



Rio Tinto Exploration Pty. Limited

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A member of the Rio Tinto Group

Annual Report
For the Period 1 December 2011 to 30 November 2012
EL 27591 Jandapa 2 –
SD5303 Arnhem Bay
Northern Territory

Exploration Report No. 29438

Tenement Holder:	Rio Tinto Exploration Pty Limited
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Author	G Hartshorn
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LIST OF PLANS

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pAI10_004	Tenement location	1:400,000
pAI10_001	Planned auger and mapping traverses	1:150,000

LIST OF APPENDICES

No.	Title	File Name
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1. SUMMARY

The Jandapa Hill Project consists of two granted Exploration Licences, EL 25395 and EL 27591, granted on 01/12/2009 and ELA 27592 under the name Territory Uranium Company Ltd. Territory Uranium have now been re-named as TUC Resources Ltd. Rio Tinto Exploration is the operator under an option agreement with TUC to conduct exploration on the project for bauxite. The Option period was extended for a further 2 years in 2012. This report covers activities on the tenement EL 25395, Jandapa 1 and does not include activities on EL 27591, Jandapa 2. Combined reporting will be sort for this project for the next period.

This is the third annual report for the tenement.

EL27591 was split out of the original application area of EL25395 upon grant. This tenement covers 5km² which is approximately 1% of the original area. The area has bauxite potential however the work programmes are contingent on the completion of work and positive indications of bauxite within the granted area of EL25395.

To date, due to unforeseen access issues to the priority target area, the work has not been able to be completed.

No ground work was completed on EL27591.

2. INTRODUCTION

The Jandapa Hill Project consists of two granted Exploration Licences, EL 25395 and EL 27591, granted on 01/12/2009 under the name Territory Uranium Company Ltd. Rio Tinto Exploration has an option agreement with Territory Uranium to conduct exploration on the project for bauxite. This report covers activities on the tenement EL 25395, Jandapa 1 and does not include activities on EL 27591, Jandapa 2. Remaining tenure within the Jandapa Hill project is contained within eight tenements ELA 27592 to ELA 27599 which remain in moratorium. The tenements are located approximately 60 km west of Nhulunbuy in north-east Arnhem Land and were consequently processed under the Aboriginal Land Rights Act 1975 (ALRA).

After the tenement was granted in December 2009, a work programme clearance meeting was held on the 18th May 2010. The approved work programme was planned to be conducted in October 2010 following all necessary final approvals by the NLC and during the dry season to aid in access and general work conditions. Due to issues with community members and an early onset of the Northern Territory 2010 wet season, the approved work program was rescheduled for the 2011. However due to disputed access issues over the key target area, this work could not be undertaken. In 2012 the fundamental access issue with respect to the key target area remained unresolved and work was postponed.

3. LICENSE DETAILS

EL 25395 and EL 27591 were granted from the original application area of ELA 25395 following the consent process from the Northern Land Council. The remaining area was split out and put into moratorium under ELA 27592. The original EL 25395 tenement application covered 483 sq. km of which 174 sq. km as EL 25395 and 5 sq. km as EL 27591 were granted. Of the non-consent area, EL 27592 was returned into moratorium. Both granted tenements reside within east Arnhem which is subject to the Aboriginal Land Rights Act 1975 (ALRA). Tenement details are listed in Table 1 below.

Table 1: Tenement Details

Tenement No.	Tenement Name	Ownership	Grant Date	Area Applied km ²	Area Granted km ²
EL25395	Jandapa 1	TUC Resources Ltd	1/12/2009	483	174
EL27591	Jandapa 2	TUC Resources Ltd	1/12/2009		5
EL27592		TUC Resources Ltd	Application		-
EL27593		TUC Resources Ltd	Application		-
EL27594		TUC Resources Ltd	Application		-
EL27595		TUC Resources Ltd	Application		-
EL27596		TUC Resources Ltd	Application		-
EL27597		TUC Resources Ltd	Application		-
EL27598		TUC Resources Ltd	Application		-
EL27599		TUC Resources Ltd	Application		-

4. PREVIOUS EXPLORATION

Previous exploration within the area of Jandapa 2 is limited to early reconnaissance work completed by BHP for manganese and bauxite. Within the original application area, BHP had previously drilled 11 holes, of which 4 holes remain now in the granted area of EL 25395. Of these four holes drilled to an average depth of 37m, no geochemical assays are recorded. No holes were completed within the area of EL 27591. No further work has been conducted in the area since the late 1960's.

Table 2: Previous Exploration Summary

Year	Company	Tenement	Exploration Completed
1960-1970	BHP Ltd	ATP1138	Manganese and Bauxite reconnaissance exploration. Eleven (11) holes completed on the original ELA 25395 area, including four (4) within the granted area of EL 25395.

5. GEOLOGY

The primary target for the exploration programme within this license is lateritic bauxite of similar style as the nearby world class, Gove deposit. The main geological formation of interest is lateritic surfaces on Cretaceous sediments.

The geology of the license area is dominated by Neoproterozoic hard quartz rich sandstones of the Mantugula Fm, Roper Group (see geological survey map SD5303, figure 2). Due to access issues the main areas of interest have not been visited or mapped.

While many occurrences of bauxite have been recorded in the east Arnhem area, large, economic deposits outside the general vicinity of the Gove mine site, have not been delineated.

6. GEOPHYSICS

The project area is covered by a regional scale aeromagnetic survey flown for the NTGS in 1990-92 (Rawlings et al., 1997). The radiometric data can be used to help distinguish the laterite-covered areas from those of both basement and Quaternary sand cover. This method does not distinguish between bauxitic and non-bauxitic laterite.

Digital terrain data has been acquired and processed to assess areas for plateaus that may be prospective for bauxite. The Jandapa Hill area contains clearly defined, gently dipping flat surfaces that may be interpreted as remnant laterite.

7. ENVIRONMENT/COMMUNITY

No field work was completed during the period.

8. EXPLORATION COMPLETED DURING REPORTING PERIOD

Work on the Jandapa project focussed on gaining access to the adjacent licence, EL25395.

9. EXPLORATION EXPENDITURE

No field work was completed and hence no on ground expenditure has been incurred.

10. PROPOSED EXPLORATION

EL27591 forms part of the Jandapa project which is under option to Rio Tinto Exploration to explore for bauxite resources. Work on this licence has been linked to adequate access on the adjacent EL25395 where a similar landform target is to be tested. Due to unforeseen access issues on EL25395, any work on this licence has been deferred.

If access continues to be an issue, then a helicopter reconnaissance mapping programme will be considered and consent for this will be sort from the Traditional Owners.

11. CONCLUSIONS AND RECOMMENDATIONS

Issues with land access continue to hamper progress on the Jandapa project. No ground work was completed on EL27591.

REFERENCES

- Blake, J. 2010, Annual Report For Period Ending 30 November , 2010, EL 25395 Jandapa 2, Gove SD5304, Northern Territory. RTX Report Number 28913.
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- Ferenczi P.A., 2001, Iron Ore, Manganese and Bauxite Deposits of the Northern Territory. Northern Territory Geological Survey Report No. 13.
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LOCALITY

Arnhem Bay SD5303 1:250 000

DESCRIPTOR

Annual Report for the Period 1 December 2010 to 30 November 2011, EL 27591 Jandapa 2 SD5303 Arnhem Bay, Northern Territory located within the Arnhem Lands Aboriginal Land Trust, Northern Territory, Australia. Exploration activities were delayed due to early onset of the wet season in the Northern Territory.

KEYWORDS

Jandapa Hill, bauxite, community, Cretaceous laterite