

Musgrave Identifies Strong EM Conductor at Mamba

- Ground EM surveys have identified three conductors at Mamba to date.
- The conductor at target M8 is very strong with a modelled conductance that is consistent with a massive sulphide source
- The Mamba nickel-copper project is in the same belt as the world class Nova-Bollinger nickel-copper sulphide discoveries
- Ground EM surveys are ongoing and drill testing is to commence in late June

Musgrave Minerals Ltd (“Musgrave” or “the Company”) (ASX:MGV) is pleased to announce the identification of three basement ground electromagnetic (“EM”) conductors using a high powered fixed loop ground EM (“FLEM”) system on the wholly owned Mamba Exploration Licence (E28/2405) in the Fraser Range of Western Australia (Figure 1). A description of the conductors can be found in Table 1.

The strongest conductor (M8) is a late time basement response with a modelled conductance of ~10,000 siemens. This is significant as it is consistent with the expected response from a massive sulphide source. The M8 conductor is in an area of no previous drilling and interpreted shallow sedimentary cover making surface geochemistry ineffective.

The conductor is at a depth of 200m with a strike extent of approximately 100m. It is located adjacent to a magnetic high (Figure 3) on what is interpreted to be an intrusive type feature, the prospective host for nickel-copper sulphide mineralisation in the district.

The EM survey is continuing with four targets still to be completed. An RC drilling program will commence in late June 2015 to test the bedrock conductors and determine their source.

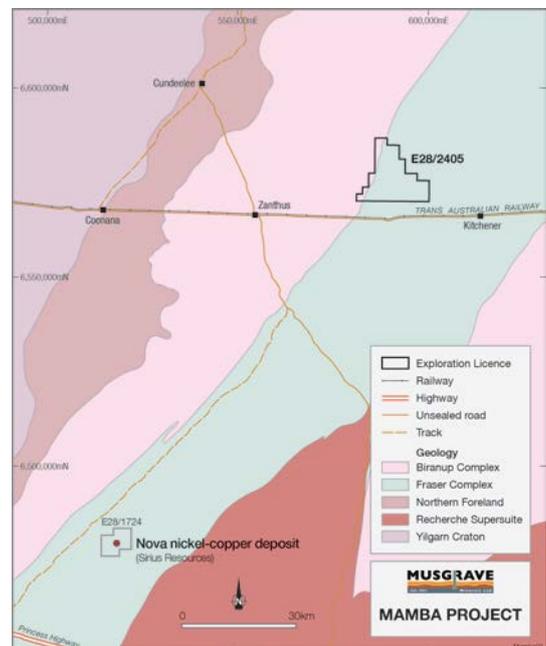


Figure 1: Mamba Project Location

The Mamba nickel-copper project is in the same belt as the world class Nova-Bollinger nickel-copper sulphide discoveries of Sirius Resources NL in south-eastern Western Australia's Fraser Range. The tenement is located only 5km from the Trans Australian rail line access corridor (Figure 1).

Musgrave's Managing Director Rob Waugh said: "This is a positive step for Mamba. The target at M8 is a particularly strong conductor and compelling drill target. The conductive response is consistent with a potential massive nickel-copper sulphide source. We plan to be out drill testing the target in late June."

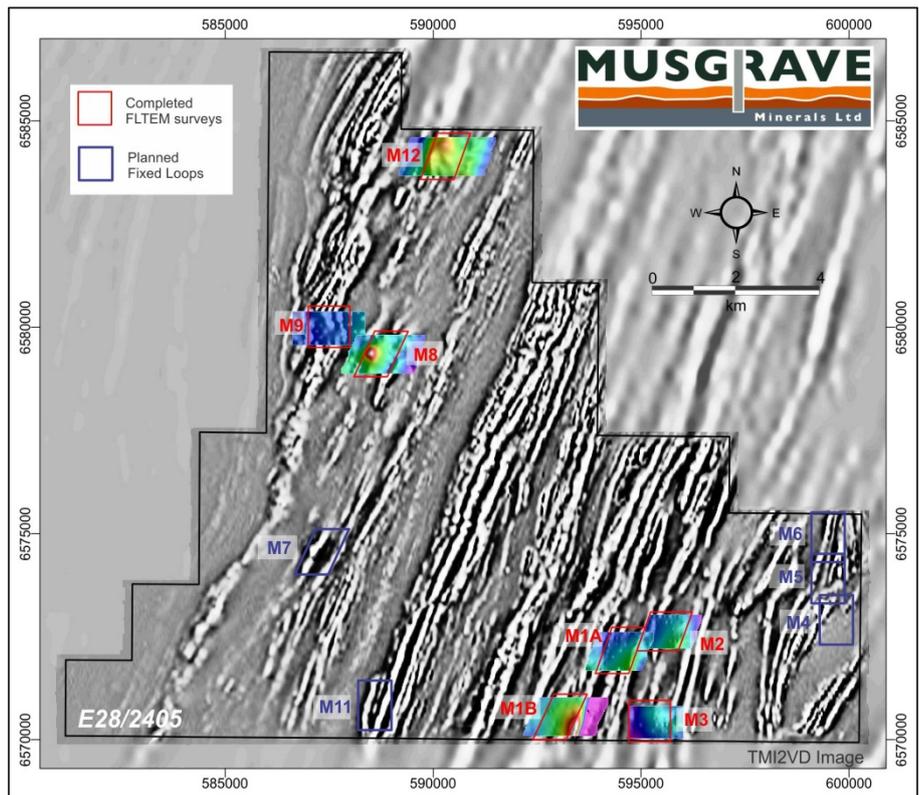


Figure 2: FLEM Survey Areas with Gridded Z Component EM Amplitude Image on Detailed Aeromagnetic Data

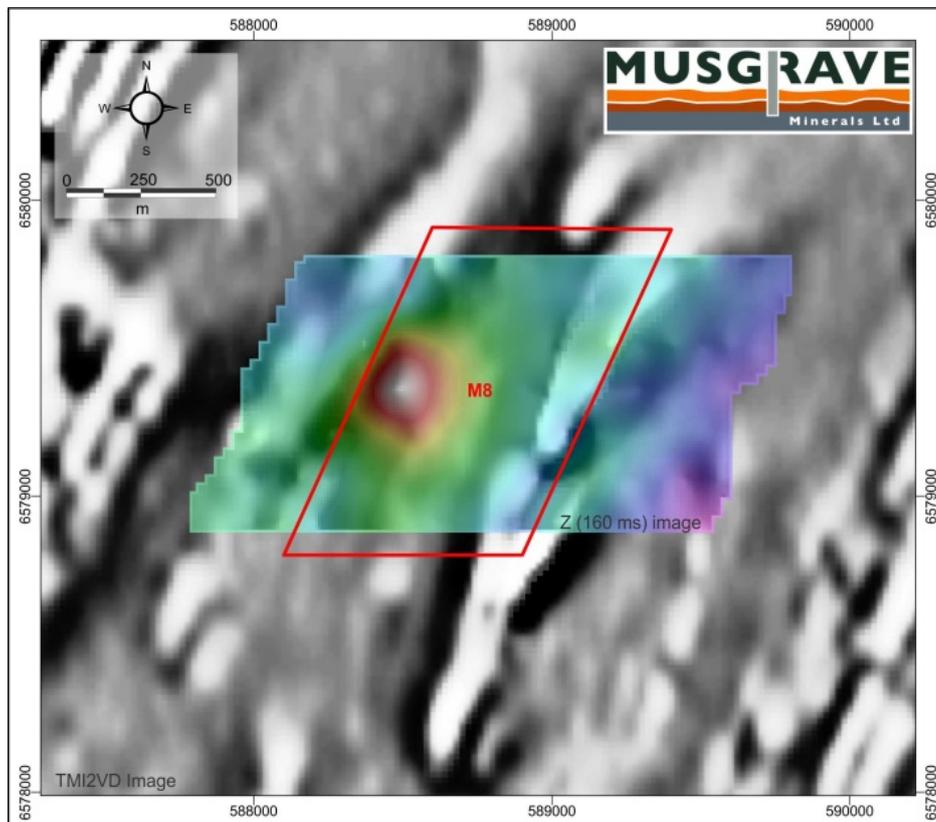


Figure 3: Gridded Z Component EM Amplitude Data on Detailed Aeromagnetic Image at M8 Target.



Table 1: Summary of EM conductors at the Mamba Project

Target ID	Easting	Northing	Priority	Comment
M8	588450	6579350	1	Local late-time FLTEM anomaly on the flank of a large stratigraphic conductor to the east. The anomaly is best defined on lines 6579350N and 6579500N, with modelling on these lines suggesting a very strong conductor (~10,000S) dipping moderately to the east at a depth of around 200m. The modelling based on these two lines suggests a confined conductor (<100m strike length); however there are more-subtle, broad late-time responses on the three lines to the south that indicate a possible deep extension. The M8 FLTEM anomaly is adjacent to a local strong magnetic feature. More data is being acquired to better define this response.
M1B	593600	6370300	2	Well-defined mid- to late-time FLTEM anomaly over numerous lines with amplitudes increasing to the south. Modelling indicates a large, sub-vertical source at a depth of 60m, with a strike length of over 1km and conductance of approximately 250S. The lack of corresponding anomaly in Loop 1A shows that it is not regionally extensive, and is therefore not necessarily representing a stratigraphic conductor response.
M12	590300	6584500	3	Poorly defined mid-time FLTEM anomaly on lines 6584600N and 6584500N on the flank of a large stratigraphic conductor to the east. The local response attenuates before that of the stratigraphic conductor, so it is not possible to model the response with any degree of confidence. This could represent a poorly coupled bedrock conductor or surficial feature. More data is being acquired to better model this response.

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About Musgrave Minerals

Musgrave Minerals Ltd is an active Australian base and precious metals explorer with a large exploration footprint in the Musgrave Province in South Australia and a new nickel-copper sulphide project in the highly prospective Fraser Range region of Western Australia. Musgrave has a powerful shareholder base with four mining and exploration companies currently participating as cornerstone investors.

Competent Person's Statement

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled and/or thoroughly reviewed by Mr Robert Waugh, a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM) and a Member of the Australian Institute of Geoscientists (AIG). Mr Waugh is Managing Director and a full-time employee of Musgrave Minerals Ltd. Mr Waugh has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration 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 Waugh consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Mamba Project JORC TABLE 1

Section 1 Sampling Techniques and Data

Criteria	Explanation	Commentary
<i>Sampling techniques</i>	<i>Nature and quality of sampling (eg 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.</i>	Historical sampling was undertaken using standard industry practices.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	Historical drill hole and soil sample co-ordinates are in UTM grid (GDA94 Z51) and have been measured by hand-held GPS with an accuracy of ±4 metres.
	<i>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 (eg 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g 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 (eg submarine nodules) may warrant disclosure of detailed information.</i>	No mineralisation detected to date
<i>Sub-sampling techniques and sample preparation</i>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	No core sampling has been completed on the tenement.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	Selected one metre historical aircore sample piles were resampled using a grab technique and calico sample bag.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Drill sample preparation and base metal and precious metal analysis is undertaken by Intertek Genalysis, in Perth, Western Australia. Sample preparation by dry pulverisation to 90% passing 75 micron.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	Field QC procedures involve the use of certified reference standards, duplicates and blanks at appropriate intervals.
	<i>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.</i>	Sampling was carried out using MGV protocols and QAQC procedures as per industry best practice.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Sample sizes are considered appropriate for the commodities and elements explored and analysed for.
<i>Quality of assay data and laboratory tests</i>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	Resampling analysis is undertaken by Intertek Genalysis, in Perth, Western Australia, multi element analysis by four acid total digest (hydrochloric, nitric, perchloric and hydrofluoric acid) and ICP-OES and ICP-MS to acceptable detection limits and Au, Pt & Pd by FA25/MS. Analysis for a total of 34 elements is recorded.
	<i>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.</i>	No geophysical tools were used to estimate mineral or element percentages.
	<i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i>	In addition to MGV standards, duplicates and blanks, Genalysis incorporate laboratory QAQC including standards, blanks and repeats as a standard procedure. Certified reference materials that are relevant to the type and style of

		mineralisation targeted are inserted at regular intervals.
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	At least two company representatives verify significant intersections including either, the Managing Director, Exploration Manager or Senior Geologist.
	<i>The use of twinned holes.</i>	No twin holes have yet been drilled by MGV.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Primary data is collected using a standard set of Excel templates on a Toughbook laptop computer using lookup codes. Geological sampling of selected one metre intervals was undertaken on historical aircore drilling. Data is verified before loading to a CSA Global database. Geological logging of all samples was undertaken.
	<i>Discuss any adjustment to assay data.</i>	No adjustments or calibrations were made to any assay data reported by MGV.
Location of data points	<i>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.</i>	All maps and locations are in UTM grid (GDA94 Z51) and have been measured by hand-held GPS with an accuracy of ± 4 metres.
	<i>Specification of the grid system used.</i>	EM survey loops and receiver data points are laid out using handheld GPS units.
	<i>Quality and adequacy of topographic control.</i>	Drill hole RL's are approximate using hand held GPS. Topographic control with 2-5m accuracy using published maps is considered sufficient for modelling of EM survey results.
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	EM Loops are laid out as squares or rectangles measuring either 1000x1000m or 1200x800m. Receiver data is acquired at 50m intervals along east-west oriented lines spaced at 150m intervals.
	<i>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.</i>	The mineralisation has not yet been demonstrated to have sufficient continuity to support the definition of Mineral Resource and Reserves under the classification applied under the 2012 JORC Code.
	<i>Whether sample compositing has been applied.</i>	No sample compositing has been undertaken by MGV.
Orientation of data in relation to geological structure	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	The precise dip and strike of the mineralisation is not yet known and it is unclear at this stage whether any sampling has a set bias.
	<i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	The geological strike is highly variable due to post emplacement deformation but the overall trend of stratigraphy is north north-east. No orientation based sampling bias is known at this time.
Sample security	<i>The measures taken to ensure sample security.</i>	Chain of custody is managed by MGV. Samples are stored on site and transported to Intertek Genalysis in Perth, Western Australia by a licenced reputable transport company. When at Genalysis samples are stored in a locked yard before being processed and tracked through preparation and analysis using the Lab Track system. Drill samples are collected in individually numbered calico bags. MGV staff deliver samples to Intertek Kalgoorlie for dispatch to Intertek laboratory in Perth.
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	No external audits or reviews of modelling techniques and data have been undertaken.

Section 2 Reporting of Exploration Results

Criteria	Explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<i>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.</i>	<p>All data is within Mamba Project tenement E28/2405 in the Fraser Range of Western Australia located on Vacant Crown Land.</p> <p>E28/2405 is owned 100% by Musgrave Minerals Ltd.</p> <p>At the time of writing the licence is granted for a 5 year period expiring on 4 February 2020.</p> <p>There is no Native Title claim over the area covered by the tenement. A heritage survey has been completed over the entire tenement area.</p>
	<i>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.</i>	The tenement application is in good standing and no known impediments exist.
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<p>Historical drilling on this tenement has been limited to a small number of shallow aircore holes covering a 2 km² area in the north-east corner of the tenement completed by Ponton Minerals Pty Ltd.</p> <p>Ponton Minerals Pty Ltd contracted Bostech Drilling Pty Ltd to undertake 100m spaced aircore drilling on a number of gold target area in 2012. Gold sampling was undertaken using 3m composites for the entire drill hole. A multi-element sample (61 elements) was analysed as a 1-3m composite at the end of hole.</p> <p>Sample analysis was undertaken by Genalysis. The following assay procedure was undertaken: AR25/OES, AR25/MS and AR25/GF on 25g homogenized samples.</p> <p>Anomalous historical drill hole samples will need to be confirmed through resampling from existing drill spoils.</p> <p>Refer Combined Partial Surrender Report Ponton Project E28/1716, E28/1717, E28/1718, E28/1727 for the period 12th November 2007 to 8th November 2013. Combined Reporting Number: C196/2008 By: J. Sharp Ponton Minerals Pty Ltd 8th January 2014.</p>
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	Musgrave is exploring for multi commodity style deposits consistent with low MgO magmatic nickel-copper sulphide systems and Proterozoic gold mineralisation.
<i>Drill hole Information</i>	<i>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.</i>	No drilling has been undertaken by the owner although limited historical drilling exists.
<i>Data aggregation methods</i>	<i>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.</i>	No drilling has been undertaken by the owner although limited historical drilling exists.

<i>Relationship between mineralisation widths and intercept lengths</i>	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	No significant mineralisation has yet been identified on the tenement
<i>Diagrams</i>	<i>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.</i>	Refer to figures in the body of this report.
<i>Balanced reporting</i>	<i>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.</i>	No drilling has been undertaken by the owner although limited historical drilling exists.
<i>Other substantive exploration data</i>	<i>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.</i>	A fixed wing aeromagnetic and radiometric survey was conducted over the entire tenement area of E28/2405 by Thomson Aviation. The survey comprises 2136 line km of data, with an E-W line orientation at 100m line spacing and nominal sensor height of 35-40m. The grid system used is GDA94 Z51 Current high-powered fixed loop electromagnetic (HPFLEM) surveys are using variable loop configurations but nominally 1000 x 1000m or 1200x800m, 50m stations and 150m lines. An ORE HP transmitter producing >150A is used. Base frequency for initial surveys – 0.5Hz, ZXY (Z+Up, X+East, Y+North), EMIT SMART fluxgate B-Field sensor.
<i>Further work</i>	<i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	A range of exploration techniques are being considered to progress exploration including drilling.
	<i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	Refer to figures in the body of this report.

