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Operator (if different from above)	MZI Resources Ltd
Tenement Manager/Agent	Austwide Mining Title Management Pty Ltd
Titles/Tenements	EL24821
Mine/Project Name	South East Bathurst
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SIXTH ANNUAL AND FINAL REPORT

EL24821_2013_AS.pdf

FOR

Exploration License 24821

SE Bathurst, Tiwi Islands, Northern Territory

For period 29/07/2008 – 9/10/2013

Commodity: Mineral Sand

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1.0 SUMMARY/ABSTRACT

This annual and final report covers EL24821 located on the south east coast of Bathurst Island, part of the Tiwi Islands, in the Northern Territory (see Figure 1). The area is prospective for zircon and rutile rich mineral sands however suitable exploration areas must be outside of environmentally sensitive beach, mangrove and river zones. The tenement was purchased by MZI Resources (previously Matilda Zircon) from Stirling Zircon Pty Ltd who obtained the tenements from the Administrator of Matilda Minerals in July 2009.

During the reporting period no mineral sand exploration field work was completed because the company was focussed on preparing internal surrender documents.

In the period starting 2013 the EL area was subjected to a desktop review by the company's new chief geologist in conjunction with the senior geologist. The aim of the review was to identify 1 million tonnes of ore at a target heavy mineral grade of 2% in a discrete area. These assumptions are explained further in the exploration section of this report. No areas were identified that were considered likely to contribute 1 million tonnes of ore at the target grade. However a small program to confirm this interpretation was considered prudent.

Prices, the market outlook for mineral sands as well as increased project costs caused a revision of the company's plans in mid-2013 and a decision was made to surrender the tenement as soon as the surrender documentation could be finalised. The surrender decision was based on the photo interpretation of the small size of sand bodies in the tenement.

2.0 INTRODUCTION

MZI Resources purchased the Tiwi Island tenements and assets from Stirling Zircon Pty Limited who had purchased the tenements from the receiver manager of Matilda Minerals in June 2009 following Matilda Minerals being placed into administration in late September 2008. The collapse of the wharf at Garden Point prevented Matilda Minerals from shipping out a large tonnage of concentrate and therefore the company could not meet its financial obligations and had little choice except to appoint an administrator to the company.

The islands are wholly within the Tiwi Island Aboriginal Land Trust administered by the Tiwi Land Council ("TLC"). Matilda signed an agreement with the TLC on 19 December 2003 which set conditions for the exploration and mining development activity.

During 2012/13 MZI Resources planned an exploration program on EL24821 based on a small petrol auger program. Unfortunately the time involved in managing the geological work at the mine site on ML27438 prevented the execution of the planned program. A drilling MMP was progressed however due to a legal dispute with Stirling Resources Pty Ltd the MMP was not able to be finalised. A subsequent management review has concluded it is unlikely an economic scale deposit exists in the tenement area.

3.0 PHYSIOGRAPHY

The climate of the Tiwi Islands is tropical monsoonal, with warm dry winters and hot wet summers. The annual average rainfall is 1200mm – 1400mm in the eastern part of Melville Island to 1800mm – 2000mm in the north-west of Melville Island and north of Bathurst Island. The majority of the rain falls between December and April under the influence of the northwest monsoons. Temperatures range from a mean of 35°C to 21°C in summer, and 26°C to 18°C in winter.

The topography of the islands is characterised by relatively low relief, dominated by partially dissected plateau rising to 100m above sea level, interspersed with broad valleys, riverine lagoons and estuarine tidal flats. The coastline varies from more exposed low cliffs and beaches to large estuaries and extensive tidal flats.

The vegetation is consistent with a tropical savannah regime, dominated by dense eucalypt and acacia woodland in the hinterland and more prominent coastal fringe, while melaleuca (paperbark) forests predominate along the watercourses. Mangroves proliferate around tidal flats, while casuarina trees and pandanus palms fringe the coastline.

The EL is located on a flat lying sand plains dissected by very minor seasonal billabongs and one metre rounded dunes in some inlets vegetated with melaleuca.

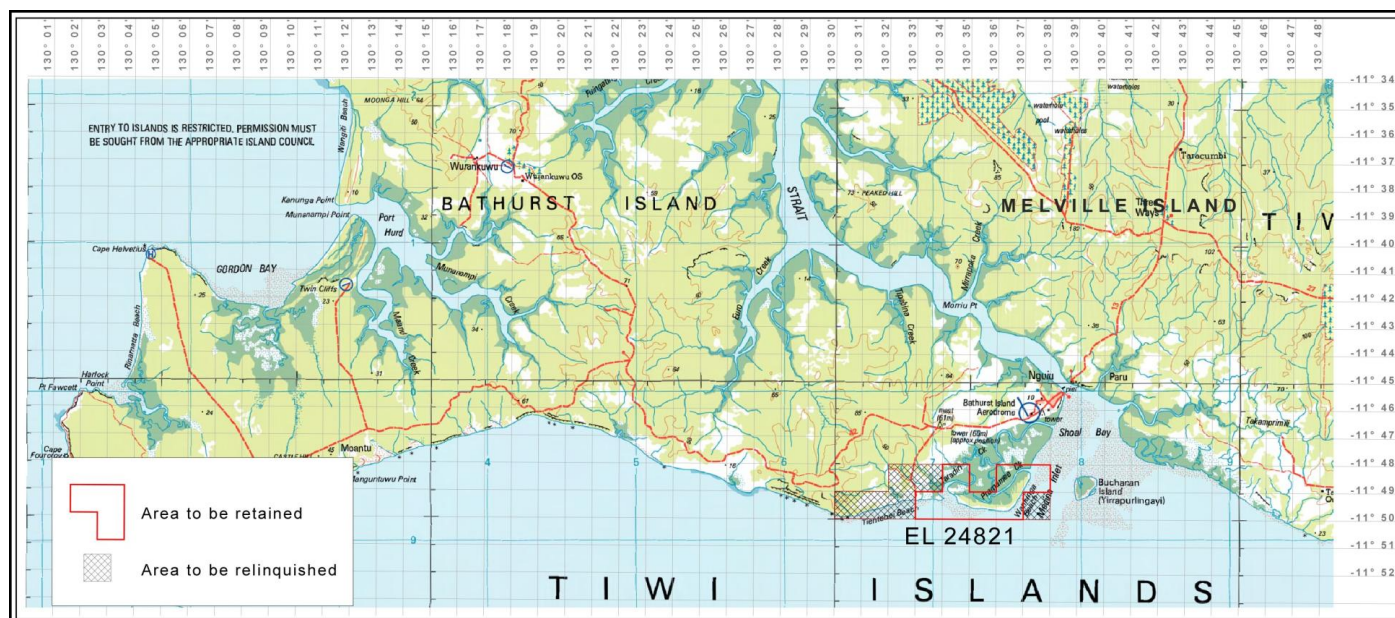


Figure 1: Location of EL24821 South East Bathurst Tenement Areas

4.0 TENURE

This report covers the following EL: Surrendered 9 October 2013

Table 1 Tenement Details

Tenement number	Date granted	Tenure Location	Blocks	Commitment -current year	Expenditure
EL24821	29/07/2008	Melville South West	13	\$25,000	\$2,500

5.0 GEOLOGY AND GEOMORPHOLOGY

5.1 Geology

The oldest rocks exposed on Bathurst and Melville Islands are represented by the Upper Cretaceous Moonkina Member. This formation consists of fine to very fine sub-labile sandstone, along with interbedded claystone, grey carbonaceous mudstone and siltstone, of shallow marine to deltaic derivation. The Moonkina Member is exposed at the base of coastal cliffs, particularly along the southern coastline of Bathurst and Melville Islands, and in lower lying portions of the hinterland (Hughes, 1977).

The Moonkina Member is unconformably overlain by the Tertiary Van Diemen Sandstone, which dominates the geology of the Tiwi Islands. This formation comprises a friable, white to yellow, medium to coarse-grained quartzose sandstone with subordinate intercalations of grey carbonaceous mudstone and siltstone of fluvial to paralic derivation. The Van Diemen Sandstone broadly dips very gently to the north, becoming thicker in the process, with the unit exposed over a 60m vertical interval at Cape Van Diemen at the extreme north-western tip of Melville Island (Hughes, 1977).

Both the Moonkina Member and Van Diemen Sandstone are disconformably to unconformably overlain by unconsolidated Quaternary fluvial, paralic, deltaic and littoral deposits. The most economically significant of these are the Pleistocene age littoral quartzose sands associated with the paleo-shoreline. Holocene (recent) littoral deposits have accumulated along the present coastline, variously abutting or transgressing the Cretaceous, Tertiary and Pleistocene deposits (J.L. Baxter & Coxhell, 2009).

5.2 Geomorphology

The Van Diemen Sandstone dominates the geomorphology of both Bathurst and Melville Island, forming low partially dissected and lateritised plateau, which are frequently capped by ferruginous to bauxitic pisolitic laterite accumulations. Low red cliffs, nick points and platforms of Van Diemen Sandstone are developed along or adjacent to the more exposed portions of the coastline (Hughes, 1977).

In many instances the Tertiary sea cliffs are preserved from further erosion by accumulations of Pleistocene and/or Holocene littoral deposits. The Pleistocene sands are distinguishable from their Holocene counterparts by a mild orange, pink or red discoloration, and are invariably developed as one or more low amplitude, but strike persistent strandlines, with a wavelength characteristically in tens, rather than hundreds, of metres (J.L. Baxter & Coxhell, 2009).

The Holocene deposits generally appear to be cleaner and marginally finer grained than their Pleistocene equivalents, incorporating a more significant proportion of coquina and coralline debris. Along the north coast of the islands the present day beaches appear to have accumulated as strandlines directly against the Tertiary escarpment or as a composite strand plain successively comprising both the Holocene and Pleistocene deposits. Holocene dune

deposits transgress the older strandlines on several beaches that are more exposed to the prevailing north-westerly monsoonal winds (J.L. Baxter & Coxhell, 2009).

Heavy mineral (“HM”) sand accumulations are present within both the Pleistocene and Holocene strands. The immediate provenance of the HM is the Van Diemen Sandstone itself, which contains thin laminae of HM identical in composition to the mineral sands. The Pleistocene and Holocene deposits have therefore been subjected to two cycles of erosion and deposition, being originally derived from the Lower Proterozoic igneous and metamorphic complexes of the Pine Creek Geosyncline on the mainland to the south.

Heavy mineral accumulations, be they Pleistocene or Holocene, appear to be best developed immediately adjacent to the Tertiary Van Diemen Sandstone escarpment, with successive strandlines being considerably and progressively more depleted in HM away from the scarp. This preferential accumulation of HM immediately adjacent to the Van Diemen Sandstone headland or scarp can be readily witnessed in the present day environment near Cape Fourcroy, located at the extreme south-western tip of Bathurst Island. Here, although limited in extent, HM species represent the only sand on a wave-cut platform at the base of an extensive cliff of Van Diemen Sandstone.

Recent dating of the underlying shelly coquina at the Lethbridge deposit on Melville Island has recorded a carbon date of 2000 years old.

6.0 PREVIOUS EXPLORATION BY MATILDA MINERALS

The following tables summarise exploration carried out by Matilda Minerals on the Tiwi Islands Exploration Licences in 2004-2008.

Table 2 – Summary of Exploration Activity 2004-2008

Exploration activity - 2004	Comments
Data compilation	Compilation of all previous exploration
Aerial photography and Digital Terrain Mapping	Stereo air photo coverage of the coastal plains at \pm 1:15000 scale DGPS surveying; production of orthophotos for Andranangoo Creek West and Lethbridge Bay West
Ground magnetic mapping	Andranangoo Creek West and Lethbridge Bay West
Helicopter-supported reconnaissance	Reconnaissance sampling – 153 EL 24330, EL24332, EL24333 and others
Air core drilling	Andranangoo Creek West – 171 holes - 669m Lethbridge Bay West – 172 holes - 895m
Modal analyses	Andranangoo Creek West – 7 Lethbridge Bay West – 5
Bulk sampling and metallurgical test work	1 x 1000kg ACW 1 x 1000kg LBW

Exploration activity – 2005	Comments
Ground magnetic mapping	Puwanapi; Wangati North; Wangati South, Atauini Point; Murrow Point, Deception Point; Brace Point; Kili Impini
Air core drilling 2787 holes – 9134.9 metres	Andranangoo Creek West - 1916 holes; 5827m Lethbridge Bay West - 98 holes; 313m Andranangoo Creek East - 248 holes; 723.5m Radford Point - 28 holes; 66.4m Lethbridge Bay South - 139 holes; 447m Cache Point – 30 holes; 90m Puwanapi – 310 holes; 1596m Wangati North – 18 holes; 72m
Reconnaissance sampling	584 auger holes; 243 sampling using a spade
Auguring (shell)	145 holes – 266.8 metres
Modal analyses of heavy mineral concentrates	Total = 27 Andranangoo Creek West – 18 Andranangoo Creek East – 4 Radford Point – 1 Goose Creek West – 1 Robinson Inlet East – 2 Lethbridge Bay South – 1
Costeaning	Andranangoo Creek West - 6 costeans
Bulk sampling and metallurgical test work	Andranangoo Creek West - BSA C-4 & BSA C-6
Ore Reserve/Resource estimation	Andranangoo Creek West and Lethbridge Bay West; Puwanapi
Surveying	Drill hole pick-up

Exploration activity – 2006 -2008			Comments	
Prospect	Date	Number of holes	Sample # start	Sample # end
Andranangoo Creek East	June	28	13316	13343
Goose Creek East	May	1	13070	13070
Lethbridge Bay South	April	47	13000 13047	13024 13068
Lethbridge Bay South	June	164	13374	13537
Lethbridge Bay South	July	25	13639	13663
Lethbridge Bay South	July	99	14005	14103
Lethbridge Bay South	August	80 40	14104 17019	14183 17058
Robinson East	July	46	13593	13638
Totals		530		

Prospect	Date	Number of holes	Sample # start	Sample # end
Wangati North	July	228 21	13664 13912	13891 13932
Atauini Point (Wangeroo)	July	64	13933	13996
Wangati South	July	20	13892	13911
One Tree Point	July	8	13997	14004
One Tree Point	Oct	19	17990	18008
Totals		360		

Note: not all Wangati North and Wangati South samples were analysed.

Prospect	Date	Number of holes	Sample # start	Sample # end
One Tree Point (Bathurst South)	Feb 2007	81	18283	18363
Totals		81		

All digital data has been previously provided to the department by Matilda Minerals. Reports presented by S. Milner (2007) contain details of exploration for many areas prior to 2007.

7.0 EXPLORATION

No field exploration work was conducted in the period. All work was directed at the internal discussion and preparation of paperwork connected with the surrender of the tenement.

Exploration activity in the previous period was limited to a desktop evaluation using Google Earth Pro to map the area of the sand bodies in the tenement. The methodology was to define sand bodies with an environmental offset from the beach of 200 metres and an offset of 100 metres from mangroves. This has been the offset used in earlier approved projects.

The basis for a theoretical exploration target was developed from experience gathered from the previous three mining campaigns on the north coast of the Tiwi Islands. The depth of the mineralised sand bodies has been defined from mining on the north coast to be a maximum of two metres from the sand dune surface. Similarly the potential depth of mineralisation within the tenement is expected to be two metres. From previous mining programs the economic cut off for mineralisation has been determined to be 2% and hence this is the grade that may be assigned to a target area. Higher grades are possible but these tend to be lensoid and of limited extent. The actual area of potential sand bodies that may be mineralised was calculated on screen using the Google Earth Pro area calculation method.

No significant exploration targets were identified within the tenement based on the above methodology.

8.0 DISCUSSION & RECOMMENDATIONS

The area of the tenement is very prospective for valuable heavy mineral deposits with a mineralogy dominated by zircon and rutile. However given the current environmental constraints and the limited size of sand bodies it is highly unlikely that a deposit of sufficient size to justify a mining operation exists in the tenement. This interpretation is based on satellite image analysis.

The paperwork to facilitate surrender was begun in mid-2013 and concluded with the acceptance of surrender on the 9th October 2014.

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