December 01, 2022



Reconnaissance rock chip results received at Morrissey Lithium and REE project

Key Highlights

- Initial field visit completed at Morrissey lithium and REE project to confirm prospectivity and access for future work
- Rock chip samples confirm base metal, lithium, and rare earth enrichment during field reconnaissance
- Copper enrichment with associated nickel and chromium in fresh rock
- Lithium and TREO enrichment detected along a sizable pegmatite body and open to the north and south
- Project covers a confirmed REE-bearing pegmatite immediately south of Red Dirt Mining's (ASX: RDT) Malinda Lithium Project

Summit Minerals Limited (ASX: SUM) ("Summit" or "the Company") is pleased to advise that it has completed a reconnaissance field visit, including an initial program of rock chip sampling to confirm the prospectivity of the Morrissey Lithium and REE project (granted licence E09/2482) in the central Gascoyne.

Elevated copper (to 0.1% Cu), with supporting nickel and chromium results, was returned from the ultramafic unit adjacent to the target pegmatite body. Nine samples from the target pegmatite display low tenor results in lithium and total rare earth oxides (TREO). Their distribution, with higher TREO values in the south and lithium values in the north, supports the anticipated zonation pattern for this mineralisation style. Alluvial deposits of clay, silt, sand, or gravel associated with the Thirty-Three River, cover potentially more prospective pegmatite north of the current sampling, which will be the focus of the Company's next exploration program.

Figure 1 and Table 1 present the key results from recent sampling activities at the Morrissey Project.

Managing Director Jonathan King commented:

"It is exciting to get supporting results in several commodities so quickly from surface sampling at the Morrissey Project. Whilst the base metal results from the ultramafic rock unit were a welcomed surprise, the anticipated zonation pattern of the mineralised pegmatite was confirmed by sampling, with lithium detected in the north and REE in the south, suggesting better opportunities for lithium potentially lie further north. The pegmatite lies open in both directions, and further exploration will be conducted in 2023 to assess the lithium potential on the northern zone of the pegmatite."

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Background Information

Segue Resources Limited identified the Thirty-Three Supersuite as a fertile parent granite having the potential to generate LCT Pegmatite swarms. These swarms lie adjacent and may include the Morrissey property. Red Dirt Metals Ltd (ASX: RDT) recently acquired the Malinda Lithium Project, which abuts the Morrissey Project. The Malinda Lithium Project extends over an area with pegmatites and associated minerals and contains historical workings, recording the presence of highly anomalous lithium and tantalum.

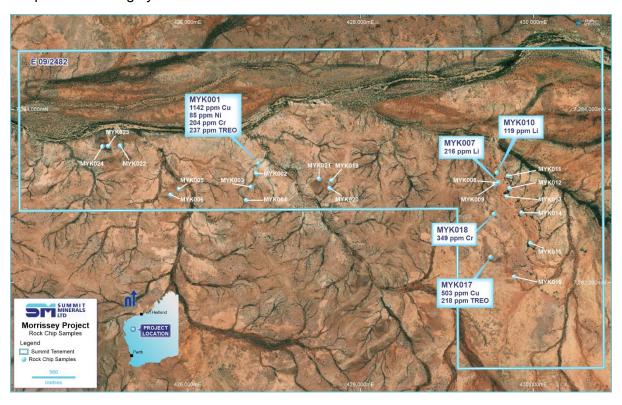


Figure 1 - Rockchip sample locations (MGA94, Z50) with selected results: Morrissey Project.

Summit's field program focused south of the Thirty-three River. Points of interest were interpreted from aerial photography and satellite and magnetic imagery before entering the field. Each point was visited, and a representative rock chip sample was taken, photographed, and submitted for assay at LabWest. The chosen assay stream was MMA-04, which includes microwave, HF/multi-acid digestion and returns 61 elements, including REEs, by ICP-MS/OES. Appropriate detection limits accompany the technique.

Of note, an extremely rare, iron-rich pyroxene, Hedenbergite, was sampled in contact with the pegmatite. Contact metamorphic rocks high in iron are the primary geologic setting for hedenbergite. Besides forming in skarns (calc-silicate metamorphic rocks), little is understood about the significance of the mineral at this locality. However, Hedenbergite is known to be associated with metamorphosed sulphide ores at Broken Hill.

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Future Work

The elevated base metal results derived from the outcropping, fresh ultramafic rock, supported by hedenbergite, speculatively indicate the presence of a sulphide system. The target pegmatite lies open to the north and south. The more prospective northern end (towards the Malinda Lithium Project) is buried by recent sediments associated with the Thirty-three River and will be the focus of future exploration. Further investigations, including additional chip sampling and soil geochemistry, are justified.

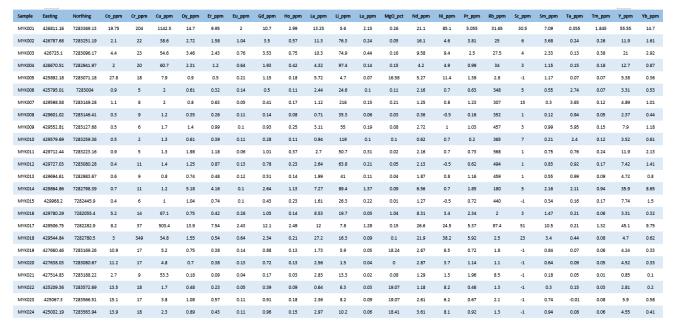


Table 1 - Morrissey Rock Chips: Selected pertinent assay results





Figure 2: Summit Minerals' project locations

Authorised for release by the Board of Summit Minerals Limited.

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About Summit Minerals Limited

Summit Minerals Limited is an Australian-focused ASX-listed battery mineral exploration company with a portfolio of projects in demand-driven commodities. It is focused on systematically exploring and developing its projects to delineate multiple JORC-compliant resources.

Summit's projects include the Windfall Antimony Project in the antimony-gold province of the southern New England Fold Belt region in NSW, the Stallion REE Project in Ponton River WA, the Phillips River Lithium Project in Ravensthorpe WA, the Bridgetown Lithium Project in Bridgetown WA, strategically located along strike of Talison's Greenbushes Mine and the Northern REE / Lithium Projects in Gascoyne and Pilbara WA. Through focus, diligence and execution, the board of Summit Minerals is determined to unlock previously unrealised value in our projects.

Competent Person Statement

The information related to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on data compiled by Jonathan King, a Competent Person who is a Member of The Australian Institute of Geoscientists. Jonathan King is a director of Collective Prosperity Pty Ltd. Jonathan King 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. Jonathan King consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.

Forward-Looking Statements

This announcement contains 'forward-looking information based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements concerning the Company's business strategy, plans, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, mineral reserves and resources, results of exploration and related expenses. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'potential', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this announcement are cautioned that such statements are only predictions, and that the Company's actual future results or performance may be materially different. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance, or achievements to be materially different from those expressed or implied by such forward-looking information.

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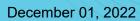


Appendix 1: JORC Code, 2012 Edition- Section 1 - Morrissey REE and Li Project

Section 1 Sampling Techniques and Data

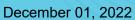
(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Comment
Sampling techniques	□ 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. □ Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Samples were chipped with a mallet, with approximately 3kg of sample collected within a 1-metre radius from a central location. Samples were photographed, and their location was recorded via GPS. The samples were submitted to LabWest in Perth for a standard exploration suite of 48-element plus the REEs analysis suite, making for 66-elements. Samples were collected within a 1m radius of the initial sample point.
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g., 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	Industry-standard sampling practices for chip sampling adopted
Drilling techniques	 Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	No drilling performed
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. 	No drilling performed
	 Measures taken to maximise sample recovery and ensure representative nature of the samples. 	No drilling performed
	 Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	No drilling performed
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	All samples were lithologically logged





Criteria	JORC Code explanation	Comment
	 Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. 	No drilling performed
	 The total length and percentage of the relevant intersections logged. 	No drilling performed
NSub- sampling techniques and sample	 If core, whether cut or sawn and whether quarter, half or all cores taken. 	No drilling performed
preparation	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	No drilling performed
	 For all sample types, the nature, quality and appropriateness of the sample preparation technique. 	Samples were dried and pulverised
	 Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 	The laboratory inserted certified standards into the sample stream as part of their QA process. No field duplicates or certified blank samples were included.
	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.	The sampling practices were suitable for the stage of exploration.
	 Whether sample sizes are appropriate to the grain size of the material being sampled. 	Sample sizes were considered appropriate for the grain size of the sampled material.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	A certified laboratory, LabWest was used to analyse the submitted chip samples. The laboratory techniques below are for all samples submitted to LabWest and are considered appropriate for the style of mineralisation
	□ 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.	No such tools employed
	 Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established. 	Laboratory standards and blank samples were inserted at regular intervals, and some duplicate samples were taken for QC checks.
Verification of sampling and	 The verification of significant intersections by either independent or alternative company personnel. 	No verification was undertaken
assaying	□ The use of twinned holes.	No hole twinning was undertaken





Criteria	JORC Code explanation	Comment
	□ Discuss any adjustment to assay data.	No sampling identified
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. 	No drilling performed
	 Specification of the grid system used. 	MGA94 Zone 50
	 Quality and adequacy of topographic control. 	SRTM data was used to provide topographic control
Data spacing and distribution	 Data spacing for reporting of Exploration Results. 	No drilling performed
	□ 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.	No drilling performed.
	 Whether sample compositing has been applied. 	No drilling performed
Orientation of data in relation to geological structure	□ Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	No mineralisation identified to date. Sampling was taken as close as possible to points of interest identified from the interpretation of the aerial photography, and satellite and magnetic imagery before entering the field
	 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. 	No drilling performed
Sample security	☐ The measures taken to ensure sample security.	The samples remained with company personnel and delivered directly to LabWest in Perth.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits were conducted





Section 2 Reporting of Exploration Results - Morrissey REE and Li Project

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

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Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The Morrissey Project comprises one granted Exploration License E09/2482 for an area of 5 blocks (roughly 18km²). The tenement is in good standing and has no Native Title encumbrances
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenement is held by Bow Island Resources, a wholly owned subsidiary of Summit Minerals.
Exploration done by other parties	· Acknowledgment and appraisal of exploration by other parties.	The Geological Survey of Western Australia identify the target pegmatite as a being rare earth bearing on the 250,000 Mt Phillips Geological Sheet (SG5002). Unreported drilling was identified during the field trip, and every endeavour will be made to identify who and when the work occurred.
Geology	 Deposit type, geological setting and style of mineralisation. 	The Thirty-Three Supersuite is identified as a fertile parent granite with the potential to generate LCT Pegmatite swarms. The presence of lithium mineralisation has been confirmed by several companies in chip sampling and drilling on the adjacent property, the Malinda Lithium Project, which is currently owned by Red Dirt Metals.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: 	No drilling performed
	o easting and northing of the drill hole collar	MGA94 Zone 50 co-ordinates were used
	o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	SRTM data was used for elevation control
	o dip and azimuth of the hole	No drilling performed





Criteria	JORC Code explanation	Commentary
	o down hole length and interception depth	No drilling performed
	o hole length.	No drilling performed
	· 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.	Not applicable as no drilling performed
Data aggregation methods	· In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.	The documented TREO results support concepts developed in identifying the opportunity presented at Morrissey and guiding future exploration.
	· 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.	TREO consists of LREO + HREO LREO Element Oxide Factor Cerium Ce2O3 1.1713 Lanthanum La2O3 1.1728 Neodymium Nd2O3 1.1664 Praseodymium Pr2O3 1.1703 Samarium Sm2O3 1.1596
		HREO Element Oxide Factor Europium Eu2O3 1.1579 Gadolinium Gd2O3 1.1526 Terbium Tb2O3 1.151 Dysprosium Dy2O3 1.1477 Holmium Ho2O3 1.1455 Erbium Er2O3 1.1435 Thulium Tm2O3 1.1421 Ytterbium Yb2O3 1.1387 Lutetium Lu2O3 1.1371
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Yttrium Y2O3 1.2699 Not used
Relationship between mineralisation widths and intercept lengths	· These relationships are particularly important in the reporting of Exploration Results.	No mineralisation identified
	· If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	No drilling performed





Criteria	JORC Code explanation	Commentary
	· If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').	No drilling performed
Diagrams	· Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	The included schematics characterise the anomalous distribution of reported TREO, lithium, and various base metal values sufficiently for the reader to comprehend the message being delivered.
Balanced reporting	· Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.	The reporting level is appropriate for first pass exploration. The results obtained justify further work on the project. Results contained in the presented section are considered representative.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Not relevant
Further work	The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).	Further sampling is already being considered to follow up on these early results to improve the context of understanding and reporting.
	· Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	









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