

## ASX ANNOUNCEMENT

22<sup>nd</sup> July 2024

### Rock chip samples of 71% Cu and 874g/t Ag: Cu-Ag-Au-Mo mineralisation pervasive at Khartoum

#### Highlights:

- Surface rock chip samples of up to 71% Cu and 874g/t Ag demonstrate previously unknown copper and precious metals potential at the Khartoum Project in northern Queensland:
  - High grade copper values include 10.9% Cu, 9.11% Cu, 8.6% Cu and 4.16% Cu
- EVR's rock chip database has been applied to generating porphyry targets with elevated copper and silver mineralisation, accompanied by elevated molybdenum assays, highlighting porphyry-style mineralisation
- Pervasive copper mineralisation in the wider district may also be indicative of larger underlying copper mineralisation
- Geophysical data has been assessed to identify specific target zones, and five new high priority targets have been identified, with further IP to be conducted on these areas before drilling

**EV Resources Limited** (ASX:EVR) ("EVR", or the "**Company**"), has identified critical areas in its Khartoum Project for possible high grade Copper-Molybdenum-Silver porphyry mineralisation.

Compilation of all present and historic surface geochemical data has resulted in a rich database that EVR is now exploring. An early standout are the copper-(Cu) silver (Ag) assays of the Project. Up to 71% Cu and 874g/t Ag occurring on the project.

Adrian Paul, Executive Director, EV Resources observed: *"Despite the very large number of historic mines, very little exploration has been carried out in the area. Our surface geochemistry compilation indicates that Cu-Ag-Au-Mo mineralisation is pervasive, strongly suggesting that porphyry mineralisation is very likely to occur here. EV Resources is now on the hunt for that porphyry at Khartoum."*

#### Khartoum Project geological setting

The Khartoum Project consists of five exploration permits covering an area of 98km<sup>2</sup>, and is located approximately 100km southwest of Cairns, Queensland.

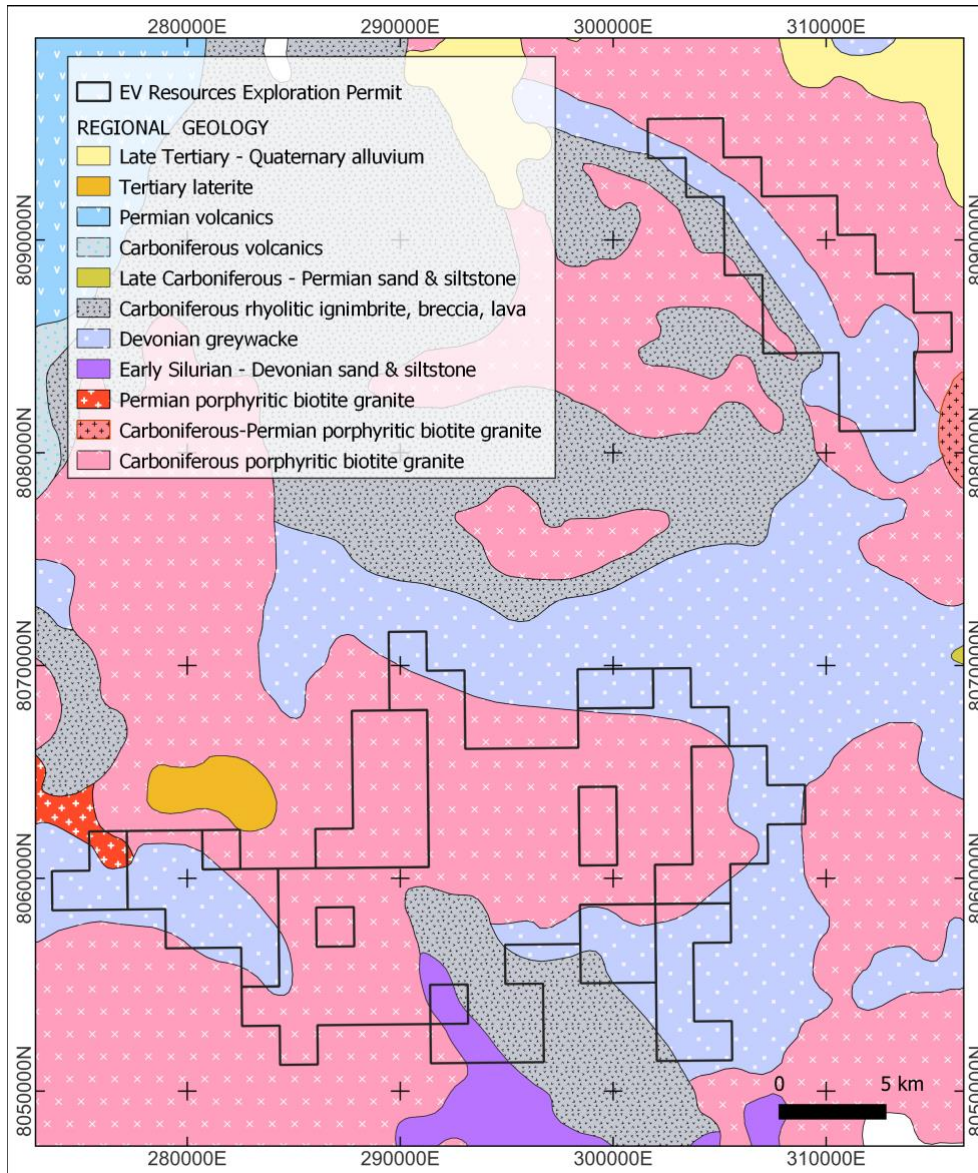
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The project sits within the Mossman Origin containing the East Tasmanide tract of Devonian to Cretaceous aged porphyritic intrusives. These are associated with the island-arc/continental-arc convergent plate boundary zone that dominates the eastern Australia tectonic setting.

Located in the Central Subcrust of Cambrian to Cretaceous aged rocks, the Khartoum leases cover areas of porphyritic granites are of the same age range as known porphyry deposits of this tract (see **Figure 1**).

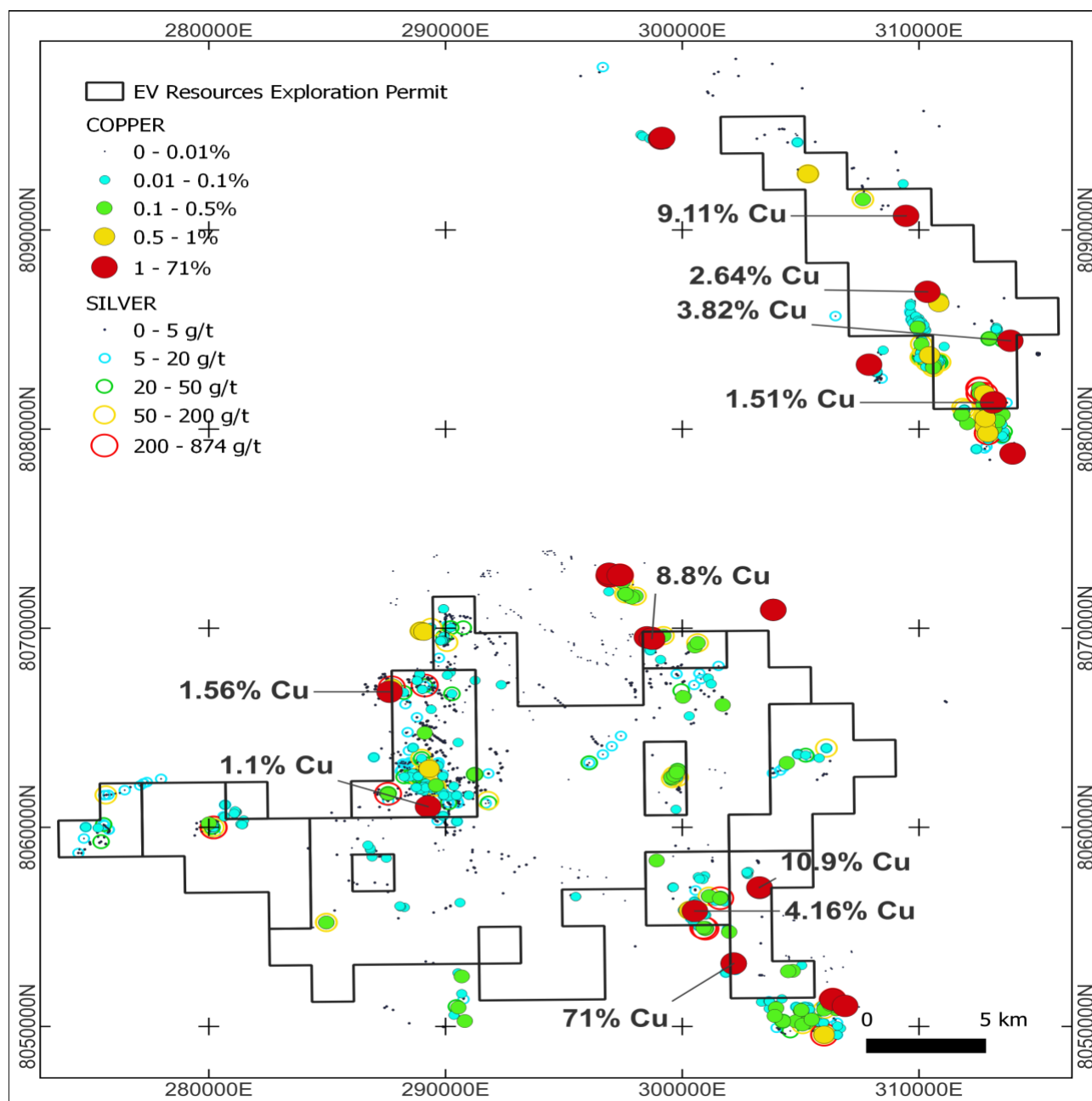
**Figure 1 Summary regional geology of the Khartoum Project area. Projection is GDA94, MGA Zone 55 (after Geological Survey of Queensland, 2012).**



## Mineralisation style being hunted

The area is considered to be highly prospective for magmatic arc porphyry and epithermal Cu-Mo-( $\pm$ Ag  $\pm$ Au) style mineralisation.<sup>1</sup> This includes a wide range of styles: porphyry Cu-Mo-Ag-Au intrusives, epithermal Au-Ag quartz veins, REE pegmatites, replacement skarns, and polymetallic breccias. While the initial focus will be on the porphyry intrusive style, all of these styles will be tested for.

**Figure 2 Summary plot of surface geochemistry for Copper and Silver at the Khartoum Project**



<sup>1</sup> Bookstrom, A.A., Glen, R.A., Hammarstrom, J.M., Robinson, G.R., Jr., Zientek, M.L., Drenth, B.J., Jaireth, S., Cossette, P.M., and Wallis, J.C., 2014, Porphyry copper assessment of eastern Australia: U.S. Geological Survey, Scientific Investigations Report 2010-5090-L, 160 p. and GIS data, <http://dx.doi.org/10.3133/sir20105090L>

## Geochemical database shows extensive, high grade copper and silver anomalism

The Company's geochemical database shows extensive areas that exhibit copper (Cu), molybdenum (Mo), and silver (Ag) anomalism. This suite of metals is usually indicative of a Cu-Mo-Ag porphyry being present.

While some of these anomalies are spectacular (copper ranges up to 71% (710,000 ppm), silver to 874 g/t and molybdenum up to 2,360ppm (*see the **Figure 2** above for the distribution of copper and silver samples*), it is the spatial association which is particularly exciting in the search for large porphyry systems.

Gold is noted in the area and is usually of the low tenor (<1g/t) that is typical for porphyry systems.

## Geophysical data focusses search

Airborne aeromagnetic and radiometric data over the project area has identified a number of exciting leads.

These data, combined with the Company's geochemistry database, have led to the identification of five high priority Cu-Mo-Ag targets (see **Figure 3** below):

1. Hayes Creek porphyry intrusive (see below)
2. Geebung porphyry intrusive – a major demagnetised zone bracketed by extensive crustal-plumbing faults
3. Ballast porphyry intrusive – on the edge of an intrusive complex along which multiple old Cu workings are present
4. Veteran Fault Zone – associated with historic Cu workings and high surface geochemistry
5. Gladstone Fault zone – associated with historic Cu workings and high surface geochemistry. The target had been previously highlighted by a USGS study

The Hayes Creek porphyry target is of highest priority.

The magnetic signature indicates a magnetic “hole” within extruded volcanics and is compared to a similar geometry seen at the Red Chris Porphyry orebody, a copper, gold, silver, lead, zinc, and molybdenum deposit. Red Chris has an estimated Measured and Indicated Resource of 1.035 Bt @ 0.35 % Cu, 0.35 g/t Au, and 1.14g/t Ag based on a 0.3 % Cu cutoff <sup>2</sup>.

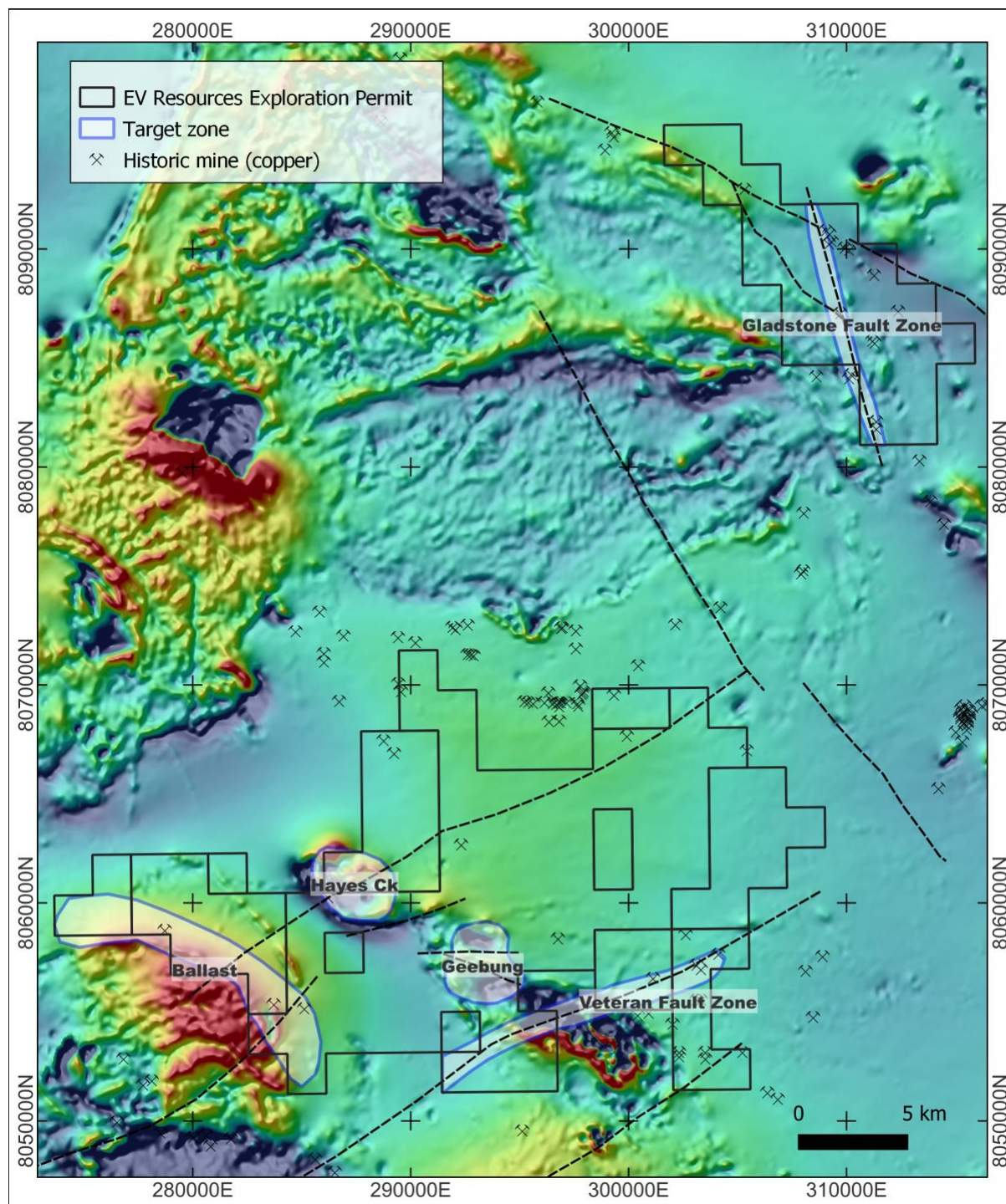
See **Figure 4** below where the diagram compares the magnetics of this deposit to that seen over the Hayes Creek target.

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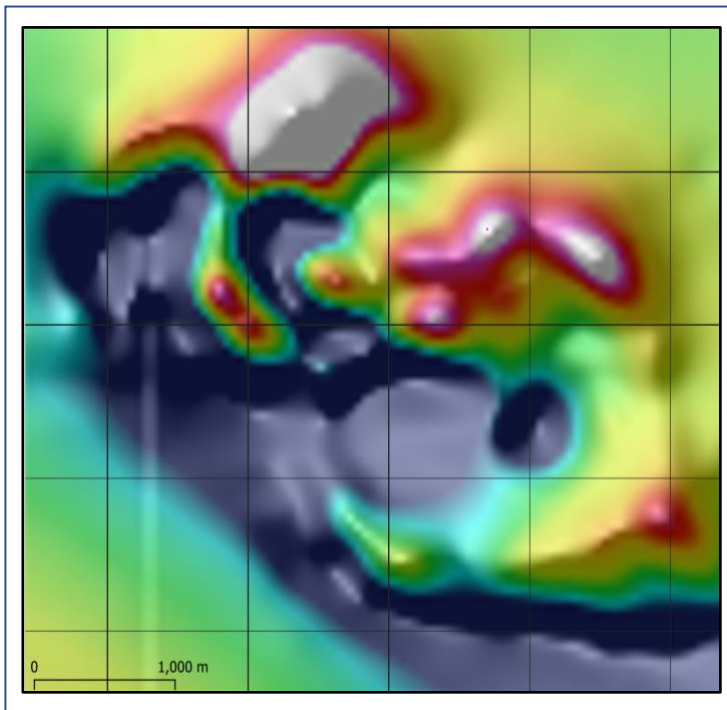
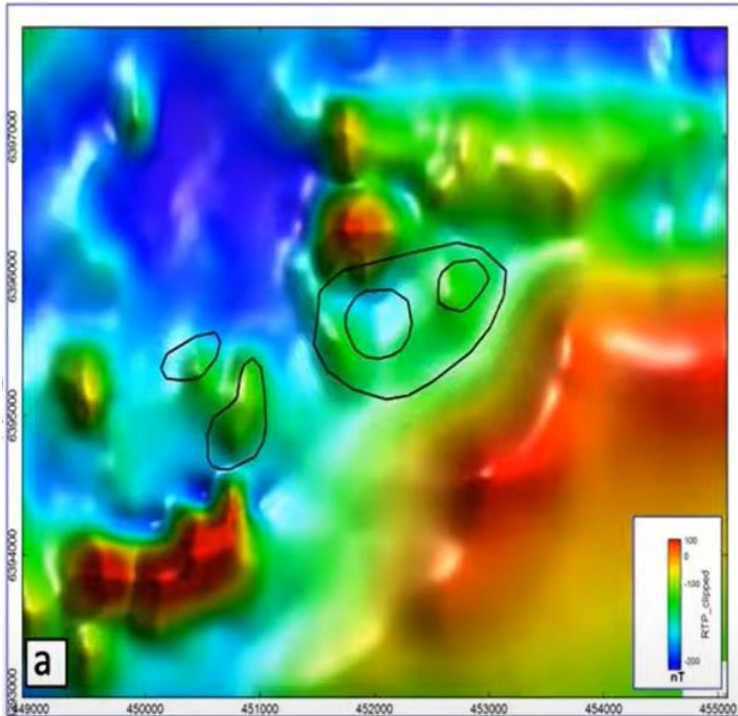
<https://minfile.gov.bc.ca/Summary.aspx?minfilno=104H++005#:~:text=MINFILE%20Mineral%20Inventory&text=The%20Red%20Chris%20porphyry%20copper,terrain%20of%20the%20Tanzilla%20Plateau.>



**Figure 3** Image of the aeromagnetic data over the Khartoum Project. Note the large number of historic copper workings. Data is from open sources. It was flown on 200m spaced east-west flight lines.



**Figure 4** Magnetics over the Red Chris porphyry in British Columbia which is outlined in 'a'. The images are at the same scale. After Tosdal, R. and Witherly, K., 2018 "Geophysical Response and Geological Reality for Porphyry Cu (Mo-Au) Deposit", Economic Geology & Geophysics Conference Videos



## Proposed work going forward at Khartoum

Planning is underway to assess these, and other targets already defined to:

1. Confirm the historic sampling results by undertaking controlled, systematic resampling and expanding the sampling in the main areas of interest to gauge possible footprint size.
2. Undertake a full geophysical interpretation of the Project area with a focus on the main porphyry and epithermal styles associated with island arc geology.
3. Assess targets suitable for rapid testing with reconnaissance IP surveys
4. Carry out preliminary drilling to test the interpretation before committing to methodical drill testing.

## EVR's Flagship Projects in Peru

EVR is undertaking a significant reappraisal of the geological model and the potential scale of the Parag project following the success of its recent drill programme at the high-grade copper-molybdenum project in Peru (EVR 70%). A Geophysics campaign commences in the first half of July 2024, with magnetometry and induced Polarisation Studies expected to assist in confirming drill targets for the large copper-molybdenum porphyry system.

Concurrently, at the Don Enrique (EVR 50%) EVR has prepared a drilling programme for later in 2024. This will involve an initial 2,000 metre diamond drilling programme to test a chargeability anomaly that is up to 1500 metres in length, averages approximately 300 metres in width, and is open at the 500-metre depth level which was the extent of the survey.

## Other EVR Projects

Directors will continue to review EVR's other assets with a view to maximising shareholder value, including the company's lithium projects.

In Austria, EV Resources holds an 80% interest in the Weinebene and Eastern Alps Lithium Projects. These projects are located immediately adjacent to European Lithium's (ASX EUR) Wolfsberg deposit, hosting a JORC compliant 10.98MT @ 1.00% Li<sub>2</sub>O resource.

In Australia, EV Resources owns the Shaw River Project, located 220km from Port Hedland, and is strategically located within 80km radius of three major lithium developments Wodgina Mine, Pilgangoora Mine and Marble Bar Lithium Project.

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*This ASX announcement was authorised for release by the Board of EV Resources Limited.*

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## Forward Looking Statement

Forward Looking Statements regarding EVR's plans with respect to its mineral properties and programs are forward-looking statements. There can be no assurance that EVR's plans for development of its mineral properties will proceed as currently expected. There can also be no assurance that EVR will be able to confirm the presence of additional mineral resources, that any mineralisation will prove to be economic or that a mine will successfully be developed on any of EVR's mineral properties. The performance of EVR may be influenced by a number of factors which are outside the control of the Company and its Directors, staff, and contractors.

These statements include, but are not limited to statements regarding future production, resources or reserves and exploration results. All of such statements are subject to certain risks and uncertainties, many of which are difficult to predict and generally beyond the control of the company, that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. These risks and uncertainties include, but are not limited to: (i) those relating to the interpretation of drill results, the geology, grade and continuity of mineral deposits and conclusions of economic evaluations, (ii) risks relating to possible variations in reserves, grade, planned mining dilution and ore loss, or recovery rates and changes in project parameters as plans continue to be refined, (iii) the potential for delays in exploration or development activities or the completion of feasibility studies, (iv) risks related to commodity price and foreign exchange rate fluctuations, (v) risks related to failure to obtain adequate financing on a timely basis and on acceptable terms or delays in obtaining governmental approvals or in the completion of development or construction activities, and (vi) other risks and uncertainties related to the company's prospects, properties and business strategy. Our audience is cautioned not to place undue reliance on these forward-looking statements that speak only as of the date hereof, and we do not undertake any obligation to revise and disseminate forward-looking statements to reflect events or circumstances after the date hereof, or to reflect the occurrence of or non-occurrence of any events.

## Competent Person's Statement

The details contained in this report that pertain to exploration target generation based upon information compiled by EV Resources and Mr Marcus Flis, an independent consultant to EV Resources. Mr Flis is a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM) and has sufficient experience in the activity which he is undertaking to qualify as a Competent Person as defined in the December 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). Mr Flis consents to the inclusion in the report of the matters based upon his information in the form and context in which it appears.



## JORC Code, 2012 Edition – Table 1 report

### Section 1 Sampling Techniques and Data

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

Criteria	Commentary
<i>Sampling techniques</i>	<p>Samples were collected by a range of previous explorers that are likely to vary in sampling methodology</p> <p>Rock chip samples of selected zones of outcrop or mullock from workings were collected based on geological determination. It is likely that some samples were collected on visual evidence of high grade.</p> <p>All samples were between 2-3kg and were individually labelled and geologically documented.</p>
<i>Drilling techniques</i>	N/A
<i>Drill sample recovery</i>	N/A
<i>Logging</i>	Sample sites were described and lithologies identified in the field.
<i>Sub-sampling techniques and sample preparation</i>	<p>Standard laboratory processing is to dry the sample, if required, then crushed and pulverised to 85% passing 75µm. This is considered to appropriately homogenise the sample to allow subsampling for the various assay techniques.</p> <p>Use of Certified Reference Material was sporadic between investigators, though the labs internal QA/QC monitored sample preparation and assaying accuracy.</p> <p>Sample sizes are industry standard and considered appropriate.</p>
<i>Quality of assay data and laboratory tests</i>	<p>Rock chip analysis was undertaken by ALS Laboratories in Brisbane, Australia. Samples were sorted, weighed, dried, crushed, and pulverised to 80% passing -75µm.</p> <p>Sn, W and In and a standard suite of RRE's plus Ga and Ge were analysed by Lithium Borate Fusion with ICP-MS finish (code ME-MS81). Over limit Sn values were analysed by Sn-XRF15b. Ag, As, Cd, Co, Cu, Li, Mo, Ni, Pb, Sc, Tl and Zn were analysed by 4 acid digest and ACP-AES finish (code ME-aACD81)</p> <p>Laboratory QA/QC was undertaken.</p>
<i>Verification of sampling and assaying</i>	<p>Rock chip data was collected and documented by EVR and previous explorers' staff geologists in the field and reported. Data has been captured in a digital database.</p> <p>Assay data was not adjusted.</p>
<i>Location of data points</i>	<p>Rock chip locations were surveyed using handheld GPS to an accuracy of approximately ±5m.</p> <p>The grid used was MGA Zone 55, datum GDA94.</p>
<i>Data spacing and distribution</i>	<p>Samples were not collected on a regular grid, but opportunistically as outcrop presented itself.</p> <p>No sample compositing was applied</p>
<i>Orientation of data in relation to geological structure</i>	Rock samples were taken opportunistically without significant consideration to geological directions. As this is a reconnaissance survey this is not considered an issue.
<i>Sample security</i>	<p>Sample chain of custody was managed by the employees of EV Resources for sampling it undertook. All samples were bagged and tied in numbered calico bags, grouped into larger tied polyweave bags in the field. Samples collected in the field were transported by geological staff to the Company's Mt Garnet field base where they were collected by courier and transported directly to the laboratory. All sample submissions were documented via ALS tracking system and all assays reported via email. The procedures used by historic explorers cannot be verified.</p>
<i>Audits or reviews</i>	No audits or reviews were deemed necessary as this work is purely qualitative assaying for first-pass exploration purposes. Critical prospective areas will be resampled by EVR as part of the follow-up.

## Section 2 Reporting of Exploration Results

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

Criteria	Commentary
<i>Mineral tenement and land tenure status</i>	<p>The Khartoum Project comprises EPMs 14797, 19112, 19113, 19114, 19203 and 27892 held by EV Resources Silver Pty Ltd, a 100% subsidiary of EV Resources Limited.</p> <p>All tenements are held 100% by EV Resources Silver Pty Ltd.</p> <p>There are no identified issues with the security of the tenure.</p>
<i>Exploration done by other parties</i>	<p>Geochemical sampling and drilling have been undertaken by a number of exploration companies over the past 40 years. These data are still being assessed.</p>
<i>Geology</i>	<p>EV Resources is targeting tin, tungsten, base metal, and REE mineralisation within the Khartoum Project. The Project covers O'Brian Supersuite granites of the early-middle Palaeozoic Hodgkinson Province. The O'Briens Creek Supersuite in the region consists of highly fractionated characteristically pale pink to white, alkali-feldspar-rich biotite granites, leucogranites and microgranites, some of which are porphyritic and some of which are miarolitic. O'Briens Supersuite has intruded Early Devonian-Late Devonian Hodgkinson Formation, comprising rhythmically interbedded fine to medium-grained arenite and mudstone (locally phyllitic), minor conglomerate, minor chert and metabasalt, and rare limestone. Style of mineralisation being tested by sampling is greisen and vein-style tin-tungsten mineralisation in granites and fissure vein-style tin, tungsten and base metal mineralisation within sediments.</p>
<i>Drill hole Information</i>	N/A
<i>Data aggregation methods</i>	<p>No averaging or aggregating of results was undertaken. Individual results have been reported.</p> <p>Multi-element results (REE) are converted to oxide (REO) using element-to-oxide stoichiometric conversion factors as follows: La x 1.1728 → La<sub>2</sub>O<sub>3</sub>; Ce x 1.2284 → CeO<sub>2</sub>; Pr x 1.1703 → Pr<sub>6</sub>O<sub>11</sub>; Sm x 1.1596 → Sm<sub>2</sub>O<sub>3</sub>; Eu x 1.1579 → Eu<sub>2</sub>O<sub>3</sub>; Gd x 1.1526 → Gd<sub>2</sub>O<sub>3</sub>; Tb x 1.1762 → Tb<sub>4</sub>O<sub>7</sub>; Dy x 1.1477 → Dy<sub>2</sub>O<sub>3</sub>; Ho x 1.1455 → Ho<sub>2</sub>O<sub>3</sub>; Er x 1.1435 → Er<sub>2</sub>O<sub>3</sub>; Tm x 1.1421 → Tm<sub>2</sub>O<sub>3</sub>; Yb x 1.1387 → Yb<sub>2</sub>O<sub>3</sub>; Lu x 1.1371 → Lu<sub>2</sub>O<sub>3</sub>; Sc x 1.5338 → Sc<sub>2</sub>O<sub>3</sub>; Y x 1.2699 → Y<sub>2</sub>O<sub>3</sub>.</p> <p>TREO values are aggregated as follows: CeO<sub>2</sub> + Dy<sub>2</sub>O<sub>3</sub> + Er<sub>2</sub>O<sub>3</sub> + Eu<sub>2</sub>O<sub>3</sub> + Gd<sub>2</sub>O<sub>3</sub> + Ho<sub>2</sub>O<sub>3</sub> + La<sub>2</sub>O<sub>3</sub> + Lu<sub>2</sub>O<sub>3</sub> + Nd<sub>2</sub>O<sub>3</sub> + Pr<sub>6</sub>O<sub>11</sub> + Sm<sub>2</sub>O<sub>3</sub> + Tb<sub>4</sub>O<sub>7</sub> + Tm<sub>2</sub>O<sub>3</sub> + Y<sub>2</sub>O<sub>3</sub> + Yb<sub>2</sub>O<sub>3</sub>.</p> <p>No metal equivalents have been used.</p>
<i>Relationship between mineralisation widths and intercept lengths</i>	N/A
<i>Diagrams</i>	Refer to the body of the announcement for all diagrams.
<i>Balanced reporting</i>	Assay results are reported in total, with no cutoff grade applied.
<i>Other substantive exploration data</i>	All meaningful & material exploration data has been reported.
<i>Further work</i>	<p>Exploration within the Khartoum Project tenements is at an early stage. EV intends to undertake more systematic, detailed exploration work over higher-priority targets, including mapping and channel sampling along the extent of outcrop that has previously returned elevated results.</p> <p>If the results of rock chip values are of sufficient grade and extent of outcropping target is deemed significant, further appraisal of prospects will be by drilling.</p>