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SAVANNAH RESOURCES PLC

AIM: SAV

RNS – 27 March 2017

PROJECT PORTFOLIO

MINERAL SANDS
MOZAMBIQUE
(CONSORTIUM AGREEMENT WITH RIO TINTO)

COPPER/GOLD
OMAN

LITHIUM
FINLAND

Savannah Resources Plc

900Mt Resource Defined at Ravene, Mutamba Project, Mozambique

Savannah Resources plc (AIM: SAV) ('Savannah' or 'the Company'), is pleased to announce a maiden resource estimation for the Ravene deposit in Mozambique ('Ravene') **(Figures 1).** Ravene forms part of the Mutamba Mineral Sands Project, being developed by Savannah and Rio Tinto as part of a consortium agreement between the two parties (the 'Consortium').

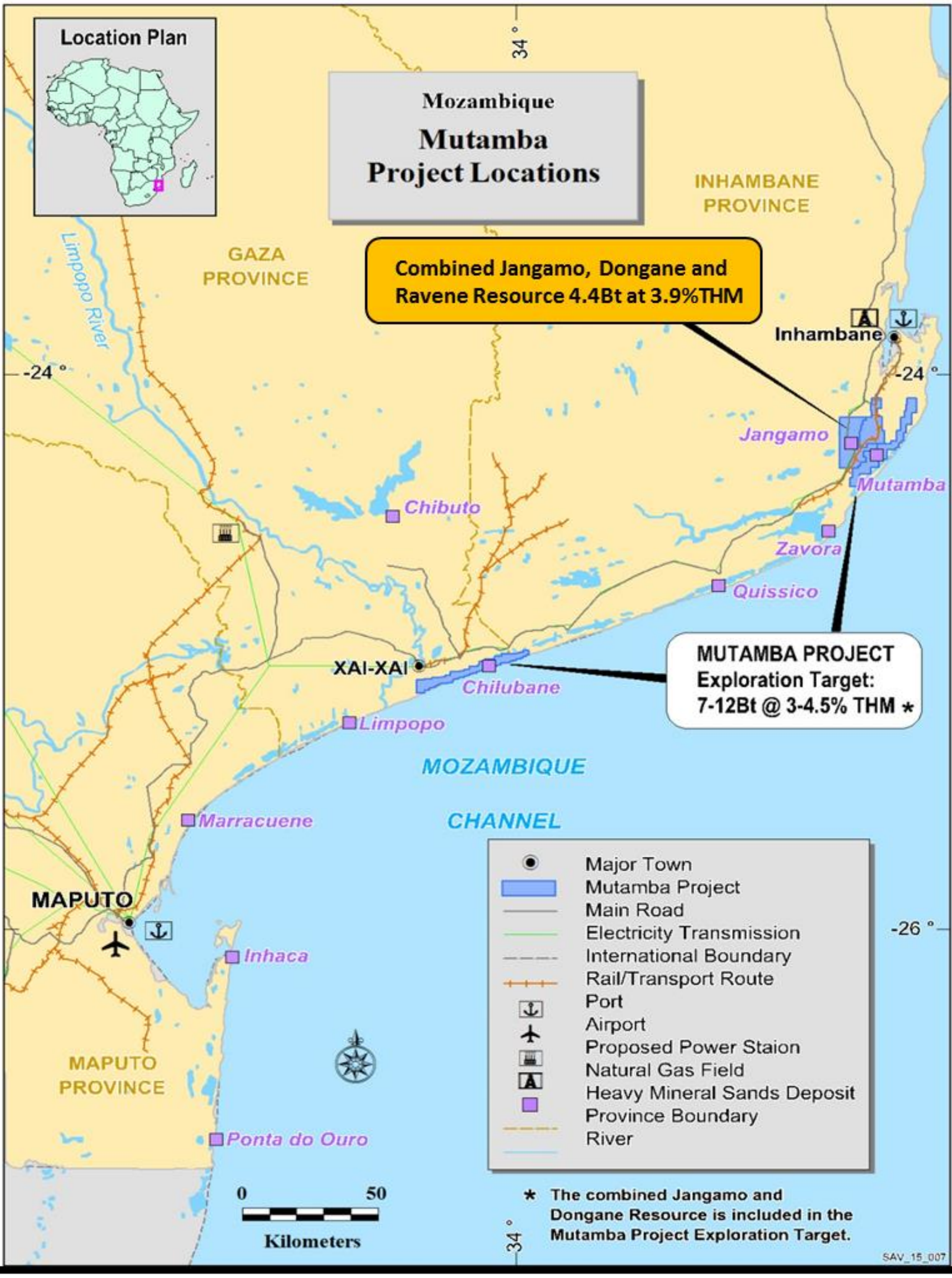
HIGHLIGHTS:

- Ravene resource estimation has defined an **Inferred JORC (2012) Mineral Resource estimate of 900Mt at 4.1% Total Heavy Minerals** ('THM')
- The **global Mineral Resource estimate for the Mutamba project (combined Jangamo, Dongane and Ravene) now stands at 4.4Bt at 3.9% THM** comprising both indicated and inferred category material
- The new resource estimate represents a **26% increase in the global Mineral Resource** and importantly an **8% increase in THM grade compared to the overall resource**
- The new Ravene resource includes a **high-grade portion of 92Mt at 6.2% THM,** which will be a primary focus within the scoping study currently being conducted
- **Significant potential remains to expand the Ravene resource beyond its current boundaries,** which will be the focus of future exploration activities
- The **Mineral Resource estimation is now included in the TZMI scoping study**, which is nearing completion and once received will be reviewed by the Consortium partners
- **The Mineral Resource compares favourably with other major, African HMS deposits**

Savannah's CEO, David Archer said: "The increased Mineral Resource for the Mutamba Project highlights its potential to be a significant producer of titanium feedstocks. In addition, this year we are seeing increasing prices for titanium feedstocks such as ilmenite and rutile, which means that it is an ideal time to be taking this project forward.

"The addition of a further 92Mt of high grade resource defined at Ravene, when combined with the other three major deposits at the Mutamba Project, means we are off to a great start in delivering on the Consortium's objective of defining an aggregate tonnage of high grade resources able to support an initial mining operation for at least 20 years."

Figure 1. Mutamba Project Location Map



* It is important to note that the above table is a summary of Exploration Targets and the potential quantity and grade is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Introduction

The Mutamba Project is subject to the Consortium and is operated by Savannah. The Mutamba Project includes the Mutamba Project North (consisting of Jangamo, Dongane and Ravene deposits) and the Chilubane deposit which is located 180km to the southwest of the Mutamba Project North.

The current mineral resource statement includes only the Jangamo, Dongane and Ravene deposits **(Figure 1).** Full details of the Jangamo and Dongane resources including supporting JORC Table 1 can be found in the RNS released on 8/11/2016.

Ravene Resource Estimation

The resource estimation utilised drill results from an initial drill programme completed by Rio Tinto between 2002 and 2004, with a total of 119 holes RC for 5,039m on a 1km by 500m grid **(Figure 2-4)** and recent work completed by Savannah pursuant to the Consortium, with 107 holes drilled for a total of 2,914m, which infilled the drilling to 500m x 500m spacing. The aim of the drilling at Ravene was to infill the original grid on a 500m line spacing to provide drilling information at a concentration of 500m x 500m so that it could be used to calculate an Inferred Mineral Resource estimate and be incorporated into the scoping study that is currently underway. The resource estimation is summarised in **Table 1**, the results used in the resource calculation are summarised in **Appendix 1** and a summary of the estimation process is provided below. Full details of the resource estimation for Ravene can be found in the **JORC Table 1** at the bottom of the release.

Table 1: Updated Mutamba resource table (including the new Ravene resource estimation in emboldened italics)

Resource	Category	Sand (Mt)	% THM*	% Ilmenite in THM	% Ilmenite in sand	% Rutile in sand	% Zircon in sand	THM (Mt)	Ilmenite (Mt)	Rutile (Mt)	Zircon (Mt)
Jangamo Indicated	Indicated	1,780	3.8	62	2.4	0.06	0.11	68	42	1.1	2.0
Jangamo Inferred 1336L	Inferred	200	3.5	63	2.2	0.03	0.11	7.1	4.5	0.1	0.2
Jangamo Inferred 3617L	Inferred	65	4.2	60	2.5	0.08	0.15	2.7	1.6	0.1	0.1
Dongane	Inferred	1,400	3.8	61	2.3	0.07	0.10	54	33	1.0	1.4
Ravene	***Inferred***	***900***	***4.1***	***56***	***2.3***	***0***	***0.10***	***38***	***21***	***0***	***0.9***
Total		**4,400**	**3.9**	**60**	**2.3**	**0.05**	**0.11**	**170**	**102**	**2.2**	**4.7**

*THM is total heavy minerals, denser than 2.85g/cm3

**Rutile was not included in the mineralogy testing of Ravene deposit, but is very likely to be present

***Tonnes and grades have been rounded and differences appear in the totals

- The Ravene estimate is based on a block model that extends beyond the resource boundaries and was created using all available data. The block model uses anisotropic search ellipsoids based on semi-variogram ranges derived from the main mineralised Dune 3 Unit. For THM, slimes and oversize assays, all blocks were allocated values. The available mineral assemblage data was used to estimate the percentage of ilmenite, zircon and rutile in the THM.

Table 2: RAVB Ellipsoid Details

Unit	Major Azimuth	Major Diam	Minor Diam	Z Diam
Dune 3	0	1,800	1,800	40

- The model is based on a detailed geological interpretation, which divides the resource area into three major units: Dune 2, Dune 3 and Dune 4. The best mineralisation is found within the Dune 3 unit
- The blocks used are 200 x 200 x 3m in size. Block averages were estimated using inverse distance algorithm using the power 2.5
- Estimates only used drill assays from within the same geological unit
- The drilling contains a mixture of 3m and 1.5m samples, so all samples were digitally re-sampled at 1.5m intervals to ensure equal weighting
- Grades were not cut, as there are no obvious high-grade outliers in the data set
- Verification: the model was checked visually to ensure the average drill hole grades were modelled correctly in the block model
- The average THM grade of the assayed drill intersections is 3.27%, compared to block model average of 3.04% THM. The model extends into low-grade, less densely drilled areas, so the block model average is slightly lower than the drill samples. The resource boundary is determined by the content of ilmenite and zircon **(Figure 4)**
- The ratio of these minerals varies and the cut-off changes accordingly, but for the average composition, the economic cut-off is 2.9% THM containing 1.6% ilmenite (55% of the THM) and 0.068% zircon (2.3% of the THM)

Figure 2. Ravene location plan showing relationship to other resources

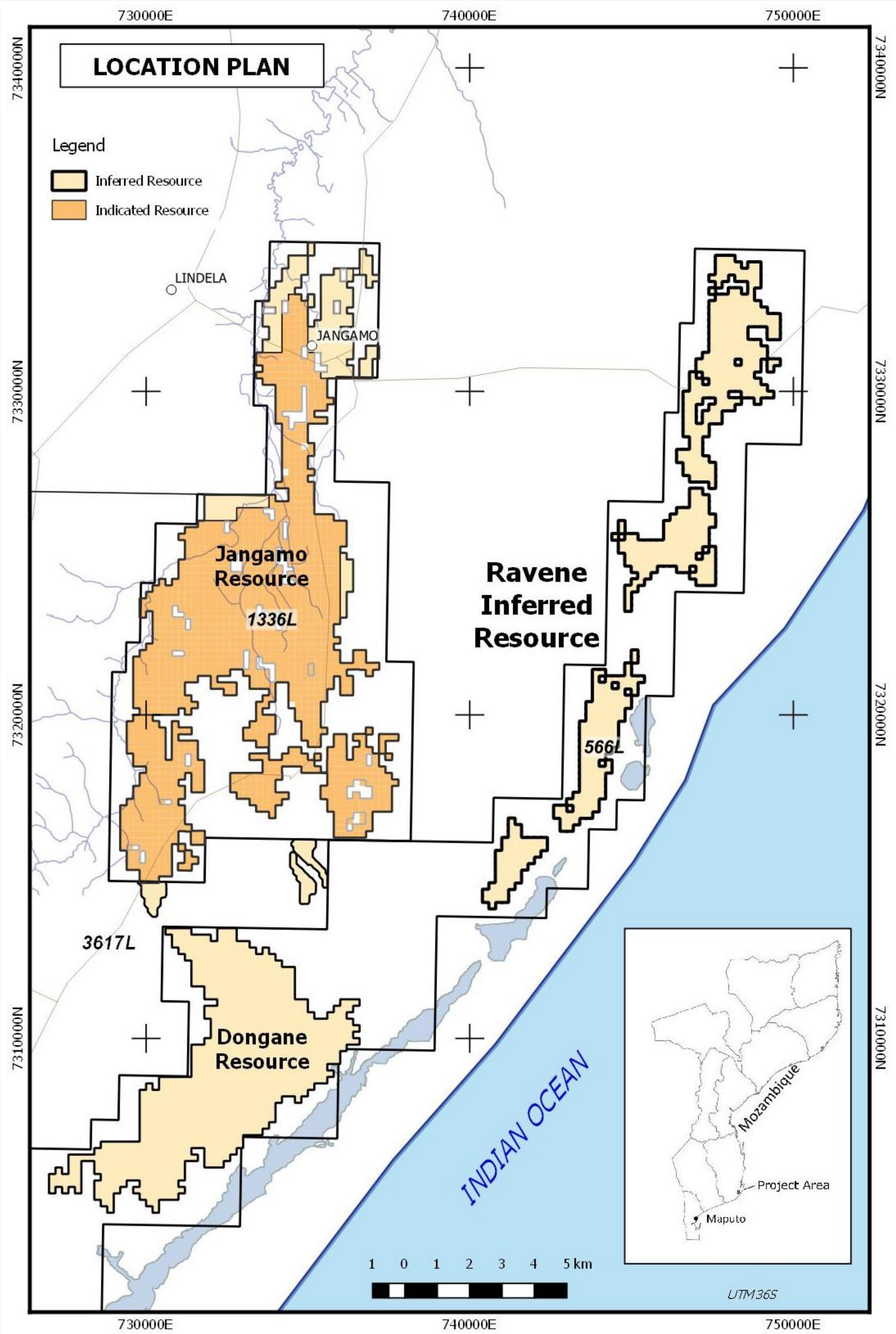


Figure 3. Drill hole summary map showing drilling complete at the Ravene resource

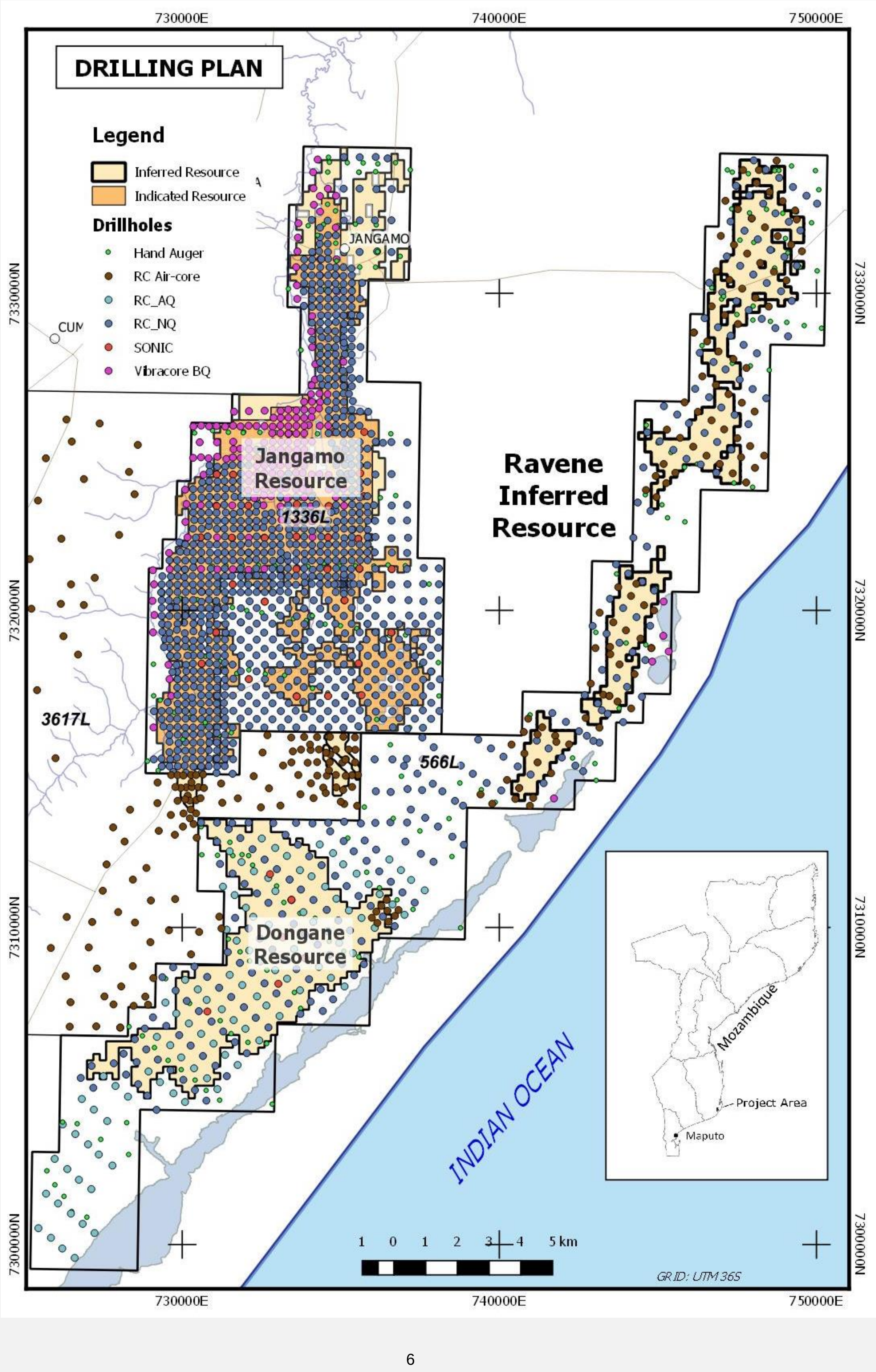
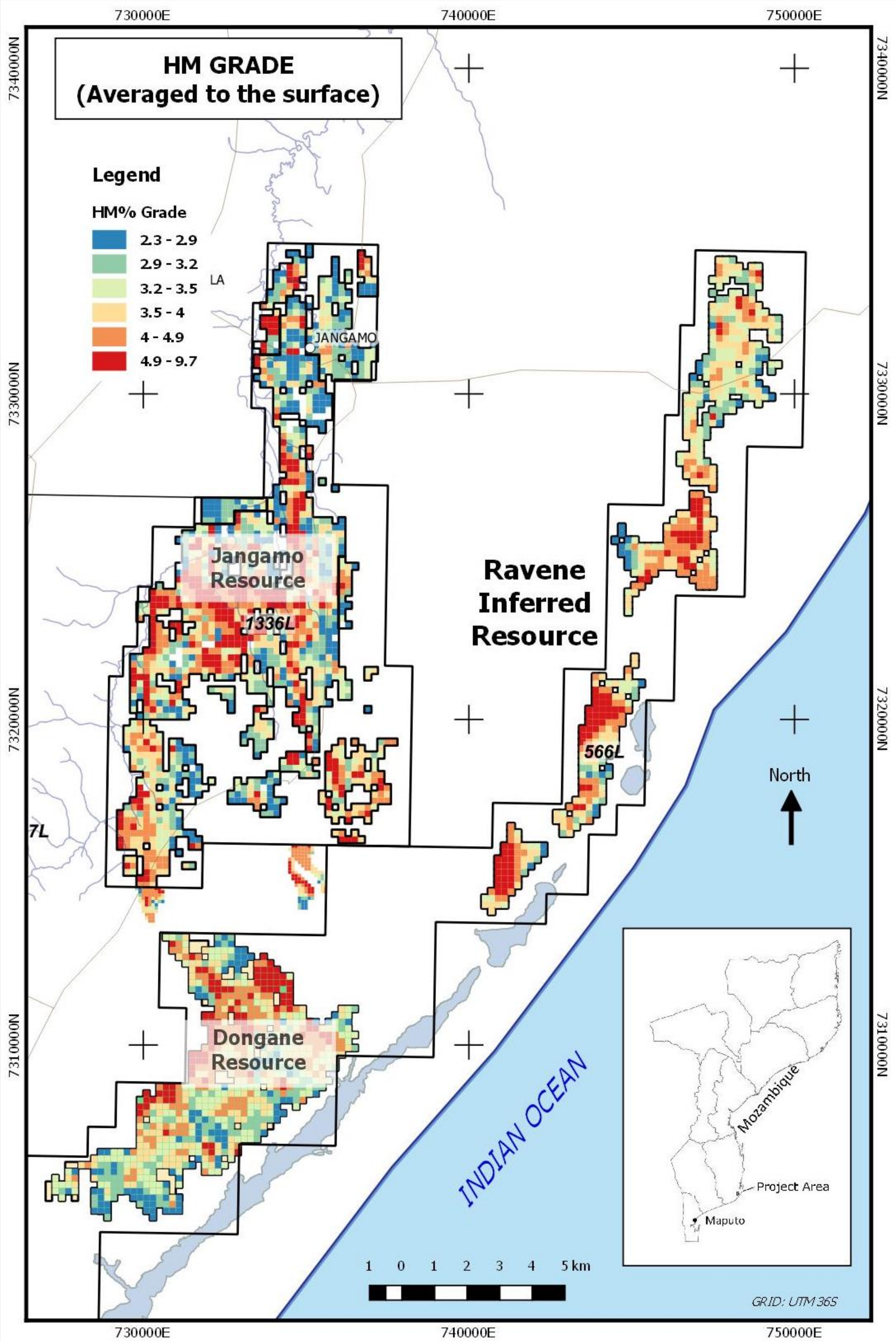


Figure 4. Ravene resource model with the THM grade averaged to the surface with the red areas showing the higher-grade material



Competent Person and Regulatory Information

The information in this document 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 Australian 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 document that relates to the resource estimation is based upon information compiled by Mr Colin Rothnie, an independent consultant. Mr Rothnie is a Member of the Australian 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 Rothnie 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.

****ENDS****

CONTACT US

For further information please visit www.savannahresources.com or contact:

David Archer	Savannah Resources plc	Tel: +44 20 7117 2489
David Hignell / Gerry Beaney (Nominated Adviser)	Northland Capital Partners Ltd	Tel: +44 20 3861 6625
Jon Belliss / Elliot Hance (Corporate Broker)	Beaufort Securities Ltd	Tel: +44 20 7382 8300
Charlotte Page / Lottie Brocklehurst (Financial PR)	St Brides Partners Ltd	Tel: +44 20 7236 1177

Notes

Savannah Resources Plc (AIM: SAV) is a growth oriented, multi-commodity, mineral development company.

Mozambique

Savannah operates the Mutamba heavy mineral sands project in Mozambique in collaboration with Rio Tinto, and can earn a 51% interest in the related Consortium, which has an established initial Indicated and Inferred Mineral Resource Estimate of 4.4 billion tonnes at 3.9% THM over the Jangamo, Dongane and Ravene deposits. Under the terms of the Consortium Agreement with Rio Tinto, upon delivery by Savannah of the following Savannah will earn the corresponding interest in the Mutamba Project: scoping study - 20%; pre-feasibility study - 35%; feasibility study – 51%. Additionally, the Consortium Agreement includes an offtake agreement on commercial terms for the sale of 100% of production to Rio Tinto (or an affiliate).

Oman

Savannah has interests in two copper blocks in the highly prospective Semail Ophiolite Belt in Oman. The projects, which have an Indicated and Inferred Mineral Resource of 1.7Mt @ 2.2% copper and high-grade intercepts of up to 56.35m at 6.21% Cu, with gold credits, provide Savannah with an excellent opportunity to potentially evolve into a mid-tier copper and gold producer in a relatively short time frame. Together with its Omani partners, Savannah aims to outline further mineral resources to provide the critical mass for a central operating plant to develop the deposits and in December 2015 outlined exploration targets of between 10,700,000 and 29,250,000 tonnes grading between 1.4% and 2.4% copper.

Finland

Savannah has Reservation Permits over two new lithium projects, Somero and Erajarvi, covering an area of 159km² in Finland. Savannah holds a 100% interest in these projects through its Finnish subsidiary Finkallio Oy. Geological mapping has highlighted the presence of seven pegmatites across the licence areas - two on Somero and five on Erajarvi – with key lithium minerals petalite, spodumene and lepidolite all identified in hand specimens. Follow up work to further expand and define the pegmatites in readiness for drilling is being planned for the second quarter of 2017 (after winter).

Appendix 1. List of mineralised intercepts used in the Ravene resource estimation

(Datum : UTM36, all holes were vertical)

HoleID	Easting	Northing	RL	Drillhole Full Depth	Drilling Type	From	To	Length	HMIN%	SLIMES%	OVSZ%
775	747078.9	7329901.6	61	10.5	HA	0	8.5	8.5	3.4	3.7	0.1
776	748009.3	7329593.9	79	10.5	HA	0	10.5	10.5	3.8	2.9	0.1
777	748687.3	7330795.6	92	10.5	HA	0	10.5	10.5	4.4	2.5	0.1
1338	743783.3	7316905.6	34	10.5	HA	0	10.5	10.5	6.8	3.5	0.1
1339	743456.5	7317285.7	82	10.5	HA	0	10.5	10.5	8.0	3.0	0.1
1344	744004.7	7318965.1	84	10.5	HA	0	10.5	10.5	3.1	3.1	0.1
1345	743504.6	7318840.8	90	10.5	HA	0	10.5	10.5	5.3	5.7	0.2
1349	744336.7	7320837.7	64	10.5	HA	0	10.5	10.5	8.4	2.8	0.3

1361	747404.7	7324013.8	42	10.5	HA	0	10.5	10.5	3.0	0.6	0.1
1362	746865.3	7324333.4	80	10.5	HA	0	0.5	0.5	3.4	1.9	0.1
1363	746248.0	7324613.4	74	10.5	HA	0	10.5	10.5	3.8	0.9	0.0
1365	745419.6	7324976.8	51	10.5	HA	0	10.5	10.5	3.9	2.6	0.1
1368	745010.0	7325283.1	56	10.5	HA	0	10.5	10.5	2.7	3.2	0.1
1369	744640.4	7325838.0	60	10.5	HA	0	10.5	10.5	3.8	3.1	0.3
1374	741204.5	7316077.6	84	10.5	HA	0	10.5	10.5	6.4	3.3	0.1
1375	741799.0	7315847.0	71	10.5	HA	0	10.5	10.5	8.8	2.5	0.1
1505	747352.4	7327789.1	80	12	HA	0	12	12	4.3	3.4	0.0
1506	746872.3	7328131.0	68	10.5	HA	0	10.5	10.5	4.2	2.0	0.1
1515	747016.5	7329817.3	68	10.5	HA	0	10.5	10.5	3.7	2.5	0.1
1516	747498.2	7329329.1	81	10.5	HA	0	4.5	4.5	5.8	3.5	0.0
1533	749478.1	7330827.2	55	10.5	HA	0	2.5	2.5	2.9	3.8	0.1
1534	749103.5	7331275.9	76	10.5	HA	0	10.5	10.5	3.1	3.2	0.1
1535	748627.0	7331364.0	100	10.5	HA	0	10.5	10.5	5.0	2.9	0.0
1536	748031.1	7331604.9	101	13.5	HA	0	13.5	13.5	4.2	2.0	0.0
1537	747895.7	7332532.5	88	10.5	HA	0	10.5	10.5	6.3	2.9	0.0
1539	747594.9	7331676.7	53	13.5	HA	0	13.5	13.5	5.2	2.2	0.1
1540	748431.7	7332647.3	76	10.5	HA	0	10.5	10.5	2.5	2.9	0.1
1542	748943.2	7332523.2	64	10.5	HA	0	10.5	10.5	2.9	4.2	0.2
1543	749380.3	7332329.3	74	10.5	HA	0	10.5	10.5	4.9	3.7	0.1
1553	747858.2	7333771.0	87	10.5	HA	0	10.5	10.5	4.9	2.6	0.1
1554	748373.9	7333824.1	60	10.2	HA	0	10.2	10.2	3.7	3.0	0.1
1556	748822.4	7333877.2	76	10.5	HA	0	10.5	10.5	3.8	2.3	0.1
1940	748189.7	7333881.6	69	16	HA	0	16	16	5.1	3.4	0.1
1941	748688.0	7333867.4	67	15	HA	0	8.5	8.5	3.8	2.3	0.1
1942	747690.3	7333888.1	77	14.5	HA	0	14.5	14.5	5.1	2.7	0.0
2591	740991.0	7314816.9	99	51	RC_NQ	0	37.5	37.5	5.5	4.4	0.2
2593	741187.1	7315886.2	100	57	RC_NQ	0	53.5	53.5	7.0	3.1	0.2
2594	741556.7	7315639.4	77	48	RC_NQ	0	27.5	27.5	3.4	3.8	0.2
2701	744331.8	7319782.8	70	54	RC_NQ	0	38.5	38.5	3.7	6.6	0.2
2702	743908.8	7320069.4	84	56	RC_NQ	0	46.5	46.5	5.5	7.4	0.1
2706	743795.5	7318974.3	98	63	RC_NQ	0	45.92	45.92	5.6	9.8	0.1
2710	744033.7	7317582.8	54	33	RC_NQ	0	13.5	13.5	3.2	6.4	0.2
2711	743706.2	7317862.1	86	54	RC_NQ	0	30.5	30.5	5.1	12.9	0.0
2720	743235.6	7316845.2	79	36	RC_NQ	0	17.5	17.5	3.8	10.0	0.2
2750	745063.7	7325329.8	50	33	RC_NQ	0	9.5	9.5	5.1	7.6	0.2
2751	745494.2	7325058.7	55	42	RC_NQ	0	14.5	14.5	4.4	5.2	0.0
2752	745907.2	7324776.7	67	42	RC_NQ	0	32.5	32.5	4.2	5.3	0.0
2753	746356.5	7324598.2	70	39	RC_NQ	0	0.66	0.66	4.7	3.3	0.1
2757	746478.5	7325594.6	70	51	RC_NQ	0	38.5	38.5	5.5	5.1	0.0
2758	746874.1	7325307.3	68	39	RC_NQ	0	24.5	24.5	5.4	6.1	0.1
2759	747425.8	7326163.2	84	42	RC_NQ	0	7.5	7.5	3.3	8.6	0.0

2762	747004.8	7326395.5	92	54	RC_NQ	0	30.12	30.12	8.3	3.7	0.0
2774	744670.0	7325612.5	76	51	RC_NQ	0	23.5	23.5	2.2	5.4	0.2
2780	747140.6	7327597.7	80	69	RC_NQ	0	62.68	62.68	5.4	3.5	0.0
2781	746762.3	7327829.3	67	48	RC_NQ	0	23.5	23.5	5.0	4.0	0.1
2785	746901.4	7328928.3	74	51	RC_NQ	0	33.5	33.5	4.6	3.2	0.1
2786	747301.5	7328661.0	65	48	RC_NQ	0	6.5	6.5	3.0	6.4	0.1
2793	747870.8	7329468.9	74	66	RC_NQ	0	0.5	0.5	2.0	3.7	0.0
2795	747037.3	7330022.0	58	33	RC_NQ	0	17.5	17.5	4.5	3.9	0.1
2798	747601.2	7330866.6	87	69	RC_NQ	0	57.36	57.36	4.4	3.0	0.0
2799	748015.5	7330591.2	71	66	RC_NQ	0	45.5	45.5	3.5	5.1	0.0
2800	748439.0	7330323.4	69	57	RC_NQ	0	49.5	49.5	4.8	3.1	0.0
2801	748891.1	7330062.8	59	36	RC_NQ	0	15.5	15.5	4.0	4.5	0.1
2803	749387.3	7330867.5	57	48	RC_NQ	0	10.5	10.5	4.2	6.2	0.1
2804	748996.5	7331147.0	81	45	RC_NQ	0	7.5	7.5	2.6	5.4	0.1
2805	748554.8	7331367.5	97	69	RC_NQ	0	65.5	65.5	4.8	4.1	0.0
2806	748157.9	7331703.5	101	54	RC_NQ	0	54	54	3.4	3.5	0.1
2807	747737.4	7331973.5	70	54	RC_NQ	0	32.5	32.5	6.6	3.7	0.0
2811	748328.0	7332826.5	72	51	RC_NQ	0	25.5	25.5	5.7	3.9	0.1
2812	748714.3	7332521.6	70	39	RC_NQ	0	23.5	23.5	7.5	4.7	0.1
2813	749136.9	7332254.9	55	48	RC_NQ	0	29.5	29.5	4.4	6.4	0.1
2814	749499.3	7331980.4	57	51	RC_NQ	0	34.5	34.5	3.4	5.3	0.1
2818	748833.6	7333642.1	73	42	RC_NQ	0	26.5	26.5	4.1	4.6	0.1
2820	748030.3	7334192.5	76	33	RC_NQ	0	23.5	23.5	2.6	3.8	0.1
4899	748383.0	7332080.0	76.2	45	RC_AC	0	32.7	32.7	3.4	15.8	0.0
4900	747962.0	7332359.0	85.6	21	RC_AC	0	21	21	1.6	14.4	0.0
4901	747965.0	7332364.0	85.4	21	RC_AC	0	21	21	1.7	11.7	0.0
4902	747531.0	7332653.0	54.8	30	RC_AC	0	17.3	17.3	3.6	8.9	0.0
4906	747821.0	7331252.0	73.2	48	RC_AC	0	41.7	41.7	3.2	14.7	0.0
4908	748666.0	7330679.0	89.6	45	RC_AC	0	19.1	19.1	2.8	9.8	0.0
4912	747665.0	7330145.0	88.4	57	RC_AC	0	14.9	14.9	3.9	12.9	0.0
4915	746702.0	7329588.0	68.2	36	RC_AC	0	9.7	9.7	3.5	12.7	0.0
4917	747532.0	7329030.0	74	57	RC_AC	0	0.5	0.5	1.8	10.7	0.0
4919	747387.0	7327923.0	81.6	30	RC_AC	0	14.1	14.1	2.6	21.5	0.0
4920	746919.0	7328163.0	67.7	33	RC_AC	0	12.2	12.2	3.3	9.0	0.0
4929	746698.0	7325991.0	67.3	42	RC_AC	0	14.8	14.8	4.3	13.4	0.0
4932	747096.0	7325706.0	86.5	48	RC_AC	0	37	37	6.4	12.5	0.0
4939	747367.0	7324319.0	55.3	51	RC_AC	0	29.8	29.8	5.1	9.9	0.0
4940	746950.0	7324611.0	63.3	51	RC_AC	0	16.8	16.8	5.9	5.0	0.0
4944	746120.0	7325159.0	76.6	42	RC_AC	0	36.1	36.1	5.0	10.7	0.0
4945	746539.0	7324877.0	79.6	54	RC_AC	0	18.1	18.1	7.4	9.0	0.0
4946	745557.0	7324337.0	66.4	39	RC_AC	0	25.9	25.9	7.1	12.8	0.0
4947	745188.0	7324614.0	67.7	18	RC_AC	0	18	18	1.9	7.1	0.0
4949	745269.0	7324010.0	42.9	18	RC_AC	0	5.4	5.4	4.3	8.5	0.0

4951	744962.0	7323570.0	58.4	24	RC_AC	0	14.9	14.9	3.7	11.4	0.0
4952	744571.0	7320159.0	54.9	24	RC_AC	0	17.4	17.4	6.9	9.0	0.0
4954	744158.0	7320451.0	74.3	46	RC_AC	0	39.8	39.8	6.0	10.5	0.0
4957	743599.0	7319619.0	71.9	28	RC_AC	0	20	20	5.9	13.3	0.0
4958	743998.0	7319365.0	84.8	18	RC_AC	0	18	18	2.3	11.8	0.0
4959	744456.0	7319107.0	52.6	30	RC_AC	0	12.1	12.1	4.0	9.8	0.0
4965	743503.0	7318613.0	92.4	21	RC_AC	0	12.9	12.9	2.7	16.4	0.0
4967	743286.0	7317335.0	79.5	24	RC_AC	0	12	12	4.6	10.5	0.0
4969	743732.0	7317119.0	57.9	24	RC_AC	0	8.4	8.4	3.2	7.6	0.0
4973	741766.0	7316041.0	73	33	RC_AC	0	20.5	20.5	3.8	8.1	0.0
4974	741357.0	7316308.0	64.4	30	RC_AC	0	17.9	17.9	3.8	9.5	0.0
4979	741210.0	7315201.0	98.3	42	RC_AC	0	39.8	39.8	5.9	13.8	0.0
4982	740632.0	7314392.0	98.3	33	RC_AC	0	24.8	24.8	3.8	12.3	0.0
4983	740630.0	7314389.0	98.4	33	RC_AC	0	24.9	24.9	3.7	12.0	0.0
4998	741209.0	7316083.0	84.3	48	RC_AC	0	40.8	40.8	5.9	12.4	0.0
4999	741802.0	7315846.0	71	24	RC_AC	0	16.4	16.4	2.5	12.9	0.0
5000	743473.0	7317297.0	82.7	33	RC_AC	0	27.2	27.2	6.6	10.1	0.0
5001	743476.0	7317293.0	82.6	33	RC_AC	0	27.1	27.1	6.4	12.9	0.0
5002	743497.0	7318843.0	88.4	18	RC_AC	0	8.9	8.9	2.9	13.1	0.0
5003	744328.0	7320835.0	64	42	RC_AC	0	35.5	35.5	5.4	9.8	0.0
5004	749384.0	7332328.0	74.7	21	RC_AC	0	21	21	3.0	12.3	0.0
5007	748192.0	7333889.0	68.2	39	RC_AC	0	18.7	18.7	4.0	10.6	0.0
5009	747691.0	7333887.0	77.3	33	RC_AC	0	24.8	24.8	4.5	10.5	0.0

APPENDIX 2 – JORC 2012 Table 1

Section 1 Sampling Techniques and Data for Ravene Resource estimation

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

Criteria	JORC Code explanation	Commentary
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.*	• Two types of drilling used: hand auger and air-core RC. 85% of the drilling is air-core RC. • Drill samples taken either at 1.5m or 3m intervals. • Total Heavy Mineral (THM), +1mm oversize and -0.045mm "slimes" fractions determined on all drill samples. • Mineralogy of the THM from selected drill composites determined by magnetic fractionation and XRF. • Reverse circulation, air-core drill samples were taken at 3m intervals. All holes were drilled vertically with NQ sized drill rods. Large plastic bags were placed under a cyclone to capture a complete 3m run of sediment intersected by the drill. The bulk sample was then dried and split using a rotary splitter to get a sub sample of 500 to 700g for heavy mineral determination.
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	• Air-Core Drilling. Drilling is conducted on a regular grid using air-core drilling technology, an industry standard drilling technique for HM deposits. Drilling rods are 3m long and 1 sample is taken for each rod interval. • Collar surveys are carried using hand held GPS with an accuracy to within 5m, and the z direction was determined by satellite derived elevation data using Geo-eye and is accurate to less than a metre. • A bulk sample of a run from a 3m drill rod was sampled, dried and weighted to assess the expected recovery for each interval. Sample weights were plotted against an "expected" value and were used to monitor the representativity of each sample.

Criteria	JORC Code explanation	Commentary
	• *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 (eg '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.*	• Heavy mineral concentrations occur as disseminated zones within sedimentary units. At Ravene there are units deposited as aeolian dunes with vertical continuity. Mineralised zones extend for many hundreds of metres to kilometers along strike with minor local variability. • Down hole sampling is carried out at 3m intervals coinciding with the length of a drill rod. The sample interval is considered standard for gaining an understanding of the vertical extent and continuity of mineralisation. Bulk samples at the rig were dried and split to 500g to 700g sub samples for heavy mineral and slimes analysis.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if*	**Drilling Statistics For the Ravene B Resource (RAVB)** / **Drillholes** / **Metres** / **Percent of Metres Drilled** Hand Auger / 35 / 356 / 15% RC-NQ Air-core / 82 / 2047 / 85% Total / 117 / 2403

Drilling Statistics For the Ravene B Resource (RAVB)	Drillholes	Metres	Percent of Metres Drilled
Hand Auger	35	356	15%
RC-NQ Air-core	82	2047	85%
Total	117	2403	

Criteria	JORC Code explanation	Commentary
	so, by what method, etc).  *Hand Auger*  *RC Air-Core drilling*	• All **hand auger** samples were collected over 1.5m intervals with the deepest hole being 16m in depth. After retrieval, samples were placed in calico or canvas bags and labelled with the hole number and sample interval. • An inherent problem with the hand auger technique is over-sampling, with the collected sample interval presenting a larger volume than the theoretical volume. Hand auger drilling becomes very difficult to impossible in clays or wet sands below the water table. • Reconnaissance hand-auger drilling is mostly used to locate the major anomalous mineralised areas. Sample quality is relatively low compared to other drilling methods and hand-auger drillholes have been superceded with later drilling of better quality. However the hand-auger drillholes contain valuable mineralogy results, so they have been retained for the final block model. • • NQ air-core drilling with hole diameter approx 75mm, and a bit diameter of 81mm, all holes are vertical. Air-core drilling is a form of reverse circulation drilling requiring twin tubes, and where the sample is collected from the open face drilling bit and blown up the inner tube. It is well suited to drilling unconsolidated sediments and is one of the few drilling techniques to give good sample quality below the water table.

Criteria	JORC Code explanation	Commentary
	 *Air-core drilling bit*  *Air-core sample collection.*	
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	• Field assessment of sample volume. Samples with good recovery weigh 22-26kg for each 3metre (24.7 kg theoretical). With air-core method, there is normally lower than average sample recovery at

Criteria	JORC Code explanation	Commentary
		the very top of the drillhole due to air and sample losses into the surrounding soil. Sample recovery below the water table can be greater than 100% as water flowing into the hole causes the hole to have a greater diameter than the drilling bit, however at Ravene the water table was very rarely encountered. When the water table was encountered, sampling below the water table still gives uncontaminated samples provided the sample stream is only sampled when the bit is cutting new material. • With the disseminated style of mineralisation typical of heavy mineral deposits, it is preferable to have samples of lower volume that are free of contamination, rather than samples of correct sample weight that may be contaminated. Therefore, while drilling the sampling team focused on ensuring that the sample stream coming from the drilling rig is only sampled when the bit is drilling into new, uncontaminated material. Contamination is most often a problem during rod changes and where there is a high flow of groundwater into the drillhole. Very few of the Ravene drillholes intersected the water table – so this source of potential contamination was largely avoided.
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	• The entire drill sample is delivered to the laboratory for further analysis, thereby eliminating the possibility of sample bias caused by splitting the sample in the field. • Sample bias and segregation are kept to a minimum with the whole sample interval collected in large plastic bags at the rig and transported to the laboratory, where they are placed into large metal trays and the whole sample air dried. The dried samples were broken up in the trays and returned to the sample bag for splitting.

Criteria	JORC Code explanation	Commentary
		• Low recoveries were observed in transitions between dune types. Higher slimes in underlying units were encountered which slowed the rigs usual advance rate. When this occurred water was injected into the airstream to stop clay particles from accreting to the inside of the inner tube and blocking it.
	• *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.*	• Materials sampled by the air-core drilling rig can be dry, moist or wet. Dry samples may lose some of their slimes fraction due to blowing out of the sampling equipment. The amount of dust coming out of the cyclone was monitored and kept to an absolute minimum. HM and oversize are not affected. Moist drill samples (the most commonly found at Ravene) are the most representative as the whole sample is returned as "clumps" of material from the bit face. There is no chance for HM or slimes to segregate in the moist samples, because all of the material stays stuck together. When dust levels were high water was generally injected into the airstream to maintain integrity of the sample fractions.
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.*	• All drill holes were logged in the field at the time of sampling. Each 3m sample interval was carefully homogenized and assessed for lithology, colour, grain size, degree of roundness and sorting. Each interval was semi quantitatively assessed for slimes content and heavy mineral concentrations by washing and panning a standard representative subsample. • Virtually all of the drill samples are sand or clayey sand. Drillhole logs are useful in separating geology units and for checking the laboratory results, but do not provide any information additional to the laboratory data that is fundamentally required for the resource estimation.

Criteria	JORC Code explanation	Commentary
	• *The total length and percentage of the relevant intersections logged.*	
Sub-sampling 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.	• The full sample of each 3m drill run was sampled in the field and after logging was labeled and sealed and taken to the laboratory for analysis. The complete sample was dried in large metal trays and once dry the sample is placed into a container to be broken up into individual particles. The complete dry sample weight is recorded and then two sub samples of 500 to 700g are made using a rotary splitter one sample is for analysis and the other sample is for reference.
	• For all sample types, the nature, quality and appropriateness of the sample preparation technique.	• All drill samples consist of sand, clayey sand or sandy clay. For these samples the sample preparation method is appropriate.
	• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	• All sample preparation and analysis stages are documented as a set of standard operating procedures. • All stages of the analytical process are monitored by the lab supervisor to ensure all procedures are being adhered to. • All weights are automatically captured by the use of an in-house laboratory information management system (LIMS) software, which minimizes any human data input and the risk of mistyping values into the database. • In-house reference standards, blanks and duplicates are routinely inserted in the sample sequence at a rate of 1:20 to assess the quality of sampling and analysis. • Drill holes were also twinned at a rate of 1:20 holes.

Criteria	JORC Code explanation	Commentary
	• 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 entire sample is delivered to the lab, so it is representative. Care is taken with the sample collection and handling to ensure that the sample delivered to the laboratory is representative of the interval drilled.
	• Whether sample sizes are appropriate to the grain size of the material being sampled.	• The three-metre drill sample of 24kg nominal size is considered large enough to reliably capture the HM, slimes and oversize characteristics of the in-situ material. • The 500g sub sample is considered sufficient large to consistently determine the concentration of heavy minerals. The sample size is also considered large enough to assess slimes content and the oversize fraction.
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.	• Sieving is carried out to assess the amount of particles greater than 1mm (oversize) and the amount of material less than 45 microns (slimes). • The heavy mineral concentration of each sample is determined by carrying a heavy liquid separation (HLS) using an industry-approved liquid with a density of 2.85g/cm3. The heavy liquid is water-soluble and density is monitored closely. • The heavy minerals are separated from the lighter minerals (mainly quartz) by sinking in the heavy liquid medium. The heavy minerals are then separated, washed and weighed.
	• For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining	• Not used.

Criteria	JORC Code explanation	Commentary
	the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	
	• Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	• Field duplicate samples are inserted into each processing batch at a rate of 1:20 samples. • Blank samples consisting of either pure quartz sand or the waste light minerals removed from the HLS process are inserted 1:20 samples. • Laboratory duplicate samples are inserted randomly in a batch from a sample split prior to HLS. • Standard material generated on site, consisting of a low grade, medium grade and high grade samples were homogenized over and extended period to ensure uniformity. Standards were inserted at a rate of 1:20 samples.
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel.	• Mineral sands drilling involves numerous drill holes over large areas with generally, moderate grade intersections. High-grade are sometimes encountered however the intersections are a relatively insignificant part of the overall mineralisation, high grade results are often checked by examining the HM “sinks” from the analysis (the HM resulting from the analysis process is stored for further testing).
	• The use of twinned holes.	• Drill holes were twinned routinely every 20 holes. The initial hole was drilled at the specified location and then the rig was moved no more than 2m from the original hole and drilled and sampled to the same depth.

Criteria	JORC Code explanation	Commentary
		• Several of the older hand-auger drillholes were twinned and deepened with the recent Air-core drilling.
	• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	• In the laboratory the data is recorded directly into the in-house LIMS software. Once a week the laboratory data is uploaded to Rio Tinto's Resource Development department in Montreal and verified. The drill hole collar, survey and geological logging data was also sent for incorporation into the database. The full data was then returned to the onsite geologists for checking, and then uploaded into a secure Acquire database platform. • Data is loaded into relevant software for cross sections to be plotted with THM and slime concentrations and interpreted geology so that the base of mineralisation can be reliably predicted.
	• Discuss any adjustment to assay data.	• No adjustments are made to the assay data for the purposes of public reporting.
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. • Specification of the grid system used. • Quality and adequacy of topographic control.	• The coordinate of each hole was taken at the time of drilling using a hand held GPS with an accuracy of 5m. • The coordinate system is UTM 36S (WGS84) • A detailed digital elevation model has been generated for the Ravene area using available high-resolution stereo pairs from satellite data. • The vertical accuracy of the data is 0.5m.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	• Data spacing for reporting of Exploration Results. • 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. • Whether sample compositing has been applied.	• Hole spacing for recent drilling is approximately 1000m by 500m at Ravene and have been designed to infill historical drilling on a 1000m by 500m spacing so that an overall drill spacing of 500m by 500m was obtained. • Data at Ravene together with historical data is sufficient to establish geological and grade continuity needed for an Inferred Mineral Resource estimation. The current drilling is infilling drilling of historical drilling conducted by Rio Tinto.
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. • 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.	• The mineralisation at Ravene has two trends, the first is the major trend following the general direction of the coast line. The second trend is dictated by dune morphology. • The drill holes are arranged along lines that are oriented perpendicular to the major coastal trend, and the orientation and 500m x 500m spacing of holes is considered effective and unbiased in testing the mineralisation.
Sample security	• The measures taken to ensure sample security.	• Chain of custody is managed by Savannah. Samples are stored on site in a locked yard. Check samples are then transported to Johannesburg by road freight. Savannah personnel have no contact with the samples once they have been dispatched.

Criteria	JORC Code explanation	Commentary
		• HM samples are retrieved as necessary when further mineralogical analysis is required.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• An audit and review of the sampling techniques and data have been completed by an independent third party who confirmed that they were appropriate and are being conducted to a suitable standard.

Section 2 Reporting of Exploration Results

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

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 security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	• The Ravene prospect is located with the exploration permit 566L where Savannah is earning a 51% interest in the Block with the remainder being held by JV partner Rio Tinto. • The tenement is subject to a memorandum of understanding (MOU) between Rio Tinto and the Mozambican government. The MoU grants Rio Tinto a right of priority to a mining concession in the area covered by the MoU during its term.

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• At Ravene, Rio Tinto carried out various field programs from 2000 to 2004, which consisted of sampling using a hand auger and an RC drill program. Interpretation of the field results has been ongoing up to 2013.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The mineralisation at Ravene is hosted in a sequence of older dune sands that are situated approximately 5km from the present coast line. The general trend of dunes is to the northeast, parallel with the present coast. The dunes themselves are a series of parabolic dunes representing ancient blowouts with mineralisation occurring in both the dune faces and arms of the blowouts. The mineralized dunes, have been mapped as the third in a sequence of older dunes that overlie the fluvial sediments of the Mutamba river. The oldest dunes D1 are characterized by high slimes and a deep red colour and are not present in the Ravene area. The next oldest D2 sands form a basement to the D3 mineralisation seen at Ravene are characterized by a slight colour change, an increase in slimes and lower THM. Overlying the mineralised D3 unit to the east are more recent coastal dunes (D4) that have been blown inland.
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:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in*	• Appendix 1 contains a complete listing of the drillhole intercepts for the Inferred Resource.

Criteria	JORC Code explanation	Commentary
	metres) of the drill hole collar ○ *dip and azimuth of the hole* ○ *down hole 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 aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *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.*	• All drillhole intercepts are reported for the resource. Because the resource starts at the surface, all reported grades are effectively averaged to the surface. No cut-off grade is applied to the reported intercepts.

Criteria	JORC Code explanation	Commentary
	• *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	
Relationship between mineralisation 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 drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Results are reported as length weighted averages. • No high grade cuts have been applied to the reporting of the results. • No metal equivalent values have been used. • The drill holes are vertical and the mineralisation is sub-horizontal.
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.*	• Figures 1 & 2 show the location of the resource. Figure 3 shows the drilling. Figure 4 shows the interpreted THM grade of the mineralization, averaged to the surface.
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*	• All results have been reported.

Criteria	JORC Code explanation	Commentary
	practiced to avoid misleading reporting of Exploration Results.	
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.*	• The geology interpretation of the dune 2, 3 and 4 and results at Ravene are consistent with the observations and information obtained from historical data collected.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Further infill drilling will be conducted as part of the on-going development of this resource. • Further mineralogy testing of the resource will also be conducted as part of on-going development.

Section 3 Estimation and Reporting of Ravene Mineral Resource Estimation

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• Samples are panned in the field and the field estimate is the first check on the final reported result. Most of the drillholes are logged in the field and many of the laboratory analyses were completed without using manually typed results. • The drilling data is loaded and held in an AcQuire database, where data integrity is checked. • Drilling results are checked on cross-section, where grade anomalies are easily spotted.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• The Competent Person visited the resource site during January 2017 to assess regional geology, drilling and laboratory practices.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and*	• The mineralised sands are windblown dune sands probably derived from beach strandline sediments where the heavy minerals were concentrated. • The heavy mineral content of the sand is one of its main distinguishing geological characteristics, indicating that natural concentrating mechanisms have been active at some stage during its past. Additionally, the slimes and oversize contents of the sand are indicators of previous geological environments. • Block model grades are estimated using samples only from within the same geological unit.

	controlling Mineral Resource estimation. • *The factors affecting continuity both of grade and geology.*	
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• Mineralisation extends for 21km north-northeast as a series of oblate "pods". The mineralised zones are of variable width, up to 3.4km wide. The dune topography is variable, but mineralisation averages 25m thickness, and has a maximum drilled thickness of 65m. Mineralisation extends up to the surface.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements*	• The estimate is based on a block model that extends beyond the resource boundaries and was created using all available data. The block model uses anisotropic search ellipsoids based on semi-variogram ranges derived from the main mineralised Dune 3 Unit. For THM, slimes and oversize assays, all blocks were allocated values. The available mineral assemblage data was used to estimate the percentage of ilmenite, zircon and rutile in the THM. *RAVB Ellipsoid Details* Unit / Major Azimuth / Major Diam / Minor Diam / Z Dune 3 / 0 / 1800 / 1800 / 40 • The model is based on a detailed geological interpretation which divides the resource area into three major units: Dune 2, Dune 3 and Dune 4. The

	or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). • *In the case of block model interpolation, the block size in relation to the average* • *sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	best mineralisation is found within the Dune 3 unit. • The blocks used are 200 x 200 x 3m in size. Block averages were estimated using inverse distance algorithm using the power 2.5. • Estimates only used drill assays from within the same geological unit. • The drilling contains a mixture of 3m and 1.5m samples, so all samples were digitally re-sampled at 1.5m intervals to ensure equal weighting. • Grades were not cut, as there are no obvious high grade outliers in the data set. • Verification: The model was checked visually to ensure the average drillhole grades were modelled correctly in the block model. • The average THM grade of the assayed drill intersections is 3.27%, compared to block model average of 3.04% THM. The model extends into low-grade, less densely drilled areas, so the block model average is slightly lower than the drill samples.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages are estimated dry.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The resource boundary is determined by the content of ilmenite and zircon. • The ratio of these minerals vary and the cut-off changes accordingly, but for the average composition, the economic cut-off is 2.9% THM containing 1.6% ilmenite (55% of the THM) and 0.068% zircon (2.3% of

		the THM). • The resource boundary is determined using the following major assumptions: overall wet concentrator THM recovery 74%, ilmenite, zircon and rutile spiral recoveries 92%, 90% and 80% respectively. MSP recoveries: ilmenite 95%, zircon 75%, rutile 30%. Mineral prices ilmenite $185, zircon $1200, rutile $800*. Area disturbance costs (including rehab) are assumed at $1.90 per square metre, and an expansion factor of 1.4 is applied to allow for off-orebody disturbance. Mining costs and wet concentration $1.32 per ton of ore mined, MSP treatment $25/t of HMC (*Heavy Mineral Concentrate)*, head office/port costs/marketing $25/t HMC, HMC and product transport costs $10/t HMC. Slimes treatment is estimated at $3/t of slimes in the ore that exceeds 5% (which is assumed to be fixed in the sand tailings). • Using these assumptions, mining and processing 1 tonne of ore at 2.9% THM costs $2.84. Revenues from the ilmenite and zircon produced from this material are also $2.84. • * The mineral prices used in the resource estimation are entirely based on price trend evaluations by the Competent Person. More detailed costs and revenues will be estimated during feasibility studies.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be*	• Dredge mining is assumed to be the most likely long-term mining method. Dry mining methods could also be used on high grade zones within the resource if a higher cut-off grade is applied.

	reported with an explanation of the basis of the mining assumptions made.	
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• Metallurgical assumptions are listed above in determination of economic cut-off. Basic mineralogy has been determined by XRF analyses of magnetic fractions of the HM. The mineralogy is consistent with other resources along strike and nearby which have been studied in greater detail.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the*	• Mining tailings will be initially stored in a dedicated tails storage facility until sufficient mining void has been opened up to allow in-pit tailings disposal. Slimes will probably be disposed of with the sand tails, or in slimes paddocks built in the original tails disposal facility. • Tailings from the MSP would be disposed of in the mining void near the MSP. These are benign and will be covered with sand and soil prior to hand-back to the community. • The mine will require a certain amount of ground disturbance, but this will be rehabilitated progressively as the mine advances. • Much of the area is currently used for small agricultural plots that are used on a rotational basis by subsistence farmers. Scattered houses and other small buildings lie on or near the resource and would probably require resettlement. In general though, there is a lower population and

	status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	fewer houses and crop areas than on other nearby resources.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Density has been measured on the same geological unit (D3) on nearby areas using Sonic drilling. The current Ravene model (RAVB) uses a density calculation of 1.62 + THM%/100.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence*	• The resource has been drilled at 500 x 500m spacing and is classified as Inferred. • The current classification was prepared by and reflects the view of the Competent Person.

	in continuity of geology and metal values, quality, quantity and distribution of the data). • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• The current resource estimate is the first to be published and has not been audited or reviewed yet.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.*	• In the view of the Competent Person the accuracy and confidence in the THM grades and mineralogy are such that with further in-fill work, the final ore grade and mineral characteristics are unlikely to vary from the current Inferred Resource estimate by more than 30%. There is scope to extend the boundaries of the resource outwards and downwards in some places with further drilling, and it is likely that more high-grade zones will emerge from further infill drilling. • At the time of writing, the mineral prices used in the modelling are approximately equal to the current market price. In the view of the Competent Person, the assumed mineral prices are slightly conservative long-term mineral prices.

	• *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	