RIO TINTO

Rio Tinto Exploration Pty. Limited

ABN 76 000 057 125 / ACN 000 057 125

A member of the Rio Tinto Group

Combined Annual Report
for the Period Ending 14 October 2012
EL4170 Cato Plateau & EL4171 Cato River
Combined reporting Number GR077/09
'Cato Project'
Gove Special SD5304, Northern Territory

Exploration Report No. 29422

Tenement Holder:	Rio Tinto Exploration Pty Limited
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Distribution:	NT Department of Resources
.	RTX Perth Information Centre
	BHP Billiton Minerals Exploration

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1 SUMMARY

EL 4170 Cato Plateau and EL 4171 Cato River were applied for by BHP Minerals Pty. Ltd. on 3rd October 1982. EL 4170 was granted on 14th October 2004, EL 4171 was granted on 12th September 2005. EL4171 was renewed until 11 September 2013 and the renewal for a two year period for EL4170 is in progress. Rio Tinto Exploration Pty Limited (RTX) signed an agreement with BHP on 27th March 2000 whereby RTX took over management of the tenements. This agreement was amended in 2007 to allow for BHPB to conduct simultaneous activities for manganese within the licence package.

The original tenement application (ELA 4170) covered an area of 593.5 km^2 of which only 57.0 km^2 was granted. The remainder of the area was split off into a new application, EL 24389 and put into moratorium. The original ELA 4171 tenement application covered an area of 846 km^2 of which 598.2 km^2 was granted. The tenements are located 30 km west of Nhulunbuy, east Arnhem Land and consequently are processed under the Aboriginal Land Rights Act 1975 (ALRA). Combined reporting of EL 4171 and EL 4170 was granted and the project called 'Cato Project' with reporting number GR077/09. The Cato Project forms part of the larger contiguous tenement package in east Arnhem Land, which is prospective for bauxite.

These two licences (Cato project area) covers part of the Cato Plateau, which is a known occurrence of bauxite within the east Arnhem area. The Cato Plateau bauxite target has the potential to contain resources similar in style to the nearby Gove deposit. BHP Billiton, through an agreement with RTX, retains the right to explore for manganese (Mn) on EL4170 and EL4171.

During the reporting Period RTX completed the following work on EL4170 and EL4171:

- Review of retained tenement for any remaining bauxite targets
- Discussions with BHPB regarding their intended work on manganese
- Mapping, rock sampling and shallow auger sampling of one bauxite target within EL 4171. 7 rock samples collected and 10 soil auger samples.

The results of the field work were negative and the remaining bauxite target has now been adequately tested.

2 INTRODUCTION

EL 4170 Cato Plateau and EL 4171 Cato River were applied for by BHP Minerals on 3rd October 1982. EL 4170 was granted on 14th October 2004, EL 4171 was granted on 12th September

2005. Rio Tinto Exploration Pty Limited (RTX) signed an agreement with BHP on 27th March 2000 whereby RTX took over management of the tenements. This agreement was amended in 2007 to allow for BHPB to conduct simultaneous activities for manganese within the licence package. The original EL 4170 tenement application covered an area of 593.5 km^2 of which only 57.0 km^2 was granted. The remainder of the area was split off into a new application, EL 24389 and put into moratorium. The original EL 4171 tenement application covered an area of 846 km^2 of which 598.2 km^2 was granted.

The tenements are located 30 km west of Nhulunbuy, east Arnhem Land and consequently are processed under the Aboriginal Land Rights Act 1975 (ALRA). Combined reporting of EL 4171 and EL 4170 was granted and the project called 'Cato Project' with reporting number GR077/09. The Cato Project forms part of the larger contiguous tenement package in east Arnhem Land, which is prospective for bauxite.

3 LICENCE DETAILS

EL 4170 Cato Plateau and EL 4171 Cato River were applied for by BHP Minerals on 3rd October 1982. EL 4170 was granted on 14th October 2004, EL 4171 was granted on 12th September 2005.

Tenement details are listed in Table 1 below. Combined reporting of EL4171 and EL4170 was granted with number GR077/09.

Table 1: Tenement Details

Name	Owner	Appn Date	Grant Date	Renewal until	Area applied (km^2)	Area granted (km^2)	Area renewed (km^2)
Cato Plateau EL 4170	RTX	3/12/1982	14/10/2004	In progress renewal lodged 30/8/12 for further 2 yrs	593.5	57.0	38.8
Cato River EL 4171	RTX	3/12/1982	12/09/2005	11/09/2013	846.0	598.2	292.3

4 PREVIOUS EXPLORATION

Previous exploration over this area is described in Report 13 of the Northern Territory Geological Survey (Ferenczi, 2001). New Guinea Resources drilled 19 auger holes in the northern end of the Cato Plateau and concluded that most of the bauxite had been eroded off. In 1966, BHP drilled 89 auger holes for a total of 778m into the Cato Plateau to test the area for

bauxite. Of these, only six holes are located within EL 4170. The BHP data (Chestnut et al., 1966) shows that there is patchy bauxite within the plateau however the silica values are generally high and the recoverable (ABEA) alumina is low. No further work has been conducted in the area since the late 1960's until these tenements were granted in 2004 and 2005.

Table 2: Previous Exploration Summary

Year	Company	Tenement	Exploration Completed
1955	New Guinea Resources Prospecting Ltd	?	19 auger holes
1966	BHP Ltd	PA 1138	Bauxite exploration including the Cato Plateau area. 89 auger holes of which 6 are within the granted El 4170 area.
2004	RTX	EL 4170	Auger drilling of small part of the Cato Plateau.
2007	RTX	EL 4171	Aircore drilling – 62 holes.
2008	RTX	EL 4170	Vacuum drilling – 52 holes.
2009	BHPB	EL 4171	RC Drilling for Mn – 21 holes.
2010	RTX	EL4171	Rock sampling
2011	RTX/BHPB		No field work
2012	RTX	4171	Rock and auger sampling

5 GEOLOGY

Geology of the Cato area comprises of a sequence of sedimentary sandstones and claystones belonging to the Walker River Formation (Middle Cretaceous) and the younger Yirrkala Formation (Upper Cretaceous) which unconformably overly Proterozioc basement. (Refer to SD5304 – Gove Special GSNT Geology Map).

During the Tertiary period, the Yirrkala Formation has undergone extensive lateritisation in the east Arnhem area. This has resulted in the formation of bauxite in areas where the protore was sufficiently clay rich.

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

The base of the Cretaceous sediments is prospective for manganese.

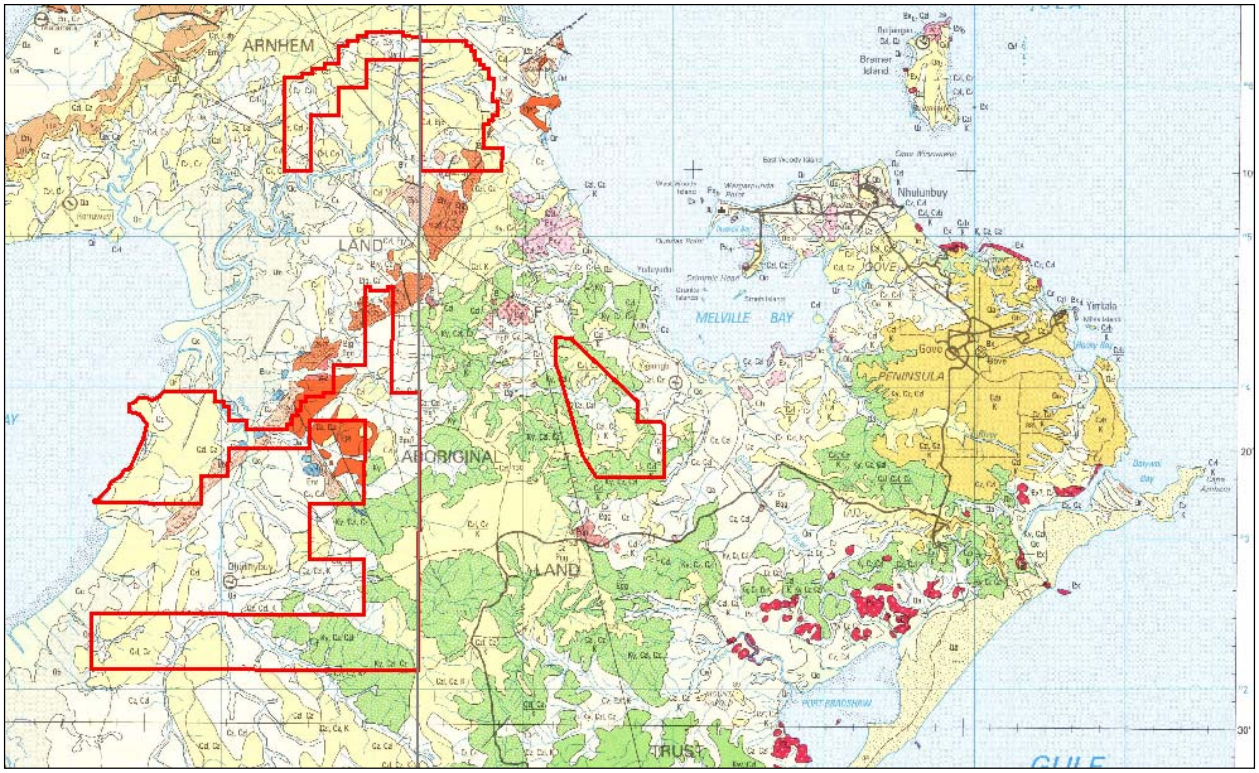

Figure 1: EL 4171 and EL 4170 showing the 1;250,000 geology plan. (SD5303-04 Arnhem Bay-Gove special sheet)

6 GEOMORPHOLOGY

The Cato Project lies within the Arafura Fall physiographic sub division between the western shore of Melville Bay, and the eastern shore of Arnhem Bay (Rawlings et al., 1997). Most of the granted tenement is low lying (<50m elevation) and includes the Cato River, and tributaries of the Cato and Giddy Rivers. A spur of the Cato Plateau extends four kilometers across the centre of EL 4170, and another spur extends 3 kilometers into EL 4171 from the east. The plateau has steep breakaways and a flat top at an elevation of approximately 100m.

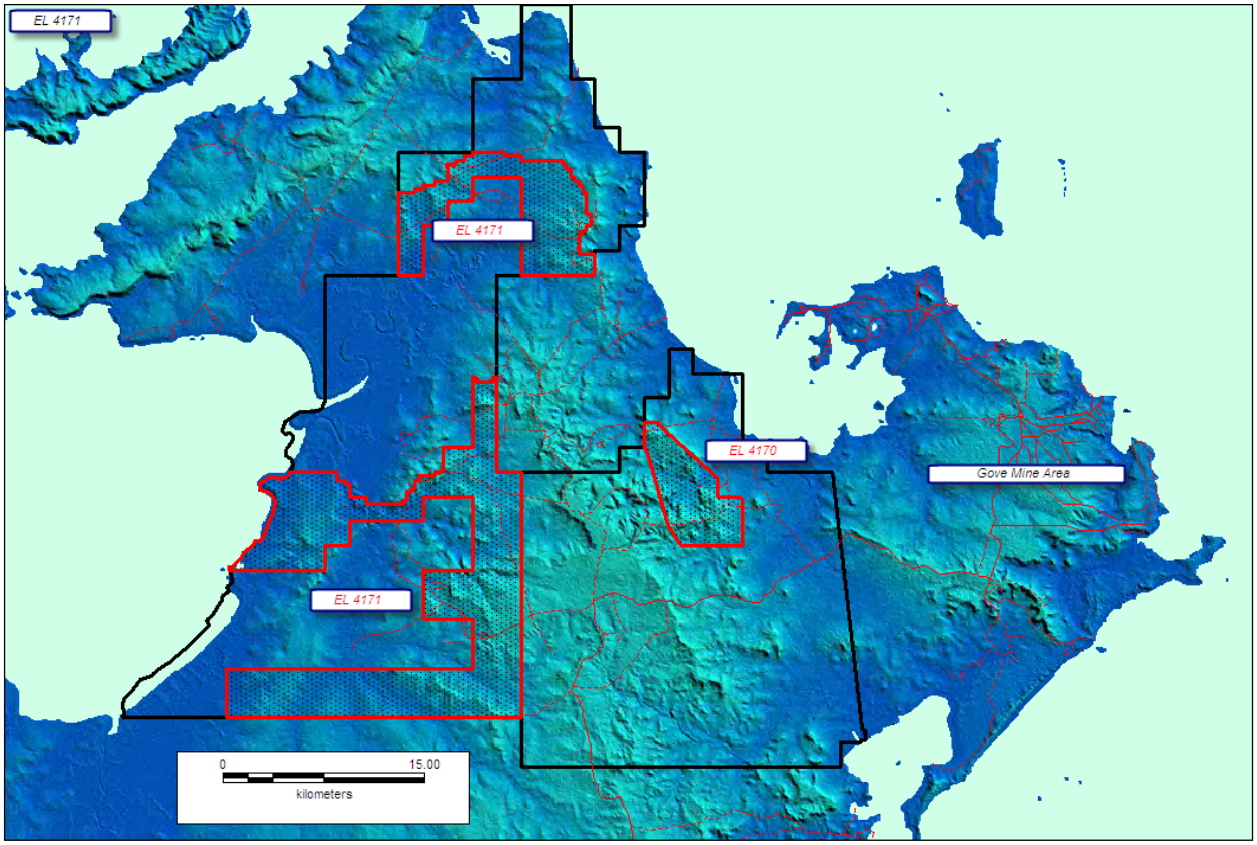

Figure 2: Cato Project showing the geomorphology on the digital terrain model

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 that may be prospective for bauxite and or areas that are not eroded. The Cato Plateau is clearly defined as a gently south-westerly dipping flat surface of approximately 100 km^2 in area. Less than 10 km^2 of the Cato Plateau lies within the granted ELs.

8 ENVIRONMENT/COMMUNITY

Discussions were held with the Traditional Owners at Dhalinbuy on the 9th July 2012 to present the proposed work programme. The work programme was essentially the same as presented in the previous year and reported in the previous annual report.

The exploration conducted was restricted to low impact activities with no track clearing or mechanical ground disturbance. The team camped at an "outstation" located along the coast within the southern portion of EL 4171.

9 EXPLORATION WORK

Exploration completed by RTX during the reporting year included:

- Review of tenement for high risk bauxite targets
- Work programme meeting at Dhalinbuy on 9 July 2012
- Mapping of the prospective coastal laterite surface (August, 2012)
- 7 rock samples within EL 4171 (August, 2012)
- 10 Auger samples within EL 4171 (August, 2012)

No work was completed on EL4170. This tenement is being reviewed whilst negotiating access on the adjacent application, EL24389 which was split out of the original EL4170 application.

9.1 Mapping

The geology of the surface was recorded whilst undertaking the auger and rock sampling (see figure 4). There was no evidence of bauxitic material (pisolites etc) recorded during the mapping.

The surface consisted of ferruginous laterite or a thin skeletal soil with common lateritic nodules. Outcrops and subcrops of ferruginous (iron cemented) sandstone was noted (see figure 3). The quartz rich nature of the sandstone is probably one of the main reasons why bauxite has not formed in this area as it did at Gove.

Figure 3. Photograph of the ferruginous sandstone within the area. (Location 646632 8635934 GDA94_Zone 53)

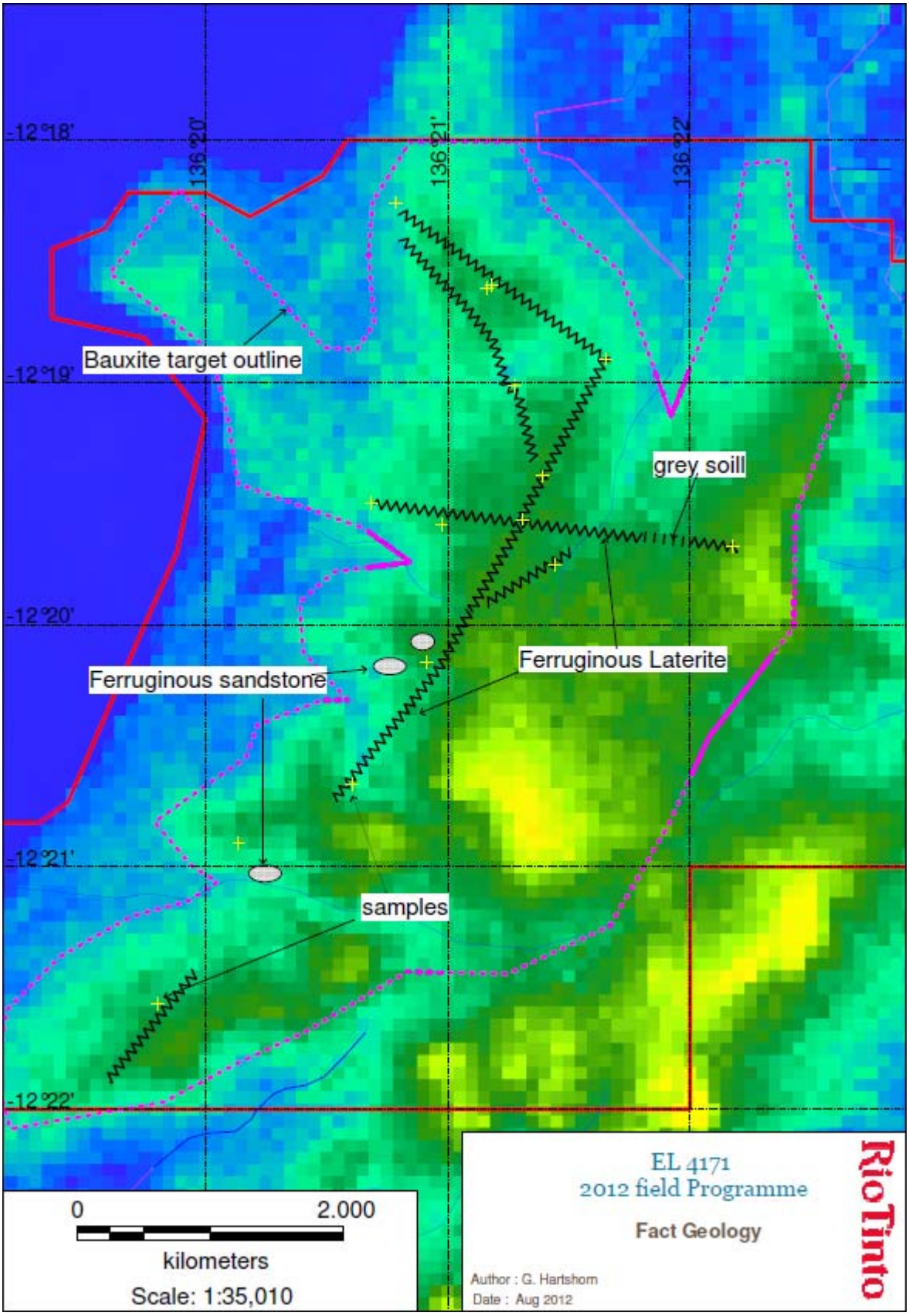

Figure 4. Fact geology

9.2 Sampling

Auger samples

A hand auger was used to attempt to penetrate through the soil and determine if there is any evidence of bauxitic material in the weathering profile. This technique is used as a first pass method in areas where bauxite is yet to be recorded. It has the benefit of being very low impact however it does have limitations if a hard laterite surface is present.

A total of 8 auger holes were completed for a total depth of 9.5 metres. Ten samples were collected for assay see plan PAI12-003 for locations. The samples were either collected at the base of the auger hole or at the end of each metre. Three of the 8 auger holes penetrated deep enough to have clay rich material (saprolitic clay) recorded. This indicates that there is very low likelihood of any bauxite being formed as the depth to the saprolite zone is less than 3 metres.

Figure 3 Photo of an auger site and the samples. Note the white material in sample 10249075 is saprolitic clay)

The samples (rock and auger) were assayed at ALS Brisbane by fused bead XRF (ALS code ME-XRF13).

The results of the auger samples show that the material is high in silica and iron with moderate alumina. These results (see the min and max assay below) match what was expected from the visual logging.

	Min %	Max %
Al_2O_3	17	22.9
SiO_2	31.7	53.8
Fe_2O_3	17.5	40.3

Summary of assay results of auger samples

Rock samples

Seven rock samples were collected whilst conducting the hand auger sampling and mapping. The rock samples were mostly ferruginous laterite (see photo below). The results show that the samples as predicted were high in iron and silica.

	Min %	Max %
Al_2O_3	14.6	26.8
SiO_2	23.4	39.38
Fe_2O_3	30.0	46.8

Summary of assay results of rock samples

Figure 5: Photograph showing the type of outcrop formation of the ferruginous laterite.

10 EXPLORATION EXPENDITURE

The details of exploration expenditure for EL4170/EL4171 by RTX combined with the expenditure of BHP Billiton for the same period, is presented separately in the Annual Expenditure Report.

11 PROPOSED PROGRAMME AND EXPENDITURE

Proposed expenditure for the next reporting period will be $40,000 comprising:

- Discussions with BHPB on whether there is further work required under the JV for manganese
- Access surveys for negotiation on adjacent ELA 24389.

Rio Tinto Exploration is currently in consultation with the Northern Land Council (NLC) with regards to the Cato Plateau 2 (EL24389) Exploration License Application. Due to the nature

and location of the Cato Plateau target with respect to adjacent tenure blocks, including Cato Plateau EL4170 and Cato River EL4171, it is likely exploration plans on these tenements will be subject to thorough review in light of any change of terms on Cato Plateau 2 EL 24389.

12 CONCLUSIONS AND RECOMMENDATIONS

Rio Tinto completed the reconnaissance hand auger sampling over a coastal laterite plateau adjacent Arnhem Bay. The results of the work suggest the protore to be quartz rich and not amenable to the formation of bauxite. The auger holes managed to penetrate through to saprolitic clay in three of the eight locations without any bauxite being identified. The visual and assay results indicate that this target is adequately tested with no evidence of bauxite.

These tenements are under review following the completion of the 2012 field season.

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LOCALITY

Gove Special SD 5304 1:250 000

LIST OF DPO'S

EBatch (Work Order)	**No. Sample**	**Laboratory**
EB80020402	10	ALS
EB80020403	7	ALS

DESCRIPTOR

Combined Annual Report for the Period Ending 13 October 2012, GR077/09 including EL 4170 Cato Plateau, EL4171 Cato River, Gove Special SD 5304, Northern Territory. Exploration activities consisted of auger sampling and rock sampling to test a subtle plateau for bauxite.

KEYWORDS

Cato, Gove, Bauxite, Surface Sampling, Laterite, Cretaceous, Auger, rock sample.

APPENDIX 1

Sample Ledgers

GR077-09_2012_GA_04_SurfaceGeochem.txt

GR077-09_2012_GA_05_AugerGeochem.txt