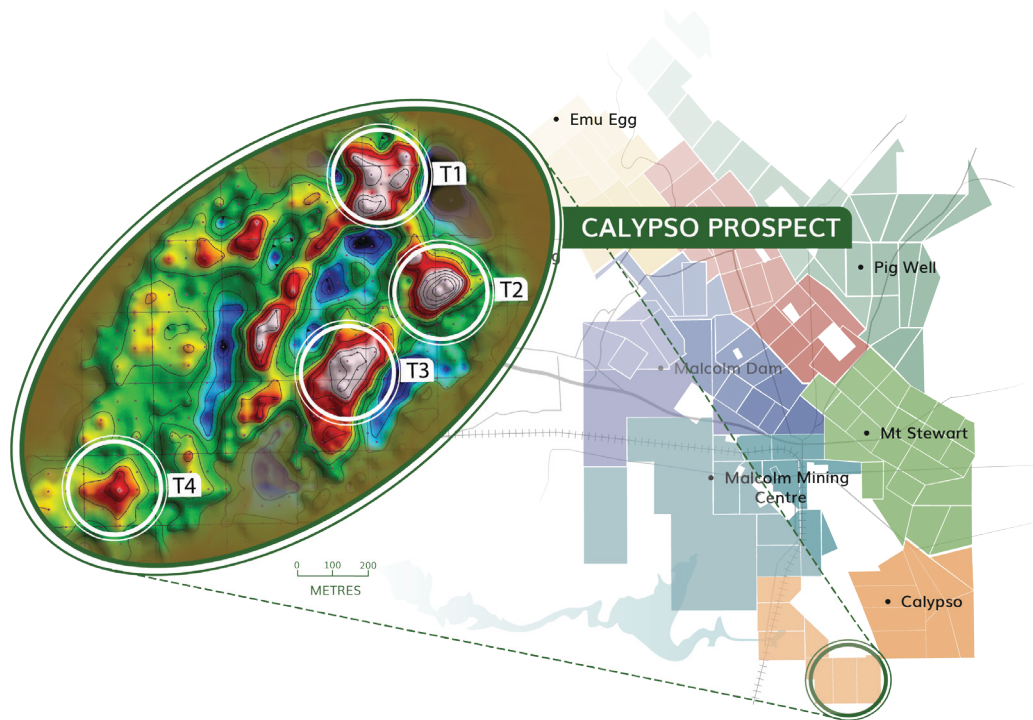


FIGURE 2

The identified four litho-structural prospective high density target areas from simple Bouguer gravity interpretation $2.67\text{g/cm}^3 - 1\text{V}$ and the spatial relationship between targets T2 & T3

The largest of four (4) identified apophysate stocks (T1-T4) that extend upward from an extremely large gravity and coincident strongly magnetic anomaly at depth (ASX:M2M 27th April 2022) has been selected as the target zones, the exploration focus is on T3, the largest of the four. The high gravity response forms the shape of a palm of an upward facing hand with the apophysate stocks (finger target zones) extending vertically upward. The "fingers" are positioned above the deeper large and extremely high-density gravity response.

The anomalous assay results confirm and complement the 3D geological-geophysical model. The stacked multi-level spatially related mineralisation is shear zone hosted within a distinctive porphyry altered magnetic corridor that extends NE along strike between the T2 and T3 target zones. Several generations of SW plunging felsic porphyries are identified within the NE trending magnetic corridor (ASX:M2M 30th December). There is a strong spatial association between the highest magnetic susceptibility and the distribution of the intrusive felsic porphyries. Altered magnetite phenocrysts within felsic porphyries indicate a magmatic-hydrothermal origin supported by a spatial association between the highest magnetite susceptibility and the felsic porphyry distribution.

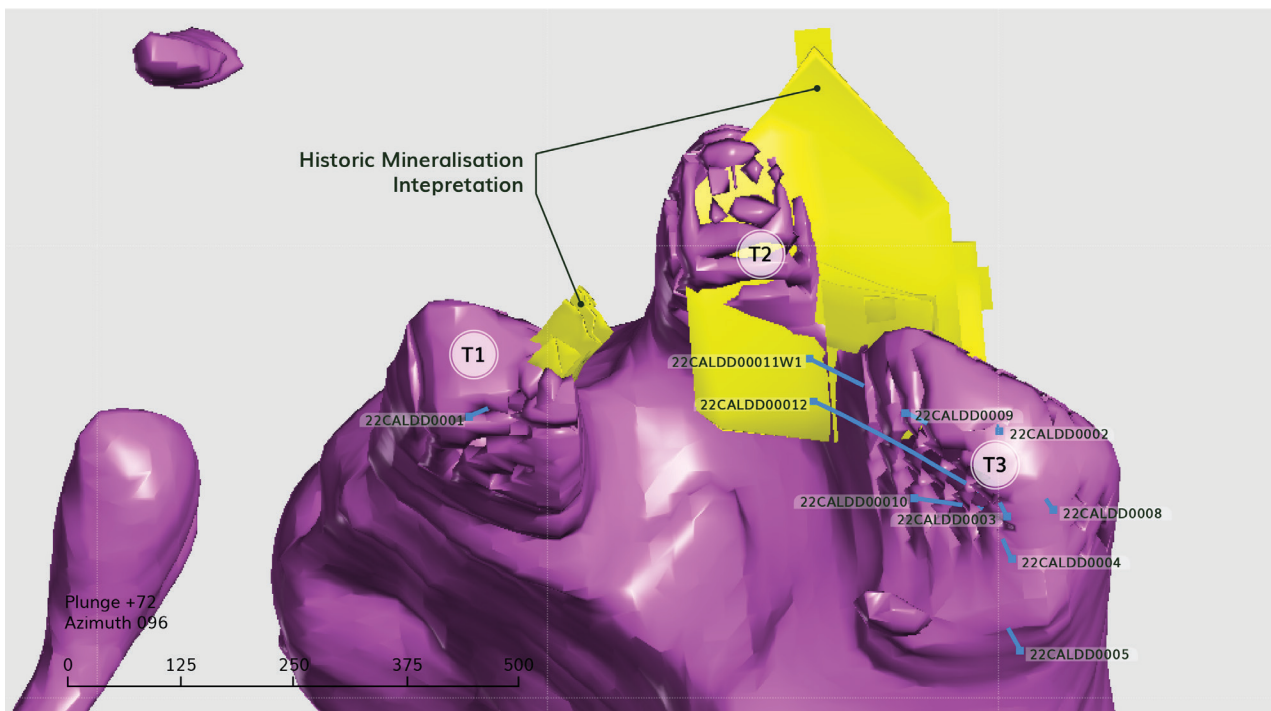


FIGURE 3

The identified four litho-structural prospective high density target areas from simple Bouguer gravity interpretation 2.67g/cm³ – 1V and the spatial relationship between targets T2 & T3

Mineralisation results from 22CALDD0009 and 22CALDD0012 endorses continuity with mineralisation returned from 22CALDD0003 and 22CALDD0004 that display a range of sulphide phases and styles concentrated within multiple alteration zones across the mineralised intervals (ASX:M2M 30th December 2022). The later holes were successful in achieving near orthogonal intersections with the mineralised bounding shear zones returning values very close to a true mineralised width of approximately 45 metres.

Mineralised intersections are coincident with shear zones that intersect the folded sedimentary package. The gravity-magnetic anomaly delineates multiple fold closures. The magnetite altered porphyry zone and the down plunge repetitions of mineralised controlling shear zones remain the primary target zone.

The lithologies at Calypso include a strongly laminated strongly deformed sedimentary sequence comprising magnetic siltstones, interbedded sandstone, conglomerates, shale and BIF, these sediments have been intruded by cross cutting quartz stockworks ± calcite and disseminated to semi massive sulphide bearing felsic porphyries. Sulphide assemblages include pyrite, pyrrhotite and arsenopyrite with interspersed hydrothermal alteration zones. Magnetite has been replaced by intersecting schistosity and veining which has developed sulfidation and zones of intense sericite-silica alteration.

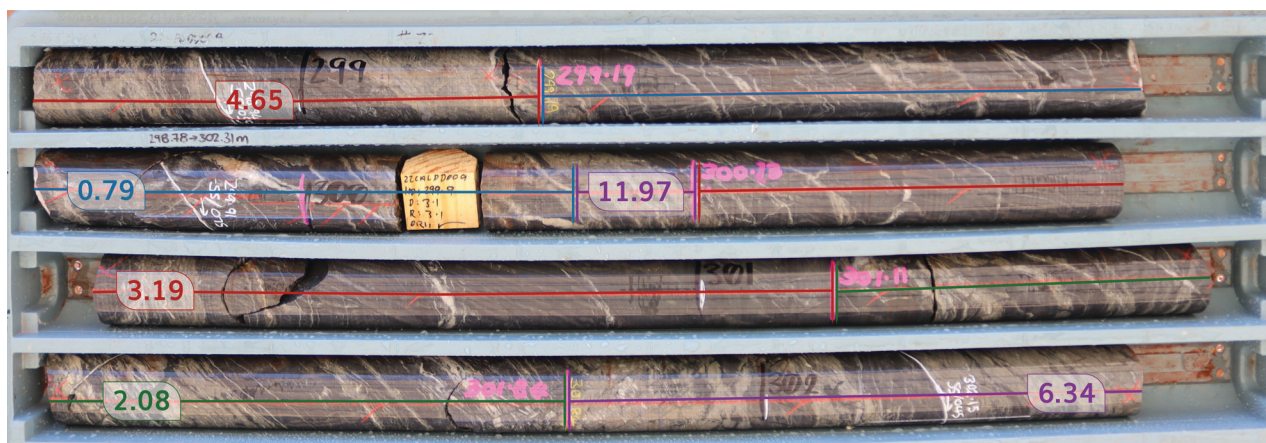


FIGURE 4

22CALDD0009 (298.75-302.35m) returned 3.97m @ 3.48 g/t Au (298.72-302.69m) including 0.10m @ 11.97 g/t Au (300.13-300.23m) which displayed 30% pyrite and 2-5% quartz veining within a magnetic siltstone and shale sedimentary package (298-303.52m)

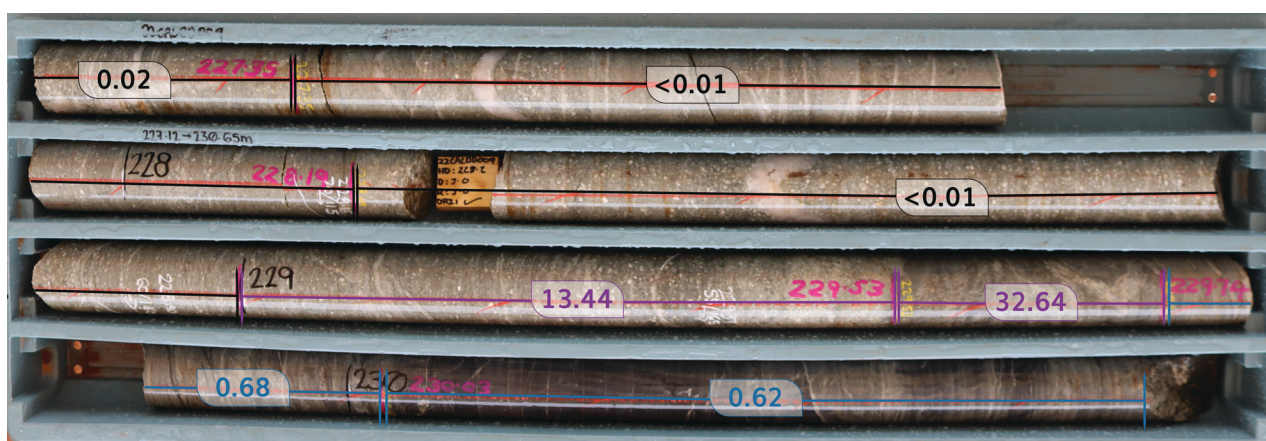


FIGURE 5

22CALDD0009 (227.15-230.60m) Felsic porphyry/sediment contact. Returning 0.74m @ 18.89 g/t Au (229-229.74m) in a zone of strongly bleached quartz feldspar porphyry with stringers of disseminated pyrite (5%) and pyrrhotite (10%) within 2m @ 7.39 g/t Au (229-231m) of moderately bleached porphyry in contact with deeper non-magnetic sediments.

The latest assay and drill results have confirmed two styles of gold mineralisation at Calypso:

- Sulphide replacement of magnetic sediments associated with multi-phase intrusive mineralised felsic porphyries, and
- Mineralised quartz-carbonate-sulphide veining.

Further announcements regarding diamond drill results from the remaining holes are expected this Quarter.

TABLE 1

Significant Calypso Diamond Drill Intersections with no more than 2.0m of internal dilution.
 Reported gold assays are >0.50 g/t Au, Reported assays are subject to a 50gm Fire assay

Hole ID	Easting MGA 94	Northing MGA 94	Total Hole Depth (m)	Azim (TN)	Dip	From (m)	To (m)	Width (m)	Grade (g/t Au)
22CALDD0012	357150.28	6790199.62	475.6m	180°	-60°	174.32	174.82	0.50	1.63
						177.53	183.00	5.47	1.93
			Including			180.12	181.49	1.37	4.66
						184.00	185.00	1.00	1.25
						262.58	262.78	0.20	5.51
						273.86	274.29	0.43	3.66
						280.51	284.55	4.04	1.82
						281.32	283.27	1.95	2.82
						288.38	294.00	5.62	1.07
						300.00	301.0	1.00	0.57
						307.81	314.14	6.33	1.97
			including			312.88	313.71	0.83	6.01
			within			312.88	314.14	1.26	4.58
						318.04	328.07	10.03	1.46
			including			320.04	320.37	0.33	11.32
						331.83	334.00	2.17	2.68
			including			331.83	332.58	0.75	6.56
						339.30	349.00	9.70	2.30
			including			341.54	341.99	0.45	7.41
			including			343.90	344.36	0.46	14.21
						356.00	370.48	14.48	1.63
			including			357.77	358.60	0.83	4.84
						360.18	362.72	2.54	2.85
						366.35	368.38	2.03	2.37
						374.85	375.16	0.31	4.73
						380.23	380.56	0.33	2.01
						406.82	407.62	0.80	0.80
22CALDD005	356841.38	6789999.23	(602.9m)	090°	-60°	565.92	566.92	1.00	0.17
22CALDD0010	357029.86	6790097.36	(357.2m)	160°	-58°	143.93	144.34	0.41	3.39
						146.49	146.84	0.35	3.36
						251.61	251.81	0.20	1.37

Hole ID	Easting MGA 94	Northing MGA 94	Total Hole Depth (m)	Azim (TN)	Dip	From (m)	To (m)	Width (m)	Grade (g/t Au)
22CALDD009	357127.94	6790100.54	(315.2m)	180°	-60°	229.00	231.00	2.00	7.39
			including			229.00	229.74	0.74	18.89
						242.92	254.24	11.32	1.18
			including			236.5	239.48	2.98	2.50
			including			243.79	246.16	2.37	1.81
			with			244.24	244.53	0.29	5.94
			including			252.66	254.24	1.58	2.23
			with			253.97	254.24	0.27	6.30
						267.87	285.91	18.04	1.23
			including			268.69	268.95	0.26	13.46
			and			274.75	275.05	0.30	12.87
			and			278.43	279.17	0.74	4.08
						288.27	290.05	1.78	1.08
						298.72	302.69	3.97	3.48
			including			300.13	301.11	0.98	4.09

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

For further information please contact:-

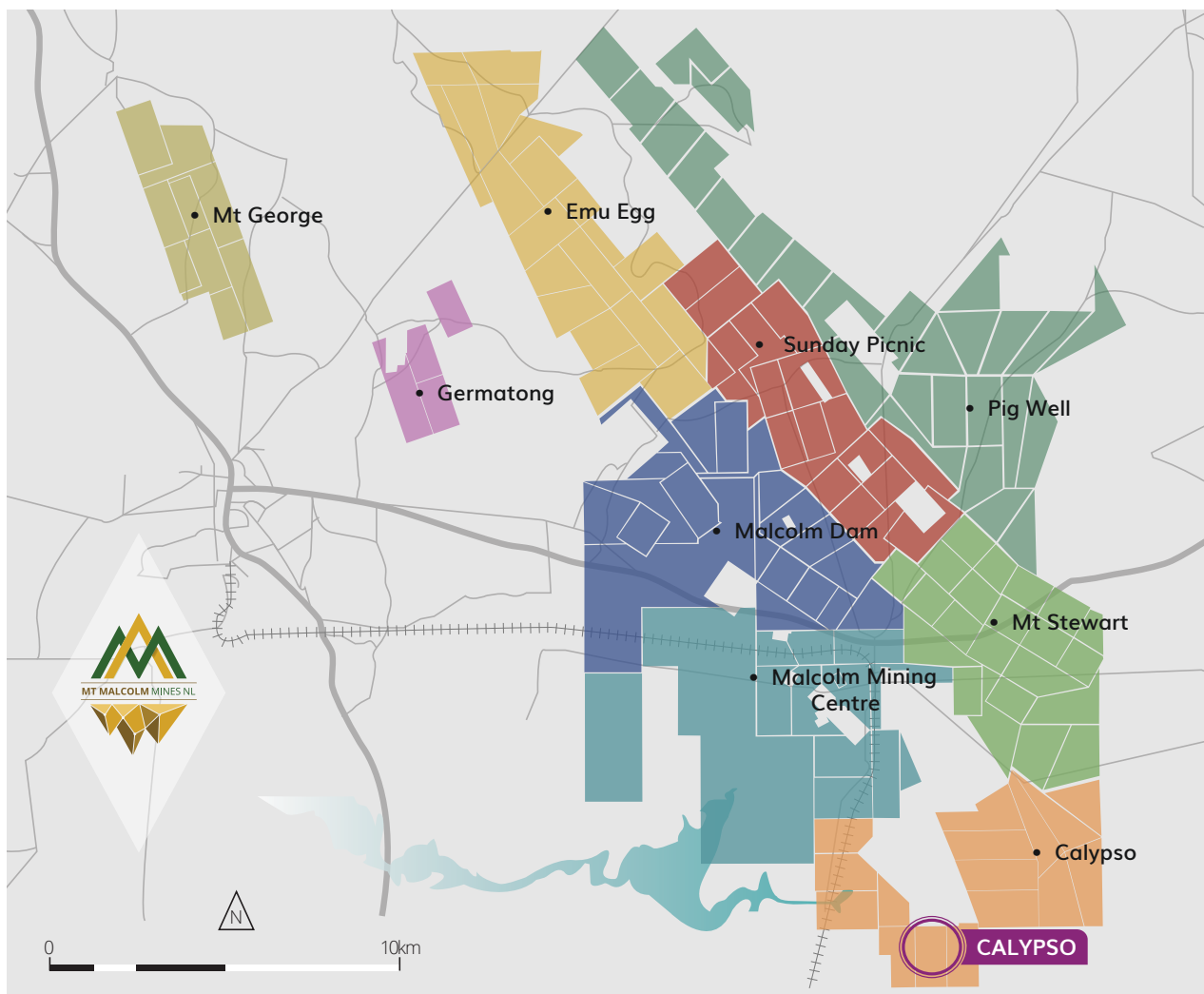
Trevor Dixon

Managing Director

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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 in addition to being a shareholder in the company. 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.'



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 '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.

JORC 2012 TABLE 1 Mt MALCOLM MINES NL (CALYPSO PROSPECT)

SECTION 1 - Sample Techniques and Data

Criteria	Commentary
<i>Sampling techniques</i>	Eight hundred and five (805) Diamond core (DD) drill samples were collected over numerous 1m and <1m meterage's depending on geological lithological contacts or geological boundary constraints. On very rare occasions the sample interval exceeded the nominal 1m sample width. Sample intervals predominantly coincided with geological contacts. Diamond core samples are HQ3 in size diameter. Core was measured and longitudinally cut in half with a diamond core cutting saw centred over a cradle holding the core in place. Half core sample intervals varied in downhole widths from 0.09m to 1.41m, 805 samples of half core have been selected for gold analysis from 712.06m of core (22CALDD0005, 0009, 0010 and 0012). There are gaps in the sampled intervals in every hole, approximately 50% of the drill core has been sampled and assayed. The average core sample length is 0.74m. Approximately 33% of all samples were 1m in length and approximately 65% were <1m in length. Half core samples, when cut, is collected and stored in pre-numbered calico bags prior to submission to the analytical laboratory. All samples collected were fresh rock. The sampling techniques and sampling methodologies employed are deemed appropriate and comply with industry standard for this style of exploration.
<i>Drilling techniques</i>	Diamond drilling techniques are industry standard practice. Diamond drilling was conducted using traditional industry standard "Q" wireline techniques with core retrieved from the inner tubes and placed in core trays as drilled. Core diameter is standard HQ3 size (63.5mm) At the end of the 3m core run the diamond core was retrieved and the driller positioned core blocks in the core tray with the core block marked with hole ID and depth. Core recovery was very good, in the vast majority of cases 100%. Core recovery was measured for each core run. Some of the drill holes deviated slightly. All holes are drilled from surface. The diamond drilling was conducted by Topdrill Pty Ltd operating a Sandvik 880 type drill rig. Upon completion drillholes are surveyed down hole using an AXIS mining technology north seeking gyro tool.
<i>Drill sample recovery</i>	Core recovery is recorded in the site geologists drill logs for most of the diamond drilling however some core is still being processed. A review of the data indicates excellent core recovery. In shallow broken ground lesser recoveries were recorded. Very good recovery was returned over zones of mineralisation. Recovery percentages are recorded and are deemed appropriate and overall considered acceptable for resource estimation. Collected samples are considered reliable and representative of drilled material. No material discrepancy that would impede a mineral resource estimate exists between collected primary 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
<i>Logging</i>	Diamond core logging was conducted once M2M personnel had retrieved the core trays from the drill rig site. Core was collected from the Constance drill site on a daily basis. When geologically logged the entire core length of every drill hole is processed. Geological logging is confined to geological contacts and controls. Recorded data contained in the drill logs includes rock type, magnetic susceptibility, alteration, structure, texture, mineralisation, sulphide content, weathering and other geological features. Drillhole collar coordinates, R.L., azimuth, dip, depth, sample intervals, geotechnical data and core recoveries are also recorded.

Criteria	Commentary
	Qualitative logging includes classification and description of lithology, weathering, oxidation, colour, texture, and grain size. Quantitative logging includes identification and percentages of mineralogy, structural measurements, sulphide content, mineralisation abundance and veining. Drill core is photographed tray by tray wet and dry prior to logging, cutting and sampling. All information collected on site is electronically stored on portable laptop computers, validated, and then transferred to the M2M database. The level of logging detail is considered appropriate for exploration and to support appropriate mineral resource estimation, mining studies and metallurgical studies.
<i>Sub-sampling techniques and sample preparation</i>	Sampling methodologies are consistent with the industry standard. Core samples collected for analysis from 22CALDD0005, 0009, 0010 and 0012 were longitudinally cut in half using a powered diamond core saw centred over a cradle holding the core in place. The vast majority of half core samples ranged in length from 0.2m to 1.0m. On 12 occasions the sample width exceeded 1.0m but never > 1.41m. The minimum sample width was 0.09m, only 3 samples were < 0.20m. The remaining core is retained and stored in core trays in Leonora. Blanks and certified standard reference material is periodically inserted into the sample batches (approximately 1 in 12). 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 within today's industry standard practice. Sample size and collection methodologies are considered appropriate for this style of gold mineralisation and as an industry accepted method for the evaluation of gold deposits in the Goldfields of Western Australia.
<i>Quality of assay data and laboratory tests</i>	Analysis of sample was conducted by SGS Laboratories in Kalgoorlie. Samples were dried (105°), crushed (nominal 6mm) and pulverised (85% passing 75µm). The samples were assayed for gold only using a 50 gram Fire Assay technique with AAS finish and a 0.01ppm detection limit. Certified reference material, standards and blanks are regularly inserted into the sample batch by M2M personnel. The analytical laboratory also included 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.
<i>Verification of sampling and assaying</i>	No adjustment or calibrations have been made to any of the assay data. Sampling and assay techniques are conducted to today's industry standard.
<i>Location of data points</i>	Drill hole collars were initially recorded using a handheld GPS and reported to the MGA94 UTM Zone51 coordinate system, with horizontal accuracy to ±3m. Collar locations were then followed up with a DGPS survey by a licenced surveyor and reported in the same coordinate system with a horizontal and vertical accuracy to 5mm.
<i>Data spacing and distribution</i>	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 and targeting depending on the nature and style of the mineralisation being tested. The sample spacing is considered close enough to identify any significant zones of gold mineralisation. The diamond drill program is a follow up/ongoing exploration exercise that is designed to identify areas of geological interest and to confirm the existing structural architecture and mineralisation within the Constance Lodes. Closer spaced diamond drilling on surrounding cross sections and along strike follow up drilling is required to further delineate the extent, size and geometry of some areas within identified zones of gold mineralisation.

Criteria	Commentary
	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 system remain open and additional infill or deeper drilling would be required to close off and confirm the full extent of identified mineralisation, particularly down plunge at depth. Data acquired and processed is only being considered for exploration purposes.
<i>Orientation of data in relation to geological structure</i>	The sheared Calypso sedimentary greenstone sequence displays an NNW to NW lithological orientation with steeply dipping stratigraphy. Stratigraphy consists of a strongly deformed sedimentary sequence with intrusive porphyries. A SW plunging mineralised magnetite altered corridor is the target zone. The zone hosts several generations of felsic porphyries comprising primary magnetite with intrusions and secondary, vein hosted magnetite within the adjacent sediments. The geological structures are considered to be multi-faceted with intersecting altered porphyry stockworks surrounding intersecting shear zones. 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.
<i>Sample security</i>	Core trays were collected from the drill site on a daily basis. Once core was collected from site trays are securely stored in a locked yard at Leonora. The core was then orientated/marked-up, logged and processed prior to dispatching it to the core cutting facility. Sampled cut core was retrieved daily and stored in the locked Leonora yard until dispatched to the analytical laboratory in Kalgoorlie. 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 laboratory (SGS Australia Pty. Ltd. West Kalgoorlie). Once in the laboratories possession adequate sample security measures are assumed to be adopted.
<i>Audits or reviews</i>	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 some data is poorly validated and confidence levels are questionable regarding some sampling procedures, collar co-ordinates, assay and logging techniques. Further audits or reviews are not considered necessary at this particular stage of exploration.

SECTION 2 - Reporting of Exploration Results

Criteria	Commentary
<i>Mineral tenement and land tenure status</i>	The Mt Malcom Project's Calypso tenement (P37/8792) is located in the centre of the North-eastern Goldfields of Western Australia in the Shire of Leonora in the Mt Margret Mineral Field. The holding is positioned in the NW corner of the Yerilla (3239) 1:100,000 scale GSWA map sheet. The tenement is held by Mt Malcolm Gold Holdings Pty Ltd a wholly owned subsidiary of Mt Malcolm Mines NL. The tenement is managed and explored by Mt Malcolm Mines NL (M2M). The tenement is in in good standing. 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).

Criteria	Commentary
	All gold production in Western Australia is subject to a government royalty of 2.5%
<i>Exploration done by other parties</i>	The Calypso tenements have been explored and drilled by a numerous exploration and mining companies over a number of years dating back to the early 1980s, more active gold exploration companies include, BHP Minerals Division Exploration Department (1984-1988), North Ltd (1995-1997) and most recently Torian Resources Ltd (2017-2019). Other companies include Occidental Minerals (1979), Valiant Consolidation Ltd - Union Oil Development Company (1983-1986), Minplex Resources Pty Ltd - Anglo Consolidated Pty Ltd (1986 and 1997-1998), Lake Raeside NL (1996), Ashton Mining Ltd (1992) and Aurora Gold Ltd (1994). All companies have contributed to various exploration programs utilising a wide variety of standard exploration techniques. Historical exploration activities by these companies comprised all aspects of mineral exploration with a particular focus on gold. On ground activities include geophysical surveys, geochemical sampling, geological mapping, RAB, Aircore, RC and diamond drill programs with subsequent sampling, structural interpretation, resource evaluations and various 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 some portions of the data however it appears that no serious problems have occurred. Historical exploration techniques and reported mineralisation, at the time, was conducted to the standards of the day.
<i>Geology</i>	The Project area is located 25km east of Leonora in the North-eastern Goldfields overlying segments of the altered mafic basalt/felsic volcanoclastic/sedimentary sequences of the Malcolm Greenstone Belt, including the Calypso sedimentary sequence comprising a strongly deformed sequence of magnetic siltstones, interbedded sandstone, shale, conglomerate and BIF's that have been intruded by cross cutting quartz stockworks ± calcite with massive, semi-massive and disseminated sulphide bearing felsic porphyries positioned within the greenstones of the Kurnalpi Terrain. Local lithologies are characterised by linier trending steeply dipping structures, multiple alteration zones and highly sheared structurally complex sedimentary stratigraphy. Sulphide assemblages can be disseminated and massive to semi-massive they include pyrrhotite, pyrite and arsenopyrite with interspersed hydrothermal alteration zones. Magnetite has been replaced by intersecting schistosity and veining resulting in sulfidation and intense sericite-silica alteration. Rock outcrop is non-existent and the project area is covered by sand dunes and recent Quaternary sediments related to the nearby Lake Raeside. Structurally the Calypso area is intensely sheared and intensely folded. Regionally within, the Mt Malcolm Greenstone Belt, gold mineralisation is associated with lithological contacts hosted by NW, NNW and EW trending shear zones often associated with quartz veining. At Calypso mineralisation is focused on faulted or sheared contacts between magnetite rich siltstone, BIF and other sedimentary facies including sandstone, chloritic siltstone and felsic porphyries in conjunction with related intense quartz-carbonate alteration with/without sericite, pyrrhotite and pyrite. There is no evidence of old workings at Calypso (P37/8792).
<i>Drill hole Information</i>	The DGPS controlled location of drill hole collars is recorded in the company database and presented in the table of 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 from the collar (top) of the hole to the bottom (end) of the hole. End of Hole depths are presented in the table of significant intersections.

Criteria	Commentary
<i>Data Aggregation methods</i>	No averaging of the raw assay data was applied. Raw data is used to determine the location, the 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 hole intercepts are quoted individual grades are reported as down hole length weighted average grades. Only intersections greater than or close to 0.5 g/t Au are regarded as significant or anomalous. Intersections less than 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 are relevant to any surrounding mineralisation halos. Significant intersections (>0.5 g/t Au) with a maximum internal dilution of 2.0 metres of are tabled in the body of this report. No top cuts were applied to any assay values. There is no reporting of any metal equivalent values.
<i>Relationship between Mineralisation widths and intercept lengths</i>	In general, the drill hole orientation may not be at an optimal angle to the strike of the local sedimentary greenstone sequence and the identified gold mineralisation. However, the latest round of diamond holes (22CALDD0009, 22CALDD0010 and 22CALDD0012) are now orientated in a southerly direction. Geological modelling suggests near-orthogonal intersections with the mineralised-bounding shear zones. Since the greenstone sequence is generally steeply dipping, 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 have been primarily determined by geological interpretation, 3D modelling and the orientation of recent and historical drilling. The maximum and minimum sample width within the reported mineralised zones in 22CALDD0005, 0090, 0010 and 0012 range between 0.09m and 1.41m. The average sample width is 0.74m. Quoted mineralised intersections are calculated downhole weighted averages.
<i>Diagrams</i>	Type example 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, samples assaying > 0.5 g/t Au, which represents a low order grade, are referred to in the compiled table of significant intersections. Anomalous intersections received to date (>0.5 g/t Au) from the Constance diamond drill program are quoted in the table of significant intersections. Assay results and details from earlier diamond drill holes 22CALDD0002-0004 and 22CALDD0008, 22CALDD0011W1 and 22CALDD0011 have been previously disclosed. The relevant ASX announcement was released 17th January 2023. (ASX:M2M 'Constance Lodes' confirm T3 Discovery Zone at Calypso).
<i>Other Substantive exploration data</i>	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. 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>	The potential to increase the existing zones of mineralisation within the Constance Lodes is viewed as probable, however committing to further exploration 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. Planned future work at the Calypso project includes exploration diamond drilling, sampling, database consolidation, on ground truthing, geophysical interpretation, 3D modelling, petrology and ongoing geological investigation.