

ASX Announcement

REE TARGETS IDENTIFIED AT LEONORA

20th March 2023



Highlights

- Situated in known REE production and exploration region.
- Recent significant pXRF results - 0.38% Ce, 0.21% La, 0.15% Nd and 0.05% Pr
- Magmatic signature fertile for REE
- Anomaly open to the south and west towards potential intrusive source
- Favourable geological setting demonstrated in the geophysics
- Fast-tracked follow-up program underway

Mt Malcolm Mines NL (ASX:M2M) ("Mt Malcolm" or "the Company") is pleased to provide an update on recent exploration activities conducted within its Mt Malcolm Project Area.

Recent reconnaissance and historical database examination has revealed enriched and anomalous Light Rare Earth Elements (LREE) within several of Mt Malcolm's tenements at Leonora being Mt Stewart, Sunday-Picnic, Malcolm Dam and the Malcolm Mining Centre. At least seven (7) tenements have been identified containing positive LREE responses and at least eight (8) untested tenements have potential to host enriched LREE. The tenement areas and the immediate surrounds present as Rare Earth Element Target Zones, located within the regionally prospective Leonora—Laverton District.

Mt Weld to the east, combined with the Redlings and Mt Stirling to the west set precedent for economic mineralisation within the district as well as strategically-placed processing opportunities (Fig. 1). The Redlings REE deposit hosted by narrow carbonatitic dykes within an alkalic granite stock (ASX:MQR Announcement 18th Aug. 2021) is being touted as the deposit analogue for REE exploration at M2M; including the near surface oxide opportunities.

MT STEWART & SUNDAY PICNIC

A litho-geochemical and PIMA study (Portable Infrared Mineral Analyser) commissioned by Hannans Reward (A74632) was undertaken on bottom-of-hole samples from the Mt Stewart Project area in order to quantify the hydrothermal alteration signature of the area (Halley 2006). Five hundred and eight (508) Infrared spectra were measured, and four hundred and ninety one (491) samples were selected from the bottom of hole drill spoil from several regional aircore drill programs. Samples were assayed for a comprehensive suite of elements including some rare earth elements (Ce, La and Sc).

In Archean gold systems, the alteration silicate mineralogy is dominated by chlorite and sericite. A broad corridor with an alteration assemblage of chlorite-biotite-albite-magnetite was established by the litho-geochemical survey mostly contained within a titanium rich mafic unit (gabbro). Sericite is the dominate alteration mineral in the data set. The survey returned irregularly distributed anomalous gold values throughout the alteration packages.

Peak LREE results from the Hannans Reward NL Aircore program (2005-2006) are shown in Table 1 on page four.

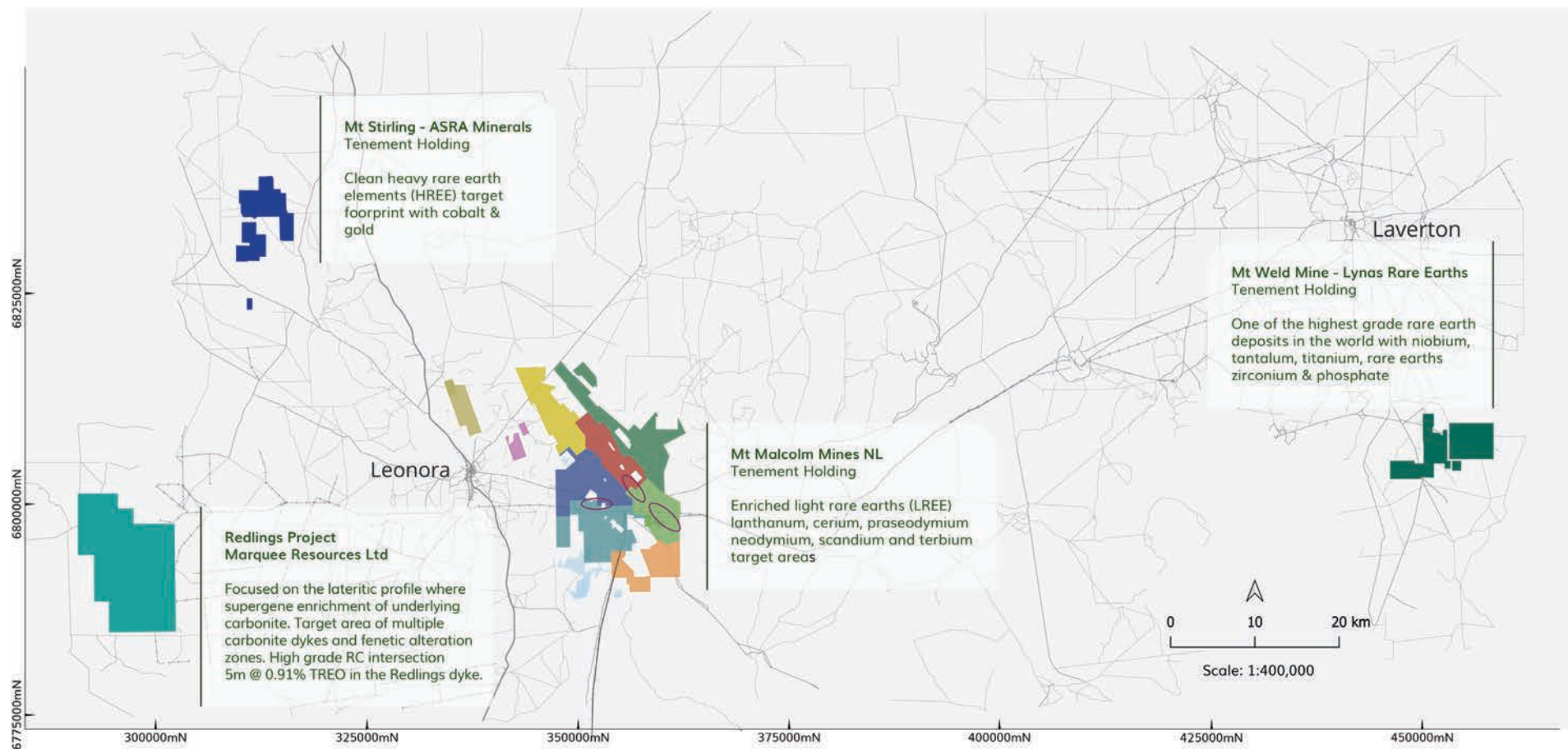


FIGURE 1

Mt Malcolm's Tenement holding and target areas with nearby REE producer (Mt Weld – Lynas Rare Earths), HREE explorer (ASRA Minerals) tenement holdings and Rare Earth Explorer (Marquee Resources Ltd) tenement holding.

TABLE 1

Anomalous enriched LREE drill results from Hannans Reward Ltd aircore drilling see Figure 2 for location

Hole ID	Easting MGA 94	Northing MGA 94	Dip	Azimuth (TN)	Hole Depth (m)	From (m)	To (m)	BOH Intersection	Lithological Class	Geology
MSAC182	359829	6798594	-90°	360°	56m	55	56	1m @ 80.33 ppm Ce	REE-rich Felsic	Not assigned
MSAC182								1m @ 40.58 ppm La		
MSAC183	359896	6798677	-90°	360°	51m	50	51	1m @ 93.56 ppm Ce	Intermediate	Mafic Schist undifferentiated
MSAC183								1m @ 42.39 ppm La		
MSAC185	306040	6798812	-90°	360°	33m	32	33	1m @ 71.18 ppm Ce	Intermediate	Schist quartz-sericite dominated
MSAC185								1m @ 35.48 ppm La		
MSAC186	360109	6798872	-90°	360°	40m	39	40	1m @ 33.00 ppm Sc	Basalt	Schist undifferentiated
MSAC187	360180	678946	-90°	360°	8m	7	8	1m @ 38.00 ppm Sc	High Ti Basalt	Not assigned
MSAC190	360503	6796963	-90°	360°	20m	19	20	1m @ 61.88 ppm La	REE-rich Felsic	Schist undifferentiated
MSAC190								1m @ 117.28 ppm Ce		
MSAC194	360791	6797251	-90°	360°	78	77	78	1m @ 101.48 ppm Ce	REE-rich Felsic	Schist quartz-sericite dominated
MSAC194								1m @ 52.99 ppm La		
MSAC195	360850	6797326	-90°	360°	81m	80	81	1m @ 105.18 ppm Ce	REE-rich Felsic	Schist quartz-sericite dominated
MSAC195								1m @ 55.53 ppm La	REE-rich Felsic	Schist quartz-sericite dominated
MSAC200	358990	6799326	-90°	360°	48m	47	48	1m @ 76.76 ppm Ce	REE-rich Felsic	Mafic undifferentiated
MSAC200								1m @ 41.51 ppm La		
MSAC201	359079	6799380	-90°	360°	20m	19	20	1m @ 126.62 ppm Ce	REE-rich Felsic	Schist biotite-quartz dominated
MSAC201								1m @ 58.9 ppm La		
MSAC203	359205	6799540	-90°	360°	20m	19	20	1m @ 92.21 ppm Ce	Intermediate	Mafic Schist undifferentiated
MSAC203								1m @ 42.38 ppm La		
MSAC204	359264	6799603	-90°	360°	25m	24	25	1m @ 110.52ppm Ce	Intermediate	Not assigned
MSAC204								1m @ 51.15 ppm La		
MSAC525	361585	6796405	-90°	360°	39m	38	39	1m @ 242.75 ppm Ce	REE-rich Felsic	Mafic Granitoid-Shear
MSAC525			-90°	360°	39m	38	39	1m @ 82.06 ppm La	REE-rich Felsic	Mafic Granitoid-Shear
MSAC526	361514	6796338	-90°	360°	47m	46	47	1m @ 126.44 ppm Ce	REE-rich Felsic	Schist undifferentiated
MSAC526								1m @ 58.42 ppm La		
MSAC527	361450	6796264	-90°	360°	42m	41	41	1m @ 144.13 ppm Ce	REE-rich Felsic	Mafic Granitoid-Shear
MSAC527								1m @ 65.07 ppm La	REE-rich Felsic	Mafic Granitoid-Shear

Although gold (Au) was the principal commodity targeted by the aircore drilling two Light Rare Earth Elements (LREE) being Cerium (Ce) and Lanthanum (La) were included in the suite of twenty (20) elements analysed (Genalysis Method AT/MS) being Ag, As, Ba, Bi, Ce, Cs, Hf, La, Li, Mo, Nb, Pb, Rb, Sb, Ta, Te, Th, Ti, W & Zr. A further seventeen (17) elements were also analysed (Genalysis Method AT/OES) being Al, Ca, Cr, Cu, Fe, K, Mg, Mn, Na, Ni, P, S, Sc, Sr, Ti, V & Zn this suite included Scandium (Sc). Cerium, Lanthanum and Scandium are regarded as immobile elements that generally survive through intense weathering and alteration hosted primarily in resistant heavy minerals like rutile, zircon, apatite and spinels.

A low order LREE anomalous response is over an area dominated by recently transported cover. The Aircore holes were drilled to blade refusal at 100m spacing, average depth 40m. Four widely spaced drill lines in the south covered a strike of 4km. A sheared schistose sericitic volcanic felsic unit and sheared minor mafic granitoids were identified.

The majority of aircore holes over the target zone returned elevated Ce, La, Sc assay results.

The LREE enriched felsic unit is superficially drilled and poorly tested. The drill pattern is regarded as shallow and very widely spaced.

A LREE enriched felsic schist unit displaying a low magnetic signature within M2M's Mt Stewart Prospect was identified over a strike length of 4km by Halley (Fig. 2). Follow-up assessment by M2M has refined the lithogeochemical classification to reveal the largest area of REE concentration is hosted by an alkalic intrusion characterised by incompatible element enrichment including K, Rb, Sr, Ba and Th (Fig. 3). In addition to felsic intrusive hosts, REEs are also concentrated along the eastern margin of the alkalic granite within a volcano-sedimentary unit and another narrow anomaly 5km to the NW coincident with a logged interflow sediment interleaved by intermediate to ultramafic volcanics (Fig. 4).

The spatial link between REEs and alkalic granites demonstrates the potential for greater magmatic REE accumulation with further exploration and refinement of the intrusive stratigraphy within the M2M tenement holding, but the intriguing anomalism with the greenstone host packages also raises a question around untapped prospectivity. The next phase of work will investigate the origin of the two stratabound anomalies identified at Mt Stewart; metasomatized wallrocks adjacent to metal-fertile granite, or diagenetic REE concentration within black shales or a combination of the two.

Geological and aeromagnetic interpretation (A82418) concluded the same felsic dominated unit continues north-westerly from the target area, along strike, into the company's contiguous Sunday Picnic Prospect for at least an additional 4.5 km (Fig. 2). Furthermore, historical mapping (A50839) confirms the same felsic and sedimentary units to those hosting REE anomalism in the Mt Stewart greenstones (Fig. 4) continue through the strike of Sunday Picnic inter-fingered with dolerite/gabbro, and thin dunite peridotite units following the western magnetic high – magnetic low boundary.

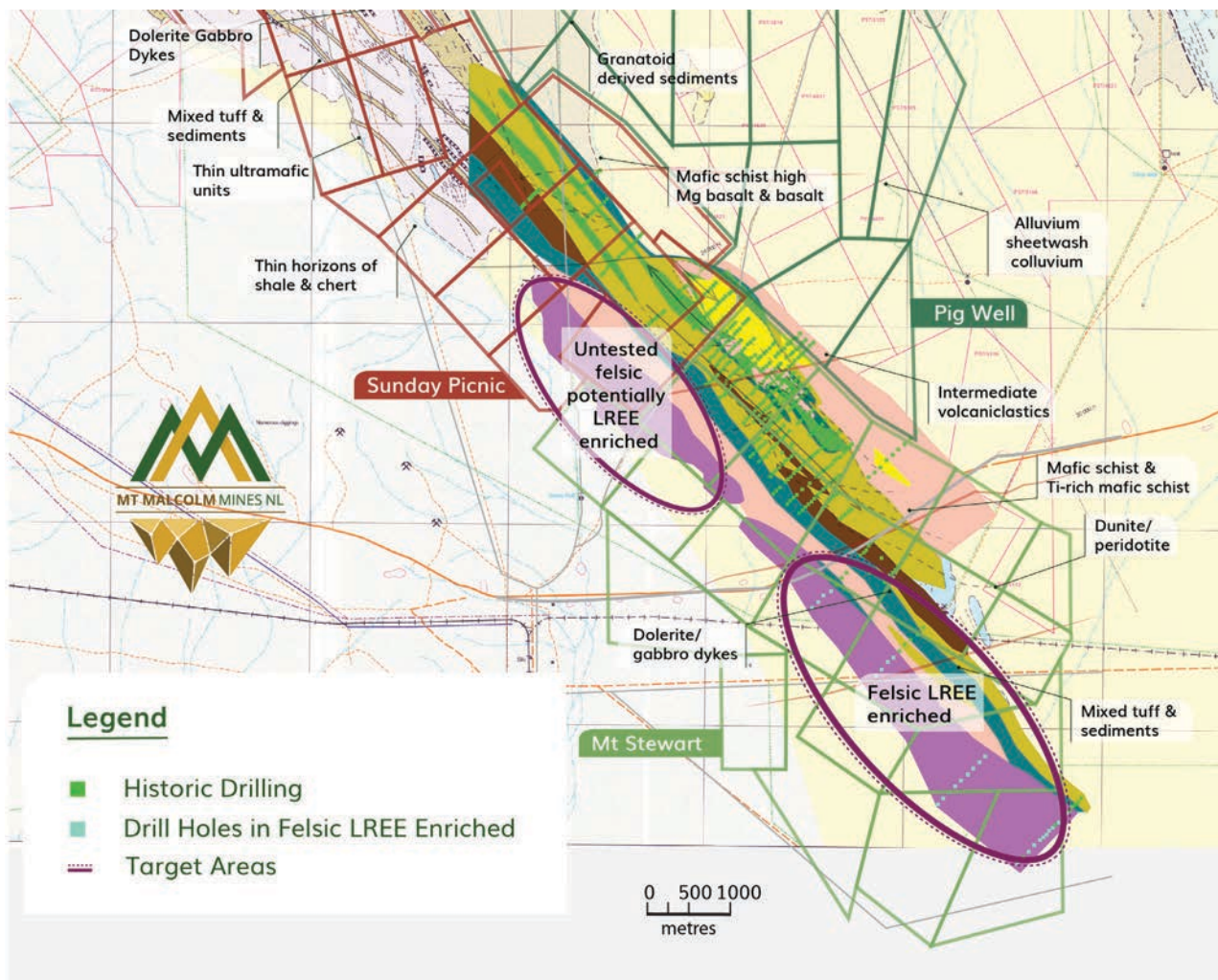


FIGURE 2

Mt Stewart and Sunday Picnic Prospects with geology, historical drilling and Target Areas, depicting the undrilled northern zone and the partly drilled southern zone which returned enriched LREE results as summarised in Table 1. (After A50839 and Halley 2006).

The entire length of these felsic greenstone units, cover approximately 20 strike kilometres of M2M's tenement holding. The sequence presents as an unexplored Rare Earth Exploration Target opportunity. Only the southernmost 4km section of the sequence, has been tested with wide spaced shallow vertical aircore drilling, albeit with a limited REE suite. No Rare Earth analysis has been conducted further along the NW strike of the Felsic and intermediate volcanoclastic greenstones (Fig. 2).

The total rare earth oxide (TREO) percentage is unknown at this stage, the vast majority of Lanthanides were not included in the assay suite, only three (3) LREE were in the suite of thirty-seven (37) analysed elements.

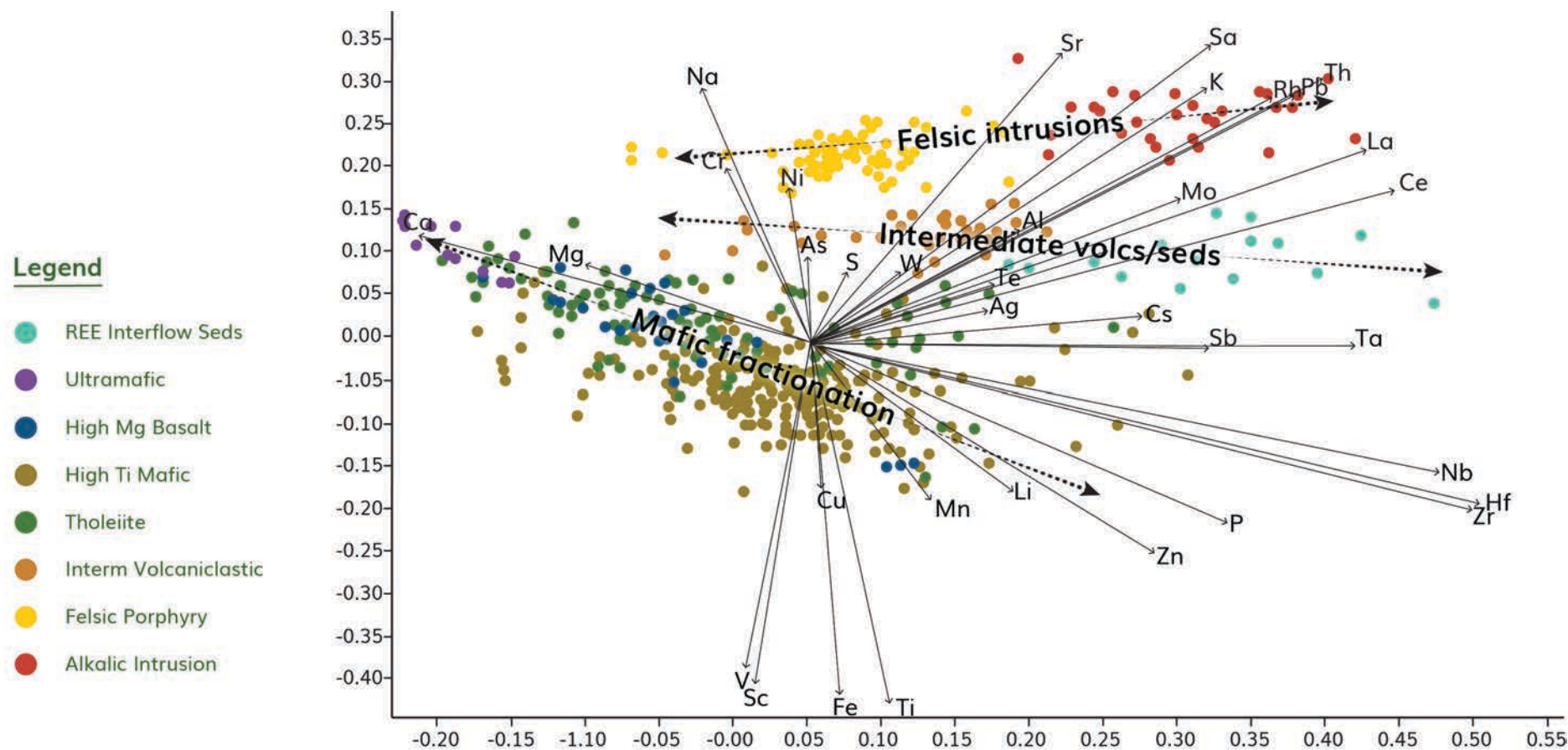


FIGURE 3
3D PCA plot showing mafic, intermediate and felsic trendlines identified from 4-acid multi-element analysis.

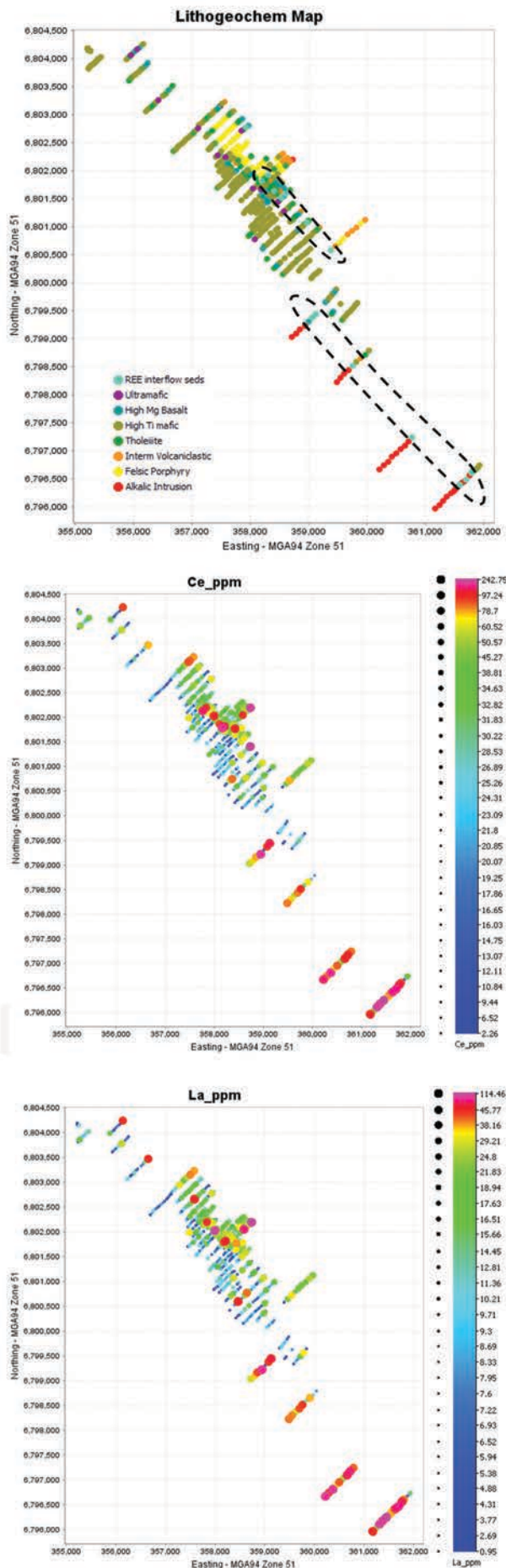


FIGURE 4
Maps of lithogeochemical classes, Ce and La, as per Figure 2

MALCOLM DAM & MALCOLM MINING CENTRE

Multi-element analysis of rock-chips collected to ascertain the prospectivity of widespread outcropping ferruginous chert horizons has identified a regionally anomalous REE concentration in multiple samples within the Malcolm Dam and Malcolm Mining Centre Prospect Areas. Principal Component Analysis (PCA) determined 3 endmember classes of metal correlation comprising elements of oxidised, base metal and incompatible element association (Fig. 5). The most extreme endmember samples within the oxidised/magmatic class were differentiated from the other samples on the same trend line demonstrating weaker elemental correlation.

The only three REEs analysed returned anomalous assays for several samples coinciding with the strongly oxidised domain at the southernmost extent of current rock-chip sampling (Fig. 6). These anomalous samples are wholly contained within Mt Malcolm Mines NL tenements E37/1331 (Malcolm Mining Centre) and P37/8731 (Malcolm Dam).

Follow-up of the magmatic REE anomalism in-field by pXRF revealed a coincident oxidised metal association including one sample containing significant LREE enrichment (Fig. 7).

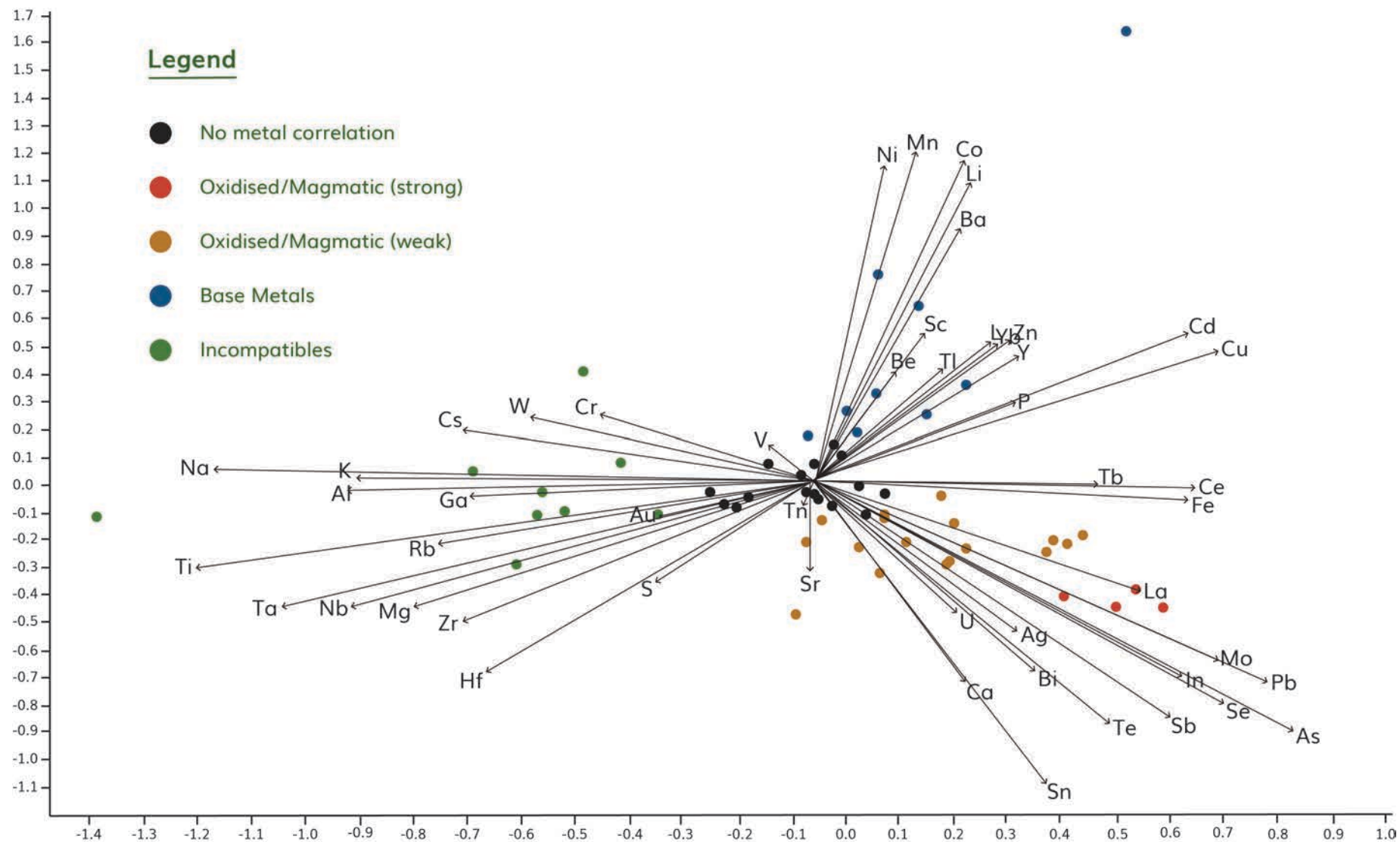


FIGURE 5
3D PCA plot showing the three metal endmembers identified from 4-acid multi-element analysis of rock chip samples taken from regionally extensive ferruginous chert horizons.

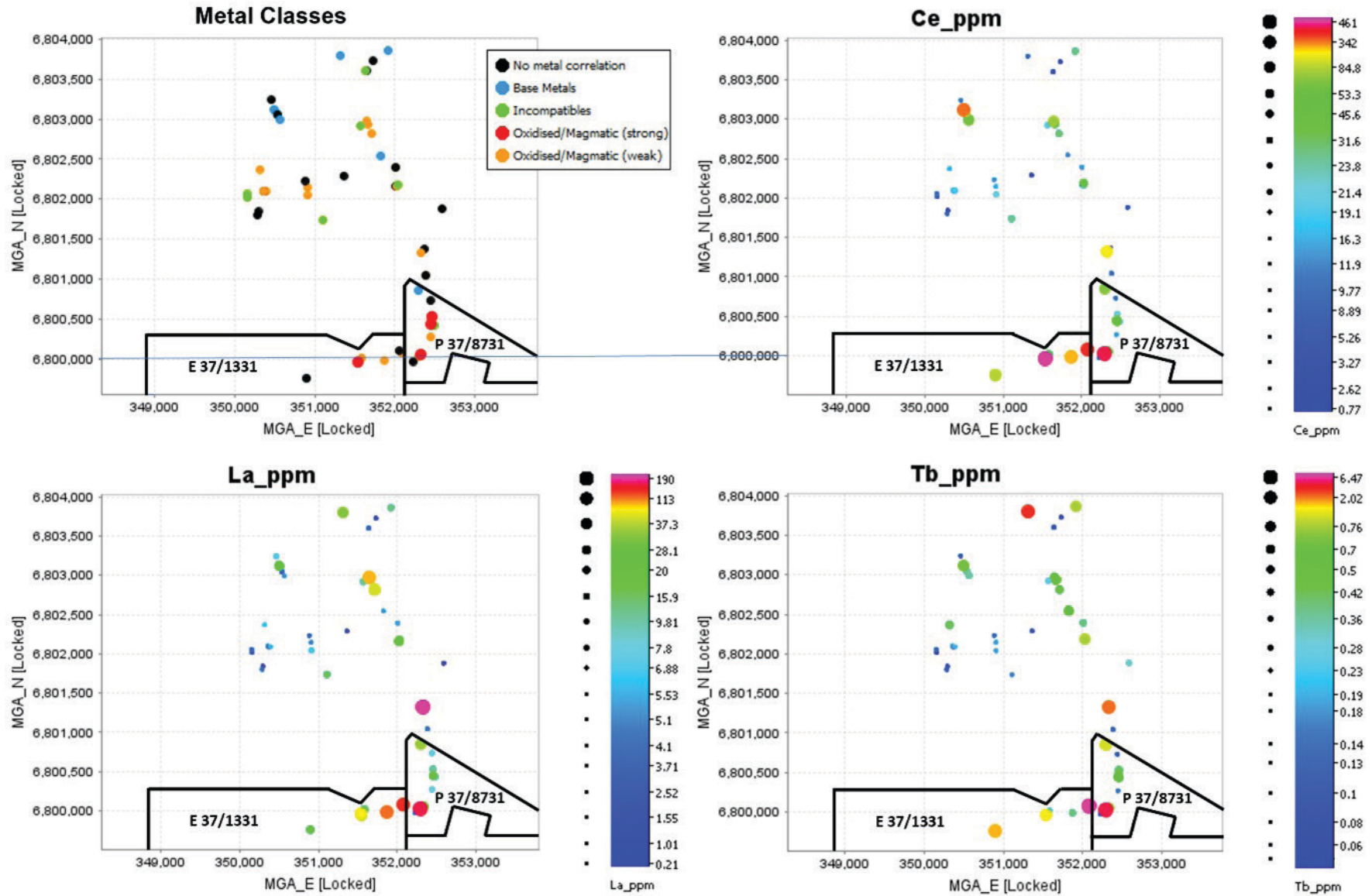


FIGURE 6

Mapped distribution (MGA94_Zone51) of sample points coloured by PCA element endmembers (metal classes), Ce, La and Tb. Tenements E37/1331 and P37/8731 are overlain for sample point reference.

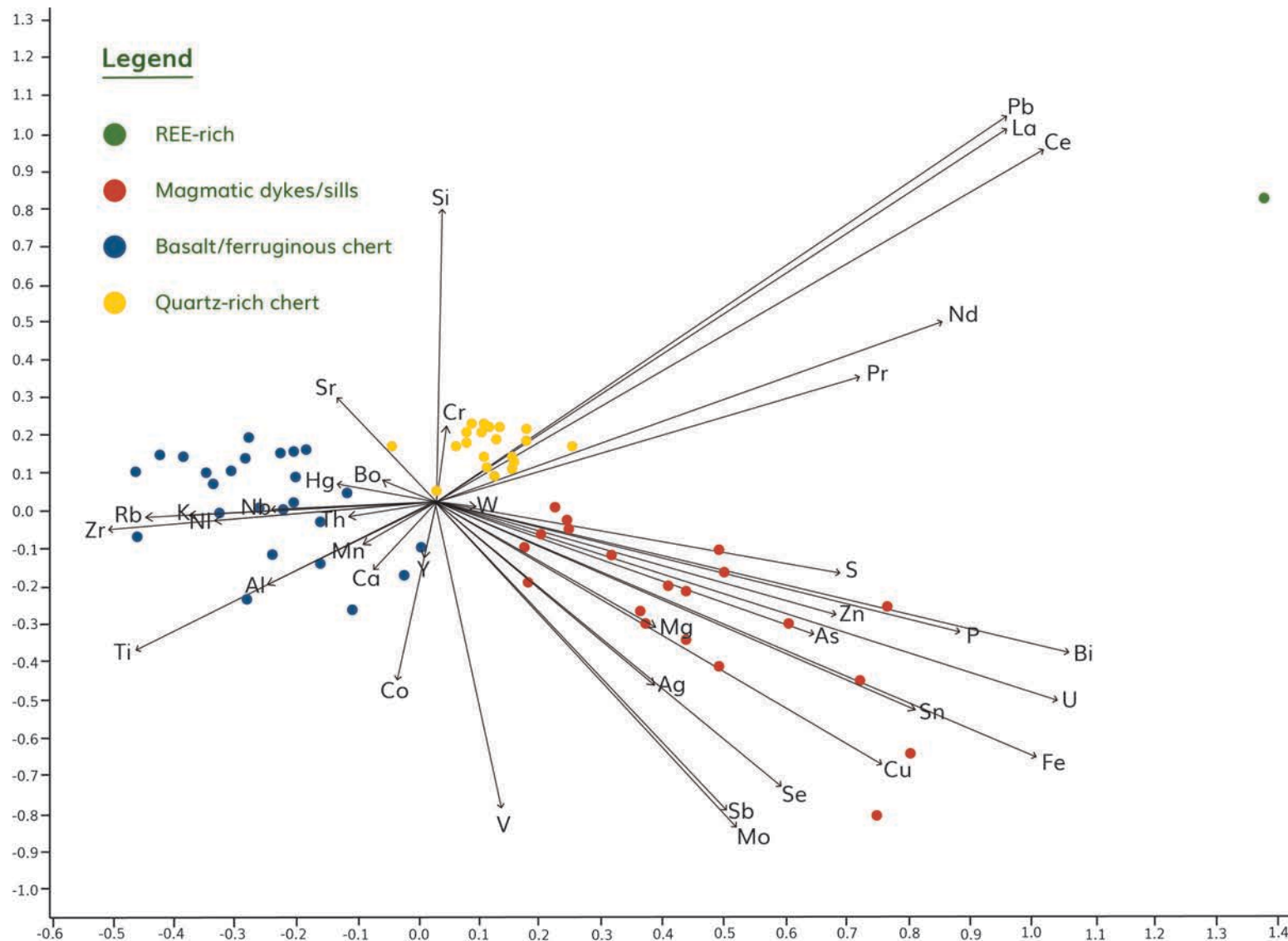


FIGURE 7

3D PCA plot of pXRF assay data showing sample points characterised by an oxidised, magmatic elemental signature in red, differentiated from background volcanic and sedimentary host rocks represented by blue (mafic) and yellow (felsic). The green point on the far right of the plot represents an extremely REE-enriched endmember on the oxidised/magmatic part of the spectrum



FIGURE 8

Field specimen of megacrystic vuggy quartz from the oxidised, magmatic domain hosting the anomalous REE sample.

Geological ground-truthing shows the oxidised metal signature is associated with highly fractionated felsic dykes and sills containing vuggy quartz (Fig. 8) and the highly anomalous REE-bearing sample containing 0.38% Ce, 0.21% La, 0.15% Nd and 0.05% Pr hosted within a stockwork of felsic dykes that crosscut a chert unit (Fig. 9).

Mapping by the renowned Jack Hallberg to the west of the oxidized magmatic domain delineated a 3.5 x 0.8 km granitoid at surface that intruded parallel to the same chert horizon hosting the significant REE anomaly. From descriptions of "hornblende phenocrysts" and "K-feldspar megacrysts", this yet-to-be sampled, potentially alkalic intrusion may represent a source for the smaller sills and dykes hosting REE mineralisation encountered to date. If so, larger intrusive bodies similar to this may hold the key to greater concentrations of REE's such as hosted by the Mt Weld carbonatite 100 km to the east (Fig. 1). HREE potential will be tested in the coming quarter with much anticipation, as Asra Minerals' Mt Stirling Project has already demonstrated the regional significance of this style of mineralisation.

THE NEXT PHASE

Five kilometres to the south of the new Mt Malcolm Mines REE anomaly, suggestions of a sizable pluton at depth coring an anticlinal dome will be initially tested in the coming quarter through extending the rock chip sampling program westwards and southwards; vectoring towards a metal-fertile alkalic intrusion complex. Similarly, Asra Minerals is at the same stage of validating evidence of a deeper alkaline intrusion as a potential

REE source (ASX:ASR Company Presentation 15th Feb 2023). Beyond the next round of surface sampling, successful validation of the exploration model will see ramping-up of exploration efforts starting with detailed geophysics to understand the size and nature of the proposed magmatic centre.



FIGURE 9

Image shows chert horizon cut by felsic veins of magmatic affinity and pXRF gun showing the location the significant REE was obtained from; including the reported La, Ce, Pr and Nd assays.

ABOUT PIMA (Portable Infrared Mineral Analyser)

PIMA operates in the short wavelength infrared region of the spectrum between 1300 and 2500 nanometres. In this range, a number of chemical bonds in the minerals absorb energy corresponding to particular wavelengths of light, giving rise to reflectance profiles with sharp dips at those particular wavelengths. From the assay results the primary rock types were classified and within the context of the primary lithologies and alteration minerals the distribution of the pathfinder elements was determined (Halley 2006).

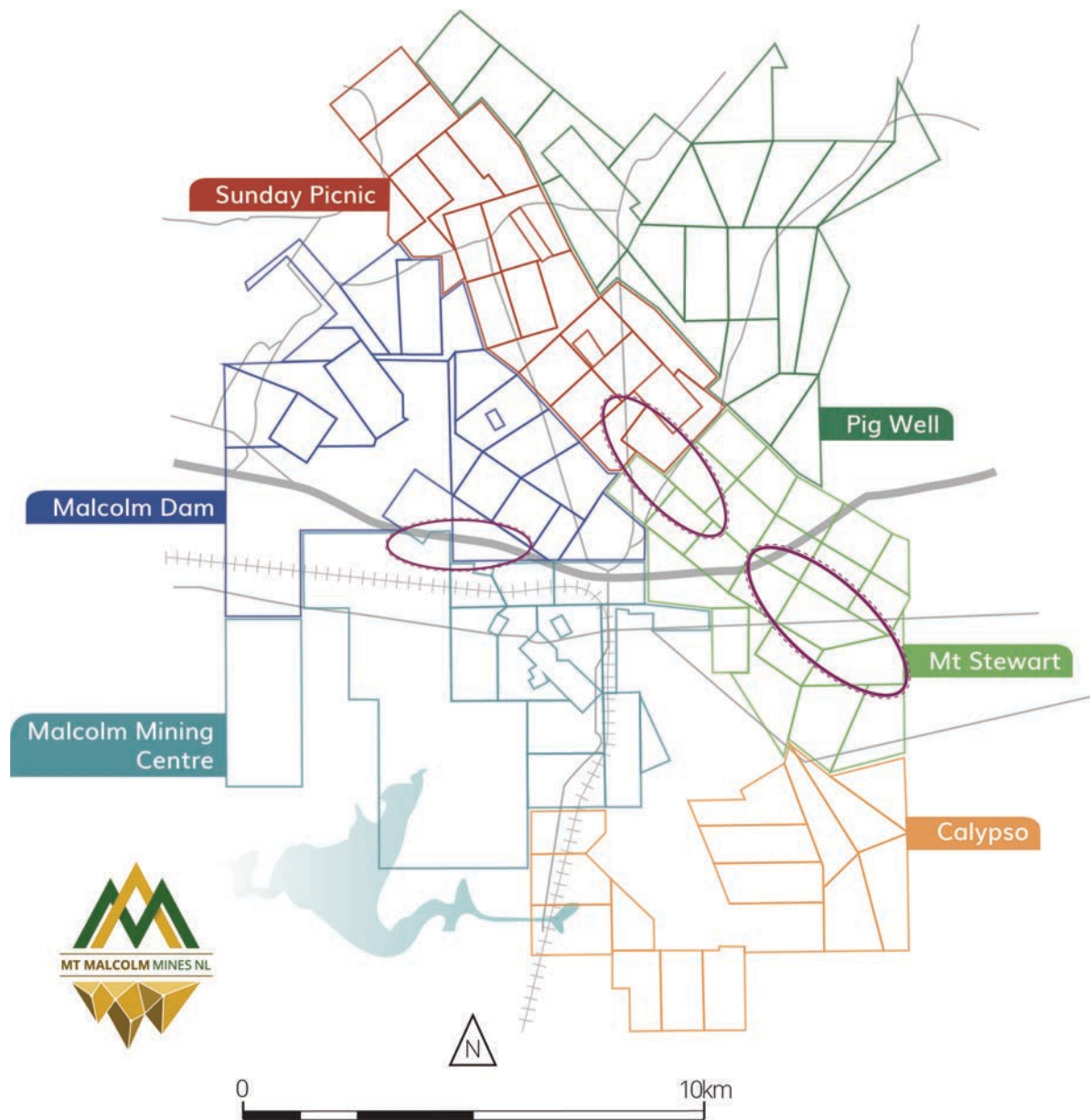


FIGURE 10
Mt Malcolm location plan highlighting the LREE target areas.

ABOUT PXRF (X-ray fluorescence)

pXRF is a non-destructive analytical technique used to determine the elemental composition of materials. Handheld XRF analysers determine the chemistry of a rock sample by measuring the fluorescent (or secondary) X-ray emitted from a sample when it is excited by a primary X-ray source. Each of the elements present in a sample produces a specific set of characteristic fluorescent X-rays ("fingerprint") that is unique for that specific element. XRF spectroscopy is an excellent technology for qualitative and quantitative analysis of material composition.

ABOUT (PCA) PRINCIPAL COMPONENT ANALYSIS

PCA is a popular technique for analysing large datasets containing a high number of dimensions/features per observation, increasing the interpretability of data while preserving the maximum amount of information, and enabling the visualization of multidimensional data. Formally, PCA is a statistical technique for reducing the dimensionality of a dataset. This is accomplished by linearly transforming the data into a new coordinate system where (most of) the variation in the data can be described with fewer dimensions than the initial data.

This announcement has been authorised by the Board of Mt Malcolm Mines NL.

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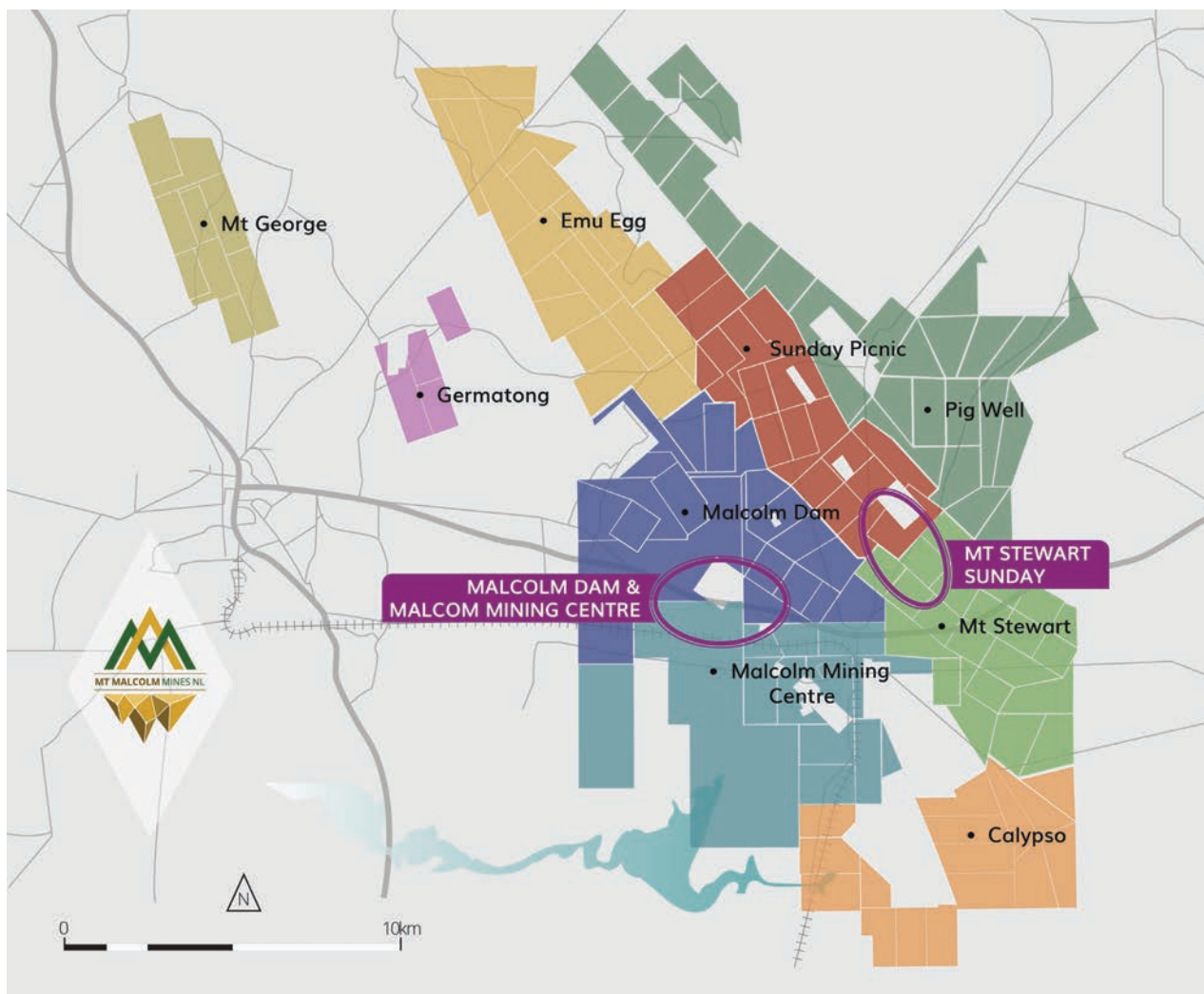
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Competent Persons Statement

The information in this report which relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Allen Maynard, who is a Member of the Australian Institute of Geosciences ("AIG"), a Member of the Australasian Institute of Mining & Metallurgy ("AusIMM"). Mr Maynard is the Director and principal geologist of Al Maynard & Associates Pty Ltd and has over 40 years of exploration and mining experience in a variety of mineral deposit styles. Mr Maynard 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 2012 Edition of the "Australasian Code for reporting of Exploration Results, Exploration Targets, Mineral Resources and Ore Reserves".(JORC Code). Mr Maynard consents to inclusion in the report of the matters based on this information in the form and context in which it appears.

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- <https://asraminerals.com.au/mt-stirling-project/#project-overview> (2023) Home Web Page ASRA Minerals.
- <https://www.investi.com.au/api/announcements/mqr/74093744-29e.pdf> (2023) Home Web Page Marquee Resources LIMITED.



About Mt Malcolm Mines NL:

Mt Malcolm Mines NL is managed by competent and experienced industry professionals with a strong background in mineral exploration and administration of mineral assets. Additionally, the company has many professional associations with and access to some of the industry's best corporate and mining resource consultants.

The projects and properties are in areas with a proven track history of exploration success and significant mining and production of gold and other minerals. The holdings are centred around the locale of Malcolm near Leonora WA. The Company believes that it's prospects offer excellent potential for the discovery of new economic mineral deposits and within the next (2) two years intends to:

- Conduct regional geological mapping and geochemical sampling programs.
- Undertake focused and systematic exploration and scientific research programs.

- Aggressively seek exploration and development opportunities of other targets and quality projects that meet the Mt Malcolm Mines development objectives and where appropriate and if opportunities arise, examine the possibilities of joint ventures and other related business and commercial opportunities that will create value and wealth for all its shareholders.

The 'Malcolm' Gold Project has the potential to host economic gold mineralisation and opportunities exist to further enhance and build on the substantial exploration data assembled to date. The project represents a large-scale district gold play.

JORC 2012 TABLE 1 Mt MALCOLM MINES NL (MT STEWART-SUNDAY PICNIC, MALCOLM DAM AND MALCOLM MINING CENTRE)

SECTION 1 - Sample Techniques and Data

Criteria	Commentary
<i>Sampling techniques</i>	<p>A litho-geochemical and PIMA study was undertaken on bottom-of-hole (BOH) samples from the Mt Stewart area. Aircore drilling was originally undertaken by Hannans Reward Ltd (2005-2006). Samples from the blade refusal aircore holes (MSAC series) were analysed for multi-element (491 samples) and infrared multi-spectral data (508 samples). The study was conducted in two parts: initially carrying out multi-element assays on existing BOH drill sample pulps and secondly carrying out PIMA spectrometer analysis of existing BOH chips. Originally samples were collected nominally in 4m composites to regolith/geological boundaries. Due to irregular hole depths some bottom of hole samples were less than the nominal 4m. Anomalous composite samples (>100ppb Au) were resampled at 1m intervals.</p> <p>Surface outcrop samples are directly analysed in situ using a handheld Olympus Vanta XRF analyser. Several measurements were taken from individual outcrops, covering a surface sample area of less than one square metre. Calibration of the pXRF is conducted daily using certified standards following Mt Malcolm's QA/QC protocols.</p> <p>The initial pXRF exploration results reported are preliminary, positive results will be followed up with surface sampling and laboratory analysis at a later date.</p> <p>The sampling techniques and sampling methodologies employed are deemed appropriate and comply with industry standard for this style of exploration.</p>
<i>Drilling techniques</i>	<p>Drilling techniques were conducted to the industry standard practice of the day. The historical Hannans Reward vertical aircore drilling (MSAC035-MSAC529) was conducted over a nominal 100m x 50m grid pattern across several drill campaigns in the mid 2000's. The drill program was conducted by contractor Prodrill from Kalgoorlie using a multi-purpose aircore/RAB rig. Holes were drilled to blade refusal with an average depth of 49m. The majority of the 495 holes terminated in lower saprock.</p> <p>Holes were located using a GPS accurate to 5m or better using the MGA94 Zone 51 coordinate system.</p> <p>No down hole surveys were conducted.</p>
<i>Drill sample recovery</i>	<p>Drill hole sample recovery has not been recorded on the historical MSAC exploration drill programs.</p> <p>Collected samples are considered reliable and representative of drilled material. No material discrepancy that would impede a mineral resource estimate exists between collected primary samples.</p> <p>No indication of sample bias is evident, nor has it been established.</p> <p>No relationship has been observed to exist between sample recovery and grade.</p>
<i>Logging</i>	<p>Geological logging was initially conducted in the field by Hannans Reward personnel and followed up with BOH litho-geochemical and alteration logging (Halley 2006). The logs have been sourced and reviewed. They are adequate but brief due to the intense regolith profile weathering. The logs are serviceable and no serious issues have emerged.</p> <p>Geological logging is confined to geological contacts and controls.</p> <p>Recorded data contained in the drill logs includes rock type, alteration intensity, lithological class, colour, mineralisation, texture, veining, weathering and other geological features.</p>

Criteria	Commentary
	<p>Drillhole collar co-ordinates, nominal R.L., azimuth, dip, hole depth, lease ID and sample intervals are also recorded.</p> <p>Qualitative logging includes classification and description of lithology, weathering, oxidation, colour, texture, and grain size. Quantitative logging includes identification and percentages of mineralogy, sulphide content, mineralisation abundance and veining.</p> <p>The level of logging detail is considered appropriate for this type of exploration and to support appropriate mineral resource estimation, mining studies and metallurgical studies.</p>
<i>Sub-sampling techniques and sample preparation</i>	<p>Sampling methodologies are considered consistent within the industry standard of the day. No standards, blanks or duplicate sample data available.</p> <p>Sample methodology and sample size are considered appropriate. QA/QC data is absent in the historical database.</p> <p>pXRF sampling is fit for purpose as a preliminary exploration technique, data is acquired and compiled into the company data base. pXRF readings have a diminished precision due to grain size effect when collected from natural settings. The diminished precision factor is considered acceptable for this phase of exploration.</p> <p>Sub-sampling and sample preparation techniques are considered to be acceptable. When conducted results indicate reasonable and acceptable analytical repeatability.</p> <p>Sample size and collection methodologies are considered appropriate for this style of mineralisation and as an industry accepted method for the evaluation of mineralisation in the Goldfields of Western Australia.</p>
<i>Quality of assay data and laboratory tests</i>	<p>Analysis of aircore drill sample was conducted by Genalysis. Samples were subject to a total preparation, dried (105°), crushed and pulverised (to 75um). The samples were originally assayed for Au, As, Cu, Ni, Pb and Zn using a 50 gram Fire Assay technique with AAS finish (1ppb detection limit) for gold (B/ETA) and an aqua regia digest technique (B/AAS) with AAS finish (1ppm detection limit) for the other 5 elements.</p> <p>The BOH sample data from the lithogeochemical study and corresponding PIMA samples is not complete, original sample pulps were re-submitted to Genalysis for analysis via method AT/MS: Ag, As, Ba, Bi, Ce, Cs, Hf, La, Li, Mo, Nb, Pb, Rb, Sb, Ta, Te, Th, Ti, W and Zr (20 elements, detection limits as per technique capability) and method AT/OES. Al, Ca, Cr, Cu, Fe, K, Mg, Mn, Na, Ni, P, S, Sc, Sr, Ti, V and Zn (17 elements, detection limits as per technique capability).</p> <p>No certified reference material (CRM), standards or blank data is recorded in the historical data packages. It's unknown if the analytical laboratory included standards and blanks as part of their internal QA/QC control, it is assumed they did, as was the practice of the day however the data cannot be sourced. Repeatability results are within acceptable limits.</p> <p>Where pXRF analysis is reported the results are field analysis only no laboratory assays have been conducted. The handheld Olympus Vanta XRF instrument was used to measure preliminary quantitative amounts of REE geochemistry. The instrument reading time was 60 seconds. Calibration of pXRF was conducted daily with OREAS standards 24c and 24b.</p> <p>No geophysical tools were used to determine any element concentrations.</p>
<i>Verification of sampling and assaying</i>	<p>No adjustment or calibrations have been made to any of the assay data. Sampling and assay techniques are historical and conducted to the industry standards of the day. Only the Hannans Reward aircore drilling (2005-2006) is referred to in this document (Drill holes MSAC035-MSAC529).</p> <p>pXRF geochemical field data has been downloaded in preparation for database import.</p>

Criteria	Commentary
<i>Location of data points</i>	<p>Drill hole collars were initially recorded using a handheld GPS and reported to the MGA94 UTM Zone51 coordinate system, with horizontal accuracy to $\pm 5\text{m}$ or better.</p> <p>The sample locations from the pXRF survey were also recorded using a handheld GPS and reported to the MGA94 UTM Zone51 coordinate system, with horizontal accuracy to $\pm 3\text{m}$.</p>
<i>Data spacing and distribution</i>	<p>The drill hole and sampling spacing is project specific and historical. The drilling patterns employed in the past were dependent on previous drilling and geological interpretation and targeting depending on the nature and style of the mineralisation being tested. Drill spacing is variable as depicted on the plans (Fig. 2) but generally conducted on a 200m x 50m grid pattern and closed down to 100m x 50m.</p> <p>The sample spacing is considered close enough to identify any significant zones of mineralisation. Closer spaced and deeper follow up drilling on surrounding cross sections and along strike is required to further delineate the extent, size and geometry of areas within identified zones of enriched REE assay results.</p> <p>Drill spacing and the drill technique is sufficient to establish the degree of geological and grade continuity appropriate for any mineral resources and ore reserve estimation procedures and classifications applied. The data is pre JORC 2012 and the anomalous low grade LREE mineralisation remains open. Additional infill or deeper drilling would be required to close off and confirm the full extent of identified mineralisation, particularly down plunge and at depth.</p> <p>Data acquired and processed is only being considered for exploration purposes.</p>
<i>Orientation of data in relation to geological structure</i>	<p>The Malcolm Greenstone sequence displays an NNW to NW lithological orientation with steeply dipping sheared stratigraphy. Lithologies include strongly deformed ultramafics, intrusive and extrusive basalt, gabbro and High Mg Basalt, felsic schists, minor felsic porphyries, metasediments (shale and chert) and felsic volcanics. ENE Proterozoic dykes truncate the sequence. The low order LREE anomalous response from the aircore drilling is over an area dominated by a veneer of recently transported cover.</p> <p>The geological structures are considered to be multi-faceted and complex with intersecting shear zones of an intense nature.</p> <p>The vertical drill pattern is considered to be normal to the strike of the greenstones.</p> <p>The chance of sample bias introduced by sample orientation is considered minimal. No orientation sampling bias has been identified in the data thus far. Drilling and sampling programs are conducted to obtain unbiased locations of drill sample data, generally orthogonal to the strike of the mineralisation.</p>
<i>Sample security</i>	<p>Sample security protocols are unknown, samples were collected from the field and transported to the analytical laboratory. Once received by the laboratory samples are checked against the field manifest, sorted, and prepared for assay. Samples were then processed and assayed under the supervision of the analytical laboratory (originally Genalysis now Intertek). Once in the laboratories possession adequate sample security measures are assumed to be adopted.</p>
<i>Audits or reviews</i>	<p>Sampling methodologies, assay techniques and QA/QC protocols used in the various historic drilling programs are not as thoroughly documented when compared to today's current standards. Reviews of the various available historical company reports regarding drilling and sampling techniques indicate that they were conducted to the best practice of the day however some data maybe poorly validated and confidence levels are questionable regarding some sampling procedures, collar co-ordinates, assay and logging techniques.</p> <p>Further audits or reviews are not considered necessary at this particular stage of exploration.</p>

SECTION 2 - Reporting of Exploration Results

Criteria	Commentary
<i>Mineral tenement and land tenure status</i>	<p>The Mt Malcom Project's: Mt Stewart, Sunday Picnic, Malcolm Mining Centre and Malcolm Dam Prospects are located in the centre of the North-eastern Goldfields of Western Australia within the Shire of Leonora in the Mt Margret Mineral Field. The holding is positioned in the SE corner of the Leonora 1:250,000 and the SW corner of the Laverton 1:250,000 scale GSWA map sheets.</p> <p>The tenements are held by Mt Malcolm Gold Holdings Pty Ltd, a wholly owned subsidiary of Mt Malcolm Mines NL. The tenements are managed and explored by Mt Malcolm Mines NL (M2M). The tenements are all in in good standing.</p> <p>The details of all Company tenements are disclosed in Annexure B "Solicitor's report on tenements" which was released by the company in its IPO Prospectus dated 2nd August 2021 "Mt Malcolm Mines NL CAN 646 466 435 Prospectus" as supplemented by a supplementary Prospectus dated 19th August 2021 (Prospectus).</p> <p>All gold production in Western Australia is subject to a government royalty of 2.5%</p>
<i>Exploration done by other parties</i>	<p>The tenements have been explored and drilled by numerous exploration and mining companies over a number of years dating back to the early 1980s, active gold exploration companies include Hannans Reward Ltd, Australian Mineral Fields, Triton Gold Limited, Hillmin Gold Mines Pty Ltd, Sir Samuel Miners NL and Jubilee Gold Mines NL, Six Mile Prospecting, Australian Mineral Fields, Asarco (Australia) Pty Ltd, Roebuck Resources NL, Normandy Exploration Limited, Pacrim Energy Limited and Gulf Mines Limited. All companies have contributed to various exploration programs utilising a wide variety of standard exploration techniques.</p> <p>Historical exploration activities by these companies comprised all aspects of mineral exploration with a particular focus on gold. On ground activities include geophysical surveys, geochemical sampling, geological mapping, RAB, Aircore and RC drill programs with subsequent sampling, structural interpretation, resource evaluations and various geological assessments.</p> <p>Historical reporting and descriptions of laboratory sample preparation, assay procedures and quality control protocols for the samples from the various drilling programs are variable in their descriptions and completeness.</p> <p>The drilling database has been assembled, interrogated and scrutinised to a satisfactory level however, in the majority of cases the data is historical and predates JORC 2012 compliance. It has not been possible to fully verify the reliability and accuracy of some portions of the data however it appears that no serious problems have occurred. Historical exploration techniques and reported mineralisation, at the time, was conducted to the standards of the day.</p>
<i>Geology</i>	<p>The Project areas are located approximately 20km east of Leonora in the North-eastern Goldfields overlying segments of the altered mafic basalt/felsic volcanoclastic/sedimentary sequences of the Malcolm Greenstone Belt positioned within greenstones of the Kurnalpi Terrain. Local lithologies are characterised by linear trending steeply dipping structures, multiple alteration zones and highly sheared complex stratigraphy.</p> <p>The area is regarded as structurally complex with both EW, NE and NS shear traces. Geological evidence suggests that numerous prominent NW to NNW trending faulting and shear zones truncate the area.</p> <p>Rock outcrop is infrequent and numerous old gold workings are speckled throughout the tenement area. Much of the project area is covered by recent Quaternary alluvial and colluvial sediments. Structurally the area is intensely sheared and intensely folded.</p> <p>Regionally within, the Mt Malcolm Greenstone Belt, gold mineralisation is associated with lithological contacts hosted by NW, NNW and EW trending shear zones often associated with ferruginous quartz veining.</p>

Criteria	Commentary
<i>Drill hole Information</i>	<p>The GPS controlled location of enriched LREE drill hole collars is recorded in the company database and presented in the table of significant intersections in the body of this report.</p> <p>The location of the drill holes is based on historical reports. All hole depths refer to down hole depth in metres. Hole collars are quoted in the MGA94 Zone51 co-ordinate system. Drill hole depths are measured from the collar (top) of the hole to the bottom (end) of the hole. End of Hole depths are presented in the table of significant intersections.</p>
<i>Data Aggregation methods</i>	<p>No averaging of the raw assay data was applied. Raw data is used to determine the location, the width of anomalous intersections and anomalous trends. Geological assessment and interpretation was used to determine the relevance of the intersections with respect to the sampled medium.</p> <p>When drill hole intercepts are quoted individual grades are reported as Bottom of Hole (BOH) grades. Only elevated enriched LREE intersections are regarded as significant or anomalous. Intersections of a low order are regarded as indicative of potential mineralisation but are not viewed as anomalous nor considered to be significant however they are useful as a guide to potential mineralisation trends and are relevant to any surrounding mineralised halos.</p> <p>No top cuts were applied to any assay values. There is no reporting of any metal equivalent values.</p>
<i>Relationship between Mineralisation widths and intercept lengths</i>	<p>In general, the drill hole orientation may not be at an optimal angle to the strike of the local greenstone sequence and the identified mineralisation. However geological modelling suggests near-normal intersections within the mineralised shear zones. Only BOH intersections are reported, the greenstone sequence is generally steeply dipping, drill holes are vertical. The reported intersections do not represent true widths. Orientation and geometry of the anomalous zones have been primarily determined by geological interpretation.</p>
<i>Diagrams</i>	<p>Type example diagrams and plans are included in the body of this announcement.</p>
<i>Balanced Reporting</i>	<p>Only LREE results regarded as anomalous are discussed and reported, samples representing a low order grade, are referred to in the compiled table of significant intersections (Table 1).</p>
<i>Other Substantive exploration data</i>	<p>Regarding the results reviewed no other substantive data is currently considered necessary. However, the project area has been explored by several listed companies in the past, only results regarded as substantial, by those companies, have been reported in the past.</p> <p>All information regarded as meaningful and material is presented in this document. Further data collection will be conducted and reviewed and reported as and when the data is considered material.</p> <p>The LREE's discovered by Hannans Reward has never been followed up.</p>
<i>Further work</i>	<p>The potential to increase the existing zones of mineralisation within the Project areas is viewed as probable, however committing to further exploration work does not guarantee that further delineation of the extent, size and geometry of some areas within identified zones of REE mineralisation will be the result.</p> <p>Planned future work includes reconnaissance exploration, drilling, surface sampling, database consolidation, on ground truthing, geophysical interpretation, 3D modelling, petrology and ongoing geological investigation.</p> <p>pXRF analytical results are yet to be confirmed by laboratory analysis. Ongoing exploration is contingent on confirmatory assays and further targeting</p>