



Savannah Resources Plc / Index: AIM / Epic: SAV / Sector: Mining  
31 December 2014

**Savannah Resources Plc**  
**Maiden 65 Million Tonne Inferred Mineral Resource – Jangamo Heavy Mineral Sands,  
Mozambique**

Savannah Resources plc (AIM: SAV) announces that it has defined an initial, 65MT maiden Inferred Mineral Resource Estimate (“MRE”) at its Jangamo Heavy Minerals Sand Project (“Jangamo”) (**Figure 1, Table 1**). Jangamo is located in a world class heavy minerals sands province adjacent to Rio Tinto's major Mutamba mineral sands deposit in southern Mozambique.

**HIGHLIGHTS:**

- A maiden JORC compliant Inferred Mineral Resource has been defined over a number of zones within the eastern part of the Jangamo exploration licence:

<b>Cut-off Grade (THM)</b>	<b>Category</b>	<b>Tonnage</b>	<b>Grade THM (“Total Heavy Minerals”)</b>
2.5%	Inferred	65Mt	4.2%

**Table 1: High Level Jangamo Mineral Resource Summary**

- Initial resource drilling has successfully identified higher grade areas of THM mineralisation at or near surface
- A major Heavy Mineral Sands (“HMS”) strandline system defined in the western part of the Jangamo tenement has excellent additional resource potential with intersections of up to 45m at 3.51% THM from 12m in JMRC133
- 2015 field programme in Mozambique is expected to start in March following the wet season with work to focus on expansion of the current resource base

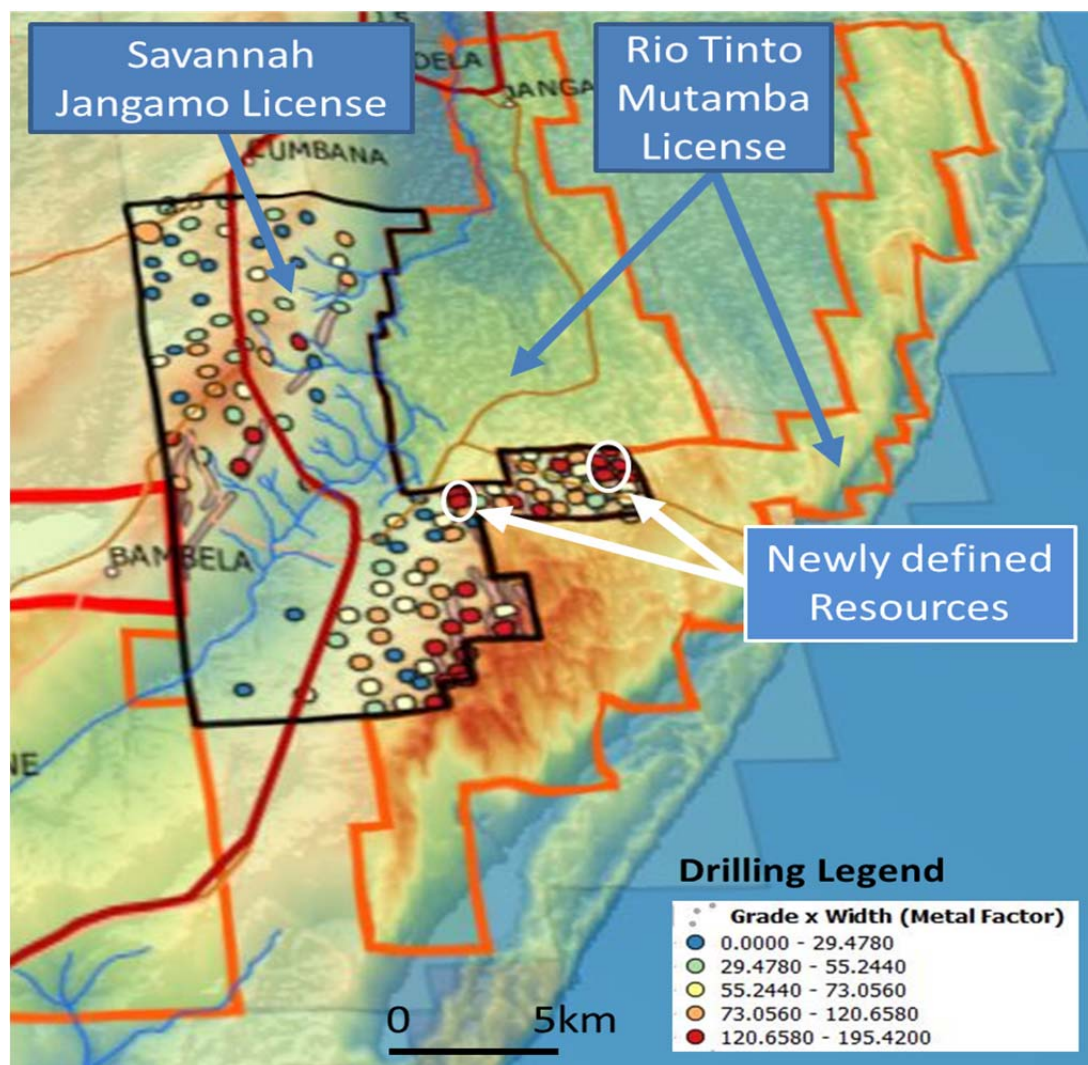
Savannah’s CEO, David Archer said, “We are delighted to announce a maiden Inferred Mineral Resource Estimate of 65Mt at 4.2% THM from a modest initial round of resource drilling over part of the eastern arm of the Jangamo tenement. The MRE provides us with a very solid resource base to build on with further resource drilling. The deposit we have identified is part of the very large Mutamba heavy mineral sands system with excellent potential to further expand the Mineral Resource in Savannah’s tenement area. The Mineral Resource identified remains open along strike.

“We have also identified a major HMS system in the western part of the tenement with excellent intersections of up to 45m at 3.51%THM from 12m in JMRC133. The western

system, which extends over at least 10km in strike, requires further exploration to be undertaken prior to resource drilling.

“Jangamo is part of a very large system and we are focused on defining a higher grade project that has superior economic characteristics for the development of a profitable mining operation with modest capital costs. Importantly, much of the Mineral Resource is from surface. This complements the favourable local infrastructure setting that benefits from nearby roads, power and port.

“We will now look to assess a number of promising commercial and strategic options for Jangamo following on from the definition of the maiden MRE. This is being done in parallel with the field programme in Mozambique which is expected to recommence in March following the wet season with work to focus on expansion of the current resource base.”



**Figure 1. Tenement location map over a digital terrain model showing Savannah's Jangamo licence, the newly defined Inferred Mineral Resource and its location adjacent to Rio Tinto's Mutamba Licences**

## Mineral Resource Estimate

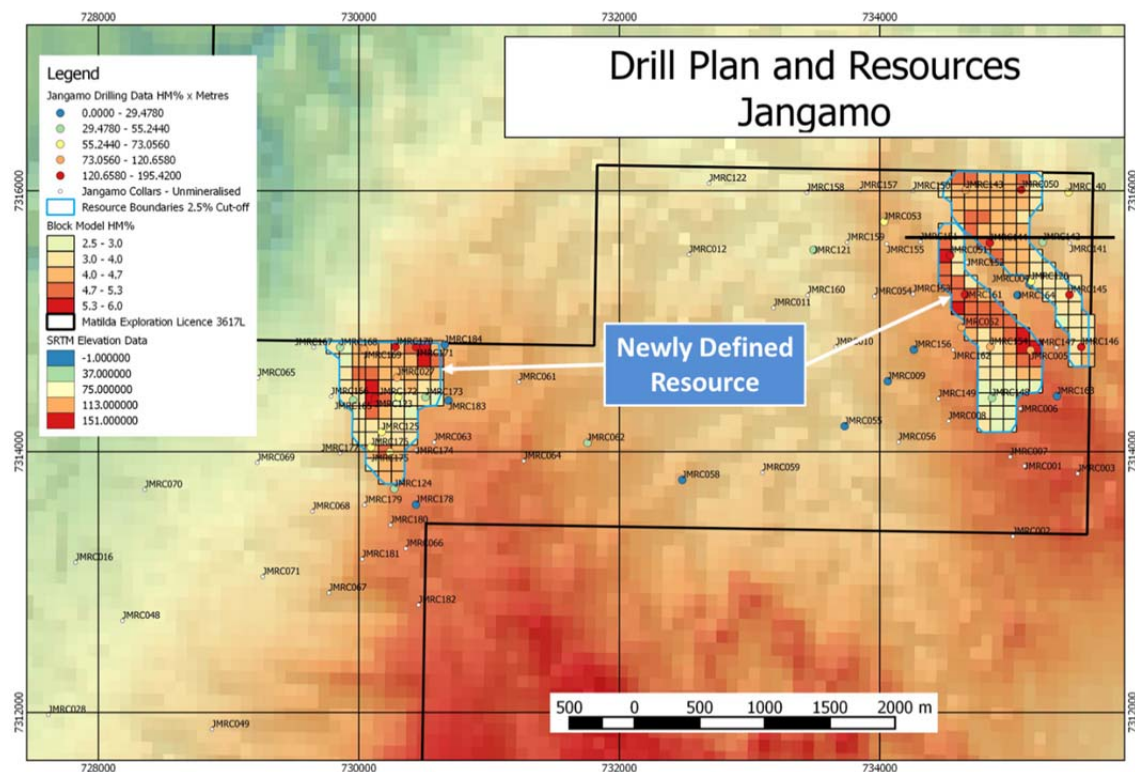
Initial resource drilling was targeted at two areas within the eastern arm of the tenement to define the maiden MRE. The exploration target of the adjacent Mutamba deposit published in 2008 was 7-12Bn tonnes at 3-4.5% THM<sup>1</sup>. Savannah's strategy has been to target potential extensions of the Mutamba mineralisation into the Jangamo tenement, with a primary focus of defining mineralisation at the upper end of the grade range for the Mutamba deposit of over 4% THM.

The strategy has proved successful with a maiden Inferred MRE of 65Mt (52Mt net attributable to Savannah) at 4.2% THM at a cut-off grade of 2.5% THM being defined within the project area (**Table 2, Figure 2**). Details of the resource are contained in **Appendix 1**. The resource remains open along strike and there are a number of areas identified during the 2014 exploration programme which require follow up work and resource drilling.

Resource Table (2.5% Cutoff)											
Zones	Category	Sand (Mt)	% THM	% Ilmenite in HM	% Ilmenite in sand	% Rutile in sand	% Zircon in sand	HM (Mt)	Ilmenite (Mt)	Rutile (Mt)	Zircon (Mt)
Jangamo	Inferred	65	4.2	60	2.5	0.083	0.15	2.7	1.6	0.054	0.10

Note: The table above has been prepared on a gross basis showing 100% interest. Savannah has an 80% indirect interest in the Jangamo Project..

**Table 2. Detailed Summary of Jangamo Mineral Resource Estimation**



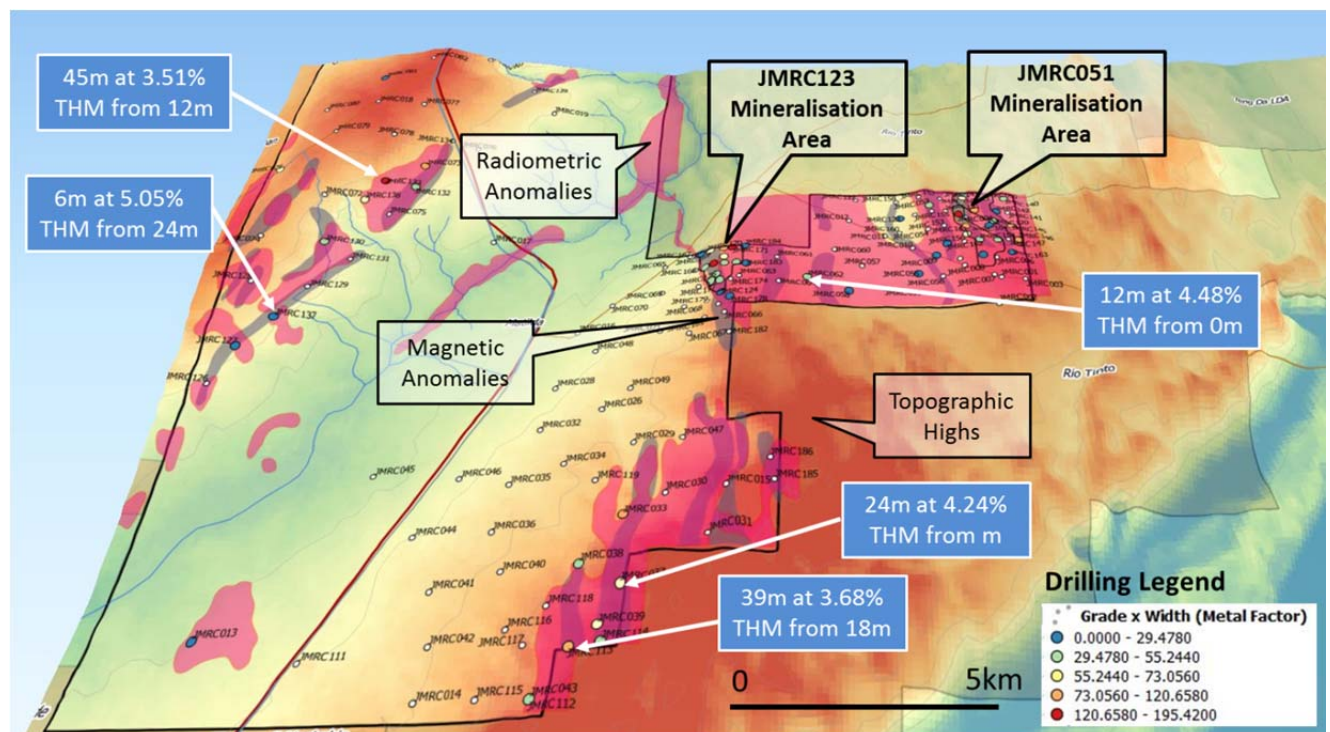
**Figure 2. Summary location map of the Jangamo initial Inferred Mineral Resource**



## Ongoing Resource Definition and Exploration Programme

Further work is now required to continue to build the current resource base and continue the ongoing exploration programme. The ongoing work programme will include:

- Metallurgical testwork to characterise the potential product from any project development
- Drilling around the newly defined Inferred Mineral Resource to further expand the resource base
- Further grid based resource drilling around anomalous exploration drill holes (**Figure 3**)
- Ongoing exploration work and resource drilling with a focus on the newly defined western dune system



**Figure 3. Summary Map of Exploration Drilling completed to date draped over a digital terrain model highlighting other Potential Resource Targets**

## Competent Person

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 resource estimations is based upon information compiled by Mr Colin Rothnie who is an independent consultant and 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.

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

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 Biddle (Nominated Adviser)	RFC Ambrian Limited	Tel: +44 20 3440 6800
Charlie Cryer (Corporate Broker)		
Felicity Winkles/ Charlotte Heap	St Brides Media & Finance Ltd	Tel: +44 20 7236 1177

## Notes

Savannah Resources Plc (AIM: SAV) is a growth oriented, multi-commodity, exploration and development company. It has an 80% shareholding in Matilda Minerals Limitada which operates the Jangamo exploration project in a world class mineral sands province in Mozambique which borders Rio Tinto's Mutamba deposit, one of two major deposits Rio Tinto has defined in Mozambique, which collectively have an exploration target of 7-12Bn tonnes at 3-4.5% THM1 (published in 2008).

Savannah has interests in three copper projects 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, provide Savannah with an excellent opportunity to potentially evolve into a mid-tier copper 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.

In addition, Savannah owns a 19.7% 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.

## 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)

## **Technical Glossary**

Inferred Mineral Resource Estimate – as defined in the December 2012 edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves” (JORC Code)

# JORC Code, 2012 Edition – Table 1: Jangamo Deposits: Inferred Resource

## Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Air-core drill samples taken at 3m intervals.</li> <li>Samples were taken from a cone splitter under the cyclone on the drilling rig.</li> <li>Two samples were taken for every interval, duplicate samples for storage and checks.</li> <li>Check samples taken at 10%</li> <li>Field splits of samples of approximately 2kg were dried and riffle split initially to 500g nominal weight prior to transport to the final laboratory in South Africa. The samples were then split to 250g, attritioned and then screened at 0.045 mm to remove slimes (determined by subtraction). The oversize fraction was screened out using a 2mm screen and the heavy mineral fraction of the remaining sand fraction separated using dense liquid TBE of density 2.85.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li><i>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 so, by what method, etc).</i></li> </ul>	<ul style="list-style-type: none"> <li>NQ Air-core drilling with hole diameter approx 75mm, all holes are vertical.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li><i>Whether a relationship exists between sample</i></li> </ul>	<ul style="list-style-type: none"> <li>Field assessment of sample volume. Samples with good recovery weigh 7-8kg for each metre (7.1 kg theoretical). With air-core method, there is normally lower than average recovery at the very top of the drillhole due to air losses into the surrounding soil. Below the water table recovery can be greater than 100% as water flowing into the</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i>	hole causes the hole to have a greater diameter than the drilling bit.
Logging	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Field logs with geology and panned estimates of HM content.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Riffle splitting in laboratory down to 250g nominal</li> <li>• Laboratory duplicates taken at approximate rate of 6%</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li>• <i>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</i></li> </ul>	<ul style="list-style-type: none"> <li>• Sieving to determine +2mm (oversize) and -45micron (slimes).</li> <li>• Heavy mineral separation using TBE heavy liquid to separate HM from other minerals (predominantly quartz).</li> <li>• Control procedures include laboratory duplicates and blind duplicates. TBE density is monitored and kept above 2.85.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<i>established.</i>	
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>• The verification of significant intersections by either independent or alternative company personnel.</li> <li>• The use of twinned holes.</li> <li>• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>• Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>• No verification at this level of assessment.</li> <li>• All samples have panned estimates for HM content and only mineralised samples were submitted for laboratory analysis.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>• Hand-held GPS was used to locate drillholes.</li> <li>• Elevation determined by projection onto SRTM regional elevation data which is generally accurate to +/- 2m.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> <li>• 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.</li> <li>• Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>• Drill spacing is nominally 400 x 400m with some areas infilled to 400 x 200m.</li> <li>• Mineralisation is hosted by arcuate dunes which have formed on top of older, less mineralised dunes. The drill spacing is adequate to show the extent of mineralisation, but with this type of mineralisation, there may possibly be unmineralised zones of sand between the drillholes. The drill spacing is appropriate for Inferred Resource category.</li> <li>• Sample composites were used to determine mineralogy of the HM.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• The main trend of the limbs of the dunes is approximately 340 – 160 degrees. However the lunate ends of the dunes trend approximately east-west. The early phases of drilling utilised existing access, but the final in-fill drilling was conducted using the UTM grid.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>• Samples are sun dried in calico bags and then stored in weather-proof shelters.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>• The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>• None for this project.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Exploration Licence 3617, of area 172 km<sup>2</sup>, lies approximately 35km south of the regional capital Inhambane and approximately 350km north east of the national capital Maputo. The lease is held by Matilda Minerals which is 80% owned by Savannah Resources.</li> <li>There are no known impediments to mining development, other than the normal social issues regarding relocation - if necessary.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>Matilda Minerals conducted preliminary field sampling and located some mineralisation on the lease.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<p>Mineralisation at Jangamo is hosted in dune sands 6 to 10 km inland from the current coastline. The mineralised dunes are possibly associated with an old coastline that lies approximately 3 kilometres inland of the current coast.</p> <p>The Inhambane region contains vast quantities of reworked coastal sands that were deposited by the Limpopo River further south.</p>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li><i>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:</i> <ul style="list-style-type: none"> <li><i>easting and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> </li> <li><i>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</i></li> </ul>	<ul style="list-style-type: none"> <li>See Appendix 1 - drillhole listing from resource zones.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>explain why this is the case.</i>	
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>A 2.5% HM cut-off was used when determining the boundaries of the mineralisation. Thin zones with grades below this cut-off were included if the average of the extended zone exceeded 2.5%.</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>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').</i></li> </ul>	<ul style="list-style-type: none"> <li>The drillholes are vertical and the mineralisation is generally sub-horizontal.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>See Figure 1, Plan view and Figures 2 – 6 representative sections.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>This resource has only been reported as an Inferred Resource, where the modeling process has averaged the grade data.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li><i>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</i></li> </ul>	<ul style="list-style-type: none"> <li>Airborne geophysics was used to help target drilling. Magnetic and radiometric data are useful to detect mineralised areas. Detailed SRTM elevation data is also used to help interpret paleo-landforms.</li> <li>Mineralogy was determined using QEMSEM scanning electron microscopy on composite samples from the mineralised areas.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>contaminating substances.</i>	
Further work	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>Infill drilling will be conducted to improve confidence in the resource.</li> <li>Mineralogy of the HM needs to be quantified throughout the resource.</li> <li>Product quality needs to be confirmed with bulk sample test work.</li> <li>Slimes characteristics need to be measured and tailings plans developed for the fines materials.</li> <li>A source of water for mineral processing needs to be located and quantified.</li> <li>Social and environmental baseline studies need to be commenced leading up to EISHA studies.</li> </ul>

### Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Data validation procedures used.</i></li> </ul>	<ul style="list-style-type: none"> <li>For Inferred models such as this at early stages of development, visual comparison of the model grades with the drillhole grades provides adequate checks of the model.</li> </ul>
Site visits	<ul style="list-style-type: none"> <li><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> <li><i>If no site visits have been undertaken indicate why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Competent Person visited site during the second phase of drilling in June 2014. During the visit the drilling and sampling methods were assessed and the logging checked.</li> </ul>
Geological interpretation	<ul style="list-style-type: none"> <li><i>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</i></li> <li><i>Nature of the data used and of any assumptions made.</i></li> <li><i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li> <li><i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li> <li><i>The factors affecting continuity both of grade and geology.</i></li> </ul>	<ul style="list-style-type: none"> <li>The mineralised sands are windblown dune sands probably derived from beach strandline sediments where the heavy minerals were originally concentrated. At Jangamo the dunes are arcuate and many have long inverted U shapes. They climb up and also incorporate reworked sand from older dunes that form a prominent ridge in the area.</li> <li>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.</li> <li>Grade is moderately continuous along the limbs of the dunes. However, the dunes have been subject to erosion and minor in-fill</li> </ul>

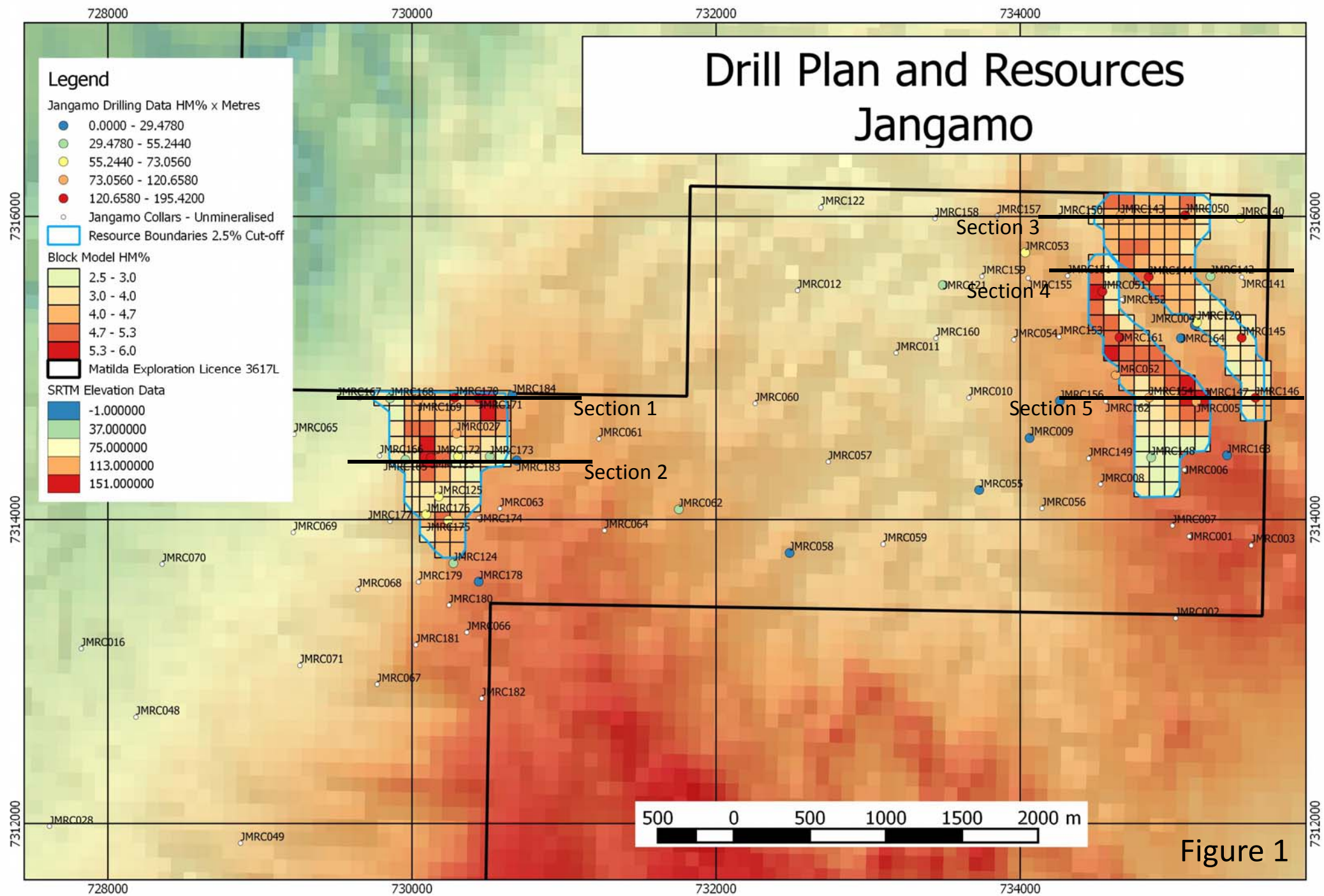
Criteria	JORC Code explanation	Commentary
		with less mineralised material. For this reason, it is uncertain if grade is continuous between some of the widely spaced drillholes.
<i>Dimensions</i>	<ul style="list-style-type: none"> <li><i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i></li> </ul>	<ul style="list-style-type: none"> <li>Mineralisation has been modeled in three zones: <ul style="list-style-type: none"> <li>JMRC123 area (also called the “Central East” area in the computer modelling). The area extends 1.1km south of the lease boundary and is up to 800m wide near the boundary.</li> <li>Two areas, possibly linked, near JMRC051. The zones were labelled East 1 and East 2 for computer modelling. The western-most of the zones is 1.6km long and approximately 400m wide. The eastern-most zone is 1.7km long and mostly 200m wide, but appears to widen to about 600m wide near the lease boundary. There is a zone of unmineralised material separating the two zones, possibly a late stage in-fill between dunes.</li> </ul> </li> </ul>
<i>Estimation and modelling techniques</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li><i>The assumptions made regarding recovery of by-products.</i></li> <li><i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></li> <li><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li><i>Any assumptions behind modelling of selective</i></li> </ul>	<ul style="list-style-type: none"> <li>The estimate is based on a block model created using the available data. This model uses anisotropic search ellipsoids based on the mineralisation typically found in aeolian sediments. Block estimation 6 400m x 20m search ellipsoid and sample weight anisotropy, with the long ellipsoid axis oriented at 20 degrees west of north (340 degrees). The blocks were 100m x 100x x 3m in size. The mineralized sediments were modeled together as a single unit (one domain). The grades were not cut, although there are no obvious high grade outliers in the data set.</li> <li>Verification: The model was checked visually to ensure the average drillhole grades were modeled correctly. Also, the average grade of the assayed drill intersections is 4.45%, compared to block model average of 4.17% HM. The block model incorporates some low-grade intervals where laboratory analyses were not obtained and so the block model has a slightly lower average grade.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<p>mining units.</p> <ul style="list-style-type: none"> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	
Moisture	<ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>Tonnages are estimated dry.</li> </ul>
Cut-off parameters	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>The cut-off grade is estimated at 2.5% using the following major assumptions: In-situ HM mineralogy 60% ilmenite, zircon 3.7%, rutile 2% as per the QEM SEM study. HM wet plant recovery 78%, MSP recoveries ilmenite 90%, zircon 70%, rutile 60%. Mineral revenues ilmenite \$150, zircon \$1200, rutile \$800. Mining costs \$1.50 per ton, MSP treatment \$20/t of HMC, mine fixed costs \$20/t HMC, HMC and product transport costs \$10/t HMC.</li> </ul>
Mining factors or assumptions	<ul style="list-style-type: none"> <li>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 reported with an explanation of the basis of the mining assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>Dry mining using dozer traps is assumed to be the most likely mining method, although front end loaders may also be used. If larger deposits are found nearby, then dredging is also a possibility.</li> </ul>
Metallurgical factors or assumptions	<ul style="list-style-type: none"> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>A QEMSEM study has been conducted on composite samples from the mineralised zones. Ilmenite content of the HM averaged 60%, zircon content 3.7% and rutile 2.0%. Metallurgical recovery assumptions are listed above in the cut-off parameters.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>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.</i></p>	
Environmental factors or assumptions	<ul style="list-style-type: none"> <li>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 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.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>
Bulk density	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul style="list-style-type: none"> <li>Assumed bulk density of 1.6 t/m<sup>3</sup>. This is moderately conservative given the range of values measured in similar materials. Density studies are recommended with further infill drilling.</li> </ul>
Classification	<ul style="list-style-type: none"> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> </ul>	<ul style="list-style-type: none"> <li>All of this resource is classified as Inferred.</li> <li>Principal uncertainties to be resolved with further work are: <ul style="list-style-type: none"> <li>Wide drill spacing. Infill drilling is required to ensure continuity between existing intersections.</li> <li>Mineralogy needs to be quantified throughout the resource.</li> <li>Metallurgical recoveries and product quality needs to be</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul style="list-style-type: none"> <li>quantified with bulk sample test work. <ul style="list-style-type: none"> <li>Bulk density of the mineralisation needs to be quantified.</li> </ul> </li> <li>The current classification reflects the view of the Competent Person.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<ul style="list-style-type: none"> <li>There have been no formal audits of this resource.</li> </ul>
Discussion of relative accuracy/confidence	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul style="list-style-type: none"> <li>In the view of the Competent Person the accuracy and confidence in the HM grades and mineralogy are such that with further infill work, the final ore grade and mineral characteristics are unlikely to be different to the current estimate than by more than 20%. The confidence in the tonnage of the resource will increase with further infill drilling and the final estimate may be higher or lower than the current estimate (in the view of the Competent Person there is an equal chance of the resource increasing or decreasing with further drilling).</li> <li>Variograms have been attempted from the current data, but the drill spacing is too coarse to obtain reasonable results (as expected with an Inferred Resource).</li> <li>To be successfully exploited, the resource requires more economic mineralisation within the region in order to justify the capital expenditure of the required processing plants. However, it understood that there are large resources on nearby leases not held by Savannah. Additionally, Savannah plan to continue exploration within the region.</li> </ul>



**Section 1** Mozambique - SECTION 7314800 NORTH

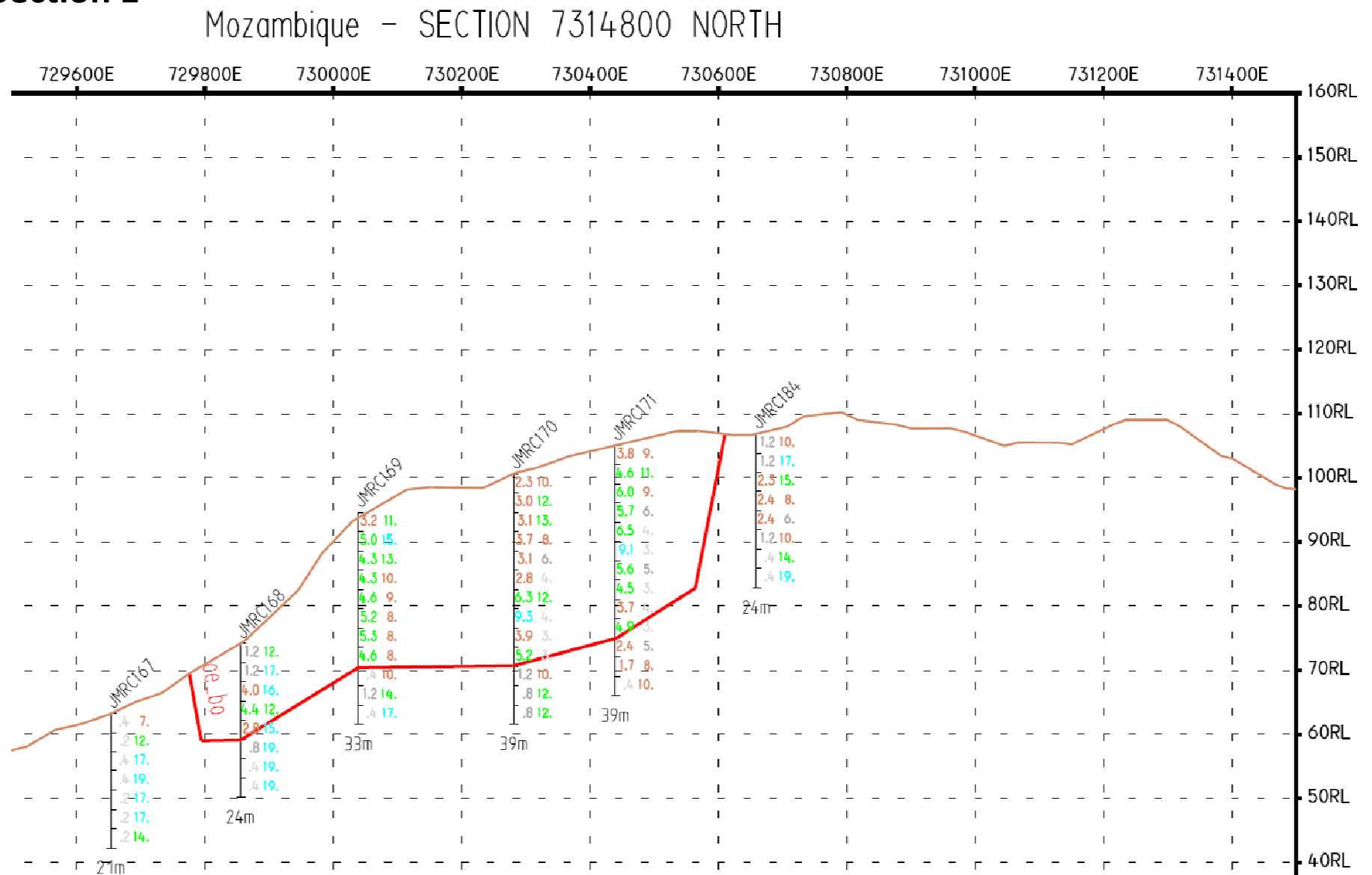


Figure 2



## Section 2 Mozambique – SECTION 7314400 NORTH

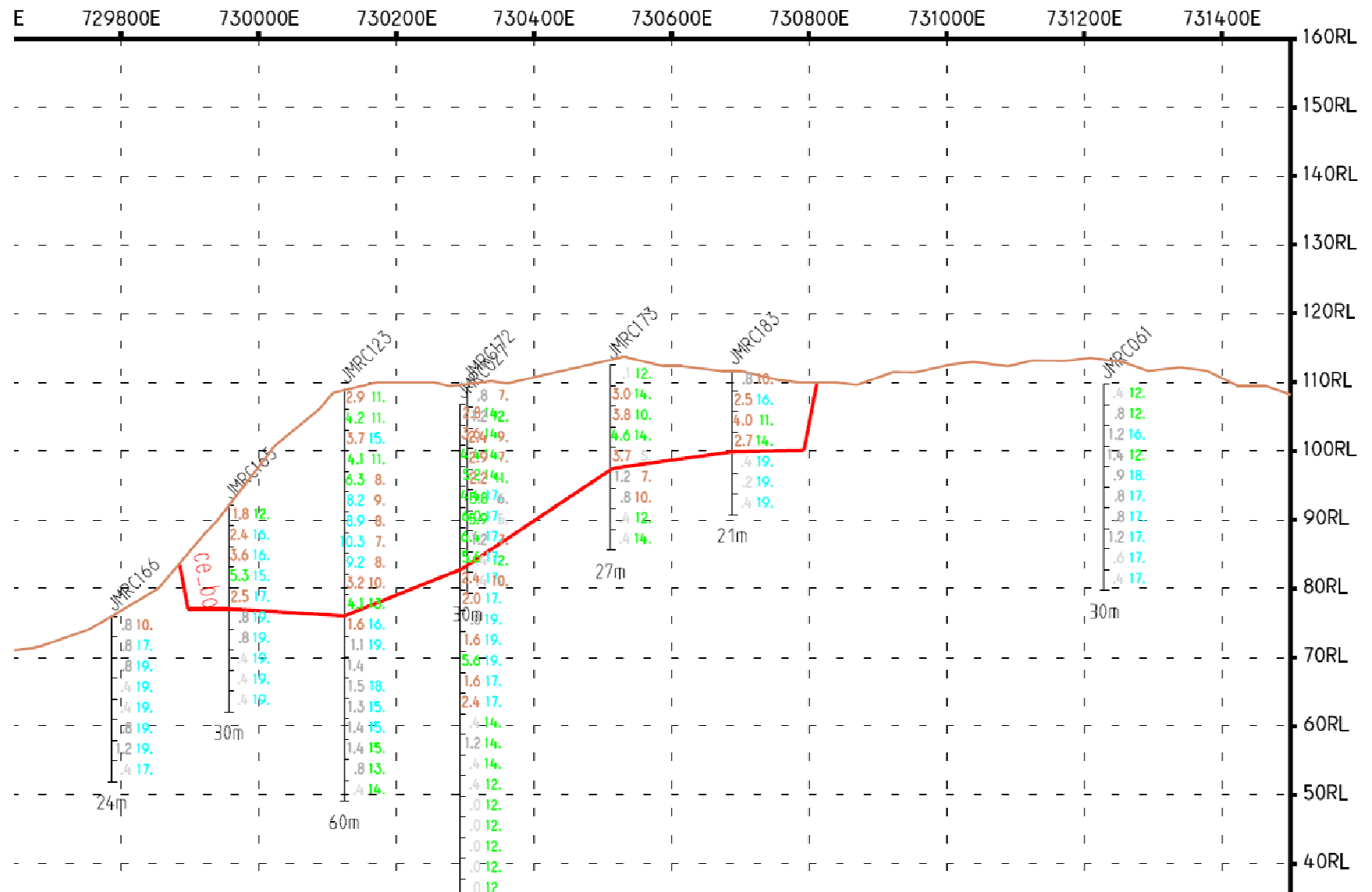


Figure 3

## Section 3

Mozambique - SECTION 7316000 NORTH

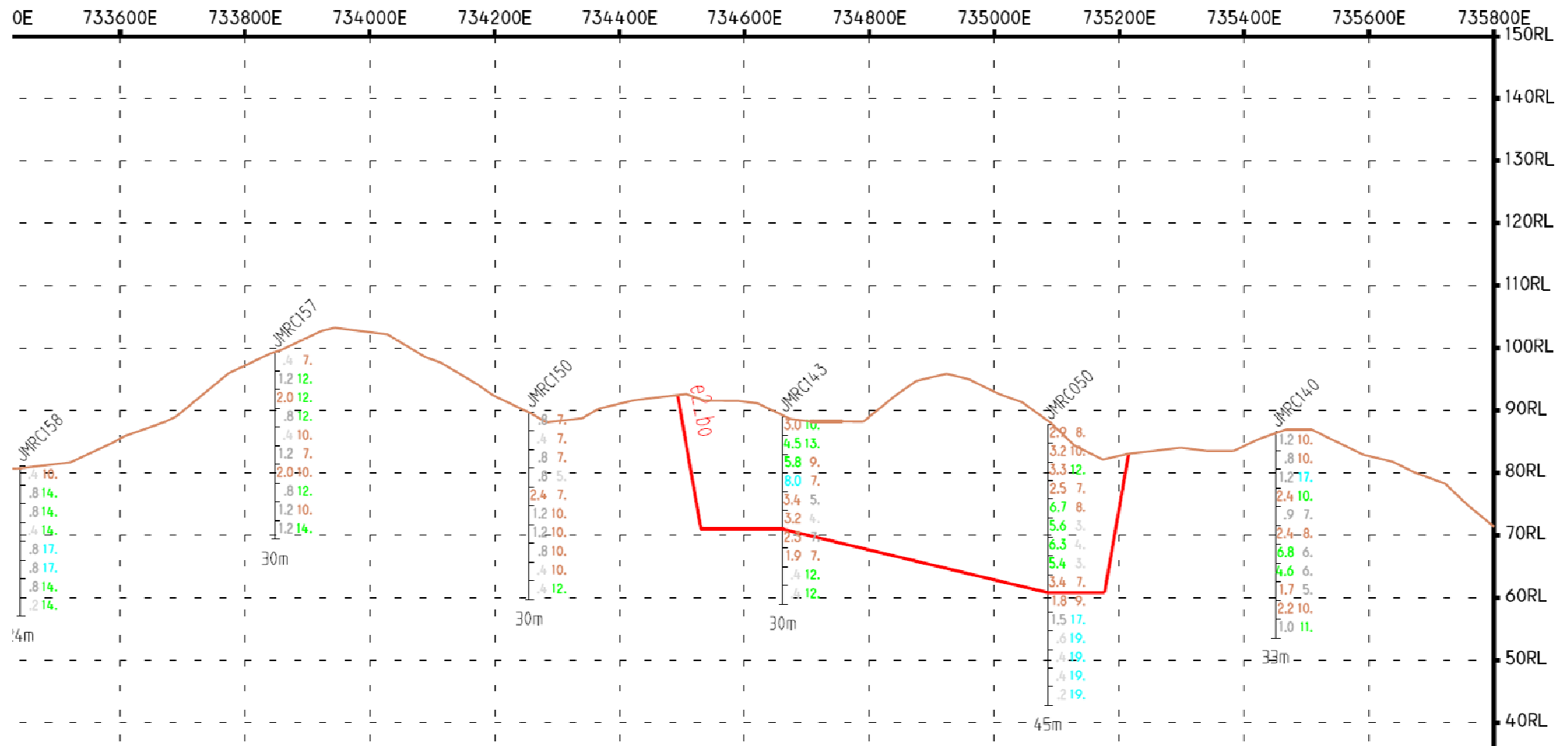


Figure 4

## Section 4

Mozambique - SECTION 7315600 NORTH

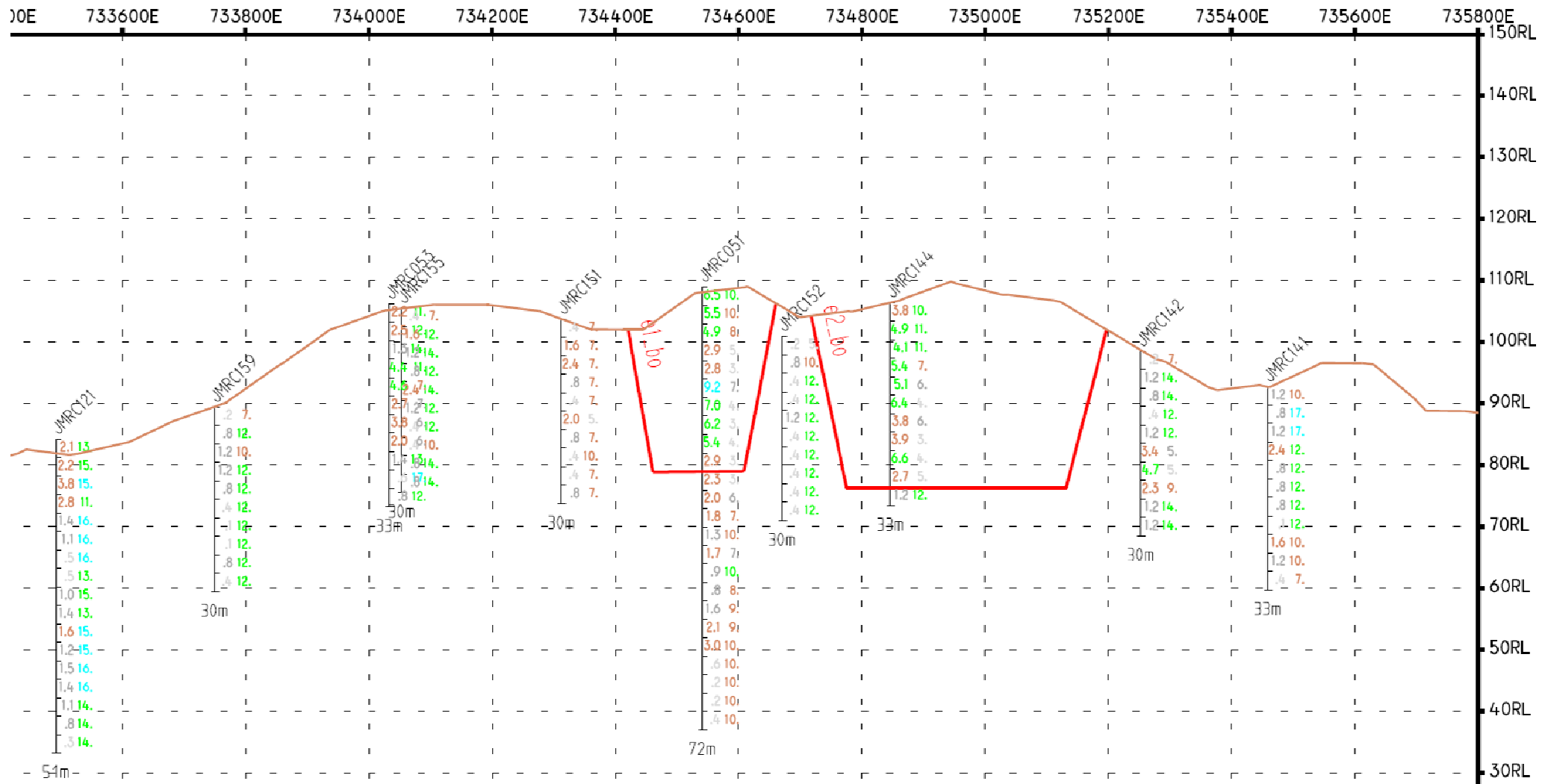


Figure 5

## Section 5

Mozambique - SECTION 7314800 NORTH

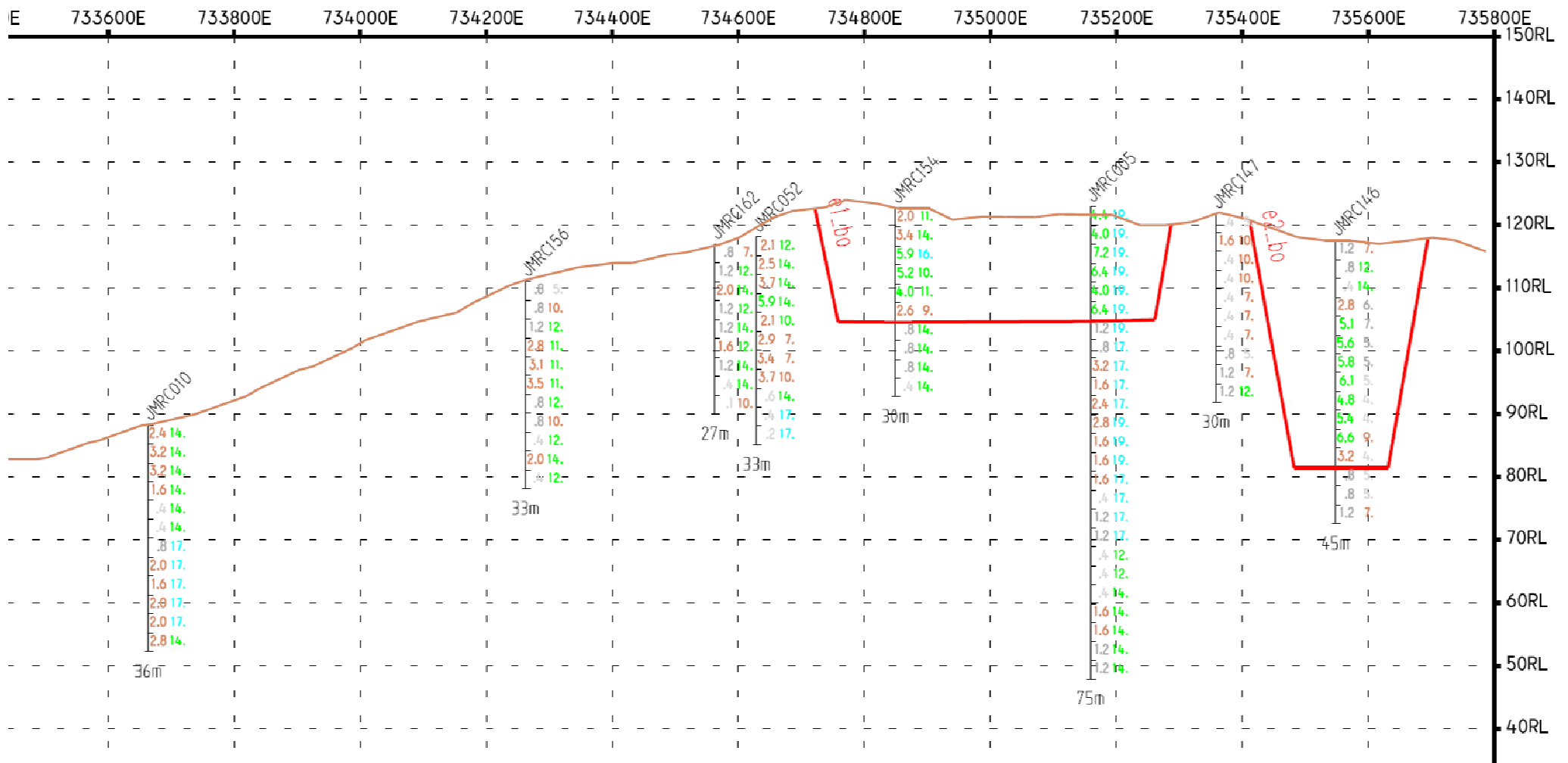


Figure 6

**Appendix 1. Drillhole listing.**

HOLE ID	Resource Zone	HOLE DEPTH	EASTING	NORTHING	ELEVATION	Water Table	DATE	PROJECTION	GEOLOGIST	Phase	AveTHM	From	To	Width	Width x Grade	Lab Results
JMRC027	1	96	730293	7314569	95		09-Nov-13	UTM/WGS84/36	JS	1	3.56	0.00	27.00	27.00	96.24	1
JMRC123	1	60	730124	7314410	112	36	20-Jun-14	UTM/WGS84/36	JS	2	5.92	0.00	33.00	33.00	195.42	1
JMRC125	1	45	730175	7314151	112	24	21-Jun-14	UTM/WGS84/36	JS	2	3.61	0.00	18.00	18.00	64.89	1
JMRC165	1	30	729956	7314395	92	19	24-Sep-14	UTM/WGS84/36	AS	3	3.46	3.00	15.00	12.00	41.55	1
JMRC168	1	24	729855	7314798	83	15	24-Sep-14	UTM/WGS84/36	AS	3	3.75	6.00	15.00	9.00	33.78	1
JMRC169	1	33	730039	7314785	100		24-Sep-14	UTM/WGS84/36	AS	3	4.56	0.00	24.00	24.00	109.53	1
JMRC170	1	39	730281	7314803	112	18	24-Sep-14	UTM/WGS84/36	AS	3	4.27	0.00	30.00	30.00	128.07	1
JMRC171	1	39	730439	7314800	106	15	26-Sep-14	UTM/WGS84/36	AS	3	5.18	0.00	33.00	33.00	170.82	1
JMRC172	1	30	730303	7314419	117	27	26-Sep-14	UTM/WGS84/36	AS	3	3.84	6.00	21.00	15.00	57.57	1
JMRC173	1	27	730511	7314417	120	25	26-Sep-14	UTM/WGS84/36	AS	3	3.77	3.00	15.00	12.00	45.27	1
JMRC175	1	24	730238	7313995	133		26-Sep-14	UTM/WGS84/36	AS	3	4.69	0.00	12.00	12.00	56.28	1
JMRC176	1	24	730093	7314033	114	21	26-Sep-14	UTM/WGS84/36	AS	3	3.71	0.00	15.00	15.00	55.62	1
JMRC005	2	75	735159	7314777	123		26-Oct-13	UTM/WGS84/36	JS	1	4.16	0.00	18.00	18.00	74.84	1
JMRC051	2	72	734541	7315505	108	31	29-May-14	UTM/WGS84/36	AS	2	5.07	0.00	33.00	33.00	167.21	1
JMRC148	2	30	734862	7314411	124	8	21-Sep-14	UTM/WGS84/36	AS	3	3.09	3.00	15.00	12.00	37.05	1
JMRC154	2	30	734849	7314803	128	25	22-Sep-14	UTM/WGS84/36	AS	3	4.22	0.00	18.00	18.00	76.03	1
JMRC161	2	33	734654	7315204	118	20	23-Sep-14	UTM/WGS84/36	AS	3	5.21	0.00	24.00	24.00	124.98	1
JMRC050	3	45	735086	7316008	89		28-May-14	UTM/WGS84/36	AS	2	4.56	0.00	27.00	27.00	123.22	1
JMRC120	3	42	735163	7315304	111	26	19-Jun-14	UTM/WGS84/36	JS	2	4.03	0.00	18.00	18.00	72.61	1
JMRC143	3	30	734661	7316005	94	19	19-Sep-14	UTM/WGS84/36	AS	3	4.33	0.00	21.00	21.00	90.96	1
JMRC144	3	33	734846	7315601	110	21	19-Sep-14	UTM/WGS84/36	AS	3	4.69	0.00	30.00	30.00	140.70	1
JMRC145	3	42	735457	7315202	103	23	19-Sep-14	UTM/WGS84/36	AS	3	4.03	9.00	39.00	30.00	120.97	1
JMRC146	3	45	735548	7314802	126		20-Sep-14	UTM/WGS84/36	AS	3	5.05	9.00	36.00	27.00	136.35	1