



Matilda Zircon Limited

KILIMIRIKA PROSPECT DRILLING & RESOURCE REPORT, AUGUST, 2011

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EXECUTIVE SUMMARY

During 2011 Matilda Zircon Limited (MZI) undertook an extensive shell auger exploration programme in the One Tree Point district on Bathurst Island. Previous reconnaissance consisting of 17 shell auger holes supervised by Simon Coxhell for Matilda Minerals Ltd that identified a potential resource of 20Mt of HM with about 1%HM, that contains about 11% Zircon with a very high trash mineral content including iron oxides. This programme consisted of 119 shell auger holes covering the section identified by the earlier drilling.

The drilling was supervised by Mark Bassett between January and May 2011. A total of 847m of shell augering was completed with an average depth of 7.1m and a range of 2m to 13.5m. Sampling was undertaken over either 0.5 or 1.0m intervals. The samples were logged and sampled for HM analysis according the geological logging resulting in 249 samples being analysed with intervals varying from 0.5m to 8.0m (averaging 3.02m). Heavy mineral analyses were completed by Diamantina Laboratories.

The dunes at Kilimiriaka are complex, composed of overlapping bachaan dunes, consequently it was necessary to complete a differential GPS survey of the terrain. This was completed by traverses across the dunes and bowls combined with traverses along the dunes and edges of the dune resulting in 9,917 estimations of elevation ranging from -0.375 to 65.7m. Due to time constraints, equipment failure and weather it was not possible to obtain a full coverage of the project and additional 970 points were interpolated from known values, Goggle Earth and topographic maps. Estimation of the volume of the dunes required establishment of wireframes of the surface and a wireframe of the base of the deposit established from the drilling. The base of the deposit was interpolated based on the depth of drilling, know RL's of the basement laterite and projection of surfaces observed in the field. Consequently the volume estimation cannot be used to estimate resource in a classification higher than inferred.

Resource modelling of the identified geological units as wireframe solids was developed. Grade interpolation was undertaken by ID2 with analyses restricted to the unit.

The inferred resources at Kilimiraka are reported in Table 1.

Table 1 Inferred Resources at Kilimiraka

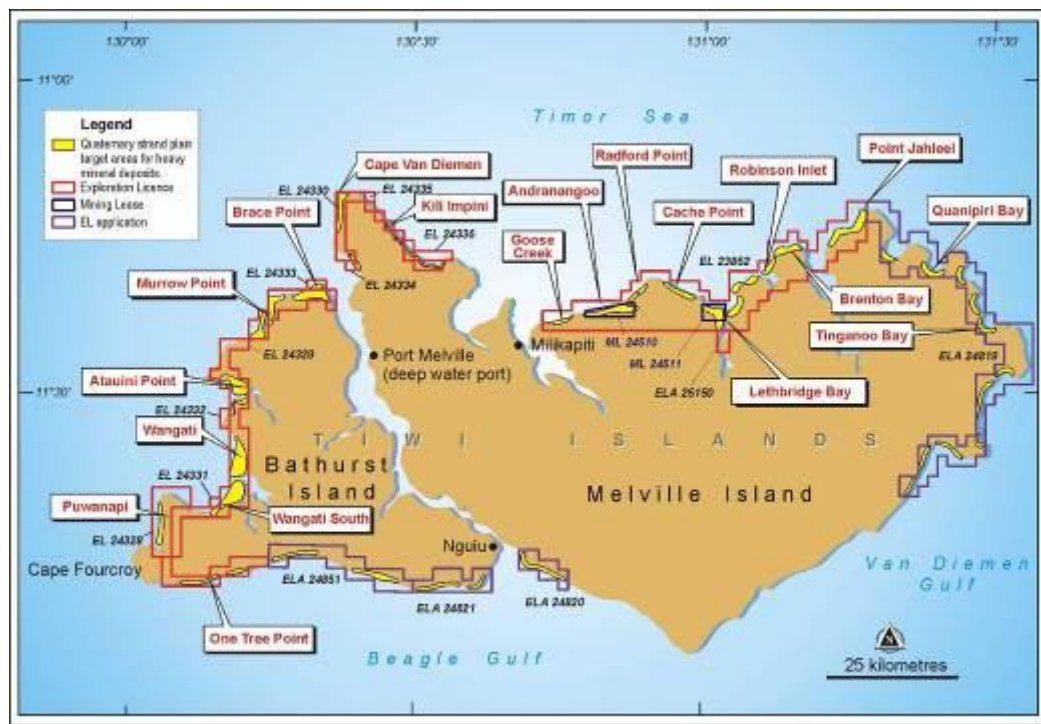
	Tonnes (Mt)	%HM	% Zircon in HM	Tonnes HM
Tutuyangu	14.7	1.6	10.4	231,800
Punnari	4.7	2.3	16.5	109,300
Tingati	6.3	1.5	9.1	92,600
Total Western	25.6	1.7		433,700
Eastern	30.6	1.5	9.0	460,000
Deposit				
Total	56.2	1.6		893,700
Kilimakara				

INTRODUCTION

Bathurst Island is the western island of the Tiwi Islands and the administrative centre is Ngiuu. The islands are accessible from Darwin by air and barges (Figure 1). Ngiuu is serviced by a store, fuel and garage post office and Shire office. On the Island roads are generally unsealed but generally negotiable by four wheel drive.



Figure 1 Access Routes to the Tiwi Islands



Tiwi Islands Project Tenements and Prospect Locations

Figure 2 Tenement Location for One Tree Point (Kilimiraka)

In December 2010 Matilda planned to undertake this exploration using aircore drilling, but eventually it was realised that access to the deposit was impossible for mechanical drill rigs without a significant amount of earthworks. As a consequence it was decided to programme the drilling with shell augers. The shell auger does not sample wet sand and in a few holes casing and bailers were used to sample the base of the deposit.

The field crew was supervised by Mark Bassett with support from Liam Castensen, Mark Schatz, Dan Meegan, Mario Munkarra and Cassima Munkarra at various times between January and May 2011.

Work on the project was interrupted by two serious cyclones, king tides, and two significant tropical lows resulting in three evacuations from the field camp and about three weeks of re-establishing vehicle access to the site after trees had been felled across the road or the road had been washed out. It was by determination alone that as much of the project was completed.

The drilling was successful in delineating substantial resources of ilmenite, zircon and other heavy minerals in the dunefields. There has been insufficient drilling completed below the water table to warrant subdivision of the various dune arrays.

It is identified that John Baxter, BSc, MSc, RPGeo, who has had in excess of 20 years' experience assessing heavy mineral sand deposits is the Competent Person with respect to this resource report. The field data was prepared by Mark Bassett and the data validation was completed by Lorne McCrum.

LOCATION AND ACCESS

The Kilimiraka Prospect is west of Nguiu on the south coast of Bathurst Island and contained within EL24329. It is accessible from the Nguiu-Ranku road for about 40km, then 27km south and west on the Cape Fourcroy road. At the intersection with the road to Puwanapi a track heads south for 1.3km to the camp site between the two main dune sets. Access to the dunes is via the beach, and then on to the dunes by foot. Vehicle access to the dunes is very difficult (Figure 3).



Figure 3 Photograph of the berm in Punnari, Kilimiraka Prospect

All coordinates referred to in this report are GDA94 coordinates, which are, for practical purposes, the same as MGA94 coordinates.

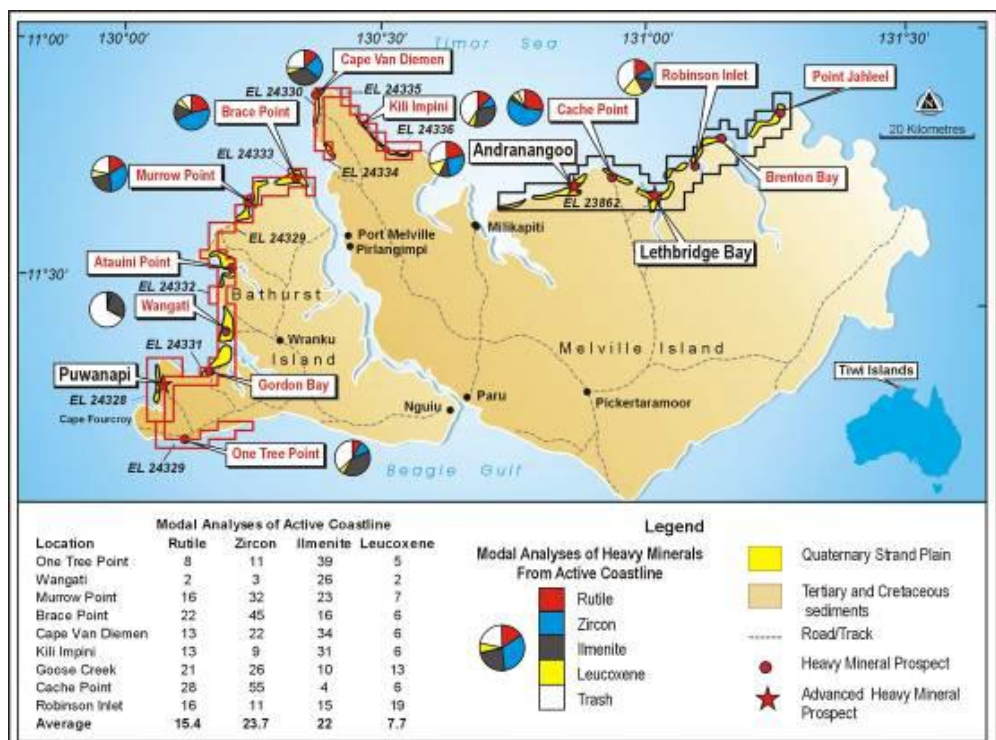


Figure 4 Project Location Map (One Tree Point is Kilimiraka)

TENEMENTS

The Kilimiraka deposit is located in EL24329 and is described in Table 2. Tenements held in the area by MZI are shown on (Figure 2).

Table 2 Matilda's Tenement Containing Resources

Tenement	Status	Holder/s	Blocks
EL24329	Granted	Matilda Zircon Ltd	28

GEOLOGY

The Kilimiriaka prospect consists of a series of baachan dune deposits separated by headlands of lateritised sandstone. The individual sand deposits have been named according to their position. The primary division is west and east and then each has been subdivided between individual headlands as shown in Figure 5 and Table 3.

Table 3 Subdivision names of Resource Blocks, One Tree Point

West		Tiwi Name
	W1	Tutuyangu
	W2	Punnari
	W3	Tingati
East		
	E1	Eastern Deposit

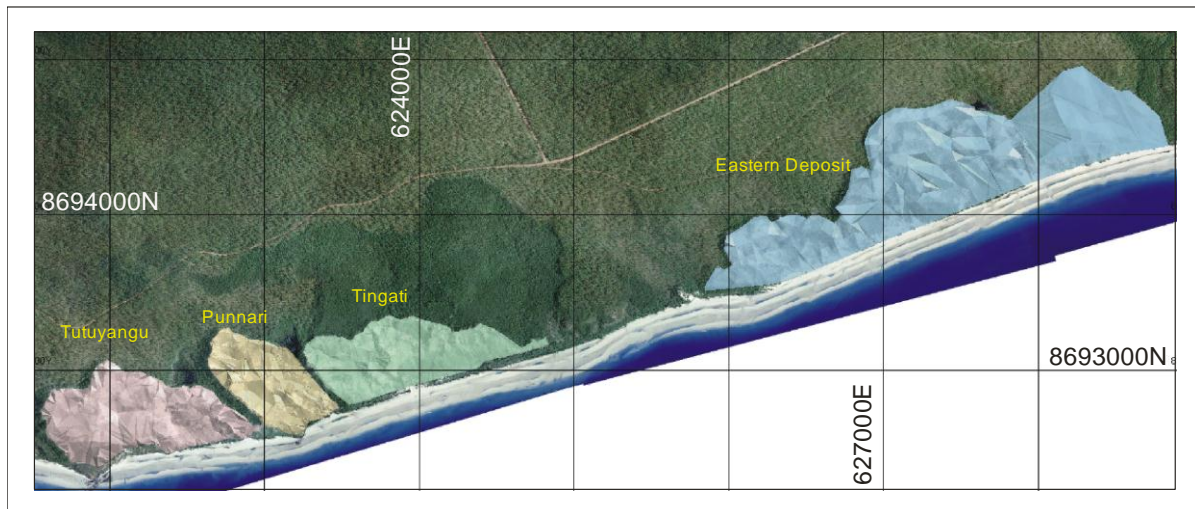


Figure 5 Location of part of Kilimiriaka for analysis purposes



Figure 6 Bahaan Dunes, Punnari, Kilimiriaka Prospect

The dune field is composed of more than 20 separate bahaan style dunes sitting on top of a

lateritized clayey sandstone. The dunes are low grade between 0.14 and 11.78%HM. The underlying lateritised unit forms headlands along the modern beach and appears to have created, now buried, shorelines that may contain significant heavy minerals. The dune field appears to have been existence for a significant period of time as the older dunes are partially lateritized producing pink or orange sand, whereas the younger dunes are white or grey. In the previous drilling Simon encountered several locations in low elevation settings where the heavy mineral grades were in excess 4%HM which is a similar grade to the modern beach. It is possible that shorelines are buried under the dunes.

EXPLORATION

Previous reconnaissance in 2007 at the Kilimiraka Prospect consisting of 17 shell auger holes supervised by Simon Coxhell for Matilda Minerals Ltd identified a potential resource of 20Mt of HM with about 1%HM, that contains about 11% Zircon with a very high trash mineral content including iron oxides. In the programme 120 samples were analysed from the 17 shell auger holes on the Kilimiraka Prospect on EL24329. The auger holes were up to 13.5 metres deep. The programme was part of regional sampling on Bathurst Island that consisted of 81 holes.

In May 2010 a helicopter supported survey of the Kilimiraka Prospect was undertaken by John Baxter, Ray Hall (Ecoz) and Taal Johannsen (Johannsen Drilling) the results of the inspection were:

Taal Johannsen reviewed the access and concluded that:

- The best access is from the track behind the dunes which is about 300m from the dunes at 622000E and access is possible up the valleys
- It will be difficult to drill on lines due to the dune shape
- Although challenging the rig he has will not have difficulty coping with the dunes

From a geological point of view resource estimation will be a challenge because:

- The dunes are bachaan (Figure 6) in shape which means the ridges are curved, the ridges are also where the thickest sand will develop
- In the low portion of the dunes the sand will be thinnest and may have the basement exposed
- The dunes are in sets separated by intervening laterite ridges up to 15m ASL which make the point along the shore

Hall (June, 2010) developed a Mine Management Plan and concluded there were no major constraints on the type of exploration planned. However, there would have to management of the swamps on the landward side of the dunes.

In December 2010 an exploration campaign was launched under the supervision of Mike Cowin employing an aircore rig from Johannsen Drilling and a payloader from the Tiwi Shire. Due to weather problems, vehicle breakdown and impassable terrain this program was suspended before a holes was drilled. It was apparent that the only way a mechanical rig could operate at Kilimiraka was with extensive earthworks.

2011 Shell Auger Sampling

Between January and May 2011 Matilda undertook an exploration program with shell augers. The field crew was supervised by Mark Bassett with support from Liam Castensen, Mark Schatz, Dan Meegan, Mario Munkarra and Cassima Munkarra at various times.

Work on the project was interrupted by Cyclones Bianca and Carlos in January and February, by king tides and two significant tropical lows in March and April resulting in

three evacuations from the field camp and about three weeks of re-establishing vehicle access to the site after trees had been felled across the road or the road had been washed out. It was only by persistence of the field team that the project was completed.



Figure 7 Shell Auger drilling at Punarri, Kilimirika Prospect (Mark, Mario and Cassima)

In the 2011 exploration programme Matilda Zircon Limited (MZI) undertook an extensive shell auger exploration programme in the Kilimiraka (One Tree Point) district on Bathurst Island. This programme consisted of 119 shell auger holes covering the section identified by the earlier drilling. The drilling was supervised by Mark Bassett between January and April 2011. A total of 847m of shell augering was completed with an average depth of 7.1m and a range of 2m to 13.5m. Sampling was undertaken over either 0.5 or 1.0m intervals. The samples were logged and sampled for HM analysis according to the geological logging resulting in 249 samples being analysed with intervals varying from 0.5m to 8.0m (averaging 3.02m). Heavy mineral analyses were completed by Diamantina Laboratories.

The shell auger does not sample wet sand, it is necessary to use bailers and casing. In a few holes casing and bailers were used to sample the base of the deposit but this part of the programme was not completed.

Topographic Survey and Modelling

The dunes at Kilimirika are complex, composed of overlapping bachaan dunes, consequently it was necessary to complete a differential GPS survey of the terrain. This was completed by traverses across the dunes and bowls combined with traverses along the dunes and edges of the dune resulting in 9,917 estimations of elevation ranging from -0.375 to 65.7m. Due to time constraints, equipment failure and weather it was not possible to obtain a

full coverage of the project and additional 970 points were interpolated from known values, Google Earth and topographic maps. Estimation of the volume of the dunes required establishment of wireframes of the surface and a wireframe of the base of the deposit established from the drilling. The base of the deposit was interpolated based on the depth of drilling, known RL's of the basement laterite and projection of surfaces observed in the field. The lack of accuracy of the topographic surveying has meant that the volume estimation cannot be used in a classification higher than "inferred".

RESOURCE MODELLING INFORMATION

Estimation of Volume

The surface was defined using the DGPS readings supplemented by interpolated values from Google Earth, topographic maps and knowledge of the terrain and recorded in a file OTP-DGPS.DAT. This surface was established covering the entire Kilimiraka Prospect area. The resulting DTM is saved as Surface→Aug-11.

Collars of drill holes were then assigned using DTM→Generate Z Values and recording the assigned RL in “RL-ASSIGN” on the file OTP-Coll.DAT.

The base of the sand was modelled by assuming that the holes either reached the base of the sand, or stopped due to water shortly before the base of sand which provided a series of points created by subtracting the depth from the RL of the collar and recorded in OTP-Coll.DAT as “RL-Base”. These data were extracted and used to create a modelling file that includes RL’s determined from surface exposures and geological interpretation recorded in the file Base_Model.DAT. A DTM was created using this data and saved as Surface→Bas-Aug.+

Using aerial photographs an outline and string of each of the project areas was made and these are saved as shown in Table 4.

Table 4 Outline and String Files - Kilimiraka Prospect

Project	String	Outline
Tutuyangu	Tutuyangu.STR	Tutuyangu.OUT
Pinnari	Punnari.STR	Punnari.OUT
Tingati	Tingati.STR	Tingati.OUT
Eastern Deposit	East Deposit.STR	East Deposit.OUT

The Surface→Aug-11 and Surface→Bas-Aug DTM’s were cut using the facility Wireframe→Cut to create both topographic and base of sand DTM’s for each of the four Projects (Table 5)

Table 5 Names of Surfaces of Each Project, Kilimiraka

Project	Top Surface	Base
Tutuyangu	TT-Cut	TTBase-Cut
Pinnari	PN-Cut	PNBase-Cut
Tingati	TG-Cut	TGBase-Cut
Eastern Deposit	ED-Cut	EDBase-Cut

The resulting surfaces were used to create solids using Wireframe→Surface to Solid and resulting in a series of wireframes in the group “Mineralisation”. It was found that the Eastern Deposit DTM’s had too many conflicts to produce a solid and consequently this Project was assessed using 2D methods.

Table 6 Names of Mineralisation Wireframes of Each Project, Kilimiraka Prospect

Project	Wireframe Name	Volume (m ³)
Tutuyangu	Tutuyangu	10,537,641
Pinnari	Pinnari	3,423,720
Tingati	Tingati	6,452,546

Volumes for each of the Wireframes could then be determined Table 6.

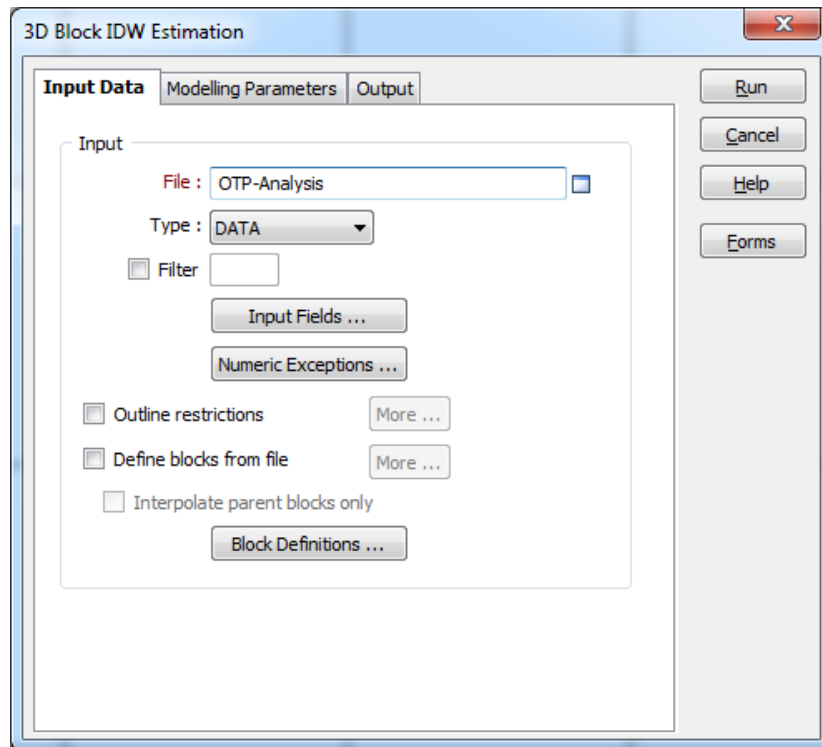
In the case of the Eastern Deposit the facility DTM→Volume→TWO DTMs was used to determine the volume at 19,151,687m³.

Interpolation of Grade

The analysis file, OTP-Analysis.DAT, was verified by Lorbe McCrum prior to any modelling. It was then modified to include a 3D generation of the mid points of the analysed intervals using Drillhole→Generate→Downhole Coordinates prior to interpolation.

The Tutuyangu, Punnari and Tingati Projects were assessed by the same method using Modelling→3D Block Estimate→Inverse Distance Weighting with Input Fields %INSAND, +2MM% and -45MIC%, saved as Form 1 (Figure 8).

Figure 8 OBM Form Kilimiraka Prospect



The Block Definitions are defined in Figure 9.

	Origin Block Centre	Spacing	# Blocks	End Block Centre
East	621300	100	65	627700
North	8692300	100	20	8694200
RL	-2	5	12	53

Figure 9 Block Definitions for Kilimiraka

The Modelling Parameter are shown in Figure 10. The output is to a file named Kilimiraka3D.DAT

Ellipsoid Properties

Axis Orientations:

- Geological (pitch)
- Geological (plunge)
- Geostatistical
- Rotation

All rotations are left-handed. Consult the help for more info.

Plane Parameters:

Strike : 270.000

Dip direction : 360.000

Dip : 2.000

Pitch (lineations) : 0.000

Sense : NORTH

Axes

Axis	Factor	Azimuth	Plunge	Rotation
1	1000	90.000	0.000	
2	500	180.000	-2.000	2.000 (+/- deg)
3	10	180.000	88.000	

Figure 10 Modelling Parameter, Kilimiraka Prospect

The Kilimiraka3D.DAT file was used to determine the volume and grade within each of the wireframes using Wireframe→Assign and reporting both the “Project” name and the portion of the block within the wireframe to a field “Block Factor” using Form 1.

The resource report can then be established using Modelling→Model Report→Block Model Report (Figure 11).

Create a Block Model Report

Input

File : Kilimiraka3D

Type : DATA

Filter 0

Easting field : EASTING

Northing field : NORTHING

Z field : RL

SG field :

Default SG : 1.6

Block Factor...

Multi types

Thickness field :

Material field :

Output

File : Kilimiraka_Resource3D

Type : DATA

Add Fields ...

Use cutoff set

Cutoff set :

Colour set : 1

Estimate Fields

	Metal by vol.
1 : %INSAND	<input type="checkbox"/>
2 : +2MM%	<input type="checkbox"/>
3 : -45MIC%	<input type="checkbox"/>
4 :	<input type="checkbox"/>
5 :	<input type="checkbox"/>
6 :	<input type="checkbox"/>
7 :	<input type="checkbox"/>
8 :	<input type="checkbox"/>
9 :	<input type="checkbox"/>
10 :	<input type="checkbox"/>

OK

Close

Forms

Help

Figure 11 Block Model Report Form

In the case of the Eastern Deposit the grade interpolation was undertaken using a 2D model Modelling→2D Block Block Estimate → Interpolation using the analysis file OTP-Analysis.DAT as the input and KILIMIRAKA.DAT as the output file. The file was then assigned to the Eastern Deposit using Modelling→Assign Outlines (Figure 12).

Assign Outlines

Outline file : East Deposit

Assign To

File : KILIMIRAKA

Type : DATA

Filter

X field : EASTING

Y field : NORTHING

Assign Strategy

Exact assign

Fast assign

Assigned Fields

Clear target field

Overwrite target field

Outline Details ...

Block Model

Sub-block More ...

Output

Report file :

Run

Close

Forms

Help

Figure 12 2D Modelling Assign Outlines for the Eastern Deposit

The Eastern Deposit model was then reported using the Modelling→Model Report→Block Model Report and using a greater than 1% cut-off the percentage of heavy mineral (1.51%), oversize (0%) and Slime (0.65%) is reported. Note the volume included in this 2D resource report is not the equivalent of the volume between the top and bottom surfaces.

RESOURCE STATEMENT

Table 7 outlines the risks of each of the sampling criteria.

Table 7 JORC Requirements for Sampling Techniques and Data

<u>JORC consideration</u>	<u>Comments</u>
<u>Sampling Technique</u>	All holes drilled intersected only sand <u>LOW to MODERATE RISK</u>
<u>Drilling Techniques</u>	All drill is by shell auger to a maximum depth of 14m, some holes stop in mineralisation, some holes stopped in water, some extra resource is possible <u>LOW RISK</u>
<u>Logging</u>	Logging and coding appropriate, <u>LOW RISK</u>
<u>Drill Sample Recovery</u>	Excellent sample recovery with little contamination identified. <u>LOW RISK</u>
<u>Sub-sampling Techniques & Sample Preparation</u>	Sample splitting appropriate for heavy mineral sands <u>LOW RISK</u>
<u>Quality of Analysis Data and Laboratory Checks</u>	Standard industry assay techniques, no standards were inserted <u>LOW TO MODERATE RISK</u>
<u>Verification of Sampling & Assaying</u>	No twinned holes undertaken. <u>MODERATE RISK</u>
<u>Compositing</u>	All holes were composited according to the geological logging <u>LOW RISK</u>
<u>Location of Drill Holes</u>	Accurate ground survey control estimated within +/- 5m in x,y,z). <u>LOW RISK</u>
<u>Topographic Survey</u>	Limited coverage of the dune field impacts on volume estimation <u>MODERATE TO HIGH RISK</u>
<u>Analysis Data Density and Distribution</u>	Appropriate for estimation of inferred resources <u>MODERATE RISK</u>
<u>Density and Recovery</u>	Based on experience at Andranangoo <u>LOW TO MODERATE RISK</u>
<u>Environmental Issues</u>	Inside either or both 200 m beach buffer and 50 m mangrove buffer. <u>HIGH RISK</u>

Table 8 summarises the JORC criteria for reporting Mineral Resources.

Table 8 JORC Criteria for Estimating Mineral Resources

<u>JORC consideration</u>	<u>Comments</u>
<u>Database Integrity</u>	No identified problems. <u>LOW RISK</u>
<u>Geological Interpretation</u>	The dunes at Kilimiraka are composite bachaan style with units of different age that have not yet been fully defined <u>LOW TO MODERATE RISK</u>
<u>Dimensions</u>	The plan area of the dune field is well defined by photography, <u>LOW RISK</u>
<u>Modelling Techniques Volume</u>	The volume has been determined by creating a DTM of the surface and base of the sand deposit using known data and interpolation. <u>MODERATE TO HIGH RISK</u>
<u>Modelling Techniques - Grade</u>	Grade interpolated where data exists using ID2, Tutuyangu, Punnari and Tingati using 3D methods, data weak on Eastern Deposit and consequently only 2D methods used <u>MODERATE RISK</u>
<u>Moisture</u>	All analytical results are on a dry basis <u>LOW RISK</u>
<u>Cut-Off Parameters</u>	The cut of 1%HM has been used based on experience from Lethbridge South. <u>MODERATE RISK</u>
<u>Mining Factors or Assumptions</u>	No assumptions have been made <u>MODERATE TO HIGH RISK</u>
<u>Metallurgical Factors</u>	No assumptions have been made in this report <u>MODERATE TO HIGH RISK</u>
<u>Mineralogy</u>	Limited mineralogy breakdowns have been determined <u>MODERATE RISK</u>
<u>Bulk Density</u>	A bulk density of 1.6 has been used throughout, no insitu measurements have been made <u>LOW RISK</u>
<u>Classification</u>	Based on experience at Lethbridge South and data density <u>LOW TO MODERATE RISK</u>

RESOURCE REPORT

Using a 3D assign of the wireframes on the three western prospects the inferred resource estimation is shown in

Table 9 Inferred Resources Tutuyangu, Punnari and Tingati Prospects, Kilimiraka

From	To	Cum_Tonnes	%HM	%OS	%Slime	Tonnes HM
Tutuyangu						
2	3	798,400	2.203	0	0.5755	17,589
1	2	14,687,200	1.5784	0.04	1.6221	231,823
0.5	1	15,775,200	1.5358	0.04	1.6616	242,276
	<0.5	15,775,200	1.5358	0.04	1.6616	242,276
Punnari						
>5		1,600	5.658	0.01	0.5776	91
4	5	150,400	4.6211	0	0.3693	6,950
3	4	1,260,000	3.5254	0	0.2875	44,420
2	3	2,548,800	2.9887	0.03	0.4294	76,176
1	2	4,682,400	2.335	0.15	1.1256	109,334
0.5	1	4,950,400	2.2493	0.15	1.2235	111,349
	<0.5	4,950,400	2.2493	0.15	1.2235	111,349
Tingati						
						0
4	5	51,200	4.92	0	0.39	2,519
3	4	88,800	4.1861	0	0.3407	3,717
2	3	498,400	2.7236	0.01	0.4266	13,574
1	2	6,290,400	1.4715	0.41	0.6872	92,563
0.5	1	8,811,200	1.2829	0.43	1.034	113,039
	<0.5	8,840,000	1.28	0.43	1.0429	113,152
Kilimiraka West						
	>1%	25,660,000	1.690257			433,720

The data from the Eastern Deposit is insufficient for a 3D analysis and consequently an estimate has been completed in 2D. This identifies a potential inferred resource of 30.6Mt of sand containing 1.5%HM, 0.65% Slimes and no oversize for 460,000t of HM.

MINERALOGY

Composite samples were made from the sink fraction of the analysed samples for grain count mineralogy. The samples chosen are listed

Minibulk	Sample	Geol Unit	Grade
KTT1	TT01 0.0-4.0	White Sand	2.62
KTT1	TT01 5.0-8.0	White Sand	1.24
KTT1	TT02 0.0-3.0	White-Grey Sand	2.93
KTT2	TT06 0.0-3.0	White Sand	1.93
KTT3	TT06 3.0-5.0	Tan Sand	2.98
KTT3	TT07 0.0-2.0	Orange Sand	2.0
KTT3	TT08 0.0-3.0	Tan Sand	2.25
KTT4	TT13 0.0-6.0		2.29
KTT4	TT14 0.0-4.0		2.26
KPN5	PN07 0.0-1.0	Tan Sand	3.41
KPN5	PN07 1.0-2.0	Grey Sand	11.81
KPN6	PN07 2.0-3.0	Gray Sand	2.01
KPN6	PN07 3.0-3.5	Yellow Sand	6.63
KPN7	PN11 0.0-5.0	Grey-White Sand	6.83
KPN7	PN11 5.0-7.0	White Sand	3.81
KPN7	PN11 7.0-11.0	Orange White Sand	4.27
KPN8	PN35 0.0-4.0	Grey Sand	4.44
KPN8	PN31 0.0-2.0	Tan-Grey Sand	4.94
KPN9	PN31 7.0-10.0	Grey Sand	3.36
KPN9	PN39 3.0-6.0	Grey Sand	2.27
KTG10	TG08 0.0-3.0	Grey Sand	1.90
KTG 10	TG02 0.0-4.0	Grey-White Sand	1.54
KTG 11	TG24 0.0-3.0	White Sand	1.64
KTG 11	TG24 3.0-6.0	Grey Sand	1.75
KTG 11	TG25 0.0-5.0	White Sand	1.63
KED12	ED01 0.0-5.0	White Sand	1.84
KED 12	ED02 0.0-4.0	White Sand	1.36
KED 13	ED05 3.0-5.0	White Sand	3.53
KED 13	ED08 3.0 -5.0	White Sand	3.04

The samples were composited by weight and combined and the grain counts completed by Diamantina Laboratories. The results are shown in Table 10.

Table 10 Grain Count Mineralogy, Kilimiraka Prospect

HEAD	KTT1	KTT2	KTT3	KTT4	KPN5	KPN6	KPN7	KPN8	KPN9	KTG10	KTG11	KED12	KED13
Goethite	12	27	38	24	5.8	2	13	13.1	17.1	19.8	35.1	23.9	15.1
Non Mag Others	1	1.2	1.2	1.3	0.9	1.1	0.5	1.3	0.9	4.2	1.7	1	1.7
Mag Others	2.6	4.4	2.9	5.4	3.6	3.3	4	1.9	3.4	4.3	3.9	2.9	6.1
Aggregates	0.3	3.5	2.1	1.2	0.4	0.7	0.3	1	3.2	5	1.8	1.9	1
HS Ilmenite	4.6	9.3	8.8	7.7	3.4	1.4	4	6.6	6.9	4.7	7	4.4	3.9
Ilmenite Mag 1	9.7	11	11	9.6	12.6	11.4	9.5	11.5	9.3	7.5	9.9	9	8.9
Ilmenite Mag 2	21	17	17	25	31.1	35.3	26	27.7	26.8	28.6	16.1	26.8	33.4
Mag Leucoxene	15	14	7.2	9.7	9.9	14.6	11	9	8.3	6.7	8.2	11.4	11.1
Rutile	7.8	4.9	5	6.5	11.3	7.8	9	8.8	7.9	6.7	5.4	6.3	5.6
Non Mag Leucoxene	4.9	2.4	1.3	2.8	3.6	6.5	5.2	2.2	2.6	2.9	2.3	2.9	4.6
Zircon	21	6	6.9	7.3	17.4	15.9	19	16.9	13.6	9.6	8.6	9.5	8.6
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

In summary the average mineralogy for the four projects is reported in

Table 11 Average grain count mineralogy, Kilimiraka Prospect

	Tutyangu	Punnari	Tingati	East Deposit
Goethite	25.075	10.1	27.45	19.5
Non Mag Others	1.175	0.94	2.95	1.35
Mag Others	3.825	3.24	4.1	4.5
Aggregates	1.775	1.12	3.4	1.45
HS Ilmenite	7.6	4.46	5.85	4.15
Ilmenite Mag 1	10.325	10.86	8.7	8.95
Ilmenite Mag 2	19.7	29.34	22.35	30.1
Mag Leucoxene	11.35	10.48	7.45	11.25
Rutile	6.05	8.96	6.05	5.95
Non Mag				
Leucoxene	2.85	4.02	2.6	3.75
Zircon	10.375	16.48	9.1	9.05

RECOMMEDATIONS AND CONCLUSIONS

The conclusions from the programme in 2011 are:

- The 2011 drilling programme at Kilimiraka has identified inferred resources in the dunes in four project areas (Table 12).

Table 12 Summary of Heavy Mineral Resources, Kilimaraka Prospect

	Tonnes (Mt)	%HM	% Zircon in HM	Tonnes HM
Tutuyangu	14.7	1.6	10.4	231,800
Punnari	4.7	2.3	16.5	109,300
Tingati	6.3	1.5	9.1	92,600
Total Western	25.6	1.7		433,700
Eastern Deposit	30.6	1.5	9.0	460,000
Total Kilimakara	56.2	1.6		893,700

- The drilling programme did not include sufficient holes with the bailer to identify the possible strandlines beneath the dunes

It is recommended that a scoping study be undertaken to see if there is potential to treat this material economically, if the answer is positive a further shell auger and baler drilling programme will bring the results to and indicated classification.

REFERENCES

Hall, R., 2010, Mine Management Plan for Exploration, One Tree Point, Bahurst Island EL24329, June 2010, VDM Consulting ExOz Report DW100050.