

DETAILED MAGNETIC SURVEY UNDERWAY AT LANG WELL PROJECT

- Detailed UAV magnetic survey over historic gold and REE anomalies
- Sampling of outcropping pegmatites and aircore drilling planned

Miramar Resources Limited (ASX:M2R, “Miramar” or “the Company”) is pleased to advise the commencement of a detailed UAV magnetic survey over the Company’s 100%-owned Lang Well Project in the Murchison region of WA.

The Company believes Lang Well is prospective for gold and/or Rare Earth Element (REE) mineralisation.

As previously advised, a review of historical information identified at least 50 outcropping pegmatite occurrences within the Project, including a swarm of pegmatites over at least 7km of strike in the northern half of the Project (Figure 1) (see ASX Release dated 5 April 2022).

None of the pegmatite occurrences have been assayed for Lithium or Rare Earth Elements (REE’s).

Historical auger drilling in 2009 identified several large Au anomalies in the southeast of the project, but these samples were also not assayed for Li or REE’s.

A single line of aircore drilling in 2010 intersected highly anomalous REE’s including **4m @ 1500ppm TREO in BADAC33** (28-32m) with holes 50m either side also returning anomalous REE results.

No exploration was undertaken at Lang Well between 2010 and Miramar securing the ground in 2019, after which time the Company conducted limited reconnaissance soil sampling over several of the historic auger anomalies.

Two of Miramar’s soil sample lines returned coincident and anomalous La and Ce results in an area with no previous drilling (Figure 2).

Given the very limited historic drilling, and the extensive auger gold anomalism in the covered southeastern area, Miramar has commenced a detailed UAV magnetic survey over this part of the Project.

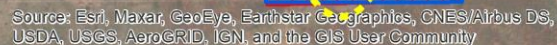
Miramar’s Executive Chairman, Mr Allan Kelly, said the magnetic survey would assist in planning the first aircore drilling programme testing both the auger Au anomalism and REE potential.

“Lang Well covers a very large area with widespread surficial material covering prospective geology and structures,” Mr Kelly said.

“Based on the limited historic exploration results, the southeastern part of the Project is prospective for gold mineralisation, and also has significant potential for REE mineralisation as indicated by the very limited historic drilling which intersected strongly anomalous REE’s,” he added.

“Given the widespread occurrence of pegmatites in the outcropping areas of the Project, we think there is potential for a significant number of additional pegmatite occurrences, potentially prospective for Lithium or REE’s, elsewhere within the Project, either outcropping or beneath shallow cover,” he said.

The Company is planning to undertake systematic rock chip sampling of the northern pegmatites, including analysis for Lithium and REE’s, and will finalise the plans for the first reconnaissance aircore drilling programme once the new magnetic data is received and processed.



ASX Announcement 21 April 2022

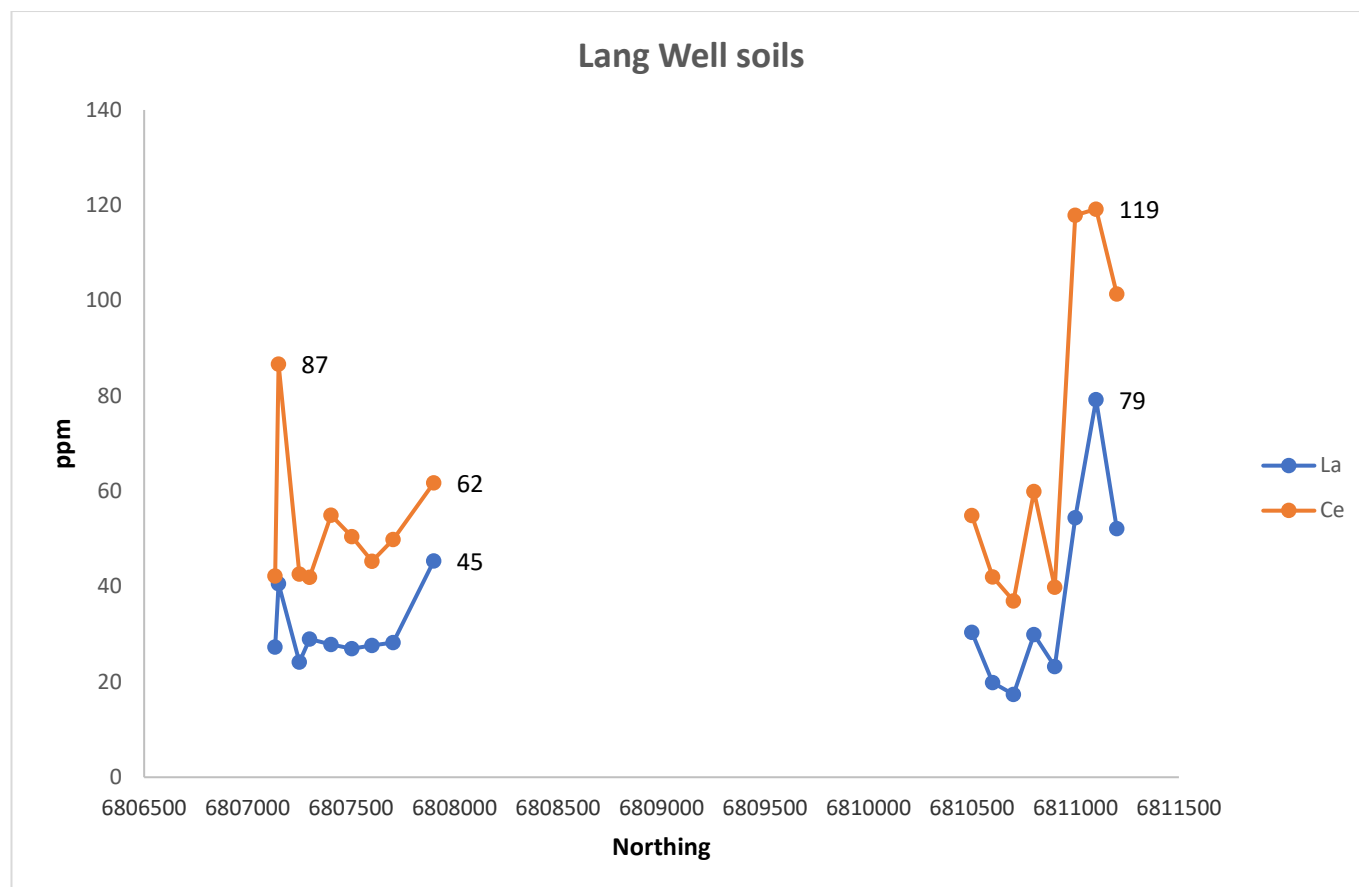


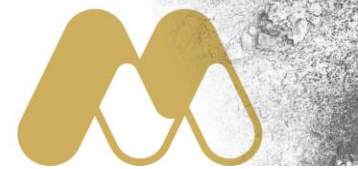
Figure 2. Lang Well La and Ce soil results (ppm).

For more information on Miramar Resources Limited, please visit the company's website at www.miramarresources.com.au or contact:

Allan Kelly
Executive Chairman
info@miramarresources.com.au

Margie Livingston
Ignite Communications
margie@ignitecommunications.com.au

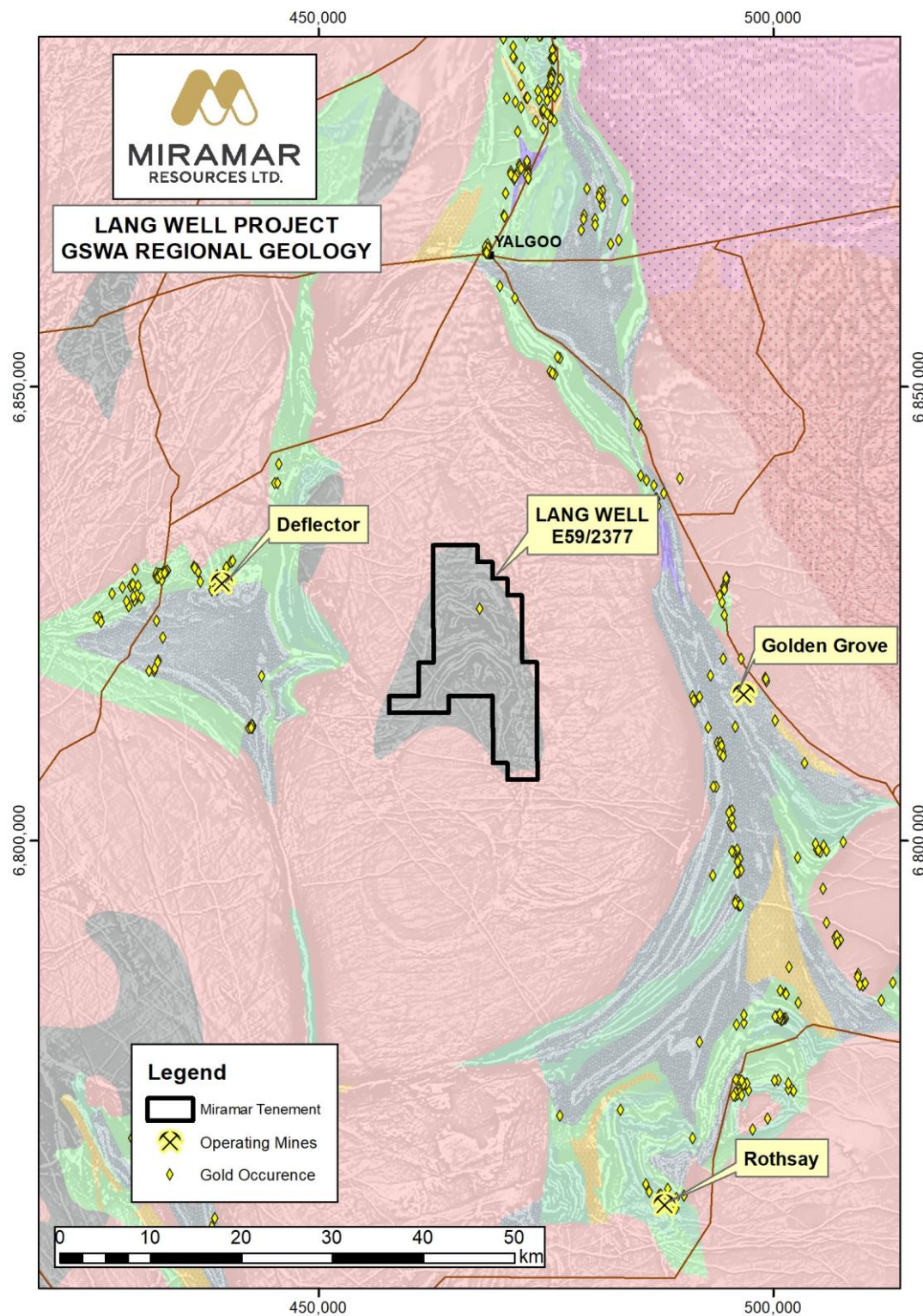
This announcement has been authorised for release by Mr Allan Kelly, Executive Chairman, on behalf of the Board of Miramar Resources Limited.



About the Lang Well Project

The Lang Well Project is located in the Murchison region of Western Australia, roughly halfway between the Deflector and Golden Grove mining operations.

The Project consists of a single Exploration Licence, E59/2377 covering approximately 210 square km.

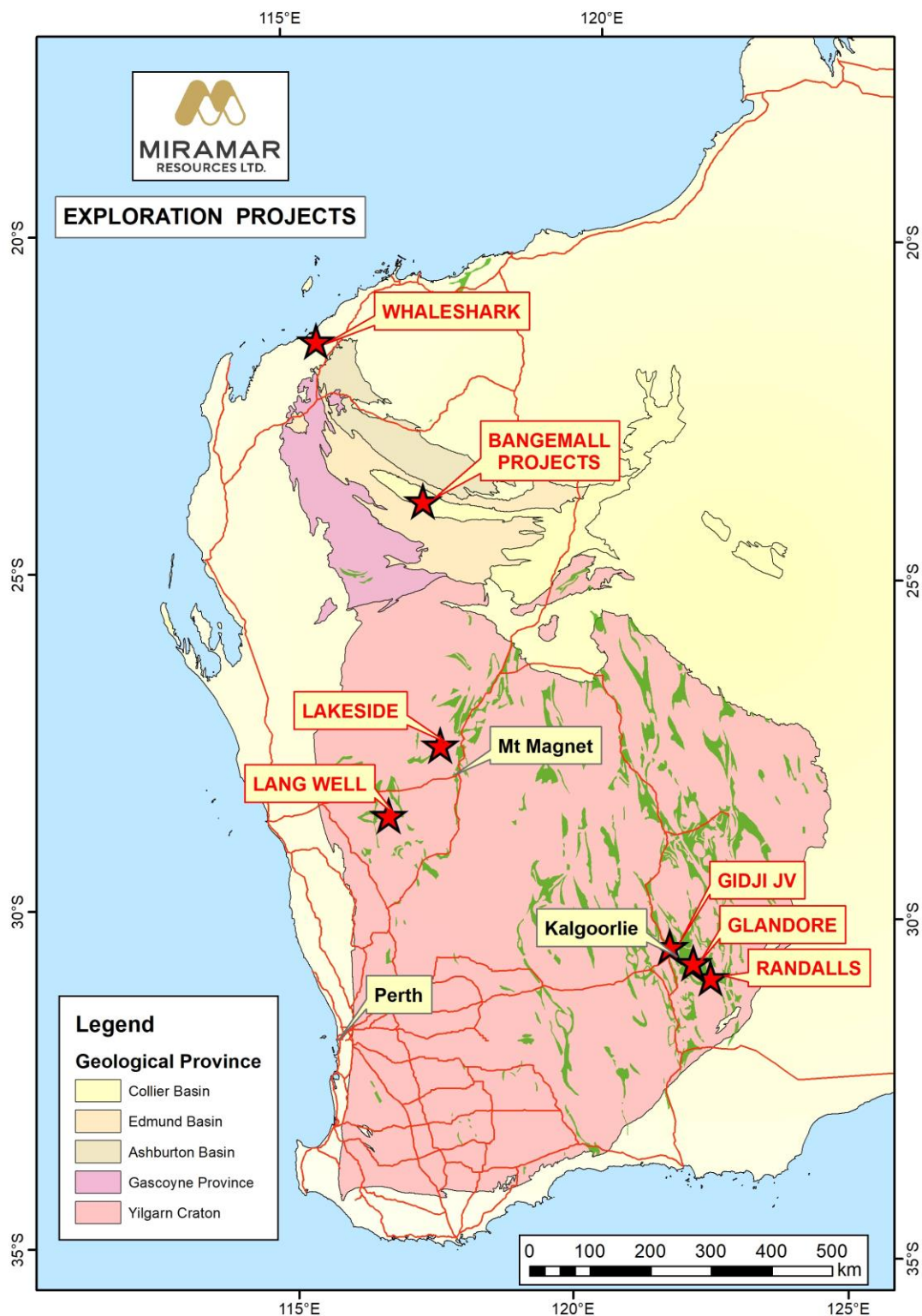


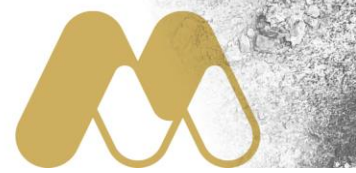


About Miramar Resources Limited

Miramar Resources Limited is an active, WA-focused mineral exploration company exploring for gold, IOCG, Ni-Cu-PGE and REE deposits in the Eastern Goldfields, Murchison and Gascoyne regions of WA.

Miramar's Board has a track record of discovery, development and production within Australia, Africa, and North America, and aims to create shareholder value through discovery of high-quality mineral deposits.





COMPETENT PERSON STATEMENT

The information in this report that relates to Exploration Targets or Exploration Results is based on information compiled by Allan Kelly, a “Competent Person” who is a Member of The Australian Institute of Geoscientists. Mr Kelly is the Executive Chairman of Miramar Resources Ltd. He is a full-time employee of Miramar Resources Ltd and holds shares and options in the company.

Mr Kelly has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to Qualify as a “Competent Person” as defined in the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’.

Mr Kelly consents to the inclusion in this Announcement of the matters based on his information and in the form and context in which it appears.

Historical exploration results for the Lang Well Project, including JORC Table 1 and 2 information, is included in the Miramar Prospectus dated 4 September 2020.

Information on recent exploration results at Lang Well, including JORC Table 1 and 2 information, is included in the ASX Release listed below:

- 5 April 2022 – *“Multiple Pegmatites identified at Lang Well indicate significant REE +/- Lithium potential”*



JORC 2012 Table 1 – Lang Well soil sampling

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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 representivity 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 (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. 	<ul style="list-style-type: none"> Soil samples taken from beneath obvious surficial material. Approximately 250g of material was taken and sieved to -2mm fraction on site
Drilling techniques	<ul style="list-style-type: none"> 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). 	<ul style="list-style-type: none"> No drilling undertaken
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No drilling undertaken
Logging	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> No drilling undertaken



Criteria	JORC Code explanation	Commentary
	<i>relevant intersections logged.</i>	
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <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> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> No sub-sampling undertaken Duplicate samples taken at frequency of 1 sample per 50 samples
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <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> <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> 	<ul style="list-style-type: none"> Samples were analysed for Au and 32 element suite by aqua-regia digest followed by analysis by ICPMS The analytical technique is considered "partial", but suitable for oxidized surficial material such as soils. Duplicate sample added
Verification of sampling and assaying	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> No verification undertaken
Location of data points	<ul style="list-style-type: none"> <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> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> Samples located with handheld GPS with accuracy to +/-5m Coordinates recorded in MGA zone 51S
Data spacing and distribution	<ul style="list-style-type: none"> <i>Data spacing for reporting of Exploration Results.</i> <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> <i>Whether sample compositing has been</i> 	<ul style="list-style-type: none"> Samples were taken at 100m spacing adjacent to fence line tracks



Criteria	JORC Code explanation	Commentary
	<i>applied.</i>	
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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 should be assessed and reported if material. 	<ul style="list-style-type: none"> Samples were taken at 100m spacing adjacent to fence line tracks Sample lines were not oriented in relation to geology or structures
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Samples were under the control of Miramar staff at all times between collection in the field and delivery to the assay laboratory
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> No reviews or audits conducted

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> E 59/2377 is 100% owned by Miramar Resources Limited
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Limited rock chip sampling by Metana Minerals in the 1980's Auger drilling and limited aircore drilling by Jervois Mining Limited in 2009-2010
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> Mesothermal lode gold and/or REE associated with pegmatites
Drill hole Information	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> No drilling conducted



Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul style="list-style-type: none"> <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> <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> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> No drilling undertaken
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <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> 	<ul style="list-style-type: none"> No drilling undertaken
Diagrams	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> Figure 1 shows all existing historical sampling and drill holes and Miramar soil sampling
Balanced reporting	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> All soil sample locations shown.
Other substantive exploration data	<ul style="list-style-type: none"> <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> 	<ul style="list-style-type: none"> No other relevant data
Further work	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <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> 	<ul style="list-style-type: none"> Sampling and analysis of pegmatites Aircore drilling of auger anomalies