

PARTIAL RELINQUISHMENT REPORT

FOR

Exploration Licence

EL24851

Tiwi Islands
Northern Territory

For areas relinquished 29th July 2010 after Year 2 of tenure

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SUMMARY

This report provides details of exploration activities within blocks relinquished from EL24851 on 29th July 2010 after 2 years of tenure. The EL is located on the southern coast of Bathurst Island, part of the Tiwi Islands north of Darwin. The EL was originally acquired to explore for zircon-rich minerals sands deposits similar in nature to other larger and more extensively tested deposits on the Tiwi Islands.

EL24851, comprising twenty four (24) sub-blocks, was originally acquired and held by Matilda Minerals Ltd (MML) until they were placed into administration in late 2008. In 2009, this EL and other Tiwi Islands assets held by MML (collectively referred to as the "Tiwi Islands Project") were transferred to Matilda Zircon Ltd ("MZL" and formerly, Olympia Resources Ltd).

Twelve (12) of the blocks from the original EL24851 were relinquished on 29th July 2010.

Exploration within the relinquished areas consisted of on-ground reconnaissance traverses and extensive review of satellite imagery aimed at identifying accumulations of coastal sands which may have contained valuable heavy minerals. Environmental studies were undertaken to identify areas where there may have been conflict between mineral sands resources and areas of mangrove vegetation or turtle nesting sites.

The areas which have been relinquished did not contain sufficient mineral sands resources to justify drilling or sampling programs. As such there is no sampling or analytical data to report.

Existing geological mapping of the Tiwi Islands covering the relinquished areas, being principally the coastal fringe, was found to be sufficiently accurate. No new geological maps were produced.

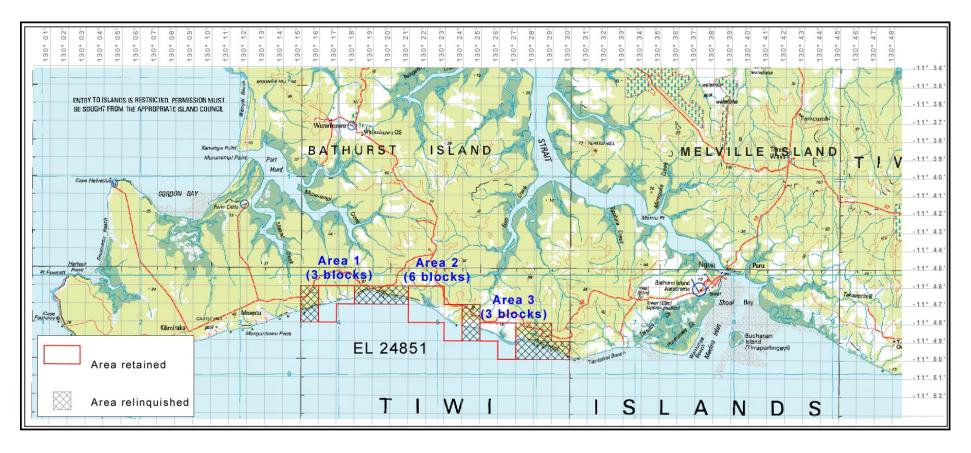


Figure 1 Tenement Location and Partial Relinquishment Plan, EL24851

1. INTRODUCTION

Numerous fringing beaches and coastal embayments of the Tiwi Islands are characterised by accumulations of beach sands which contain varying proportions of valuable heavy minerals, principally zircon, ilmenite, rutile and leucoxene.

The Tiwi islands form part of the Tiwi Island Aboriginal Land Trust administered by the Tiwi Land Council ("TLC"). Matilda Minerals Ltd (MML) had signed an agreement with the TLC on 19 December 2003 which set conditions for the exploration and mining development activity.

Matilda Zircon Ltd (MZL) purchased the assets of MML in July 2009 subsequent to the voluntary appointment of an administrator in September 2008 due to cash flow problems. MZL undertook a reappraisal of the resources identified by MML and, following feasibility studies, commenced mining activities at the high grade Lethbridge Bay deposit in July 2010.

EL24851 is one of several ELs held by Matilda Zircon Ltd and which collectively comprise the "Tiwi Islands Project". Location of EL24851 is shown on Figure 1.

2. 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 plateaux 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.

Accessibility into the EL24851 area by vehicle then a short foot traverse is generally good. The principal road going westwards from the settlement of Nguiu, site of the Bathurst Island airstrip, passes close to the northern boundary of EL24851. Principal road access tracks are depicted on Figure 1.

3. TENURE

Exploration Licence 24851 comprising twenty four (24) sub-blocks was originally granted to Matilda Minerals Ltd on 29th July 2008. The licence was transferred to Matilda Zircon Ltd in 2009 following the financial collapse of MML and the takeover of their assets by MZL.

A relinquishment of twelve (12) of the original twenty four (24) sub-blocks was lodged in July 2010. Subsequent to the relinquishment, EL24851 consists of three (3) discreet areas (refer to Figure 1).

A schedule of sub-blocks retained and those relinquished is provided in Table 1.

EL24851
Schedule of Sub-blocks (Melville Island 1:1 Million Sheet, SC52)

Block No	Original Sub-blocks	Count	Sub-blocks Retained	Count	Sub-blocks Relinquished	Count
3292	f,g,h,j,k,l,m	7	g,h,m	3	f,j,k,l	4
3293	f,g,h,m,n,o,p,t,u	9	g,h,m,n,o,t	6	f,p,u	3
3294	q,r,s,t,w,x,y,z	8	q,r,w	3	s,t,z,y,z	5
	Total:	24		12		12

Table 1 Schedule of Sub-blocks for EL24851

4. GEOLOGY and GEOMORPHOLOGY

4.1 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 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.

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.

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 younger age littoral quartzose sands associated with the palaeo-shoreline. Holocene (recent) littoral deposits have accumulated along the present coastline, variously abutting or transgressing the Cretaceous, Tertiary and Pleistocene deposits.

Recent Age dating completed by Matilda Zircon has identified the age of the Lethbridge Minerals Sand deposit (and by extrapolation, Andranangoo) as being approximately 2000 years old, probably one of the youngest mineral deposits in Australia.

4.2 Geomorphology

The Van Diemen Sandstone dominates the geomorphology of both Bathurst and Melville Island, forming low partially dissected and lateritised plateaux, 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.

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.

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.

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 thought originally to have been 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 from whence they are derived, 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 can be readily witnessed in the present day environment near Cape Fourcroy, located at the extreme southwestern tip of Bathurst Island. Here, although limited in extent, HM species represent the only sand preserved on a wave-cut platform at the base of an extensive cliff of Van Diemen Sandstone.

Recent dating by AMS (accelerator mass spectrometer) radio carbon of the underlying coquina/shelly layer at the Lethbridge Bay deposit has returned a date of approximately 2000 years old, a remarkably young minerals sand deposit. The age of 2,000 years is consistent with the soil development and topography of the beach ridges and the fresh appearance of the shell material and co-bedded marine brown algal strands.

From a pragmatic point of view this may indicate that by comparison the Lethbridge South ridges are possibly older but still probably post glacial (<6,000BP) and more importantly the equivalent Pleistocene coastal sands formed when the sea levels were previously around present levels (eg around 120,000BP) has not been identified. They may have been obliterated or they may be preserved either beneath the Holocene sands or preserved but unrecognized in the coastal hinterland.

5. PREVIOUS EXPLORATION

Previous exploration in EL24851 by Matilda Minerals during the first year of tenure has been reported by Simon Coxhell, 2009 and exploration by Matilda Zircon Ltd during the second year of tenure by Colin Morrow, 2010.

6. EXPLORATION WITHIN RELINQUISHED AREAS

In 2009 ground traversing was conducted into parts of the EL which were readily accessible by boat and/or road to inspect relict and active beach strands with potential to contain heavy mineral deposits. It became readily apparent that the use of satellite imagery was extremely effective for identifying areas with any significant tonnages of such sands. A helicopter was subsequently used to review the geological features within the EL following the transfer of Matilda Minerals Ltd assets to Matilda Zircon Ltd.

Consultant geologist, Colin Morrow, was engaged in June 2010 to undertake a further review of the prospectivity of EL24851 and other Tiwi Islands tenements as a prelude to statutory tenement reductions which fell due at the end of 24 months tenure. The review concluded that potential existed for outlining small quantities of heavy minerals sands in several locations within the EL. At best, such deposits would provide a supplementary resource for existing mining operations on Melville Island or a future mining operation on Bathurst Island. Potential for a stand-alone, economically viable mining project within EL24851 was considered poor. The larger strands identified within the EL were selected for retention and future drill testing in late 2010 / early 2011. A reduction from 24 sub-blocks to 12 sub-blocks was effected at the end of July 2010. The consultant's report was appended to the Annual Report for the 12-month period to 29th July 2010. It has not been appended to this report since it relates more specifically to areas retained rather than areas relinquished. Excerpts from that report which relate to the relinquished areas are as follows:

"The current EL area has been broken down into 3 separate areas for retention and 4 areas for relinquishment / reduction.

<u>Reduction Area 1</u> at the far western end of the EL has cliff faces of Mookina Fm sediments rising from the high water mark to as high as 30m asl. No strand formation is evident. There is no economic potential for mineral sands in this section of the EL and consequently it should be relinquished. Figure 4.2 illustrates this feature." [Figure 2, below, is the Figure 4.2 referred to in that report]

"Reduction Area 2 is very similar to Area 1, above. Cliff faces of outcropping sediment descend to the high water mark. No strand development is evident. There is no interpreted economic potential.

<u>Reduction Area 3</u> has no obvious outcrop close to the ocean front, but also no significant strand development. Savannah covered gentle slopes extend from well inland down to the water front. There is no interpreted economic potential. Figure 4.3 shows this area." [Figure 3, below, is the Figure 4.3 referred to in that report]

"Reduction Area 4 is at the far eastern end of the EL. The majority of the beach front within this area has exposed outcropping sediments at, or just above, the high water mark with quite steep cliffs rising up to as high as 50m. A lateritic crust is apparent at the head of the cliffs in some sections of the area. No strand development is apparent and there appears to be no reason to retain this area. Refer to Figure 4.4."

[Figure 4, below, is the Figure 4.4 referred to in that report]

Figures 2, 3 and 4 below are *GoogleEarth* satellite photographic images (oblique view) of sections of EL24851 area with an overlay of the EL boundary and showing some of the areas relinquished.



Figure 2 Far Western Section of EL24851 – (Reduction Area 1)



Figure 3 Reduction Area 3 of EL24851



Figure 4 EL24851 Reduction Area 4 (Far Eastern End of EL)

No actual sampling programs were conducted within those blocks of the EL which have been relinquished. As such there is no analytical data for reporting.

Geological reconnaissance during previous traverses did not suggest that the published geological maps of the Tiwi Islands required modification. As such no new geological maps were produced.

7. REFERENCES

S. Coxhell, 2009 Annual Report for EL24851 for 12 month period to July 29th 2009

C. Morrow, 2010 Annual Report for EL24851 for 12 month period to July 29th 2010