

Multiple VTEM anomalies confirm high priority targets at Midas' Challa Project

Highlights

- Initial analysis of 800 line km high-powered helicopter-borne electromagnetic (VTEM Max[™]) geophysical survey at Challa completed.
- Midas has identified several strong VTEM conductor anomaly targets.
- Initial in-field "ground truthing" of VTEM targets provides additional confidence that EM conductors are bedrock responses.
- Several high priority VTEM targets occur in areas known to contain copper (Cu), gold (Au) and platinum group elements (PGE) mineralisation.
- Assay results from Midas' initial 3,000-hole auger drilling program at Challa are due this month.
- Analysis of geophysical data and geochemical results will assist in vectoring to targets for a maiden drill program at Challa in 2022.

Midas Minerals Ltd ("Midas" or "the Company") (ASX: MM1) is pleased to announce geophysical consultant Resource Potentials has completed an assessment of helicopter-borne VTEM[™] Max electromagnetic survey data acquired over Midas' Challa Project near Mt Magnet WA in December 2021.

The VTEM survey area at Challa covered 136km² at 200m line spacing. A further 70 line km of infill lines at 100m line spacing was also flown over areas of strong interest. The VTEM survey covered a portion of the northern section of a giant mafic-ultramafic layered intrusion known as the Windimurra Igneous Complex (WIC). The survey aimed to identify bedrock conductors that may relate to intrusion related massive sulphide mineralised bodies with the potential to host Ni-Cu-Co-PGE mineralisation. Known sulphide gossan occurrences have been identified in this part of the WIC and often contain anomalous to high grades of base metals and/or precious metals.

Analysis of the preliminary VTEM data has identified at least 34 higher priority conductive anomalies occurring as discrete or clusters of mid to late-time responses forming bedrock targets (Figure 1). Some VTEM targets are considered drill ready, and others require ground-based electromagnetic (EM) surveys to refine and define their precise orientation prior to drilling using reverse circulation (RC) or diamond drilling methods.

Executive Director Nick Katris commented:

"Initial analysis of the VTEM survey results over Challa is highly encouraging, given the link between conductive bedrock targets and the potential discovery of precious or base metals sulphides in these mineral systems.

The VTEM survey is an important part of our systematic exploration strategy to cover one of the world's largest ultramafic-mafic intrusions. It will enable us to focus exploration on areas containing potential massive sulphide accumulations very rapidly.

We also look forward to receiving assay results for the initial 3,000 auger holes drilled at Challa, which are pending. These auger geochemical results should complement the geophysical targets and allow us to further prioritise targets for RC drilling in 2022."





Figure 1: VTEM anomalies in Midas' Challa Project tenements.

VTEM ANOMALIES

Geophysical consultants Resource Potentials has reviewed the 800 line kilometres of preliminary VTEM[™]-Max data and has selected and ranked a large number of bedrock EM anomalies, where the strongest anomalies occur within several clusters to form target areas (refer Figures 1 to 4 and Appendices A and B).

John Bore East (JBE)

The JBE VTEM anomaly cluster contains 15 subtle to strong late-time conductors extending over a strike of 2.7km. Field checking confirmed that the strongest anomalies follow a zone of sub-cropping gabbro sequence (high-MgO content). The JBE cluster is a priority as it includes roughly half of the highest ranked VTEM anomalies from the survey. The area has essentially had no prior exploration before the VTEM survey.

John Bore West (JBW)

The JBW VTEM anomaly cluster comprises eight medium ranked mid to late time conductors extending over 2.2km. The lithology in the area comprises a gabbro cumulate sequence. A single historic diamond drill hole intercepted lead-zinc sulphides within a shear zone nearby.

Wondinong East (WE)

The WE VTEM anomaly cluster comprises 14 early to late time conductors over 3.9km. The target area comprises mafic gabbro to ultramafic anorthosite cumulates. Limited historic geochemistry and drilling returned strongly anomalous palladium and platinum in this area. Rock-chip sampling of a small gossan outcrop contained high-grade copper-silver-gold mineralisation and likely represents a structurally controlled sulphide occurrence.



Killarney (KL)

The KL VTEM anomaly cluster comprises 16 early to late time conductors identified within a 2.5km radius of the Killarney gold workings. The area is complex geologically and structurally, a number of copper-gold and arsenic-gold gossanous quartz veins and shears have been mined. The most prospective areas are mostly soil covered and initial auger geochemistry results covering the VTEM target area are pending.

Additional VTEM Anomalies

Midas has identified another 27 VTEM conductor anomalies that justify further assessment, including mapping, geochemistry or ground EM follow up.



Figure 2: John Bore East VTEM anomaly cluster on channel 30 Z component image.



Anomaly JBE02

Anomaly JBE05





Figure 3: Northern portion of Wondinong East VTEM anomaly cluster on channel 30 Z component image.



Anomaly WE14





Figure 4: John Bore West VTEM anomaly cluster on channel 30 Z component image.



Anomaly JBW01



NEXT STEPS

Assays for Midas' 3,000 auger hole geochemical survey are pending with results expected this month. It is proposed to infill and extend the geochemical survey areas to include these areas returning VTEM anomalies.

Midas is also planning ground EM surveying to refine the VTEM anomalous areas, and aims to work up and prioritise several drill targets, testing geochemical and/or geophysical targets with RC drilling as soon as possible.

The Board of Midas Minerals Limited authorised this release.

For more information:

Nick Katris Executive Director E: info@midasminerals.com Nathan Ryan Media / Investor Relations E: nathan.ryan@nwrcommunications.com.au

About Midas

Midas Minerals is a junior mineral exploration company based in Western Australia, targeting the discovery of economic mineral deposits.

Midas' primary focus is gold, however our projects are also prospective for nickel, PGE, copper, silver and lithium.

The Company has three projects located in the Leinster, Leonora, and Mt Magnet areas of Western Australia. Midas' projects Weebo, Challa and Sunset have prospective targets areas that remain essentially unexplored due to prior fragmented land holdings or private ownership. All of Midas' mineral exploration projects are also located proximal to infrastructure and within 60km of mining towns and processing plants.

Midas' Board and management have extensive experience in mineral discovery and a proven track record of significant gold discoveries and mine development.



Forward Looking Statement

Statements regarding Midas's plans, forecasts and projections with respect to its mineral properties and programmes are forward-looking statements. There can be no assurance that Midas's plans for development of its mineral properties will proceed. There can be no assurance that Midas's will be able to confirm the presence of Mineral Resources or Ore Reserves, that any mineralisation will prove to be economic or that a mine will be successfully developed on any of Midas's mineral properties. The performance of Midas's may be influenced by a number of factors which are outside the control of the Company, its directors, staff or contractors.

Competent Persons Statement

The information in this announcement that relates to Exploration Results is based on and fairly represents information and supporting documentation prepared by Mr Mark Calderwood, a consultant of the Company. Mr Calderwood is a Competent Person and is a member of the Australasian Institute of Mining and Metallurgy. Mr Calderwood has sufficient experience relevant to the style of mineralisation 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" (JORC Code). Mr Calderwood consents to the inclusion in this announcement of the matters based on his information and supporting documents in the form and context in which it appears.

Mr Calderwood is a shareholder of the Company and the Company does not consider this to constitute an actual or potential conflict of interest to his role as Competent Person due to the overarching duties he owes to the Company. Mr Calderwood is not aware of any other relationship with Midas which could constitute a potential for a conflict of interest.

Disclaimer

All maps, photographs and diagrams in this announcement are first published by the Company on the date of this announcement, unless stated otherwise.



APPENDIX A: VTEM ANOMALY LOCATIONS

Table 1: VTEM anomalies JBE cluster.

Ref	Easting	Northing	Rank
JBE01	638,103	6,910,546	1
JBE02	637,982	6,910,563	1
JBE03	637,554	6,910,121	1
JBE04	638,177	6,910,631	1
JBE05	637,427	6,910,004	1
JBE06	637,380	6,909,999	1
JBE07	637,470	6,910,056	2
JBE08	638,313	6,910,810	2
JBE09	637,349	6,909,661	2
JBE10	638,729	6,911,282	2
JBE11	638,251	6,910,706	2
JBE12	637,016	6,909,438	3
JBE13	638,910	6,911,358	3
JBE14	637,342	6,909,885	3
JBE15	638,682	6,910,968	3

Table 2: VTEM anomalies WE cluster.

Ref	Easting	Northing	Rank
WE01	638,745	6,907,849	1
WE02	638,749	6,907,630	1
WE05	637,441	6,907,113	2
WE06	636,419	6,905,682	2
WE08	638,614	6,907,869	2
WE09	637,973	6,906,185	2
WE11	638,912	6,907,551	2
WE14	638,546	6,907,801	3
WE18	636,298	6,905,892	3
WE20	636,658	6,906,067	3
WE21	636,981	6,906,697	3
WE22	639,294	6,908,289	4
WE24	638,339	6,906,750	4
WE25	639,203	6,908,061	4

Table 3: VTEM anomalies JBW cluster.

Ref	Easting	Northing	Rank
JBW01	635,271	6,907,266	2
JBW02	637,127	6,908,456	2
JBW03	636,855	6,908,120	2
JBW04	635,477	6,907,319	2
JBW06	635,955	6,908,082	3
JBW07	636,591	6,907,781	3
JBW08	636,379	6,907,750	3
JBW11	636,164	6,907,715	3

Table 4: VTEM anomalies KL cluster.

Ref	Easting	Northing	Rank
KL01	645,659	6,905,667	1
KL02	645,996	6,905,488	1
KL03	646,481	6,907,857	2
KL04	646,091	6,907,726	2
KL05	647,630	6,908,259	2
KL06	646,292	6,907,781	3
KL07	645,522	6,905,502	3
KL08	647,216	6,908,732	3
KL09	647,158	6,906,687	3
KL10	645,378	6,905,362	3
KL11	645,216	6,905,240	3
KL12	646,158	6,907,208	3
KL13	647,914	6,905,775	3
KL14	647,027	6,906,093	3
KL15	645,806	6,907,823	3
KL16	647,358	6,906,502	4

Table 5: Other VTEM anomalies.

Ref	Easting	Northing	Rank
WE03	634,814	6,906,191	1
WE07	638,655	6,904,591	2
WE04	640,547	6,906,923	2
WE10	640,255	6,907,029	2
WE12	639,034	6,905,938	2
WE13	637,637	6,904,368	2
CN01	644,527	6,911,639	2
JBE16	638,052	6,909,262	3
JBE17	637,983	6,910,985	3
JBW05	634,759	6,908,561	3
JBW09	635,068	6,909,219	3
WE15	638,358	6,904,713	3
WE16	638,853	6,905,857	3
WE17	640,115	6,904,877	3
WE19	638,880	6,904,610	3
CN02	641,343	6,908,756	3
CN03	641,121	6,908,740	3
CN04	642,718	6,907,165	3
CN05	642,428	6,906,075	3
CN06	644,040	6,912,081	3
CN07	643,455	6,905,486	3
CN08	643,936	6,905,452	3
JBW10	636,030	6,909,149	4
JBW12	636,126	6,908,592	4
WE23	639,293	6,905,106	4
CN09	643,754	6,907,776	4
CN10	642,347	6,907,808	4



APPENDIX B: SELECTED VTEM PROFILES





Profile L3505 dB/dt data Z component JBE01.



Profile L3551 dB/dt data Z component WE02 & WE08.

Profile L3540 dB/dt data Z component JBE03.



Profile L3545 dB/dt data Z component WE01& WE11.



APPENDIX C: JORC CODE 2012 EDITION - TABLE 1 FOR EXPLORATION RESULTS

Section 1 Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling techniques	 Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representativity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information. 	A Helicopter borne VTEM [™] Max survey of approximately 825 line- km was conducted over about 130km ² of the Challa project area between December 2 and December 11, 2021. The survey was carried out on flight lines oriented at 330-150 degrees at 200m intervals with 100m infill lines in selected areas. Tie lines were completed at 2000m intervals at 60-240 degrees The VTEM [™] Max Configuration: Transmitter loop terrain clearance - 48m average Peak dipole moment - 640,571 nIA Transmitter Pulse Width - 7.34ms Base Frequency - 25Hz Receiver - X, Y, Z coils Magnetic Sensor - 0.02 nanoTesla (nT) at interval of 0.1 seconds Flying height - 83.2m average EM senser clearance - 35.2m average Effective Transmitter loop area - 3760.99m ² Magnetic sensor clearance - 73.2m average The VTEM survey was undertaken in industry standard and is used for testing for potential accumulations of sulphides.
Drilling techniques	 Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.). 	No drilling activities are being reported.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	No drilling activities are being reported.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography The total length and percentage of the relevant intersections logged. 	No drilling activities are being reported.



Criteria	JORC Code Explanation	Commentary
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	No drilling activities are being reported.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	VTEM [™] Max system was calibrated prior to commencement of the survey All digital data is inspected daily by the Geotech site crew and the Company's consultant geophysicist The data and has not undergone processing/leveling by Geotech and the final dataset was delivered 3/2/2022. The Company's consultant geophysicist has advised the data is suitable for public release.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	Not applicable for the survey undertaken.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	Real-time GPS navigation system utilising the NovAtel WAAS enabled GPS receiver providing in-flight accuracy of 1.8m and up to 1.0m depending on satellite availability. All locations have been presented in zone 50 GDA 1994 MGA.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	The spacing between flight lines ranges from 100m to 200m. readings sampled to locations every 2.3m along survey flight lines.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this 	The flight paths were perpendicular to the general strike direction of the major geological formations and line spacing is sufficient to locate discrete conductive anomalies.



Criteria	JORC Code Explanation	Commentary
	should be assessed and reported if material.	
Sample security	 The measures taken to ensure sample security. 	All data acquired by Geotech was reported to the Company's representatives
Audits or reviews	 The results of any audits or reviews of sampling techniques and data. 	Data was uploaded via FTP to the UTS office in Aurora daily for quality assurance and quality control by qualified personnel.
		Mid time anomalies proximal to fence lines or other cultural features were removed from the anomaly database.
		Eighteen high ranking anomalies were subject to ground truthing with no concerns raised.



Section 2 Reporting of Exploration Results

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	The Challa project comprises exploration licences 58/563 and 58/567 and exploration licence applications E58/564, E58/565 and E58/566 totalling 859km ² located east of Mt Magnet. The Company holds 100% of the tenements in the name of its wholly owned subsidiary Marigold Minerals Pty Ltd. The project is subject to a 0.75% gross revenue royalty from whom the project was acquired. The Company has assumed responsibility for the payment of State Government royalty. The two approved tenements are in good standing, the VTEM survey was undertaken over these two licences. There are no registered native title interests, wilderness areas, national park or environmental impediments (other than usual environmental and rehabilitation conditions on which the granted tenements have been granted) over the outlined current areas. There are no current impediments to obtaining a license to operate in the project area.
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	This report refers to prior exploration results. The prior exploration is comprehensively referenced in the Independent Geologists Report and Appendices within the Midas Prospectus of 3 September 2021.
Geology	Deposit type, geological setting and style of mineralisation.	 The survey aimed to identify bedrock conductors that could relate to sulphide bodies and host PGE, nickel, copper, and gold within the northern section of the Challa project. The survey area covers a portion of the giant mafic-ultramafic layered intrusion known as the Windimurra Igneous Complex (WIC). Targets include: Structurally controlled sulphide Cu-Ag-Au mineralisation (John Bore South) Structurally controlled sulphide Au-Cu, Au-As mineralisation (Killarney) Reef-style PGE sulphide or chromite mineralisation (Wondinong-Killarney) Reef-style or fault breccia hosted Ni-Cu-PGE sulphides (Entire survey area) Structurally controlled Pb-Zn mineralisation (John Bore).
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	No drilling activities are being reported
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. 	Not applicable for the survey undertaken



Criteria	JORC Code Explanation	Commentary
	 Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). 	No drilling activities are being reported
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	Figures 1-4 show locations of anomalies Tables 1 to 5 contain anomaly locations and ranking Selected VTEM profiles included in Appendix B
Balanced reporting	 Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	Commentary on all VTEM anomalies considered of potential significance at the time of reporting, have been included within tables. Anomalies suspected on balance to the result of fences or IP effects have been removed from the anomaly dataset. Some of the listed VTEM anomalies may be the result of super-paramagnetic (SPM) effects.
Other substantive exploration data	 Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	All relevant and material exploration data for the target areas discussed, has been reported or referenced.
Further work	 The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	Further 'ground truthing' including ground EM is warranted across anomalies. All relevant diagrams have been incorporated in this report.