



AN ENERGY METALS GROUP

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PROJECT
PORTFOLIO

MINERAL
SANDS
MOZAMBIQUE
(CONSORTIUM
AGREEMENT WITH
RIO TINTO)

COPPER/GOLD
OMAN

LITHIUM
PORTUGAL

Savannah Resources Plc

Metallurgical Testing Provides Further Positive Results Mina do Barroso Lithium Project, Portugal

Savannah Resources plc (AIM: SAV and SWB: SAV) ('Savannah' or the 'Company'), the AIM quoted resource development company, is pleased to announce that Phase 2 metallurgical test work has returned encouraging results at the Mina do Barroso Lithium Project ('Mina do Barroso' or the 'Project'), located in Portugal (**Figure 1**). Further follow up work is now underway.

HIGHLIGHTS:

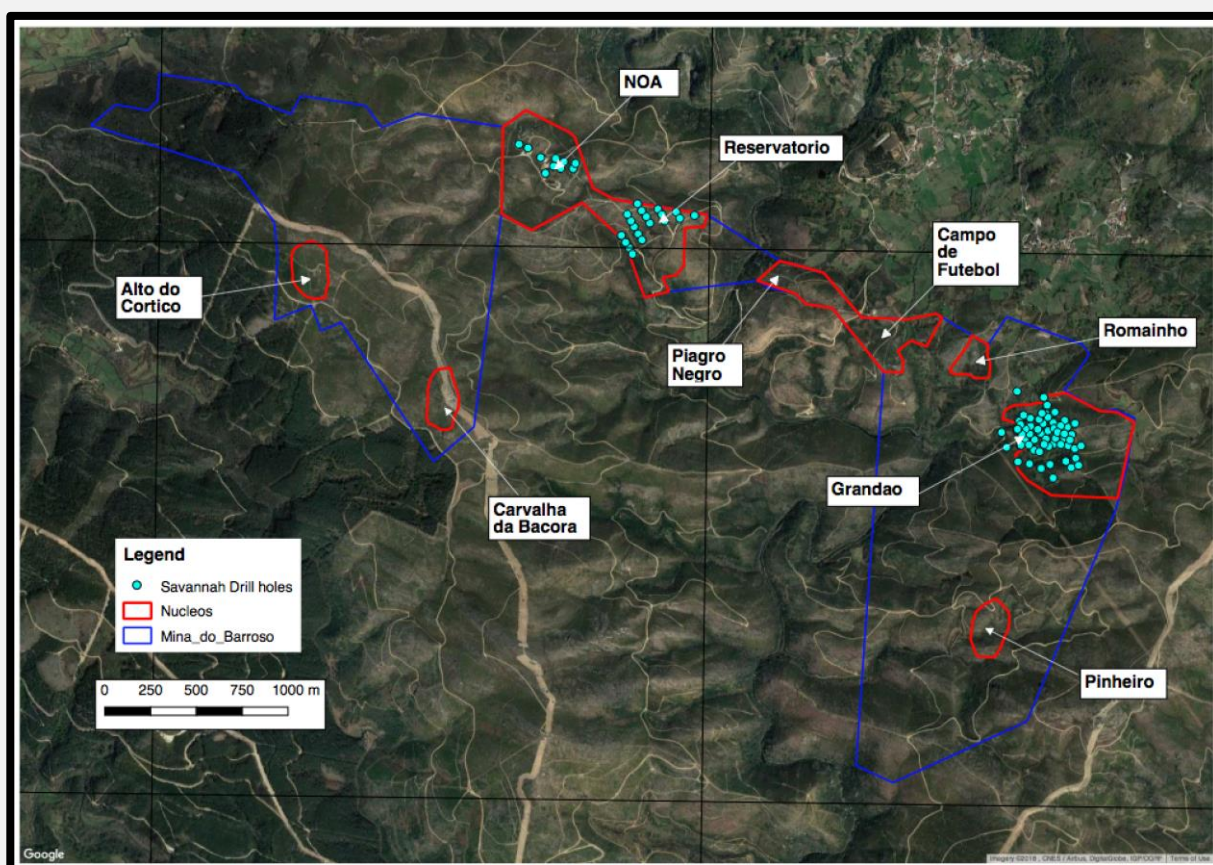
- Analysis confirms high-grade spodumene mineralisation with a lithium content of around 1.7% Li_2O and low impurities – less than 0.5% Fe_2O_3
- Mineralogy analysis confirms spodumene is the dominant lithium mineral with low contaminants
- Test work continues to confirm well proven, conventional metallurgical processes will produce a spodumene concentrate
- Preliminary test work suggests that by using a process route combining both gravity separation and flotation that a total recovery of at least 80% at a concentrate grade of over 6% Li_2O is likely to be achieved
- Heavy Liquid Separation (HLS) testing and small-scale pilot testing confirms industry benchmark, low-iron, 6% Li_2O concentrate can be produced by low cost gravity processing
- Test work completed to date suggest at least 40% of the contained lithium can be recovered via gravity processing
- Preliminary tests show that over 70% of lithium not recovered by gravity can be recovered by flotation at a grade of over 6% Li_2O
- Further improvements are expected as part of Phase 3 of the test work programme currently underway – diamond drilling is underway at Grandao and Reservatorio to collect additional samples for the Phase 3 test programme, with results expected in Q3 2018
- Mr Noel O'Brien, a metallurgist and lithium processing expert with over 35 years' experience has been appointed as a technical consultant to direct Savannah's metallurgical test work programme

Savannah's CEO, David Archer said: "We are delighted to see the results to date show that Mina do Barroso continues to demonstrate impressive metallurgical results, with spodumene being the dominant lithium mineral that can be recovered using conventional processing techniques to produce an industry benchmark product with low contaminants at good recoveries.

"Mina do Barroso continues to shape up as a European near-analogue to the highly successful Western Australian spodumene producers. It is also important to remember that globally, ALL significant hard-rock lithium mines currently supplying the makers of lithium carbonate extract spodumene.

"We hope that more metallurgical work will continue to refine and improve these already excellent results and we are delighted to welcome Noel O'Brien as a technical consultant to direct this programme."

Figure 1. Mina do Barroso Project Summary Map showing prospects and drilling completed to date



Summary of Phase 2 Metallurgical Test Work Programme and Results

The first series of testing involved conducting sighter tests on a combined sample of mineralisation from Grandao, NOA and Reservatorio to establish metallurgical response and to determine the dominant lithium minerals.

The samples were crushed to 10mm, 6.3mm and 4mm and screened at 0.5mm. The crushed samples were subjected to densimetric profiling tests using Heavy Liquid Separation (HLS) at four densities of 2.9,2.8,2.7 and 2.6.

Each HLS SG fraction was examined by X-Ray Diffraction (“XRD”) to establish the dominant lithium minerals.

Crush Size	HLS Fractions	Grade % Li ₂ O	Grade % Fe ₂ O ₃	Mass % Distribution	Li ₂ O % Distribution	Spodumene Content	Petalite Content	Lepidolite Content
10 mm	2.9 product	5.89	0.37	7.4	25.3	77%	-	1%
	2.9 middlings	4.14	0.32	14.1	33.7	51%	-	1%
	2.8 middlings	2.60	0.36	18.9	28.4	44%	1%	1%
	2.7 residue	0.44	0.27	45.8	11.6	8%	-	-
	2.6 residue	0.12	0.13	13.8	1.0	2%	1%	-
6.3mm	2.9 product	6.00	0.40	8.1	29.2	79%	-	1%
	2.9 middlings	4.22	0.34	13.0	33.0	59%	-	1%
	2.8 middlings	2.54	0.39	16.3	24.9	38%	-	-
	2.7 residue	0.41	0.26	47.2	11.8	6%	-	1%
	2.6 residue	0.12	0.14	15.4	1.1	2%	-	-
4 mm	2.9 product	6.19	0.39	10.2	37.3	78%	-	1%
	2.9 middlings	4.26	0.34	11.9	29.8	58%	-	1%
	2.8 middlings	2.56	0.40	13.7	20.7	37%	-	1%
	2.7 residue	0.40	0.25	47.0	11.1	5%	-	-
	2.6 residue	0.11	0.14	17.3	1.1	-	-	-

These results are extremely encouraging and established the key attributes of:

- The dominant lithium mineral is spodumene. There is very little petalite and this is confirmed by the low Li₂O assays in the 2.7 and 2.6 float fractions. Petalite is a light mineral that has a lower lithium content and if present, will show up in these light fractions.
- The HLS results show improving lithium recovery and grades as the crush size decreases. At a 4mm crush size, 37% of the lithium in the +0.5mm fraction has been recovered at a grade of 6.19%.
- There are low impurities and an iron content in the spodumene of less than 0.5% Fe₂O₃ which is well below the threshold of 1.4% Fe₂O₃ demanded by most off-takers.
- An overall head grade of 1.7% Li₂O was obtained for the composite sample which was higher than expected based on the past rock chip results

A second series of tests were conducted on a larger composite of the ore. This had a head grade of 1.73% Li₂O. Sub-samples were crushed to 4mm and 3.35mm and screened at 0.5mm.

Samples were processed in a small-scale gravity DMS pilot plant that has a 100mm cyclone.

The following results were obtained:

Crush Size	Medium SG	Grade % Li ₂ O	Grade % Fe ₂ O ₃	Mass% Distribution	Li ₂ O % Distribution
-4+0.5mm	2.9 product	5.54	0.40	8.23	26.28
	2.9 middlings	3.36	0.35	29.39	55.20
	2.7 residue	0.52	0.23	62.37	18.52
-3.35+ 0.5mm	2.9 product	5.90	0.72	9.35	32.43
	2.9 middlings	3.12	0.36	27.05	49.64
	2.7 residue	0.48	0.21	63.60	17.93

The concentrate from the 3.35mm test was subjected to magnetic separation to remove iron minerals and residual mica. The grade of the concentrate increased to 6.03% Li₂O, with a loss of only 0.8% of the mass.

These results confirmed the findings of the HLS tests and indicated 30%-40% of the lithium can be recovered by gravity as 6% concentrates. It also indicated that significant mass rejection of low grade lithium residue of around 60% may be possible by using up-front gravity separation.

This work is far from optimised and further improvements are expected.

The intermediate SG fractions (2.9 middlings), still contain 3%-4% Li₂O and represent around 50%-55% of the contained lithium. Further work is required to follow up on the favourable phase 1 results to determine the best way to process this material and improve the overall lithium recovery to over 80%.

Established methods are:

- Re-crushing of the middlings material and put it back through the DMS. This technique has been successfully implemented by other operators.
- Investigate fines DMS which is a new technique that uses gravity separation down to 0.3mm. The technology is advanced and one plant in Australia is about to install a circuit.
- Use the well-established, conventional method of flotation to process fines. This requires milling to less than 180 microns which is a well-established practice.

A preliminary un-optimised flotation test was done on the ore to determine whether could be utilised to recover the lithium from the middlings material. At a grind size of 180 microns, a very high figure of 71.4% of the lithium was recovered into a mass yield of 31% at a grade of 6.04% Li₂O.

This is a very encouraging result and moving forward, the use of flotation for further lithium recovery and for feldspar recovery, will be studied in far greater depth.

Lithium Expert Joins the Savannah Technical Team

Mr Noel O'Brien has been appointed as a technical consultant to direct Savannah's metallurgical test work programme, he is a metallurgist and lithium processing expert with over 35 years' experience. Mr O'Brien is currently a technical adviser to Tawana Resources Limited on its Bald Hill Lithium Project and Kidman Resources Limited on the Mount Holland Lithium Project. Previously,

Mr O'Brien was a technical consultant to the Galaxy Resources Lithium Project in Western Australia and the Bikita Minerals Lithium Project in Zimbabwe.

Competent Person and Regulatory Information

The information in this announcement that relates to exploration results is based upon information compiled by Mr Dale Ferguson, Technical Director of Savannah Resources Limited. Mr Ferguson is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM) and 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 December 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). Mr Ferguson consents to the inclusion in the report of the matters based upon the information in the form and context in which it appears.

The information in this announcement that relates to metallurgical results is based upon information compiled by Mr Noel O'Brien, Director of Trinol Pty. Limited. Mr O'Brien is a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM) and 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 December 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). Mr Ferguson consents to the inclusion in the report of the matters based upon the information in the form and context in which it appears.

This announcement contains inside information for the purposes of Article 7 of Regulation (EU) 596/2014.

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About Savannah

We are a diversified resources group (AIM: SAV and SWB: SAV) with a portfolio of energy metals projects - lithium in Portugal and copper in Oman - together with the world-class Mutamba Heavy Mineral Sands Project in Mozambique, which is being developed in a consortium with the global major Rio Tinto. We are

committed to serving the interests of our shareholders and to delivering outcomes that will improve the lives of our staff and the communities we work with.

The group is listed and regulated on AIM and the Company's ordinary shares are also available on the Börse Stuttgart (SWB) under the ticker "SAV".