

14 May 2024

ASX Announcement

# High Resolution Airborne Survey Targeting Alkaline Intrusive's

## <u>Key points</u>

- **Critical Minerals Explorer:** Corella Resources rapidly progressing towards becoming a producer of kaolin and HPA and has expanded its exploration and land package to include REE's and other pegmatite-hosted critical minerals in its strategically-held western Yilgarn tenements.
- **New Geological model:** The Company has recently pegged additional tenements on the back of a desktop-based targeting exercise which defined a previously unrecognised complex suite of intrusives and pegmatites with the potential to host REE's, Lithium and High Purity Quartz mineralisation.
- **Field-based proof of geological concept:** Recently completed field reconnaissance has demonstrated on-ground presence of the interpreted pegmatites with multiple outcropping targets successfully identified.
- New high-resolution Airborne Magnetics and Radiometrics survey planned: Based on the confirmation of initial mapping using publicly available, low-resolution magnetics and radiometrics data, the company has engaged Thomsons Aviation to undertake a 7970-line kilometre, high-resolution (50m primary flight line spacing) airborne magnetic, gamma ray spectrometer, radar altimeter for topography anticipated to start at the end of May, 2024.
  - Airborne magnetic data will be used to better resolve the two interpreted sets of pegmatite dykes and other host rocks within the region.
  - The high-resolution survey will also be used to refine the follow-up soil sampling and alkaline intrusion-targeted drilling program.

**High Purity Alumina and critical mineral-focused exploration company Corella Resources Ltd** (ASX:CR9) ("Corella" or "CR9" or the "Company"), is pleased to advise that it has successfully completed several milestones in recent months. The completion of a desktop-based re-interpretation of the project geology was supported by field-based confirmation of the interpreted pegmatites in the region. Based on the outcomes of these results, the company is pleased to announce that it will be undertaking a target-focussed high-resolution airborne magnetics and radiometrics survey over the northern part of the tenement package (See Figure 1) where a number of pegmatites dykes and variably magnetic intrusives have been interpreted and then documented in field. The survey will be critical in helping the company understand the geometry and abundance of the multiple generations of pegmatites which will be matched with their respective compositions.

The survey will be the first of its kind in the area and will provide unprecedented detail of this complex geological region. It is anticipated that the results of the survey will assist further refining of its existing targets prior to follow-up in-field confirmation of rock types and prospects.

Jess Maddren, Corella Resources CEO, commented: "The progress towards kaolin and HPA is progressing smoothly and complemented by some great results from our exploration work focussed on REE's and Pegmatites in the region. I am thrilled with the identification of multiple large pegmatites in the region which helps CR9 progress its aims of delivering a portfolio of critical mineral projects to help support the transition to net zero by 2050".

"With so many positive results obtained from the recent field sampling, it was a logical "next step" to undertake a higher-resolution airborne magnetics and radiometrics survey to help better define the geology in this high potential but underexplored area. We have a busy pipeline of work planned for our HPA-, REE- and Pegmatitefocussed projects over the coming months and I look forward to providing further updates on progress."

#### Planned Airborne Magnetics and Radiometrics Survey

Corella Resources has engaged Thomsons Aviation to undertake an approximately 7970-line kilometre survey at spacings of 50m E-W lines with 500m N-S tie lines. The primary geological trend in the region is N-S. Specifically, the survey will collect multiple sets of geophysical field data including magnetic, radiometric data including K- Th- and U, and high-resolution radar topography. The survey will significantly increase the resolution of the existing datasets which currently consist of 200m flight line data available for public use from the Geological Survey of Western Australia (GSWA).



Figure 1. Map showing planned airborne magnetics survey (blue) overlain on existing low-resolution airborne magnetics data (RTP). CR9 tenements shown outlined in black.

The primary flight line spacing of 50m (See Figure 2) has been selected in order to help detect features including, but not limited to, pegmatite dykes in multiple orientations, intrusion contacts, remnant "screens" of metasediments and greenstones (if present and identified), and other features including paleochannels and other geomorphological features. Based on the recent field work, the timing of the survey has been expedited and is anticipated to start by the end of May, with the final datasets available by the end of June 2024.



Figure 2. Map showing the location of the planned survey with the primary lies oriented E-W and tie lines oriented N-S.

## A New Regional Geological Interpretation

The Corella Resources tenements lie over a part of the Yilgarn, which based on current mapping, is uncharacteristically dominated by granite intrusives with little to no greenstones or other siliciclastic metamorphic basement rocks previously recognized or mapped in the region. A recent desktopbased interpretation of all existing geological and geophysical datasets has been undertaken which has revealed significantly more complexity to the region than has been previously recognised.

Much of the geology has likely been overlooked due to historically low-resolution regional datasets, poor on-ground mapping coverage, simple air photo interpretation of the geology negating detailed documentation of rock types and a general lack of exploration interest in the region due to the inherited assumption that the region is all granitic rocks and therefore not prospective. The prospectivity of the region has, however, increased dramatically with the recent recognition of minerals considered "critical" to the transition to net zero in 2050 including high purity Alumina, REE's, Lithium and High Purity Quartz (Silica).

There is an abundance of well-defined intrusive centers across the Company's extensive tenement package. These are typically characterised by higher than background magnetic signatures. The geological map of the region shows the rocks of the region as granite, but the heterogeneity of the current low-resolution magnetics combined with the lack of historical ground truthing in the region raises concerns as to the inferred simplicity. Further, recent mapping has confirmed an abundance of different granite types, pegmatite types and potentially remnant rafts of metasedimentary host rocks (See Figure 3).



Figure 3. Map showing the regional geological features interpreted from multiple geophysical and geological datasets.

## Field Reconnaissance and Pegmatite Identification

Field reconnaissance to investigate the new regional geological interpretation visually identified multiple pegmatites across the tenements, in-situ photos included in Figures 4.



Figure 4. Photos of pegmatites across the tenements

## <u>Next Steps</u>

Near Term Plans are:

- High Resolution Airborne Survey Targeting Alkaline Intrusive's
- Results from the survey will allow the pegmatite areas to be defined for a soil sampling program in Q3CY24
- The geophysics, soil sampling and analysis program will be used to refine for drill hole targets for the 2024 exploration program and application for co-funding support through the exploration incentive scheme by DEMIRS in Q3CY24 for drilling in Q4CY24

ASX release authorised by the Board of Directors of Corella Resources Ltd.

#### - ENDS -

#### For further information, please contact:

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#### No New Information

Except where explicitly stated, this announcement contains references to prior exploration results and Mineral Resource estimate, all of which have been cross-referenced to previous market announcements made by the Company. The Company confirms that is not aware of any new information or data that materially affects the information included in the relevant market announcements and, in the case of the estimate of Mineral Resource, that all materials assumptions and technical parameters underpinning the results and/or estimate in the relevant market announcements continue to apply and have not materially changed.

#### **Forward-Looking Statements**

This document may contain certain forward-looking statements. Forward-looking statements include but are not limited to statements concerning Corella Resources Ltd's (Corella) current expectations, estimates and projections about the industry in which Corella operates, and beliefs and assumptions regarding Corella's future performance. When used in this document, the words such as "anticipate", "could", "plan", "estimate", "expects", "seeks", "intends", "may", "potential", "should", and similar expressions are forward-looking statements. Although Corella believes that its expectations reflected in these forward-looking statements are reasonable, such statements are subject to known and unknown risks, uncertainties and other factors, some of which are beyond the control of Corella and no assurance can be given that actual results will be consistent with these forward-looking statements.

# Competent Person Statement – Exploration and Geological results

The information in this announcement that relates to exploration and metallurgical results is based on information reviewed, collated, and fairly represented by Mr. Anthony Cormack who is a Member of the Australian Institute of Mining and Metallurgy and the Managing Director of Corella Resources. Mr. Cormack has sufficient experience relevant to the style of mineralisation and type of deposit under consideration, and to the activity which has been undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Cormack consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

# JORC Code, 2012 Edition – Table 1

# Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	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 downhole 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 (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 (e.g. submarine nodules) may warrant disclosure of detailed information.	No drill sample assays have been reported in this release. The airborne magnetics images have been produced from the geological survey of WA 200 or 250m grid of open file surveys.
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 has been reported in this release.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	No drilling has been reported in this release.

Criteria	JORC Code explanation	Commentary
	Measures taken to maximise sample recovery and ensure representative nature of the samples. Relationship between sample recovery and grade/sample bias.	
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.Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.The total length and percentage of the relevant intersections logged.	No drilling has been reported in this release.
Subsamplin g techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality, and appropriateness of the sample preparation technique Quality control procedures adopted for all subsampling stages to maximise representivity of samples. 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.	No drilling has been reported in this release.
Quality of	Whether sample sizes are appropriate to the grain size of the material being sampled. The nature, quality and	No assay data is reported.
assay data and laboratory tests	appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters	

Criteria	JORC Code explanation	Commentary
	used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures	
	adopted and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	
Verification of sampling and assaving	The verification of significant intersections by either independent or alternative company personnel.	No drill sample assays have been reported in this release. Airborne magnetic and Airborne Electromagnetic data were stored and
assaying	The use of twinned holes.	supplied by geological survey of WA.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	
	Discuss any adjustment to assay data.	
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	No drilling has been reported in this release. Any coordinates quoted were recorded in MGA Zone 51 GDA94
	Specification of the grid system used.	
	Quality and adequacy of topographic control.	
Data spacing and	Data spacing for reporting of Exploration Results.	No drilling has been reported in this release. Airborne magnetic survey is a mixture of 200m, 250m lines with the gravity survey at 400m line
distribution	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.	spacing. Reprocessing of three open file magnetic surveys was completed by Southern Geophysics Consultants Pty Ltd comprising of three surveys below:
	Sample compositing.	70625 Southwest 1 MAG RAD B247 Aeroquest Airborne 2011 200 50 090 - 270 Open File   S6485 Mount Marshall MAG RAD 1469 Kevron Geophysics 1997 250 60 000 - 180 Open File   S6883 Mag Iake MAG RAD 1480 Kevron Geophysics 1997 250 60 000 - 180 Open File
Orientation	Whether the orientation of sampling	No drilling has been reported in this release.
relation to	possible structures and the extent to	West line direction.

Criteria	JORC Code explanation	Commentary
geological structure	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.	
Sample Security	The measures taken to ensure sample security.	No drill sample assays have been reported in this release.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No drill sample assays have been reported in this release.

# Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement	Type, reference name/number, location and ownership including	The Company owns 100% of the following tenements and tenement applications.
tenement and land tenure status	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.	TenementionProjectStatusHoldersCommenceExpiryCurrent AreaApplication AreaGant AreaF705514TampuLiveHpaa Py,Ltd.5-May-2422 BL22 BL22 BLF705515KalannieDeadHpaa Py,Ltd.7-Sep-206-Sep-2511 BL11 BL11 BLF7055216WittshireLiveHpaa Py,Ltd.3-JuL-192-JuL-2412 BL12 BL12 BLF7055215TampuLiveHpaa Py,Ltd.3-JuL-2412 BL12 BL12 BL12 BLF7055235TampuLiveHpaa Py,Ltd.27-Oct-2116 - BL24 BL24 BL24 BLF7055382TampuLiveHpaa Py,Ltd.19-Sep-2218-Sep-27171 BL171 BL171 BLF7055382TampuLiveHpaa Py,Ltd.19-Sep-2218-Sep-2710 BL30 BL30 BLF7055382TampuLiveHpaa Py,Ltd.19-Sep-2218-Sep-2710 BL30 BLF7055382TampuLiveHpaa Py,Ltd.19-Sep-2218-Sep-2710 BL30 BLF706579PendingHpaa Py,Ltd.19-Sep-2218-Sep-27191 BL11 BLF7065592PendingHpaa Py,Ltd.191 BL191 BL191 BL
		known impediments to exploration or mining exist.

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Corella's tenure in the Yilgarn Region of Western Australia has had no known previous alkaline intrusive exploration completed to date.
Geology	Deposit type, geological setting and style of mineralisation.	The project is dominated by lateritised felsic intrusive basement of the Murchison Terrane covered by Tertiary aeolian and alluvial/colluvial sediments. The basement has been intruded by dolerite dykes and quartz veins.
Drillhole information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:	N/A
	easting and northing of the drillhole collar	
	elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar	
	dip and azimuth of the hole	
	downhole 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.	
Data aggregatio n 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.	N/A
	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.	

Criteria	JORC Code explanation	Commentary
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisati on widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be	N/A
lengins	reported. If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').	
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 drillhole collar locations and appropriate sectional views.	Refer to the appropriate figures and tabulations of the results being reported in the body of this report.
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 to avoid misleading reporting of Exploration Results.	N/A
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	No other substantive exploration data is available.
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).	The Company plans to complete further development work for alkaline intrusives including pegmatites at the Tampu Project, including soil sampling and drilling.

Criteria	JORC Code explanation	Commentary
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	