

Ground Magnetics Enhances Rare Earths Potential at Currawalla

Highlights

- High-grade rare earths were discovered by Eastern Metals Limited (**Eastern Metals** or the **Company**) near the Currawalla mine shaft on the Company's *Tara* tenement, EL9810 in the Cobar basin, in March 2023;¹
- Mullock from the shallow shaft and nearby outcrop returned assays of up to 3.38% total rare earth oxides (**TREO**) associated with a quartz breccia unit that has been sampled over a strike length of more than 100 metres;
- The mine shaft, the quartz breccia unit, and the zone of high-grade samples are coincident with a "bulls eye" aeromagnetic anomaly;
- The Company has recently completed a ground magnetic survey that has provided greater detail on the structure of the magnetic anomaly than can be obtained from the airborne data alone;
- The new data confirms an intimate relationship exists between the highly anomalous surface samples, the quartz breccia unit and the source of the magnetic anomaly, and has provided additional drilling targets to add to the program previously announced², which will commence as soon as possible after the successful completion of the Company's current \$1.4 million entitlement issue, which will now close on 9 June 2023 unless extended.³

Eastern Metals' Chairman Bob Duffin said: "The new data provides greater detail about the character of the magnetic anomaly. Not only does it better define the relation between the quartz breccia unit, the Currawalla mine shaft, the locations of the mineralised samples, and the magnetic anomaly itself, it also suggests the presence of a larger circular structure, perhaps similar to circular structures that are often associated with hard rock rare earth deposits elsewhere. We have refined our proposed drilling program in light of this new information. The drilling program is expected to commence soon after the successful closure of the Company's current rights issue. The \$1.4 million issue will now close on 9 June 2023 unless extended."

¹ See the Company's ASX announcement of 20 March 2023 "High Grade Rare Earths at Tara".

² See the Company's ASX announcement of 24 May 2023 "Drilling Planned for Rare Earths at Currawalla".

³ See the Company's ASX announcements of 5 May 2023 "Entitlement Issue Prospectus" and 29 May 2023 "Extension of Non-renounceable Issue Closing Date".

Rare Earths at Currawalla

In March 2023, Eastern Metals Limited (**Company**) commenced exploration activities in the Company's Tara exploration licence (EL9180) south of Cobar in New South Wales. This work included sampling of outcrops and mullock dumps at the Currawalla mine, located towards the southeastern corner of the tenement. Laboratory analysis of samples collected returned highly anomalous TREO assays including one sample which assayed 3.38% TREO and 1.39% lead. Following the discovery of rare earths on the Tara tenement, the Company has taken out an adjoining tenement, EL9565 Black Range, that adjoins the Tara licence area.⁴ The locations of these tenements and the Company's other tenements in the Cobar basin are shown in Figure 1.

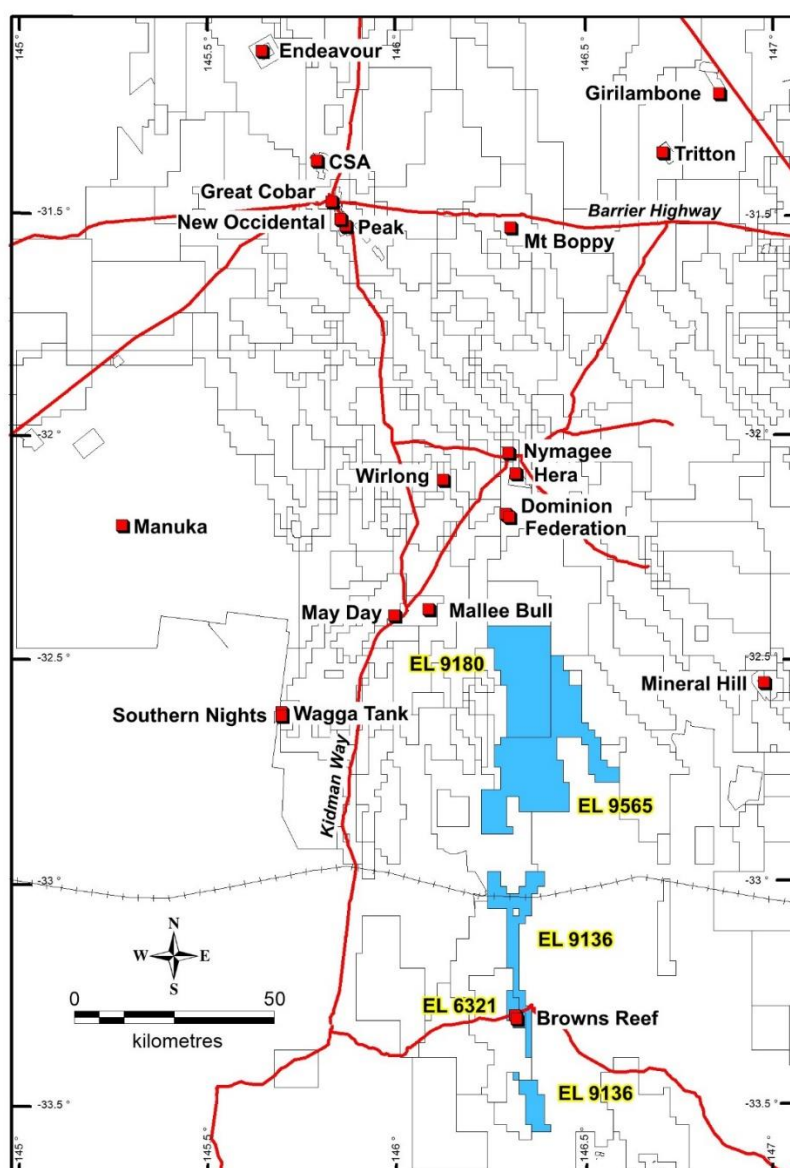


Figure 1. Location of Eastern Metals' tenements in the Cobar Basin

⁴ See the Company's ASX announcement of 15 May 2023 "Grant of Black Range Exploration Licence".

A table summarizing the TREO assays at Currawalla, which have been previously reported⁵, is set out in Appendix 1.

Ground Magnetics

The ground magnetic survey has recently been completed at Currawalla. The objective of this survey was to better define the anomaly than is possible from the airborne data alone. The survey was completed on north-south lines spaced 50 metres apart, with station spacings of approximately 1.3 to 1.5 metres. Further details of the survey are shown in Appendix 2. A contour map of the total magnetic intensity is shown in Figure 2.

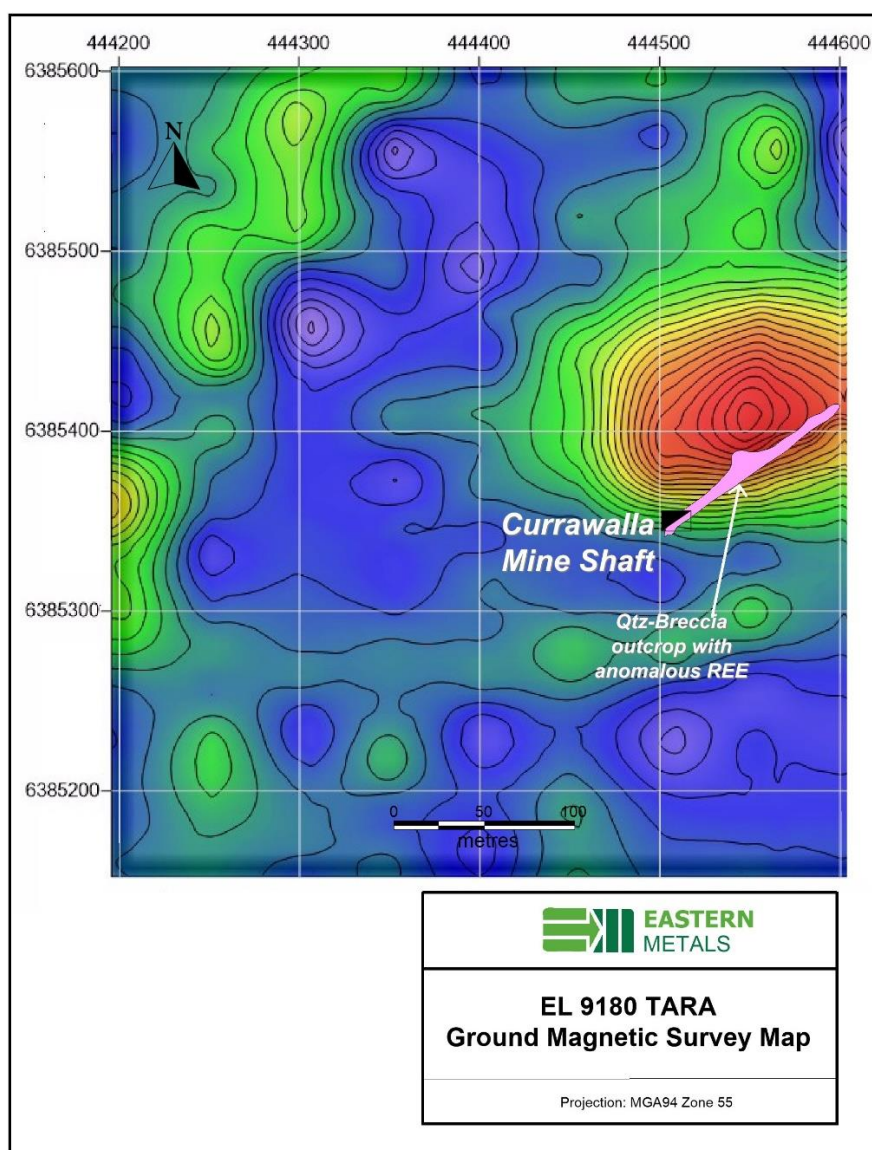


Figure 2. Total Magnetic Intensity, Currawalla Mine Area. Contour Interval 2nT

⁵ Most recently in the Company's ASX release "Quarterly Activities Report for the Period Ending 31 March 2023" announced 28 April 2023.

Figure 2 also shows the location of the Currawalla mine shaft, and the quartz breccia unit that is associated with the highly anomalous samples that returned high TREO assays. A comparison between this map and the data in Appendix 1 suggests there is a very clear spatial association between the shaft, the samples carrying high TREOs, and the magnetic anomaly. It is in this area that the drilling program scheduled to commence soon after the successful closure of the Company's current rights issue will be carried out.

While not as intense as the anomaly near the shaft, Figure 2 also shows a possible circular or ring-like structure in the magnetics that runs to the north, west, and south of the main anomaly. This structure has not yet been explained, though Eastern Metals is aware that some hard rock rare earth deposits are associated with circular magnetic features.

Previously Reported Information

The information in this announcement that references previously reported Exploration Results for EL 9180 *Tara* is extracted from Company's Prospectus dated 18 August 2021, and from the Company's ASX announcements "High Grade Rare Earths at Tara", "Grant of Black Range Exploration Licence" and "Drilling Planned for Rare Earths at Currawalla" dated 20 March 2023, 15 May 2023 and 24 May 2023 respectively. The Prospectus and the aforementioned announcements are available to view on the Company's website (www.easternmetals.com.au) and on the ASX website (www.asx.com.au). The Company confirms that it is not aware of any new information or data that materially affects the information included in the Prospectus or these announcements and that all material assumptions and technical parameters underpinning the Exploration Results continue to apply and have not materially changed.

Forward-Looking Statements

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning the Company's planned activities, including mining and exploration programs, and other statements that are not historical facts. When used in this document, the words such as "could", "plan", "estimate", "expect", "intend", "may", "potential", "should" and similar expressions are forward-looking statements. In addition, summaries of Exploration Results and estimates of Mineral Resources and Ore Reserves could also be forward looking statements. Although Eastern Metals believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.

Competent Person Statement

The Exploration Results in this announcement are based on information compiled by Mr Gary Jones who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Jones is an employee of Geonz Associates, Consultant Geologists, a former director of Eastern Metals, and Principal Consultant – Geology to the Company. Mr Jones has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the JORC Code. Mr Jones consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

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APPENDIX 1

TREO Assays, Currawalla Project

Sample Number	Easting (m)	Northing (m)	RL (m)	Lithology	TLREO (ppm)	THREO (ppm)	TREO (ppm)	TREO (%)
T23-002	444562	6385195	298	metasediments	63	27	91	0.01
T23-003	444514	6385352	302	quartz/metasediments +/- Fe staining	883	14	896	0.09
T23-004	444514	6385352	302	Kaolinised metasediments	12,557	540	13,096	1.31
T23-005	444514	6385352	302	purple/red Fe metasediments	2,935	32	2,966	0.30
T23-006	444507	6385346	304	red/brown Fe stained metasediments	23,563	857	24,421	2.44
T23-007	444507	6385346	304	purple/grey metasiltstone sheared	31,940	1,909	33,849	3.38
T23-008	444507	6385346	304	quartz vein, sheared metasediment	3,336	86	3,422	0.34
T23-009	444542	6385386	309	purple stained quartz vein, fractures	2,033	55	2,087	0.21
T23-010	444542	6385386	306	quartz vein cutting numerous 2° veins	22,317	395	22,711	2.27
T23-011	444585	6385406	306	quartz vein, fractured, Fe stained	745	24	769	0.08
T23-012	444585	6385406	306	abundant purple/red Fe stained	156	6	162	0.02
T23-013	444585	6385406	306	quartz vein with red/bn Fe staining	51	1	52	0.01
T23-014	444514	6385352	302	quartz vein cutting numerous 2° veins	1,563	78	1,641	0.16
T23-015	444585	6385406	306	milky quartz, Mn staining	153	11	164	0.02

APPENDIX 2 - JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data: Currawalla Project

Ground magnetic survey only, no other exploration data or drilling reported.

Criteria	JORC Code explanation	Commentary
Sampling techniques	<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>	Not applicable. This announcement relates to a geophysical (magnetometer) survey only. No rock or soil samples were collected, and no assaying has or will be performed, other than as previously reported. Further details of the geophysical survey are set out herein.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	Not applicable. No rock or soil samples were taken. The calibration of the magnetometer follows methods set out by the manufacturer.
	<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 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 (eg submarine nodules) may warrant disclosure of detailed information.</i>	Not applicable. This announcement relates to a geophysical (magnetometer) survey only. No rock or soil samples were collected, and no assaying has or will be performed. Further details of the geophysical survey are set out herein.
Drilling techniques	<i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).</i>	Not applicable as no drilling is being reported herein.
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Not applicable. No core or chip samples were taken.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples</i>	Not applicable. No rock or soil samples were taken.
	<i>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.</i>	Not applicable. This announcement relates to a geophysical (magnetometer) survey only. No rock or soil samples were collected, and no assaying has or will be performed. Further details of the geophysical survey are set out herein.

Criteria	JORC Code explanation	Commentary
Logging	<i>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.</i>	Not applicable. This announcement relates to a geophysical (magnetometer) survey only. No rock or soil samples were collected, and no assaying has or will be performed. Further details of the geophysical survey are set out herein.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography</i>	Not applicable. This announcement relates to a geophysical (magnetometer) survey only. No rock or soil samples were collected, and no assaying has or will be performed. Further details of the geophysical survey are set out herein.
	<i>The total length and percentage of the relevant intersections logged.</i>	Not applicable. This announcement relates to a geophysical (magnetometer) survey only. No rock or soil samples were collected, and no assaying has or will be performed. Further details of the geophysical survey are set out herein.
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken</i>	Not applicable. This announcement relates to a geophysical (magnetometer) survey only. No rock or soil samples were collected, and no assaying has or will be performed. Further details of the geophysical survey are set out herein.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	Not applicable. This announcement relates to a geophysical (magnetometer) survey only. No rock or soil samples were collected, and no assaying has or will be performed. Further details of the geophysical survey are set out herein.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Not applicable. This announcement relates to a geophysical (magnetometer) survey only. No rock or soil samples were collected, and no assaying has or will be performed. Further details of the geophysical survey are set out herein.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	Not applicable. This announcement relates to a geophysical (magnetometer) survey only. No rock or soil samples were collected, and no assaying has or will be performed. Further details of the geophysical survey are set out herein.
	<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>	Not applicable. This announcement relates to a geophysical (magnetometer) survey only. No rock or soil samples were collected, and no assaying has or will be performed. Further details of the geophysical survey are set out herein.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	Not applicable: This announcement relates to a geophysical (magnetometer) survey only. No rock or soil samples were collected, and no assaying has or will be performed. Further details of the geophysical survey are set out herein.
	<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>	A Geometrics G858 Cesium Vapor Magnetometer was used. The magnetometer was mounted on a frame that is supported by the field operator. Samples were recorded every 1 second which at a normal walking pace is equivalent to a sample every 1.3 to 1.5 metres. Traverses were spaced every 50 metres in a true north-south direction. A Trimble Ag114 GPS was used for position control, with a 1 second reading interval. A Geometrics G858 magnetometer mounted on a 3m stand-alone, guyed aluminium pole with data interval of 5 seconds was used as a base station. Synchronous GPS positioning data and field magnetic data was logged concurrently into the G858 console. Diurnal correction processing was by interpolated base time after data transfer in Geometrics MagMap 2000 software. The magnetometer's sensitivity is estimated at 0.05nT at 0.1 second sampling rate or 0.01nT at 1 second sampling rate. The Trimble Ag 114 digital GPS has a horizontal positional accuracy of better than 1 metre providing there are sufficient satellites in view.
	<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>	Not applicable. This announcement relates to a geophysical (magnetometer) survey only. No rock or soil samples were collected, and no assaying has or will be performed. Further details of the geophysical survey are set out herein.

Criteria	JORC Code explanation	Commentary
<i>Verification of sampling and assaying</i>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Not applicable. This announcement relates to a geophysical (magnetometer) survey only. No rock or soil samples were collected, and no assaying has or will be performed. Further details of the geophysical survey are set out herein.
	<i>The use of twinned holes.</i>	Not applicable. This announcement relates to a geophysical (magnetometer) survey only. No rock or soil samples were collected, and no assaying has or will be performed. Further details of the geophysical survey are set out herein.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	The MagMap2000 data processing software uploads the combined data from the 858 DataLogger, linearly interpolates the positions and provides each datapoint from magnetometer with its own Lat/Long or UTM coordinate location. The GPS positions are imported into MagMap2000 for editing, correcting, and plotting of the data and then exported to other software for additional analysis.
	<i>Discuss any adjustment to assay data.</i>	Not applicable – no assays involved. For the magnetic data, normal diurnal corrections were made, and a background removed to produce a residual data set, which was then profiled and contoured.
<i>Location of data points</i>	<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>	Satellite data produces positions accurate to approximately one metre on average for each station occupied.
	<i>Specification of the grid system used</i>	Grid system used for the Currawalla project is Geodetic Datum of Australia (GDA) 94 Zone 55S.
	<i>Quality and adequacy of topographic control.</i>	See above.
<i>Data spacing and distribution</i>	<i>Data spacing for reporting of Exploration Results.</i>	Magnetometer stations were located each 1.3 to 1.5 metres apart on lines 50 metres apart.
	<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 spacing of the stations is sufficient for the purposes of the survey. Mineral Resource or Ore Reserve estimates are not applicable for this survey.
	<i>Whether sample compositing has been applied</i>	Not applicable. This announcement relates to a geophysical (magnetometer) survey only. No rock or soil samples were collected, and no assaying has or will be performed. Further details of the geophysical survey are set out herein.

Criteria	JORC Code explanation	Commentary
<i>Orientation of data in relation to geological structure</i>	<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>	Not applicable. This announcement relates to a geophysical (magnetometer) survey only. No rock or soil samples were collected, and no assaying has or will be performed. Further details of the geophysical survey are set out herein.
	<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>	Not applicable. This announcement relates to a geophysical (magnetometer) survey only. No rock or soil samples were collected, and no assaying has or will be performed. Further details of the geophysical survey are set out herein.
<i>Sample security</i>	<i>The measures taken to ensure sample security.</i>	Not applicable. This announcement relates to a geophysical (magnetometer) survey only. No rock or soil samples were collected, and no assaying has or will be performed. Further details of the geophysical survey are set out herein.
<i>Audits or reviews</i>	<i>The results of any audits or reviews of sampling techniques and data.</i>	No audits or review are warranted at this stage.

Section 2 Reporting of Exploration Results

Criteria	JORC Code 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. 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>	EL9180 Tara is located some 30km NE of Euabalong town and 120km S of Cobar NSW. The tenement was granted on 21 May 2021 for a 3-year period and is held 100% by Eastern Metals Limited. Ground activity and security of tenure are governed by the NSW State government via the Mining Act 1992. Approval of the landholder to access the site was obtained prior to entry onto the property
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	The area covered by EL9180 has been intermittently held and explored by several companies; most notably Cobar Mines 1960's; Samedan Oil 1970's; Getty Oil early 1980's; Packrac late 1980's; Placer 1990's Golden Cross 2000's and Peel Mining 2010's. Various regional mapping, geophysics, and follow up drilling programs were undertaken but no extensive mineralisation found.
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	EL9180 is located mainly over the Emerian Granite in the Rast Trough of the Cobar Basin. The Silurian Emerian Granite is a cordierite-biotite granite and monzogranite with minor rhyolite intrusions. In the south-eastern EL corner, the Urambie Granodiorite abuts the Early Ordovician Abercrombie Formation, a mica-quartz sandstone, interbedded with laminated siltstone and mudstone, which is overlain by the Late Ordovician Bendoc Group Currawalla Shale.
<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> • 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.	No drilling results are reported herein. Eastings and northings of all magnetometer survey stations are recorded in the Geometrics 858 DataLogger.
	<i>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.</i>	Not applicable. This announcement relates to a geophysical (magnetometer) survey only. No rock or soil samples were collected, and no assaying has or will be performed. Further details of the geophysical survey are set out herein.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	<i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i>	Not applicable. This announcement relates to a geophysical (magnetometer) survey only. No rock or soil samples were collected, and no assaying has or will be performed. Further details of the geophysical survey are set out herein.
	<i>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</i>	Not applicable. This announcement relates to a geophysical (magnetometer) survey only. No rock or soil samples were collected, and no assaying has or will be performed. Further details of the geophysical survey are set out herein.
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	Not applicable. Metal equivalents are not reported.
Relationship between mineralisation widths and intercept lengths	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	Not applicable. This announcement relates to a geophysical (magnetometer) survey only. No rock or soil samples were collected, and no assaying has or will be performed. Further details of the geophysical survey are set out herein.
	<i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>	Not applicable. This announcement relates to a geophysical (magnetometer) survey only. No rock or soil samples were collected, and no assaying has or will be performed. Further details of the geophysical survey are set out herein.
	<i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i>	Not applicable. This announcement relates to a geophysical (magnetometer) survey only. No rock or soil samples were collected, and no assaying has or will be performed. Further details of the geophysical survey are set out herein.
Diagrams	<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>	No discoveries are reported in this announcement. But see the body of the report for other information.
Other substantive exploration data	<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>	Other exploration data are discussed in the body of the report and Eastern Metals is not reporting grade this announcement does not relate to anything other than the magnetometer survey. The main body of the announcement includes references to previously reported information.
Further work	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	Further geophysical and other fieldwork including soil sampling and drilling will be undertaken in due course.
	<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>	See the main body of the report.