# **Rio Tinto Exploration Pty Ltd**

ABN 76 000 057 125 / ACN 000 057 125

A member of the Rio Tinto Group

Annual Report For the Period 5 November 2015 to 4 November 2016 EL30952 Walker River, Northern Territory

**Report Title:** Annual Report for EL 30952 for the period ended 4 November 2016

Tenement Number(s): EL 30952

Project: Walker River

Tenement Holder: Rio Tinto Exploration Pty Ltd

Tenement Operator: DPG Resources Australia Pty Ltd

Commodity: Zinc

Author: G. Duncan, DPG Resources Australia Pty Ltd

Date of report: 18 January 2017

Mapsheet: SD5307 Blue Mud Bay

RTX Internal Report Number: 30509

**Distribution:** Department of Primary Industry and Resources

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EL30952\_2016\_A\_02\_DJonesReport.pdf David Jones Report EL30952\_2016\_A\_03\_GeoimageProcessing.pdf Annual Report for the Period 5 November 2015 to 4 November 2016, EL30952 Walker River, SD5307 Blue Mud Bay, Northern Territory.
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# 1. <u>SUMMARY</u>

Exploration Licence (EL) 385 was applied for in 1972 by CRA Exploration Pty Limited (CRAE). Partial consent of the application area resulted in the granting of two separate licences (ELs 385 & 24304) in June 2004. EL 30952, a moratorium application resulting from EL 385, was granted on the 5<sup>th</sup> of November, 2015. The tenement area is located approximately 180km south-west of Nhulunbuy, and 80km north of Numbulwar in south east Arnhem Land on Aboriginal Land Rights Act 1975 (ALRA) land managed by the Northern Land Council (NLC).

The tenement is considered prospective for zinc, laterite aluminium and manganese.

In January 2014 Rio Tinto Exploration and DPG Resources Australia Pty Ltd entered into an Earn In and Joint Venture Agreement with DPG managing the tenements. This applies to EL 30952 as well as EL 385 & 23565 & 24305 and ELA, 844, 5561, 24305, 27919, 27920, 30953, 30954,30955, 30956, 30957, 30958.

DPG Resources Australia Pty Ltd is a wholly owned subsidiary of GPM Metals Inc which is listed on the TSXV

Work conducted during the year was conducted from the camp on EL 24305 and included a Report by D Jones, World View 2 Satellite Imagery purchase and processing, access reconnaissance on ground assessment with access by helicopter.

# 2. CONCLUSIONS AND RECOMMENDATIONS

The first year of exploration on EL 30952 comprised evaluation of previous exploration in the tenement area and including review of the auger testing conducted by RTX to the south of EL 30952 on EL 385. Auger testing on the Coastal Pain did not intersect potentially economic laterite with a best value of 24% Al in a weathered lateritised sandstone.

Auger depth to refusal was generally between 2 and 6m with a maximum of 16m.

Reconnaissance mapping and portable auger sampling is proposed for 2017 to evaluate base metal levels and the potential for economic AI or Mn laterite in the tenement area.

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## 3. INTRODUCTION

EL 30952 was granted in November, 2015 and was an application area subsequent to EL 385 which was originally applied for in 1972 by CRAE. The tenement area is located approximately 180km south-west of Nhulunbuy, and 80km north of Numbulwar in south east Arnhem Land on Aboriginal Land Rights Act 1975 (ALRA) land managed by the Northern Land Council (NLC).

In January 2014 Rio Tinto Exploration and DPG Resources Australia Pty Ltd entered into an Earn In and Joint Venture Agreement with DPG managing the tenements. This applies to EL 30952 as well as EL 385, 23565 & 24305 and ELA, 844, 5561, 24305, 27919, 27920, 30953, 30954,30955,30956,30957,& 30958.

The tenement covers the Coastal Plain on Haddon Head. RTX conducted an auger reconnaissance programme on the Coastal Plain immediately to the south on EL 385 and tested for base metals and laterite Al and Mn. No mineralisation of interest was noted.

The Fe-Ox enhancement of the World View 2 imagery shows the continuation of Fe rich laterite onto EL 30952. Reconnaissance by helicopter confirms this and the presence of a trafficable access track to the north of the tenements from which access can be made.

Hand auger sampling will be conducted in 2017 to evaluate the potential of the tenement.

**GPM Metals Inc** Walker Gossan Project Gove Northern Territory, Australia. EL Application Darwin EL Granted Мар Northern Territory Walker Balma Gossan EL 385 Blue ELA 844 Mud EL24305 Bay Andanangki Walker River ELA 5561 EL 23565 D ELA 27919 ELA27920 Rose River NUMBULWAR



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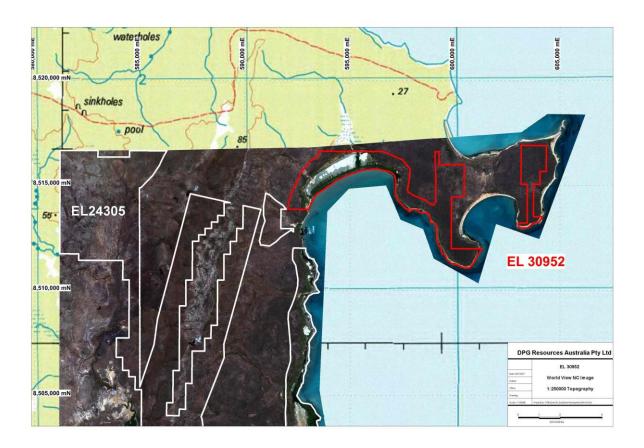


Fig 2 Table 1: Tenement Details

Tenement No.	Tenement Name	Ownership	Application Date	Grant Date	Blocks Granted	Area	
EL30952	Haddon Head	Rio Tinto Exploration Pty Limited	19/1/1972	5/11/2015	17	16.7sq km	

# 4. <u>GEOMORPHOLOGY</u>

The tenement area covers part of Haddon Head on the Coastal Plain which comprises low relief areas to the east of the Coast Range extending to the present beaches. Mapped geology is Cainozoic and Quaternary alluvials.

# 5. PREVIOUS EXPLORATION

Two exploration licences have been held over the tenement area. Both of these licences existed prior to the grant of the ALRA in 1975. Authority to Prospect (AP) 1138 was granted to

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BHP Minerals in 1964 and was relinquished in 1972, however it only covered the tenement area between 1964 and 1967. No exploration from the tenement area was reported by BHP.

AP 1967 was held over the tenement area between 1969 and 1970 by Noranda Australia. Again no exploration was reported. Limited exploration comprised an airborne spectrometer survey and ground follow up of five anomalies. No economic uranium mineralisation was intersected. Anomalous radioactivity is due to thorium concentrations with minor associated uranium.

### 6. <u>GEOLOGY</u>

The tenement covers the beach and low coastal plain on southern and central Haddon Head.

The cover of Cainozoic and Quaternary sediment overlies the Grindall Fm basement of the Arnhem Shelf.

Sediments mapped include;

- Cz undifferentiated sediemnts
- Czl pisolitic and massive ferricrete and laterite
- Qc grey clay, silt and sand active sediments on intertidal and supratidal flats
- Qa alluvial gravel, sand, silt and clay in active channels, floodplains and outwash sheets
- Qr active cheniers and sandy beach ridges

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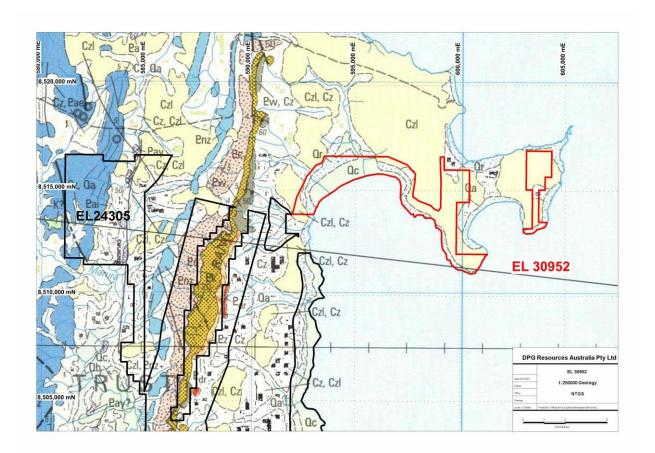


Fig. 3

# 7. <u>GEOPHYSICS</u>

The project area is covered by regional gravity and by airborne magnetic and radiometric data. The aeromagnetic data are from the Mitchell Ranges 1990 and Marumba 1988 Surveys. These surveys had east west oriented flight lines with a line spacing of 500 metres and a mean survey elevation of 100 metres.

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# 8. <u>EXPLORATION COMPLETED DURING REPORTING PERIOD</u>

Exploration completed during the reporting year included:

Purchase of World View 2 imagery over the area and processing by Geoimage.

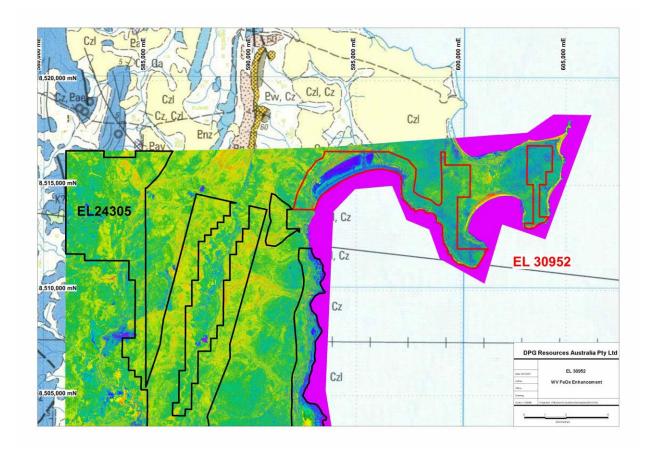
Review by David Jones compliant with the TSX 43-101 reporting requirements.

### World View 2 Imagery

This high resolution imagery was purchased through and processed by Geoimage of Brisbane.

The imagery assists with geological mapping and was processed in an endeavour to discriminate iron oxides associated with outcropping laterite. The method is effective in discriminating areas of iron oxide, the extent of which will require field work and auger drilling.

The Fe-Ox enhancement is shown below in Fig 4 & 5. and the natural colour in Fig 2.





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m 삩 596,000 mE H H Cz 602,000 504,000 8,516,000 mN 8,514,000 mN Cz 8,512,000 ml Cz DPG Resources Australia Pty Ltd EL 30952 age with Fe-O 8,510,000 mM

# Fig. 5

# 9. ENVIRONMENT

No ground disturbing work was undertaken

# 10. EXPLORATION EXPENDITURE

A full breakdown of expenditure for the reporting period has been submitted on the prescribed form.

# 11. PROPOSED EXPLORATION

Reconnaissance mapping and portable auger sampling is proposed for 2017 to evaluate the potential for economic zinc and lead and note AI or Mn laterite in the tenement area.

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## **LOCALITY**

Blue Mud Bay

SD 5307

1:250 000

# **KEYWORDS**

Walker River, Blue Mud Bay, Haddon Head, airborne magnetics, satellite imagery.