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# JANDAPA 1 1<sup>st</sup> Surrender Report EXPLORATION LICENCE EL25395

First Partial Surrender Report EL 25395 Jandapa SD 5303 Arnhem Bay Northern Territory

RTX Report No.29597

Author G. Hartshorn

Date December 2013

Distribution TUC Resources Ltd

RTX Perth Information Centre

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# **BIBLIOGRAPHIC DATA SHEET**

PROJECT NAME: Jandapa
TENEMENT NUMBER/S: EL25395

TENEMENT OPERATOR: TUC Resources
TENEMENT HOLDER: TUC Resources
REPORT TYPE: Annual Report

**REPORT TITLE:** Partial Surrender Report, EL 25395

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PERSONAL AUTHOR: Greg Hartshorn

YEAR OF PUBLICATION: 2013

**1:250,000 MAP SHEET:** Arnhem Bay SD5303

**1:100,000 MAP SHEET:** Arnhem 6173

TARGET COMMODITY: Bauxite

**KEYWORDS:** bauxite, Annual Report, Cretaceous, laterite

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#### **SUMMARY**

This is the first Surrender Report for El 25395, Jandapa 1 license. A total of 46 out of 87 sub blocks were relinquished on the 1<sup>st</sup> December 2013. This constitutes the first surrender of area from EL 25395.

The Jandapa Hill Project consists of two granted Exploration Licences, EL 25395 and EL 27591, granted on 01/12/2009 and an application ELA 27592 under the name Territory Uranium Company Ltd. Territory Uranium has now been re-named TUC Resources Ltd. Rio Tinto Exploration (RTX) was the operator of this project under an Option Agreement with TUC until the date of withdrawal from the agreement which was 22 October 2013.

The approved field exploration programme for EL25395 which was focused on exploring for lateritic bauxite was still in dispute due to unresolved access issues over the key target areas. Informal discussions held by the NLC with the regard to the disputed area did not indicate any easy resolution. Due to this impasse and a review of the prospectivity, RTX decided to withdraw from the project.

No field work was conducted in the relinquished area.

Following the exit of RTX from the Option Agreement, this license was reviewed and a relinquishment of 46 out of the original 87 sub blocks completed effective as of 1 December 2013. The remaining tenement area consists of 41 sub blocks for an area of 84.03km<sup>2</sup>.

RTX has compiled this surrender report as part of their commitment under the Option Agreement.

#### 1 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, now TUC Resources. Rio Tinto Exploration had an Option Agreement with TUC to conduct exploration on the project for bauxite. RTX formerly withdrew from this Option effective of the 22 October 2013. This report covers activities on the tenement relinquished part of EL 25395. No work other than the RTX work was completed. This report has been written by RTX to cover their obligations under the Option. The tenement is located approximately 50 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 18<sup>th</sup> May 2010. The approved work programme was planned to be

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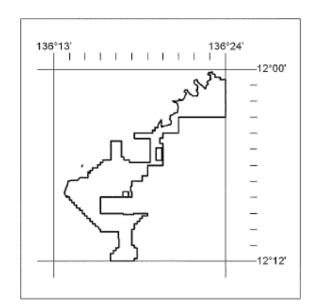
conducted in October 2010 following all necessary final approvals by the NLC and during the dry season to aid in access and general work conditions. Due to issues with community members and an early onset of the Northern Territory 2010 wet season, the approved work program was rescheduled for the 2011. However due to a dispute to access over the key target area, this work could not be undertaken. In 2013 the fundamental access issue with respect to the key target area remained unresolved and a review of the project by RTX led to them exiting from the Option Agreement.

### 2 TENURE STATUS

EL 25395 was granted on 1 December 2009 and its first relinquishment of greater than 50% (46 out of 87 sub blocks) was finalised on 1 December 2013.

EL 25395 was 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 km² of which 174 km² was granted as EL 25395 and 5 km² as EL 27591.

The tenement falls wholly within Arnhem Land and is subject to the provisions of the Aboriginal Land Rights Act which is administered by the Northern Land Council.



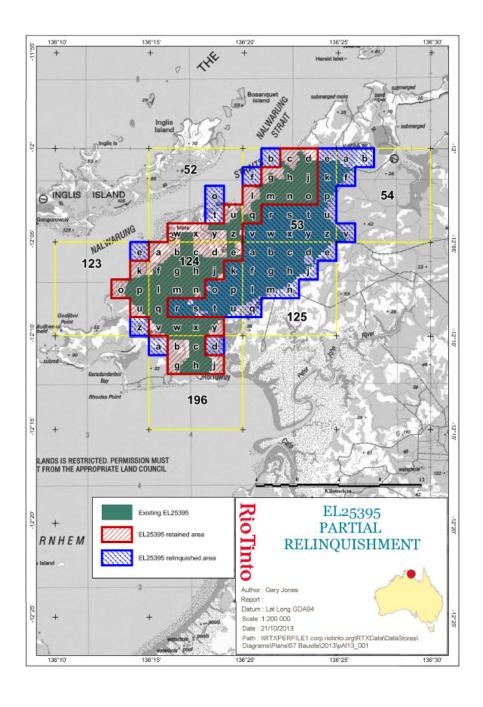
Tenement outline as per the Mines department confirmation

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# 3 LOCATION AND ACCESS

EL25395 covered 174 km² in NE Arnhem Land approximately 50km east of Nhulunbuy prior to the relinquishment. After relinquishment the retained are was reduced to 84km². The licence area lies adjacent the small community of Mata Mata. There is dry season road access to the licence area.

**Figure 1** Location Map of EL 25395 showing the area recommended for partial relinquishment.



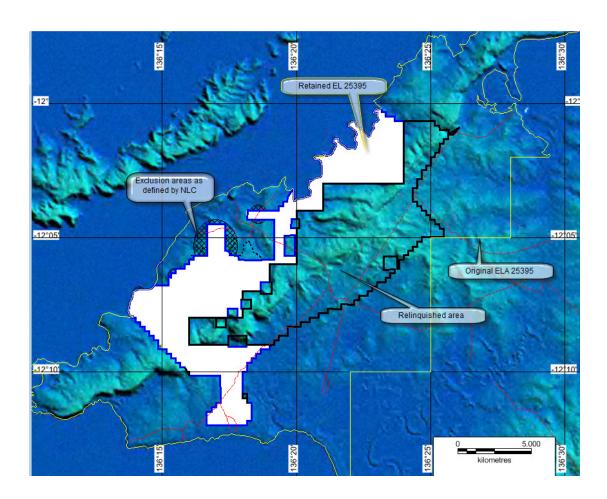
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# 4 GEOLOGY

The primary target for the exploration programme within EL 25395 is lateritic bauxite of similar style as the nearby world class, Gove deposit. The main geological formation of interest is preserved lateritic surfaces on clay rich Cretaceous sediments.

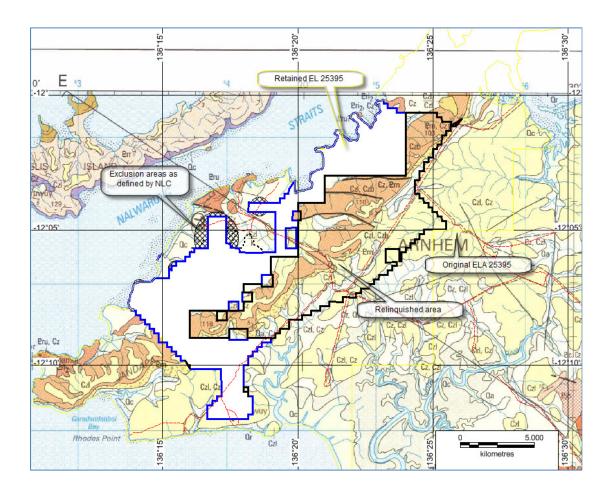
The geology of relinquished area is dominated by a northeast trending ridge of Neoproterozoic hard quartz rich sandstones of the Mantugula Fm, Roper Group (see geological survey map SD5303, figure 3).

Figure 2: EL25395 showing the area being relinquished on the digital terrain model (SRTM) data



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Figure 3: EL25395 showing the relinquished area plotted on the 1:250,000 geology plan



# **5 GEOMORPHOLOGY**

The geomorphology of relinquished portion of EL 25395 clearly shows the northeast tending ridge of hard Proterozoic sediments (see figure 2 &3). This ridge of older sediments is not prospective for bauxite..

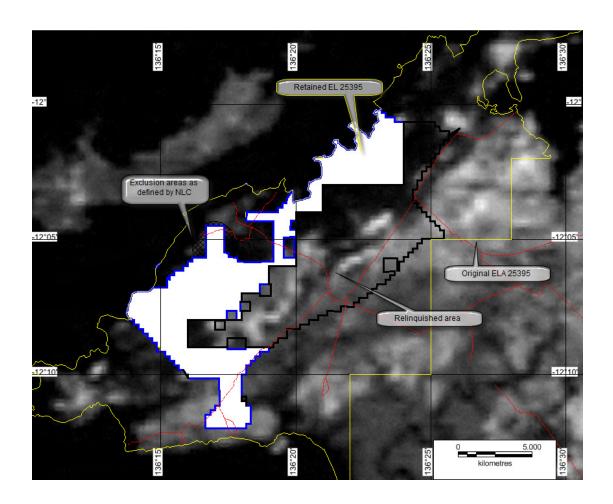
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### **6 GEOPHYSICS**

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 (elevated thorium response) 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. The thorium radiometric response within EL 25395 is not particularly elevated.

Digital terrain data has been acquired and processed to assess areas for plateaus that may be prospective for bauxite.

**Figure 4**: EL25395 showing the relinquished area plotted on the grey scale imaged regional thorium radiometric data



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# 7 PREVIOUS EXPLORATION

Previous exploration within the area of EL25395 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 are within the granted area of EL 25395. Of these four holes drilled to an average depth of 37m, no geochemical assays are recorded. No further work has been conducted in the area since the late 1960's

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.

### 8 EXPLORATION ACTIVITIES DURING THE REPORTING PERIOD

Exploration within EL 25395 was restricted to desk top review of the existing data, mostly being landforms and radiometric data. Field work on the area was to be conducted within EL 25395 however due to ongoing access issues this was never completed.

A review of the license after RTX withdrew from the Option Agreement has resulted in the relinquishment of 46 of the 87 sub blocks.

There was no sampling completed within the relinquished area

#### 9 ENVIRONMENT AND SAFETY

No ground disturbance activities took place within the relinquished area. The figure below (Figure 5) shows the area where access was disputed. This area covers most of the licence and all of the main bauxite target area. Discussions with the NLC were held in mid-2013 however there was no progress on the access dispute

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Figure 5: EL25395 showing the area where access was in dispute

# 10 FUTURE WORK

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#### 11 REFERENCES

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Ferenczi P.A., 2001, Iron Ore, Manganese and Bauxite Deposits of the Northern Territory.

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Rawlings, D.J., 1997, 1:250 000 Geological Map. Explanatory Notes. Arnhem Bay Gove SD5303-04, Northern Territory Geological Survey.

#### **LOCALITY**

Arnhem Bay SD5303 1:250 000

#### **DESCRIPTOR**

First Relinquishment Report For EL 25395 Arnhem Bay SD5303, Northern Territory. Located within the Arnhem Lands Aboriginal Land Trust, Northern Territory, Australia. Bauxite exploration activities included only desk top studies. Negative results and licence partially surrendered.

#### **KEYWORDS**

Bauxite, Annual Report, Final Report, Cretaceous, laterite