



8 January 2024

Directors & Management

David Williams
Executive Chairman

Nick Huffels
Non-Executive Director

Scott Dreincourt
Non-Executive Director

Rebecca Jackson
Non-Executive Director

Registered Office

Level 3
101 St Georges Terrace
Perth WA 6000

ACN 648 177 897

Targeting review of re-emphasises Frida-Midway as a priority target

Highlights

- A targeting review of historical drilling has re-established Frida Midway as a priority drill target
- Results of up to 3m @ 1.02 % Cu (2.4m TW) were returned from 2018 RC drilling but not previously announced
- Intercept geometries suggest a structural control on mineralisation
- An induced polarisation survey from 2021 found chargeability zones consistent with copper sulphide accumulations

Mount Isa Minerals Limited ("M1M" or the "Company") is pleased to provide the following update to shareholders.

Summary

In anticipation of commencing our comprehensive exploration program in 2024, all major targets have been subject to review and Frida Midway has been validated as a priority target:

- Outcropping pegmatites in the Frida Midway area are commonly rich in malachite due to secondary oxidation of copper minerals present in the system. Historical surface rock chip samples (>1% Cu) from the area occur over 900m of strike at Midway and over 300m of strike at Frida East. Surface rock chip samples are highly selective in nature and individual grades should not be considered in isolation, so drilling was required to quantify the presence of copper mineralisation in the area.
- A 2018 reverse circulation (RC) drilling program undertaken by Nova Strategic Minerals (which is now a wholly owned subsidiary of the Company) returned highly anomalous copper results up to 3m @ 1.02% copper from drill samples. These results confirm the presence of significant copper mineralisation in the area.
- Four drill intercepts over 0.4% Cu defined a steeply dipping plane extending well into fresh rock suggesting that the mineralisation located is not simply supergene enrichment. The planar geometry additionally indicates that mineralisation is probably structurally controlled giving it scale and continuity potential.
- The site visit by Board members and key management personnel in October 2023 found further extent to the surface copper expressions at Midway.
- The presence of significantly elevated copper with a structural control further validates the Company's exploration strategy looking for copper mineralisation that is related to, but distinctly different in style from, the adjacent Glencore copper mine.

Exploration History

It is unclear if the historical Midway Shaft that gives its name to the area was exploratory only or was small-scale copper production, but since those workings, which occurred in the early part of the 20th century, the tenure was held by dedicated uranium explorers until the owner of Mount Isa Mines (Xstrata/Glencore) acquired the area for copper exploration in 2000.

Xstrata/Glencore conducted mapping, soil sampling rock chipping and an induced polarisation survey over their fifteen years they held tenements in the Mount Isa Minerals Project area that included the Frida-Midway area and they observed substantial percent-level copper mineralisation in rock chips and ‘moderate’ soil anomalies but did not drill test the area citing “results appeared to be isolated with no strike continuity” (cr106978 – Final Report 2018).

Nova Strategic Minerals continued an exploration program and conducted mapping and surface rock chipping campaigns from 2016 onwards, which have also returned percent-level copper at surface. Unconstrained by the need for globally relevant target sizes which the previous tenement holders had, Nova Strategic Minerals also undertook a small six-hole RC drill program in 2018 to test for small-scale supergene copper mining potential of Frida-Midway. The particulars of that program are detailed in the next section, but whilst the results of the program did not return a small-scale mining opportunity, they did return intercepts up to 1% copper in a primary structurally controlled geological context warranting that the target be reinvestigated for its larger-scale copper potential distinctly different from the nearby Mount Isa Copper Mine.

Subsequent to that drill program, the Company commissioned a small induced polarisation survey over Frida-Midway which returned discrete chargeability zones worthy of direct drill testing for copper sulphide mineralisation. None of these chargeability zones were directly intersected by the 2018 RC drill program. A further review of the drilling and IP survey together suggested that the 2018 mineralised intercepts are on the eastern edge of a zone of high resistivity.

After integrating the drilling and IP survey results, the Company has designed a follow-up drill program to direct drill test those anomalies which will be a priority in the drill campaign post-IPO in 2024.

2018 Frida-Midway RC drill program

The premise of the 2018 RC programme was to assess the supergene copper mineralisation (malachite and chalcocite) for small scale mining potential. The near-surface supergene malachite-chalcocite mineralisation was not as extensive as hoped, but deeper in situ mineralisation (not related to surface oxidation) was encountered in a planar geometry implying a structural control and not simply following the irregular intrusive margins of the pegmatite.

Drilling by RC alone cannot confirm that the copper mineralisation is indeed structurally controlled, but a structural control is far more likely to give lateral continuity to mineralisation than that implied by the previous interpretation that copper mineralisation locally controlled by the pegmatite intrusive contacts.

Hole ID	Easting (MGA94 Zone 54)	Northing (MGA94 Zone 54)	RL (AHD)	Dip	Azimuth MGA	Depth	Assayed DH interval	Significant Intercept
FDA001	332693	7701973	422	-50	90	45	1-45m	1m @ 0.12% Cu from 18m in quartz biotite schist (unknown TW)
FDA002	332669	7702024	421	-50	90	70	0-70m	3m @ 1.02% Cu from 28m in dolerite and schist at the pegmatite contact (2.4m TW)
FDA003	332689	7702024	421	-50	90	45	0-30m	3m @ 0.70% Cu from 5m in pegmatite (2.4m TW)
FDA004	332677	7702075	421	-50	90	65	0-57m	1m @ 0.89% Cu From 31m biotite schist (0.8m TW)
FDA005	332695	7702074	420	-50	90	35	0-20m	1m @ 0.41% Cu from 6m in pegmatite (0.8m TW)
FDA006	332689	7702124	419	-50	90	35	0-20m	No Significant Intercept

Figure 1. Drill physicals and significant intercepts from the 2018 RC drill program.

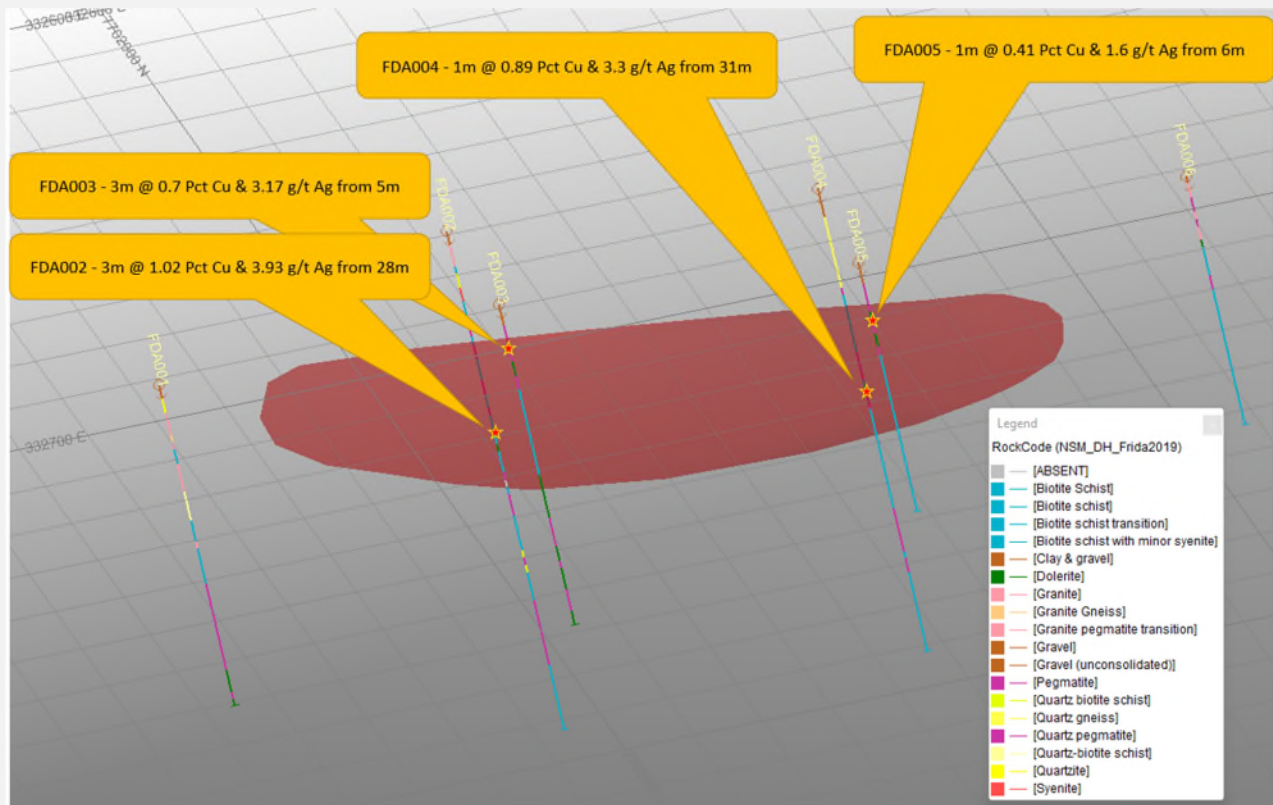


Figure 2. Coplanar copper mineralisation intercepts from the Frida RC drilling of 2018. The interpreted mineralised plane shown is 90m long by 50m dip extent and is open to the south and down dip. FDA001 does not intersect the projection of that plane to the south. If the trend follows the inflection of the chargeability anomaly then it is open to the north also.

The presence of in situ mineralisation gave grounds for the 2021 IP survey. The potentially structurally controlled mineralised trend warrants further drill testing which will form part of the Company’s comprehensive drill program to be commenced in 2024.

2021 Induced Polarisation Survey

The induced polarisation (IP) survey conducted by Mount Isa Minerals in 2021 aimed to test for copper sulphide potential of the area. This survey complemented the extensive high powered IP surveys by Xstrata/Glencore across the rest of the region, but was a smaller more targeted survey aiming specifically to test for fresh rock copper mineralisation below the percent-level surface copper shows at Frida-Midway.

The survey consisted of nine lines, seven lines at West Frida and two at East Frida. Each line was of 385m length with an effective final length of 235m, and 64 electrodes; the outer seven electrodes on both sides had a separation of 10 metres while the central 50 had a separation of five metres. The instrument setup was at the centre of each line.

The survey returned multiple discrete chargeability zones which are consistent with the presence of copper sulphides. These zones are shallow and warrant direct drill testing. The mineralised intercepts of the earlier RC drilling appear to coincide with the eastern boundary of a resistive zone mapped out by the survey. The early success of the IP survey suggests that there is value in more refined processing of the current data and further IP survey work, however the discrete and near surface nature of the targets revealed makes it more cost effective to directly drill test them.

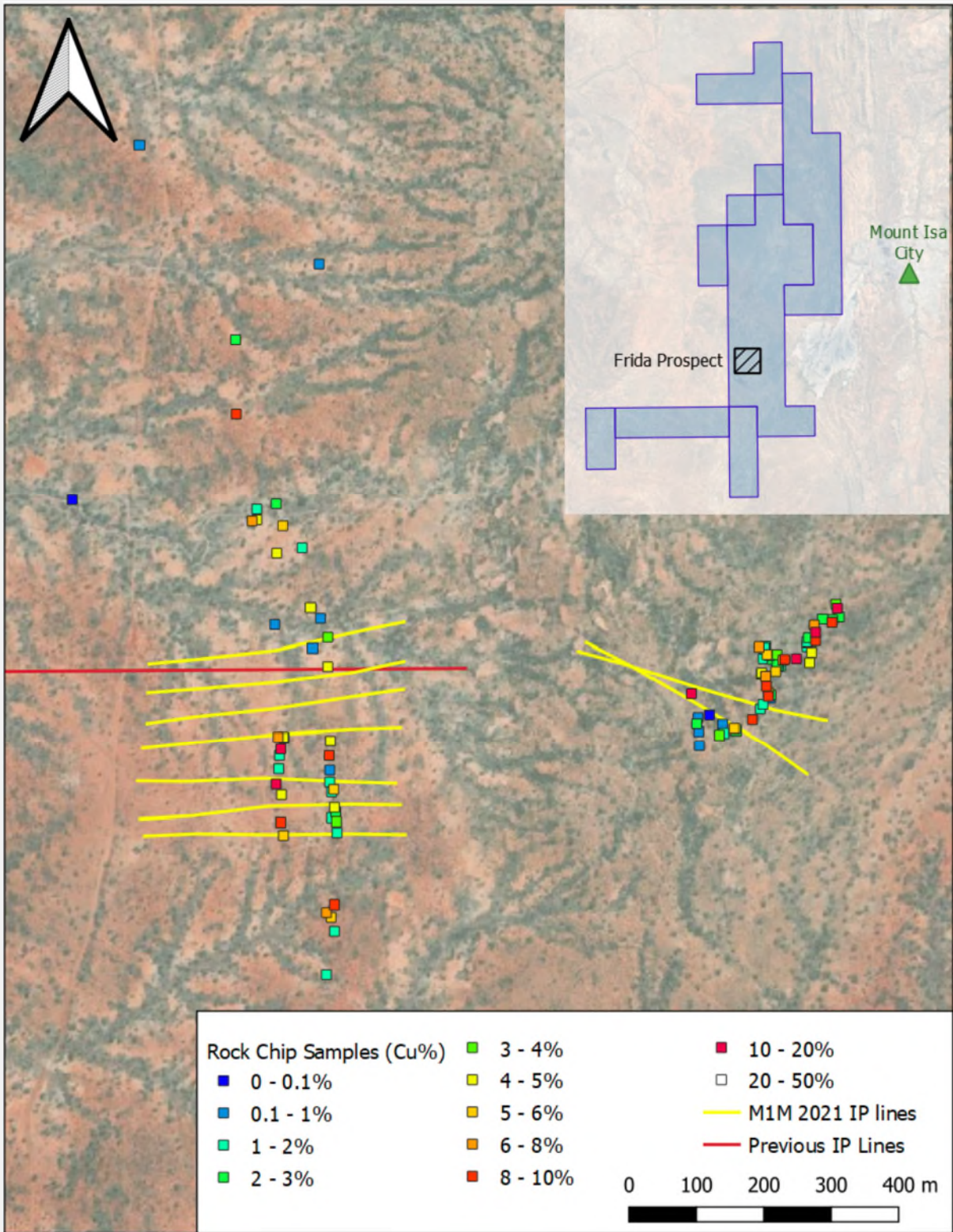


Figure 3. The location of the 2021 IP survey lines with respect to the Previous Frida IP line and surface mineralisation indicated by grab samples. Note that handpicked rock chip samples are highly selective, and grades should not be interpreted as having any equivalency to drill results or in situ rock grades.

This IP survey was a small nimble survey that did not penetrate deeply below the surface. It is highly likely that with positive drill results higher powered more penetrative surveys of a similar nature will be considered across the project area.

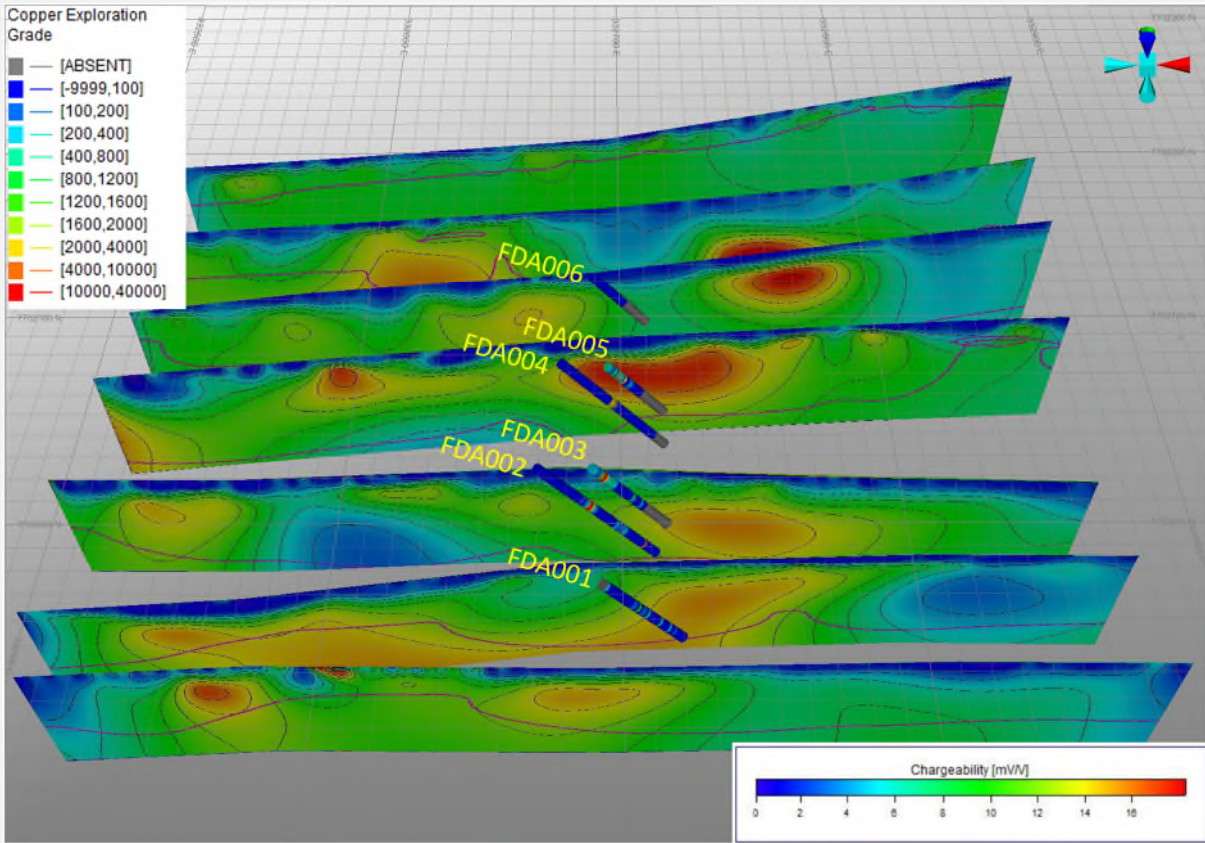


Figure 4. Chargeability results for the Frida 2021 IP survey shown with respect to the 2018 RC drilling program with drillhole traces coloured by grade. View is looking downward to the north. Grid: 100m MGA grid with 10m minor gridlines.

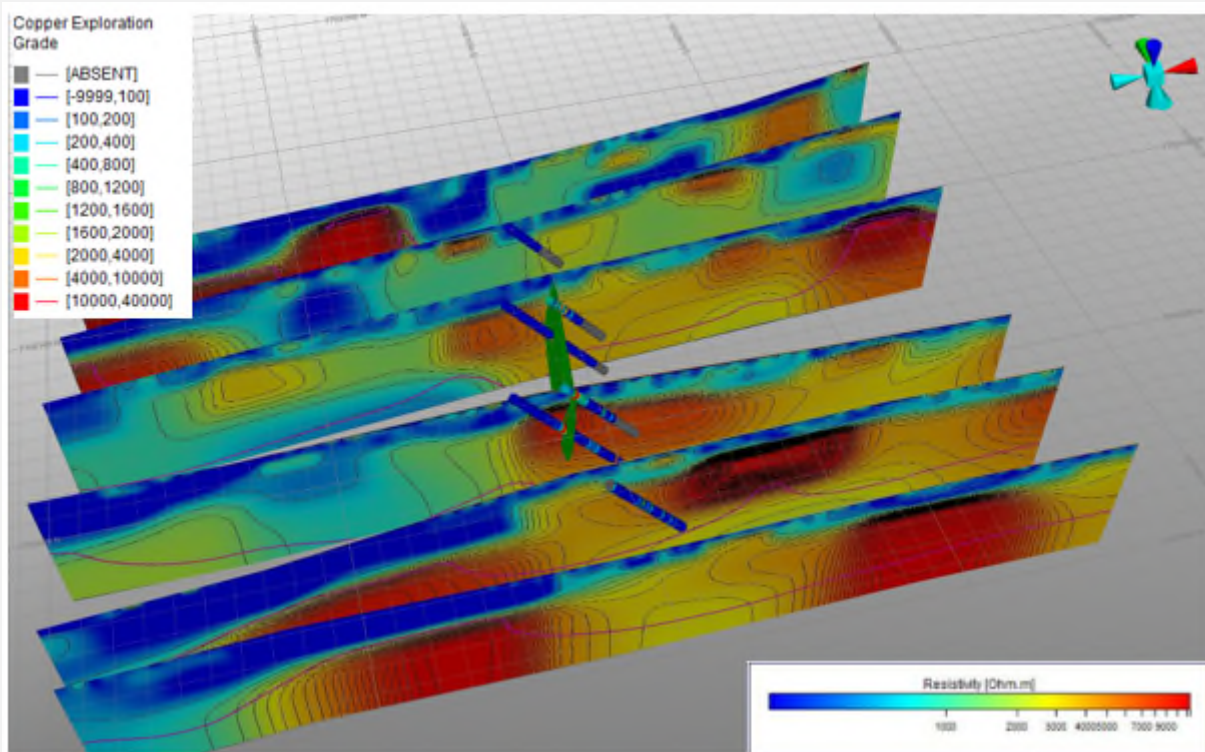


Figure 5. Resistivity results for the Frida 2021 IP survey shown with respect to the mineralised plane (shaded green) defined by drilling which approximates the eastern boundary of a resistive feature. View: Looking downward to the NNE. Grid: 100m MGA grid with 10m minor gridlines.

Conclusion

Surface copper expressions are very common at Frida. A recent site visit by members of the Board and key management personnel located further malachite copper mineralisation unearthed by recent pastoral grading that was not previously mapped (see Figure 6). The recent targeting review has highlighted the value in the extensive historical exploration on the Company's tenements. It also highlighted that Frida-Midway will remain a priority target for drilling in the comprehensive drill campaign to commence post IPO 2024.



Figure 6. Field checking of the Frida Midway prospect in October 2023 found malachite rich rocks recently exposed by the pastoral grader.

For more Information please contact:

David Williams
Executive Chairman
Mobile: +61 419 779 250
Email: david@mountisaminerals.com.au

About Mount Isa Minerals

M1M is a copper exploration company and its strategy is to deliver a copper Mineral Resource Estimate within 3 years. The Company's initial focus will be to undertake a comprehensive drilling program on already identified copper targets based on the existing extensive database.

Appendix 1: JORC Table 1.

Section 1 Sampling Techniques and Data

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

Criteria	Explanation
Sampling techniques	Reverse circulation (RC) drill chips are sampled on one metre interval. The bulk 40kg sample retrieved from the face sampling bit was funnelled through a cyclone system which then split into a two-to-three-kilogram samples calico bag and the rest of the material collected as a 20-30kg sample in a green plastic bag. At the laboratory, the nominal one metre calico sample is pulverised 1000g to 85% passing 75 microns to produce a sample pulp for analysis. The 2-3 kg samples are considered representative of the metre drilled.
Drilling techniques	All holes were drilled reverse circulation with a nominally 5.5-inch hammer.
Drill sample recovery	Drill sample recoveries were recorded as part of the drill log. Recoveries were all excellent at over 90% for all but the first rod (top 6m of the hole) where recoveries were commonly less than 50% for the first two metre samples as is typical of RC drilling before casing off the collar.
Logging	All RC chips are qualitatively logged in entirety with primary lithology, alteration, mineralisation, and veining data collected digitally and have since been uploaded into a MS SQL Server database.
Sub-Sampling techniques	Two-to-three-kilogram samples were split directly off the cyclone with a cone splitter. On a one-in-thirty basis duplicate three kilogram samples were taken from the bulk drill spoil to allow for monitoring of the repeatability and quality of the cone split, although the process by which this was done was not documented at the time.
Quality of assay data and laboratory tests	Samples were submitted to ALS Mount Isa to be assayed using their ME-ICP61 (33-element suite) with a four-acid digest and ICP-AES analytical finish. The four-acid digest is a near complete digest method and is suitable for trace concentrations through to ore grade samples up to 50% copper. The ICP-AES analytical finish is appropriate for ppm-level background mineralisation and the laboratory applies an equivalent percent-level ICP-AES analysis for any ore-grade samples as a matter of routine. Certified reference materials (CRM) of known and certified copper concentration (and other elements of the assay suite) were inserted into the sample stream on a one-in-thirty basis. Blank material (beach sand from Bunnings Mt Isa) known to be of negligible copper content was also inserted into the sample steam on a one-in-thirty basis. Any laboratory job returning multiple standards outside of two standard deviations from certified values is flagged for investigation. Similarly, a job is flagged for investigation if any single standard is outside of three standard deviations or if a blank returns greater than 12 ppm copper.

Criteria	Explanation
	The above protocol was monitored at the time by the consultants responsible for the drill program (CSA Global) and has since been independently reverified by geologists from Xirlatem.
Verification of sampling and assaying	Significant intersections were initially compiled by geologists from CSA Global using a 0.25% cut-off. These results have been independently verified by geologists from Xirlatem. No twin holes are planned at the exploration stage. Logging and sampling data is recorded in MS Excel spreadsheets and uploaded into a MS SQL Server database. All original digital records are retained independent of the database. Assay data is uploaded from the laboratory supplied CSV file directly into the database via a script with no adjustment or alteration of the original laboratory file.
Location of data points	Drillhole collars are pegged before drilling with a hand-held GPS (GPSMAP 64s) using the GDA94 datum. After completion, the final collar position is again picked up with a hand-held GPS. The four-metre accuracy achieved is sufficient at the exploration stage. Topographic control is achieved by overlaying points on regional DEM of the project area.
Data Spacing and Distribution	The Frida drill program involved drillholes on four drill lines 50m apart with the two central lines having two holes 20m apart in the line and only one hole on the northernmost and southernmost lines.
Orientation of data in relation to geological structure	The malachite mineralisation observed at surface is related to the contact margins of pegmatite intrusions, although generally dyke-like these intrusions are highly irregular. The drilling orientation was optimised to best approximate the general trend of the pegmatite dykes. The drill orientation is appropriate for the target.
Sample Security	The original drilling report did not elaborate on sample security measures.
Audits or reviews	The sampling techniques and data were devised and reviewed by independent geological consultants who executed the program originally and have since been additionally reviewed by Mount Isa Minerals' embedded consultants, Xirlatem.

Section 2 Reporting of Exploration Results

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

Criteria	Explanation
Mineral tenement and land tenure status	Mount Isa Minerals holds eight granted Exploration Permits for Minerals (EPMs) through its two wholly owned subsidiaries Nova Strategic Minerals Pty Ltd and May Downs Resources Pty Ltd. All tenements are wholly owned, in good standing and there are no joint ventures or private royalties applicable to the tenure.

Criteria	Explanation
	<p>The drilling reported here falls within the scope of an 'Ancillary Agreement for Exploration' and further 'Deed of Variation' with the Kalkadoon Native Title holders. This agreement presents no material issues with the ongoing mineral exploration of the area and clarifies protocols around aboriginal heritage management in the area.</p> <p>The neighbouring Glencore mine has placed special purpose mining applications over some of the Company's tenements which are currently subject to negotiation. The Company expects an outcome that will be workable for both the Company and Glencore with minor impact on the proposed exploration activities planned by the Company. That special purpose mining lease application does not encroach on the Frida area.</p> <p>The Mount Isa Minerals tenure is also subject to two other stakeholder agreements relating to the Vast Solar and to the May Downs Pastoral Lease. Neither of these agreements present any material issues with the ongoing mineral exploration of the area.</p> <p>No environmental restrictions are applicable beyond standard environmental regulation and management practices applicable to mineral exploration in Queensland.</p> <p>There are no known impediments to obtaining a licence to operate in the area.</p>
Exploration done by other parties	<p>The May Downs Project was found to host minor uranium mineralisation in 1954 and since then uranium has dominated exploration activity, but with sporadic attention by Mount Isa Mines searching for copper-gold systems. The margins of the Sybella Granite have also received some attention for tin, tungsten and tantalum, but mostly prior to the mid-1980s.</p> <p>The primary tenement holder for many years, Mount Isa Mines, farmed out uranium rights to Deep Yellow limited who intensely drilled radiometric anomalies over the May Downs area between 2008-2010 totalling over 24 000 RC drill meters from 228 holes and a further ten holes with diamond tails totalling 1736m. This drill dataset was only assayed for uranium species and despite the large amount of drill metres, only the downhole geology logging is directly useful for further copper exploration of the area.</p> <p>Copper exploration across the Western Fold Belt of Mt Isa has focussed on analogues of the giant Mount Isa Copper orebody, epigenetic replacement-style sediment hosted massive sulphide deposits (SHMS). The rocks west of the Mt Isa Fault are deeper older rocks and the carbonate-rich host lithologies able to host SHMS deposits are rare, which has resulted in significantly less copper exploration. There are however somewhat common copper occurrences in these older rocks and one small mine, the King Prospect (338370mE 7685415mN) which operated in 1968.</p> <p>Prior to Mount Isa Minerals and its subsidiary Nova Strategic Metals, the only modern copper exploration of the area was by Mount Isa Mines Limited (MIM) and its various parent companies. Initially MIM based their exploration on a gold-copper skarn mineralisation model associated with the Sybella Granite, however the more recent exploration and the vast majority of activity, was based around target models variably referred to as structurally controlled copper-gold, metasomatic copper-</p>

Criteria	Explanation
	<p>gold or iron oxide-copper-gold (IOCG), all of which are subtle variants of the same general concept. The Ernest Henry and Olympic Dam deposits were touted as analogues of the target.</p> <p>With that target model in mind, exploration centred around geophysics with several campaigns of updating and refining the aeromagnetic and gravity datasets. Forty-four lines of induced polarisation (IP) surveys were completed between 2001 and 2009 totalling 140 line-kilometres of survey data.</p> <p>A single diamond drillhole, SYC1 was drilled in June 2001 to 649.5m to follow up a coincident chargeability and resistivity anomaly in an IP from earlier that year that was near a two-point gold in soil anomaly from a 1994 soil survey. The drillhole intersected various phases of the Sybella Batholith and failed to identify any significant mineralisation, but also failed to identify the source of the anomaly.</p> <p>In October 2006, the Dali prospect was drilled with the 584m-deep DALI1 diamond drillhole to follow-up a strong resistivity anomaly with nearby copper-gold anomalism in outcropping rock chips (1265ppm Cu and 55ppb Au). Originally planned as a four-hole programme to test for an Olympic Dam analogue, the first hole was drilled off-centre from the modelled anomaly and returned alternating magnetite and haematite dominated zones with chalcocite occurrences "restricted to redox zones between oxidised and reduced rocks." The resistivity identified by the IP survey was attributed to a zone of siliceous quartz-feldspar dominated rocks, and despite the chalcocite (and rare chalcopyrite) occurrences, the remainder of the drill programme was cancelled, presumably because the resistivity feature on which the programme was now interpreted as primary mineralogy, not secondary alteration.</p> <p>Nova Strategic Minerals Pty Ltd, now a wholly owned subsidiary of Mount Isa Minerals, drilled a six-hole RC drill program in 2018. That RC program and the two diamond holes drilled by MIM are the only modern drilling of the project area dedicated to copper exploration.</p> <p>Mount Isa Minerals completed a small-scale IP survey over the Frida Prospect in late 2021 consisting of seven acquisition lines.</p>
Geology	<p>The Proterozoic Mount Isa Inlier consists of three broadly different component belts with the slightly older rocks of the Kalkadoon-Leichhardt Belt separating the Eastern Fold Belt from the Western Fold Belt. Eastern Fold Belt is renowned for its IOCG (iron oxide copper gold) deposits, such as Ernest Henry, Osborne, Starra and Selwyn, whereas the Western Fold Belt hosts both copper and lead-zinc-silver SHMS (sediment hosted massive sulphide) deposits at George Fisher and Mount Isa.</p> <p>The exposed rocks of the Western Fold Belt accumulated in two major basin systems, the older Leichhardt Superbasin and the younger Isa Superbasin which were then intruded with three periods of magmatism, the voluminous Sybella Batholith at ~1655Ma and then two pegmatite events at ~1530Ma and ~1480Ma.</p> <p>The emplacement of the Sybella Batholith was coeval with the early extensional event that allowed for the accumulation of the Isa Superbasin rocks. The protracted polyphase Isan Orogeny multiply deformed the rock mass between 1575Ma and</p>

Criteria	Explanation
	<p>1510Ma. In the Mount Isa Minerals project area, the Isan contraction resulted in multiple phases of reactivation of the pre-existing basin margin structures to form the Mount Isa Fault System. A large anticline, the May Downs Anticline formed to the immediate west of the fault system as deeper rocks were thrust up against it.</p> <p>The SHMS mineralisation at Mount Isa is hosted within the younger Isa Superbasin rocks and is dated at 1532Ma which puts it within error of the 1530Ma pegmatites and in the late stages of the Isan Orogeny.</p> <p>The Mount Isa Minerals Project area covers parts of the Sybella Batholith but is mostly dominated by the older Leichhardt Superbasin rocks. The May Downs Anticline exposes the May Downs Gneiss at the centre of the area where the package of metasedimentary rocks and dolerites is intruded by common pegmatites including the 1530Ma generation coeval with mineralisation on the eastern side of the Mount Isa Fault System.</p> <p>Outcropping copper expressions are common across the project area west of the Mount Isa Fault, most notably in association with pegmatite intrusions or with variably iron-oxide altered metabasalts of the Eastern Creek Volcanics.</p> <p>The Frida (West) Prospect is located approximately 12 kilometres west southwest of the city of Mount Isa. It is situated within the prominent structurally controlled Western Fold Belt of the Mount Isa Inlier. The host rock is a north-south orientated biotite pegmatite and is one of many similar pegmatites located within the sedimentary and volcanic successions of the Leichardt River Fault Trough. The host sequence to the Frida Prospect pegmatite is known as the May Downs Gneiss and comprises many dolerite sill-like intrusives within gneiss, schist, sandstone.</p>
Drillhole information	Drillhole physicals are detailed in the body of this report. All holes are reported regardless of the outcome.
Data aggregation methods	Reported intercepts are calculated from length-weighted composites across the breadth of intervals with comparable geology including primary rock type and relevant alteration styles. Significant intercepts are reported with a 0.25% Cu cut off grade with the highest grade sample in the drillhole reported for the sake of completeness where no interval occurred in a drillhole meeting that threshold.
Relationship between Mineralisation widths and intercept lengths	The mineralised zone intersected and discussed in this report were intersected at a high angle, and true widths (shown in brackets in the body of this report) are estimated based on the likely orientation of stratigraphy based on orientation data from the geological logging.
Diagrams	Refer to the location map in the main body of this report for the location and regional context of the holes discussed.
Balanced reporting	Six holes were drilled in the exploration program. All holes are reported regardless of the outcome.
Other substantive exploration data	Beyond drilling information contained in this report, two separate induced polarisation (IP) geophysical surveys relate to the mineralisation at Frida-Midway. Mount Isa Mines completed a single line of high powered IP over and to the west of Frida in 2006. Nova Strategic Minerals conducted its own IP survey over Frida Midway, as discussed in the body of this report, in 2021.

Criteria	Explanation
Further work	As is the subject of this announcement, the positive identification of a mineralised plane and chargeability anomalies in the IP survey warrant direct drill testing of the Frida-Miday prospect. A drill program has been designed accordingly.

~~END OF APPENDIX 1~~