



Savannah Resources Plc / Index: AIM / Epic: SAV / Sector: Mining

24 April 2014

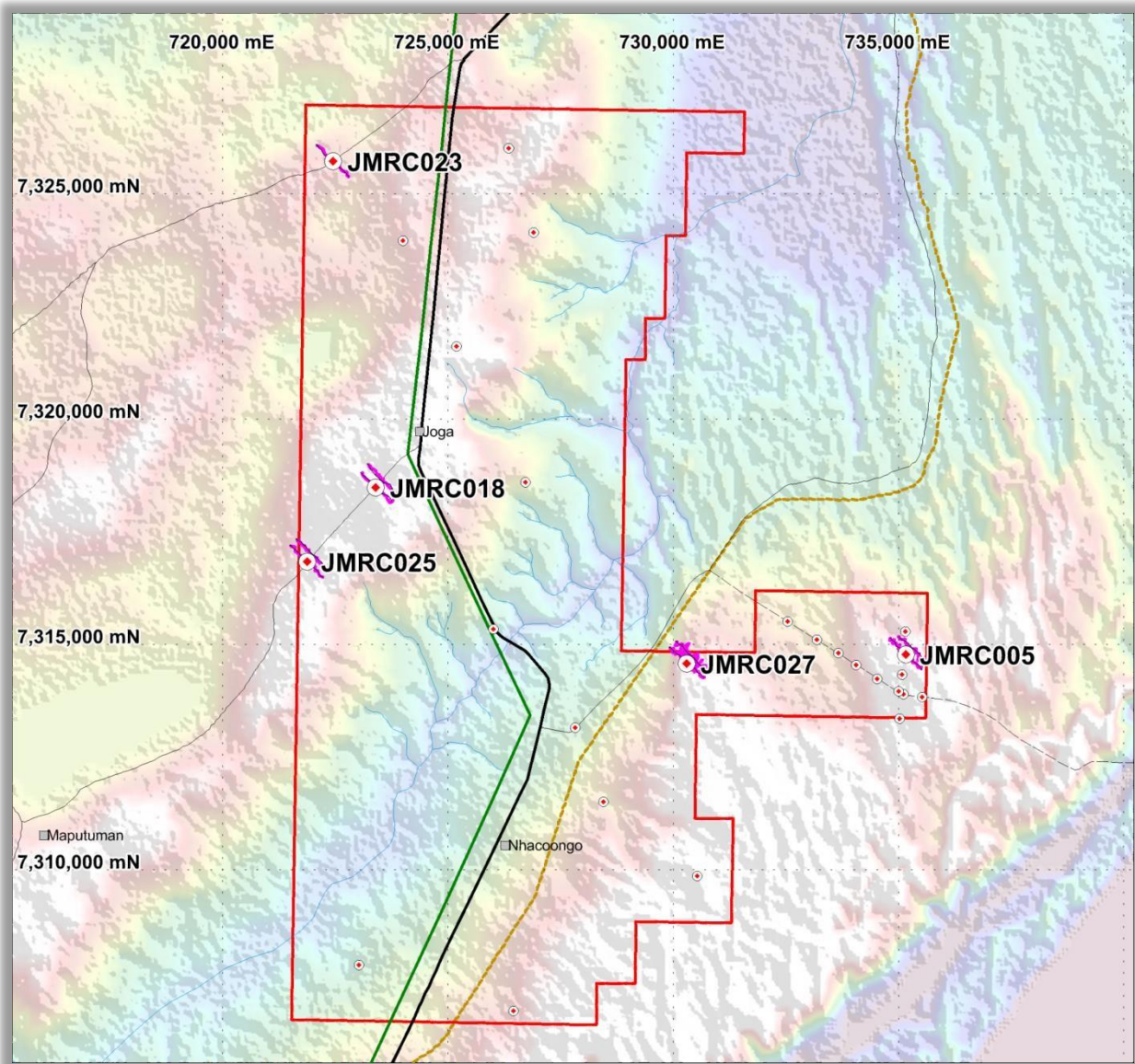
**Savannah Resources Plc**  
**Ground Magnetic Test Survey Successful at Jangamo Project**

Savannah Resources Plc (AIM: SAV) announces that it has received positive results from its ground magnetic test survey at its highly prospective 180km<sup>2</sup> Jangamo heavy mineral sands ('HMS') project ('Jangamo' or the 'Project'), located in a world-class mineral sands province in southern Mozambique.

**Highlights:**

- Ground magnetic test programme completed and positive results returned, underpinning potential to host a major HMS deposit in world class province
- Results demonstrate that it is possible to detect the geophysical signature of the HMS deposits using an airborne platform, to rapidly advance and lower cost of the Project
- Heliborne magnetic and radiometric survey planned to commence first half of May 2014 by to define the extent of the HMS mineralised system and any re-worked strand lines, which are likely to carry higher grades
- 2014 exploration programme well underway, with the second scout drilling programme planned second half of May 2014

Savannah's CEO, David Archer said, "The success of the ground magnetic test programme over the anomalous drill holes returned from the scout drilling programme is very important to the overall speed and cost of the exploration programme for the Jangamo project. The heliborne magnetic survey will help us define the overall mineralised system and more importantly any potential re-worked strand lines, which will carry higher grade HMS. The Project is now poised for further positive results as our 2014 exploration programme is rolled out"



**Figure 1 – Savannah Resources Plc, Jangamo Heavy Mineral Sands Project in Mozambique. Tenement outline shown in red on background image of SRTM. Drill holes selected for testing are labelled.**

### Ground Geophysics Test Programme

Ground Total Magnetic Intensity ('TMI') and Gamma Ray Spectrometer (K, U, Th and Total Count) readings have been acquired along 1km traverse lines over JMRC005, 018, 023, 025, 027 which have returned positive results for HMS in the recent sample analysis. The main aim of the surveys was to test the magnetic and radiometric signature of HMS over selected drill sites with the view to designing a larger airborne survey that will help to map the deposits and guide drilling and further exploration.

The results of the ground TMI surveys show:

- TMI anomalies with amplitudes between 2 and 17 nT have been detected from shallow sources near the test drill holes which are most likely as a result of HMS in the sands.
- The strongest responses are observed from holes JMRC005 and JMRC027, both of which are positioned on the eastern side of the tenement. Both anomalies are associated with (relatively) shallow and strongly magnetic sources.

- All the TMI profiles show coherent anomalies from shallow sources away from the test holes that may be considered targets for HMS.

The results of the ground spectrometer survey show:

- Variations in the radiometric signal are associated with the thorium channel, and possibly to a lesser degree, the uranium channel response.
- The strongest response was seen at JMRC005 with a thorium anomaly that was approximately three times background. The anomaly was coincident with the strongest TMI anomaly from a shallow source.

The data acquired during the field campaign shows that it is possible to detect the geophysical signature of the HMS deposits using an airborne platform, providing that the correct data density and resolution are selected. Based on these findings it was concluded that the use of a heliborne AMAG / RAD platform for any follow-up geophysical surveys is the preferred option using the contractors New Resolution Geophysics ('NRG');

- NRG offers a heliborne platform which flies slower than the fixed wing platforms resulting in higher data density.
- NRG use the Radiation Solutions RS-500 spectrometer at a sample rate of 2Hz providing readings at 20m spacing.
- NRG sample the magnetics at 20Hz sample rate providing readings at 2m spacing along line.

Savannah has contracted NRG to complete the heliborne magnetic and radiometric survey with the work scheduled to commence in the first half of May 2014. This survey will aid significantly in outlining the extent of the mineralised system and importantly any re-worked strand lines which are likely to carry higher grade HMS.

### **Summary of Geochemistry Testwork Completed to date**

The scout drilling programme completed in 2013 was the first step in Savannah's exploration programme to thoroughly examine the mineral sands potential of the Jangamo tenement. This was a first pass, scout drilling programme and was designed to broadly test the Jangamo license area and confirm the presence of heavy minerals.

The 27 holes drilled achieved this aim and the initial, low cost characterisation of the holes via XRF analysis was released to the market on 17 February 2014. In this release, results from all 27 holes drilled were announced, while detailed, metre by metre results from 18 holes were given. Only those holes that recorded results >0.5% TiO<sub>2</sub> over 12m with no internal dilution were reported on in the release (see the note at the end of the assays table on page 12 of release dated 17 February 2014). These criteria applied to 18 of the 27 holes, therefore these holes were included in the table in Appendix 3 of the release. Nine holes did not meet these criteria and were not included in the table in Appendix 3 of the release.

From the 18 holes with anomalous TiO<sub>2</sub> over widths of >12m from the XRF analysis, five of the better holes were selected for detailed analysis for total heavy minerals ('THM') percentages. These results were released on 13 March 2014.

From these five holes, one hole, JMRC005 was selected for further detailed analysis to determine zonation of the mineralisation. These results were released on 17 April 2014. The compositing of 3m intersections for hole JMRC005 was designed to give some idea as to zonation of the mineralisation downhole. It showed generally reducing levels of slimes from surface which is good and valuable news. It also showed increasing THM percentages from surface to total depth. The hole finished with very strong THM levels which is also seen to be very encouraging.

Savannah is looking to complete a series of tests in coming weeks to determine the actual proportions of mineral species (ilmenite, rutile, zircon etc) in selected sections of the drill holes. In addition, given the very positive results from the analysis of individual 3m composite samples from JMRC005, further analysis of individual 3m composites from other mineralised holes will now be completed. The results will be released when available.

While these extra results will provide further valuable information, the results to date confirm the potential for Jangamo to host a major heavy minerals system.

### **Next Steps**

The next steps for the project are:

- Further test work on 2013 scout drilling programme
- Provenance mapping of sand dunes
- Airborne magnetics and radiometrics
- Scout drilling
- Detailed grid drilling
- JORC resource

### **Further Information**

#### **Jangamo Project - Exploration Licence 3617L**

The Jangamo Project is located in Southern Mozambique within a world class mineral sands province and is highly prospective for mineral sands including zircon, ilmenite and rutile. The Project covers an area of 180km<sup>2</sup> along an extensive dune system near the village of Jangamo, about 350km to the North East of the capital, Maputo.

The Project lies immediately to the west of Rio Tinto's ('Rio') Mutamba deposit, one of two major deposits Rio has defined in Mozambique<sup>1</sup>, which collectively have an exploration target of 7-12Bt at 3-4.5% THM (published in 2008). Importantly, exploration work conducted at the Project to date indicates that the geology and geomorphology of Jangamo is similar to that of Rio's adjacent Mutamba deposit.

The Project area features excellent infrastructure with both grid power and the main EN1 highway cutting through the middle of the Project. The nearby town of Inhambane is serviced daily by LAMAir flights out of Maputo and there is excellent logistics in place to support operations, including a small port. The licence is valid until 10 December 2017.

### **Mozambique Mineral Sands**

Based on extensive heavy mineral sand deposits located along most of the 2,700km long coastline, Mozambique has the potential to grow as one of the world's foremost producers of titanium and zirconium minerals. The country is currently the world's fourth largest producer of titanium feedstocks and the fifth largest producer of zircon. Furthermore, in Mozambique, FTSE 250 listed Kenmare Resources Plc has developed the producing Moma Mine, which has a Proved and Probable Ore Reserve of 869Mt @ 3.7% THM and a Measured Indicated and Inferred Mineral Resource of 7.4Bt @ 2.9% THM. Other large deposits, which further underpin Mozambique's prospectivity, include the Chibuto heavy sands deposit, which averages 4% THM and has a reserve of 72Mt of ilmenite, 2.6Mt of zircon and 400,000t of rutile, and Rio's Mutamba and Mutamago deposits, which combined have an exploration target of 7-12Bt at 3-4.5% THM.

### **Competent Person**

Dale Ferguson: The technical information related to Exploration Results contained in this announcement has been reviewed and approved by Mr D. Ferguson. Mr Ferguson has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity to which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Ferguson is a Director of Savannah Resources plc and a Member of the Australasian Institute of Mining and Metallurgy. Mr Ferguson consents to the inclusion in this announcement of such information in the form and context in which it appears.

### **Notes**

<sup>1</sup>[http://www.riotinto.com/documents/ReportsPublications/Titanium mineral sands exploration target in Mozambique.pdf](http://www.riotinto.com/documents/ReportsPublications/Titanium_mineral_sands_exploration_target_in_Mozambique.pdf)

For further information please visit [www.savannahresources.com](http://www.savannahresources.com) or contact:

David Archer	Savannah Resources Plc	Tel: +44 20 7389 5019
James Maxwell / Jennifer Boorer	N+1 Singer	Tel: +44 20 7496 3000
Felicity Edwards/ Charlotte Heap	St Brides Media & Finance Ltd	Tel: +44 20 7236 1177

### **About Savannah**

Savannah Resources Plc (AIM: SAV) is a multi-commodity focussed exploration and development company. Through its 80% ownership of Matilda Minerals Limitada it operates the Jangamo exploration project in a world class mineral sands province in Mozambique. This borders Rio Tinto's Mutamba deposit, one of two major deposits Rio Tinto has defined in Mozambique, which collectively have an exploration target of 7-12Bt at 3-4.5% THM<sup>1</sup> (published in 2008).

Savannah holds two copper projects in the Semail Ophiolite (Oman), the world's largest and best preserved thrust sheet of oceanic crust and upper mantle, provides Savannah with an excellent

opportunity to potentially evolve into a mid-tier copper producer in a relatively short time frame. Small to medium sized Cyprus-type Cu-Au VHMS deposits have been worked in the Semail Ophiolite since ancient times. Modern exploration has identified many small to medium sized high grade copper deposits within the belt which as yet have not been brought into production. Together with its Omani partners Savannah will look for ways to aggregate and explore as many of these opportunities as possible with a view to providing the critical mass for a central operating plant to develop the deposits.

In addition, Savannah owns an effective 20.9% strategic shareholding in Alecto Minerals Plc which provides Savannah with exposure to both the highly prospective Kossanto Gold Project in the prolific Kenieba inlier in Mali and also to the Wayu Boda and Aysid Meketel gold / base metal projects in Ethiopia for which Alecto has a joint venture with Centamin Plc. Under this joint venture, Centamin Plc is committing up to US\$14m in exploration funding to earn up to 70% of each project. The Company is also evaluating additional opportunities to expand its portfolio and geographical focus.

**\*\*ENDS\*\***