

Rio Tinto Exploration Pty Ltd

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A member of the Rio Tinto Group

Partial Relinquishment Report

Tenement No. EL 23971 – Arrla Bay 4, Northern Territory

Report Title: Partial Relinquishment Report for EL 23971 – Arrla Bay 4, Northern Territory

Tenement Number(s): EL 23971

Project: Arrla Bay 4

Tenement Holder: Rio Tinto Exploration Pty Ltd

Tenement Operator: Rio Tinto Exploration Pty Ltd

Commodity: Uranium

Author: Adam Black

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Mapsheet: SC5313 Cobourg Peninsula

RTX Internal Report Number: 31119

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See appendices

1 Abstract

This is a partial relinquishment report for EL 23971 (Arrla Bay 4), West Arnhem Land. This report covers the relinquishment of 2 sub blocks from a total of 6 sub blocks. The retained licence area covers 2 whole sub blocks and two partially granted sub blocks.

The EL23971 tenement is located approximately 65km northeast of Oenpelli in north-west Arnhem Land and is consequently processed under the Aboriginal Land Rights Act 1975 (ALRA).

The geology of the tenement area comprises Cretaceous sedimentary cover of the Bathurst Island Formation with outcropping Proterozoic Kombolgie Sandstone in the southern most corner of the tenement overlying the Nimbuwah Formation.

The Arrla Bay region has been explored primarily for uranium. Historical exploration on the tenement has been undertaken by Union Carbide Exploration from 1970 to 1973 and PNC Exploration Australia and Cameco Australia from 1996 to 2004 on tenement EL5891.

RTX has explored the tenement since 2013 including a helicopter supported sampling programme in October 2013.

Note all plans/maps in this report have datum and projection of MGA94 Zone 53

2 Copyright

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3 Introduction

3.1 Location

The EL23971 tenement is located approximately 65km northeast of Oenpelli in north-west Arnhem Land, Northern Territory (Figure 1). Access is via the Arnhem Highway from Darwin to Jabiru and along the Oenpelli-Maningreda road, the Coburg Peninsular road and Lamilami track which provides access to the tenement.

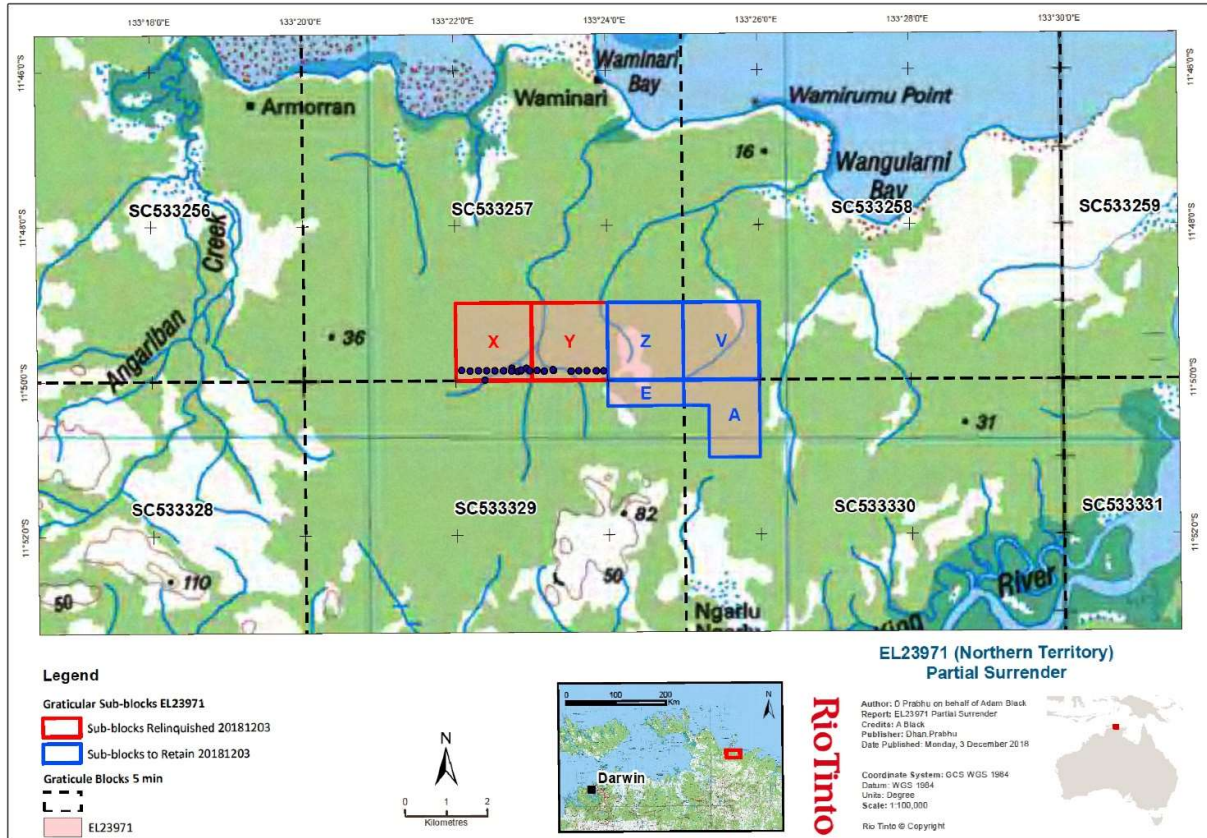


Figure 1: EL 23971 Location Map with samples collected shown as blue dots

3.2 Title History

EL23971 (Arrla Bay 4) was part of the Arrla Bay Project which consisted of four granted Exploration Licences (EL) 22744, 22708, 24657 and 22707 that were applied for in 2000 by RTX. A further four applications EL 23972 Arrla Bay 5, EL 27156 Arrla Bay 5a, EL 27157 Arrla Bay 5b and EL24108 Arrla Bay 6 were granted in June 2009. All these tenements in the region were surrendered, except the Tenement EL 23971 which was granted in 2013.

Tenement Number	Tenement Name	Tenement Status	Tenement Holder	Tenement Operator	Project
EL 23971	Arrla Bay 4	Active	Rio Tinto Exploration Pty Ltd (100%)	Rio Tinto Exploration Pty Ltd	Arrla Bay 4

Table X1: Summary of tenement

3.3 Physiography

The tenement has low elevation up to 150m above sea level with undulating terrain called “sandy plains” (Needham, 1984). The two main topographic features of interest are low smooth elevated plateaus between Cooper Creek and King River. Cooper Creek flows west to the Timor Sea and drains the western tenement, and the King River drains the northern tenement into the Arafura Sea.

3.4 Access

The tenement is processed under the Aboriginal Land Rights Act 1975 (ALRA). The exploration agreement for EL23971 was signed on 3rd September 2013, between RTX and the Northern Land Council.

4 Geology

4.1 Geological setting

The tenement is within the East Alligator River uranium province. The tenement area is mostly covered by Tertiary sediments with some outcropping lateritic weathered Cretaceous sediments. The Cretaceous Bathurst Island Formation was historically known as the Mullaman beds (Rix, 1965). These sediments consist of sandstone with variable feldspar content, poorly sorted quartz sandstone, siltstone, and lesser mudstones. The units are fossiliferous in part which have been interpreted as representing a shallow marine depositional setting. The age of these units is roughly equivalent to the protore sediments upon which the Gove bauxite deposit has formed.

The sub-cropping basement in the tenement is mostly of Archaean to Paleoproterozoic rocks including tonalitic granites, gneisses, migmatites and dolerites of the Nimbuwah Complex (Figure 2).

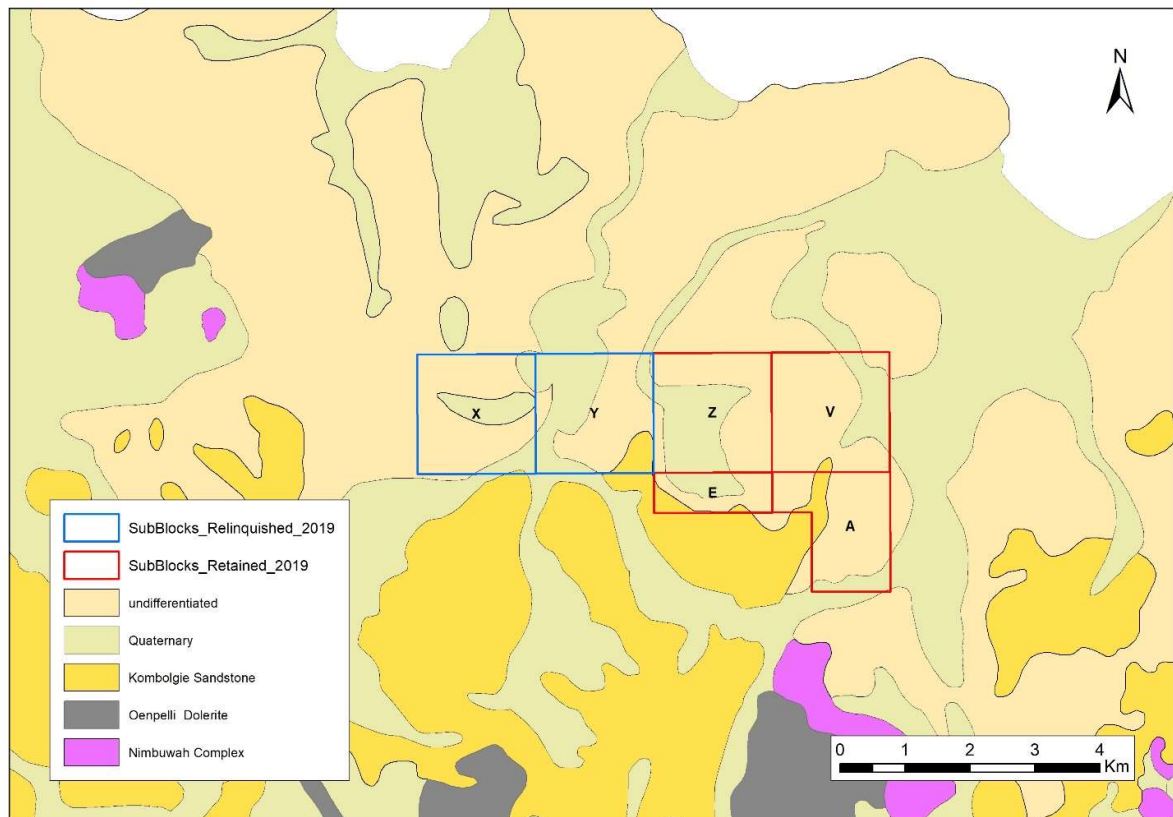


Figure 2: EL 23971 Geology Map

4.2 Exploration History

Bauxite exploration in the region was conducted in the late 1950's to early 1970's, work focussed on the coastal areas of Arnhem Land including the Cobourg Peninsula and Croker Island where small bauxite resources were found. In 1964, United Uranium NL conducted both ground and helicopter supported exploration for bauxite and manganese in the Cretaceous laterites along the coastline between Coburg and Milingimbi. No significant occurrences were discovered, however minor tubular laterite indicative of bauxite development was recorded near Maningridi in the Arlra Bay region.

A helicopter reconnaissance sampling programme was completed the southern portion of the tenement to evaluate the potential for uranium anomalism in October 2013. A total of 26 samples were collected over the portion of tenement being surrendered.

The 26 samples consisted of:

- 19 soil samples
- 7 stream sediment samples

4.3 Exploration Index Map

Figure 1 shows the work done in the surrendered areas of the tenement.

5 Geological Activities and Office Studies

No additional work has been done relating to the portion of tenement being surrendered.

6 Remote sensing

No remote sensing datasets were either referenced or generated for this project and report.

7 Geophysical Activities

No geophysical datasets were either referenced or generated for this project and report.

8 Surface geochemistry

Assay reports for the 18 surface samples are included with this report, see appendices.

9 Drilling

No drill data were either referenced or generated for this project and report.

10 Geotechnical studies

No geotechnical data were either referenced or generated for this project and report.

11 Resources and reserve estimation/modelling

No resources, reserves, or related estimation/model data were either referenced or generated for this project and report.

12 Conclusions and Recommendations

Conclusions:

- Assay results from samples were not encouraging for uranium mineralisation.

Recommendations:

To surrender the portion of the tenement detailed in this report.

13 References

K Hartshorn, M J Pankhurst, K M Fry. 2007, Annual Report (Combined Arrla Bay Project) For the period Period 6 June 2006 to 5 June 2007 EL 22744 Arrla Bay 1, EL22708 Arrla Bay 2 EL24657 Arrla Bay 2a, EL22707 Arrla Bay 3, SD5301 Alligator River, SD5302 Milingimbi SC5313 Coburg Peninsula, Northern Territory. Internal report No. 27967

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- G K Hartshorn, 2009, Annual Report (Combined Arrla Bay Project) For the period 6 June 2008 to 5 June 2009 EL 22744 Arrla Bay 1, EL22708 Arrla Bay 2 EL24657 Arrla Bay 2a, EL22707 Arrla Bay 3, SD5301 Alligator River, SD5302 Milingimbi SC5313 Coburg Peninsula, Northern Territory. Internal report No. 28550
- A Faragher, 2010, Annual Report (Combined Arrla Bay Project) For the period 6 June 2009 to 5 June 2010 EL 22744 Arrla Bay 1, EL 22708 Arrla Bay 2 EL 24657 Arrla Bay 2a, EL 22707 Arrla Bay 3 EL 23972 Arrla Bay 5, EL 27156 Arrla Bay 5a EL 27157 Arrla Bay 5b, EL24108 Arrla Bay 6, SD5301 Alligator River, SD5302 Milingimbi SC5313 Coburg Peninsula Northern Territory. Internal report No. 28740
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- A Black, 2016, Annual Report for the period 25 September 2015 to 24 September 2016 – EL 23971 – Arrla Bay 4, Northern Territory, SD5301 Alligator River, SD5302 Milingimbi sula Northern Territory Internal report No. 30425
- M Gill, 2017, Annual Report for the period 25 September 2016 to 24 September 2017 – EL 23971 – Arrla Bay 4, Northern Territory, SD5301 Alligator River, SD5302 Milingimbi sula Northern Territory Internal report No. 30425
- P Rix, P. 1965, 1: 250 000 Geological Map Series Explanatory Notes. Milingimbi
SD53-2 Northern Territory Geological Survey.

14 Photographs other than those in the body of the text

No photo data have been referenced or generated for this project and report.

15 Appendices

EL23971_ArriaBay4_2019_P_02_SoilGeochem.txt

EL23971_ArriaBay4_2019_P_03_StreamSedimentGeochem.txt