

Rio Tinto Exploration Pty Ltd

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A member of the Rio Tinto Group

Annual Report
For the Period 6 January 2014 to 5 January 2015
EL 398 Slippery Creek –
SD5303 Arnhem Bay
Northern Territory

RTX Report No. 29810

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1 SUMMARY

This is the fifth annual report for EL 398 (Slippery Creek).

Exploration Licence EL 398 (Slippery Creek) was granted on 6 January 2010 under the name Rio Tinto Exploration Pty. Limited (RTX). This tenement was originally applied for by BHP Billiton Minerals Pty Ltd (BHPB) on the 24 January 1972 covering an area of 1240.8km² and had been in moratorium since that date. The granted area of EL3 98 covers only 127.8km² or just over 10% of the original application, with the remaining area split out into a new application (ELA 27873). The licence was granted to RTX under the conditions of the farm-in agreement with BHPB which was executed in 2000 and revised in 2007.

RTX has a farm-in agreement with BHPB whereby RTX manages the licence and has the rights to 100% interest in any discovered bauxite resource. As a condition of the amended agreement (2007) BHPB retains 100% of the manganese rights and has access to the licence for concurrent exploration activities.

The tenement is located approximately 100 km west of Nhulunbuy in north-east Arnhem Land and is processed under the Aboriginal Land Rights Act 1975 (ALRA).

Field work during the reporting period included follow up mapping by BHPB to confirm and characterise minor manganese occurrences identified in previous (1960's) work.

2 INTRODUCTION

Exploration Licence EL 398 (Slippery Creek) was granted on 6 January 2010 under the name Rio Tinto Exploration Pty Limited. This tenement was originally applied for by BHPB on the 24 January 1972 covering an area of 1240.8 km² and has been in moratorium since that date. EL 398 was granted over an area of 127.8km² (or just over 10% of the original application area). The non-consent area of the original application was split off into ELA 27873 and put into moratorium.

RTX has an agreement with BHPB to conduct exploration for bauxite within North East Arnhem Land. As a condition of this agreement RTX became the tenement holder and operator upon grant however BHPB continues to have rights to explore for manganese.

3 TENURE STATUS

EL 398 (Slippery Creek) was granted on 6 January 2010 to RTX. This tenement was originally applied for by BHPB on the 24 January 1972 covering an area of 1240.8 km² and has been in moratorium since that date. EL 398 was granted over an area of 127.8km² (or just over 10% of the original application area). The area is officially listed as

53 blocks. The non-consent area of the original application was split off into ELA 27873 and put into moratorium. Both 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

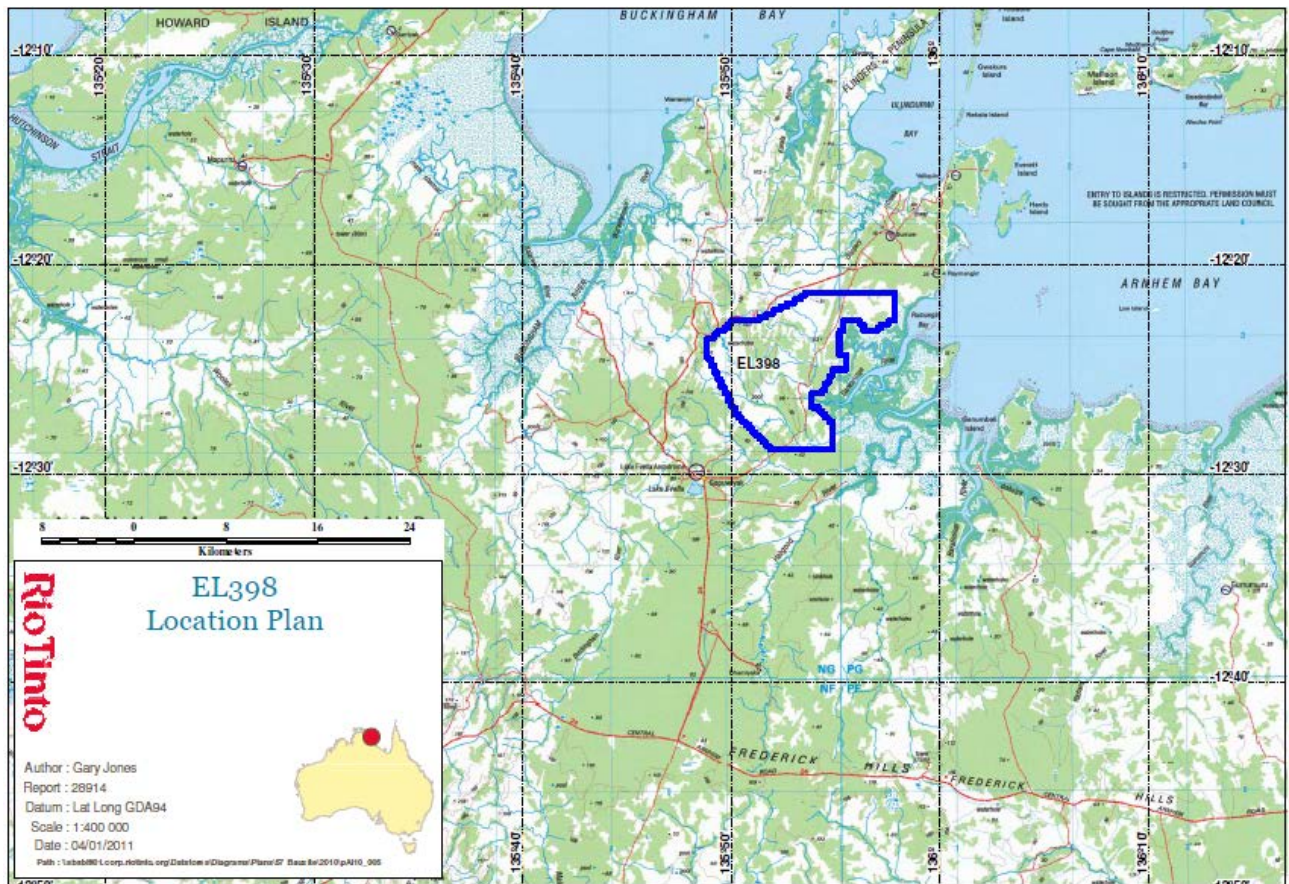
Tenement No.	Tenement Name	Ownership	Grant Date	Area Applied km ²	Area Granted km ² /blocks
EL398	Slippery Creek	Rio Tinto Exploration Pty Limited	06/01/2010	1240.8	128.8/53
EL27873	Slippery Creek 2	BHP Billiton Pty Ltd	moratorium		

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 (NLC).

4 LOCATION AND ACCESS

EL 398 is approximately 15km northeast of the township of Gapuwiyak and 110km east of Nhulunbuy in northeast Arnhem Land, Northern Territory. Access is via the Central Arnhem Highway. Permits from the NLC are required to access this area.

Figure 1 Location Map



5 GEOLOGY

Geology of the Slippery Creek area comprises of a sequence of sandstones and claystones belonging to the Walker River Formation (Middle Cretaceous) and the younger Yirrkala Formation (Upper Cretaceous) (Refer to SD5304 – Gove Special GSNT Geology Map). Proterozoic basement outcrops in the west of the tenement.

During the Tertiary period, the region underwent extensive lateritisation resulting in bauxite development such as that seen at Gove. While several 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 discovered.

The area is prospective for manganese of a style equivalent to the Groote deposit.

6 GEOMORPHOLOGY

The area covered by the tenement (EL398) consists of mostly of a low flat surface (~45m RL) that gradually slopes into drainage channels leading to swampy areas (~25m RL). The Proterozoic rocks form narrow northerly trending ridges that cut across the area

7 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 Slippery Creek area contains a slightly elevated area that is interpreted as a remnant lateritic surface. This area is defined by an elevated thorium response in the regional geophysics.

8 PREVIOUS EXPLORATION

Previous exploration over this area has been undertaken in the past, however, of less detail than that of the most-easterly region of Arnhem Land. Within the original application area, BHP Ltd had previously drilled 10 holes in the 1960's, of which three holes are in EL 398. These three holes which were drilled to depths ranging from 19 to 62m and there are no geochemical assays recorded. No further work had been conducted in the area since the late 1960's until the license was again granted in 2010 when shallow hand auger sampling was conducted to test for bauxite by RTX.

Table 2: Previous Exploration Summary

Year	Company	Tenement	Exploration Completed
1960-1970	BHP Ltd	ATP1138	Manganese and bauxite reconnaissance exploration. Ten holes completed in original application area, of which three are in the granted EL 398.
2010	RTX	EL398	Auger and rock sampling
2011-12	RTX / BHPB	EL 398	Review of tenement and renewed interest by BHPB under their JV agreement in the manganese potential
2012-2013	BHP	EL398	Mapping and sampling. Drill rig mobilised to drill 4 RC and 1 diamond abandoned due to early onset of wet season.

9 EXPLORATION ACTIVITIES DURING THE REPORTING PERIOD

No field work was completed by RTX during the period.

RTX closed out its Environmental Authority covering the Slippery Creek project. No further bauxite work is planned within the licence.

Results from activities conducted by BHPB

BHPB received results for samples collected during the previous reporting period. Of the 7 samples collected, one sample was submitted for petrographic analysis and seven were submitted for HLS (Heavy Liquid Separation) and XRF analysis. Petrographic analysis suggested the presence of Manganese oxides contained within incipient pisolites within a lateritic matrix. HLS separations of the pisolites from the matrix however yielded low grades of Mn. Mn grades were generally below 5% however one sample at the base of the lateritic profile returned a grade of 22% for the >3.3sg fraction. Follow up mapping of this unit was conducted during the reporting period, however little continuity of the unit was noted. No further sampling was conducted.

Figure 2

