YEAR 1 ANNUAL REPORT

BING BONG (EL 28319)

Title Holder: NATURAL RESOURCES EXPLORATION PTY. LTD.
Operator: Natural Resources Exploration Pty. Ltd.
Tenement Manager: Nicole Munro, Natural Resources Exploration Pty. Ltd.
Titles / Tenements: EL(s): 28319
Project Names: Bing Bong
Report Title: Year 1 Annual Report – Bing Bong (EL 28319)
Type of Report: Annual Report
Author(s): Nicole Munro
Company Ref: NRE_NT2012: BING BONG – Year 1 Annual Report
Target Commodity / Commodities: Uranium, Base metals and Manganese
Date of Report: 3 July 2012
Contact Details: NATURAL RESOURCES EXPLORATION PTY. LTD.
PO Box 9235, Gold Coast Mail Centre, QLD 9726
Level 8 Corporate Centre, 2 Corporate Ct, Bundall QLD
Tel: (07) 5644 5500 Fax: (07) 5528 4558
Email: info@naturalresources.net.au
Contents

Summary ................................................................................................................................................. 4
1. Introduction .................................................................................................................................... 5
2. Tenure ............................................................................................................................................. 6
   2.1 Location and Access ................................................................................................................ 7
   2.2 Topography and Drainage ....................................................................................................... 9
3. Geology ......................................................................................................................................... 10
   3.1 Regional Geology .................................................................................................................. 10
   3.2 Permit Geology ..................................................................................................................... 11
4. NRE’s Exploration Activities during the Reporting Period ............................................................ 13
   4.1 Exploration Studies ............................................................................................................... 14
   4.2 Water Bore Cuttings Analysis ................................................................................................ 15
5. NRE’s Exploration Activities for next 12 month period ................................................................. 16
6. Reports lodged during the reporting period.................................................................................... 17
7. Conclusions ................................................................................................................................... 17
8. Bibliography .................................................................................................................................. 18

Figures

Figure 1. Location Map ...................................................................................................................... 8
Figure 2. Access Map ........................................................................................................................ 8
Figure 3. Cadastral Map .................................................................................................................... 9
Figure 4. Topography Map ............................................................................................................... 10
Figure 5. Regional Geology Map .................................................................................................... 11
Figure 6. Permit Geology Map ....................................................................................................... 12
Figure 7. Historic tenements over the Bing Bong Prospect ............................................................. 15
Figure 8. Water Bore Location Map ................................................................................................ 16

Tables

Table 1. Tenement Details ................................................................................................................ 6
Table 2. Stratigraphy (adapted from Northern Territory Geological Survey, 1989) ....................... 13
Table 3. Historic Tenures and Previous Companies’ Exploration Reports ........................................ 14
Table 4. Water Bores Tested using the portable XRF Device ............................................................ 16

Appendices

Appendix I Water Bore Cuttings XRF Assay Results ...................................................................... 19
Summary

Section 94 of the *Mineral Titles Act* requires the submission of an Annual Report prepared by the titleholder for each exploration licence. The purpose of the following Annual Report for Exploration Licence (EL) 28319 is to provide a summary of the activities carried out over the permit in the past 12 months, including results produced by those activities.

To delineate prospective areas for base metal and uranium mineralisation and define the next phase of exploration, Natural Resources Exploration (‘NRE’) has carried out extensive office-based studies of EL28319, known to NRE as its ‘Bing Bong’ Prospect. NRE also conducted a site visit to the Darwin Core Library for the purposes of testing available water bore cuttings within Bing Bong Prospect area.

NRE has conducted extensive desktop reviews of all previous exploration across the area including review of all previous historical exploration reports, acquisition and interpretation of ASTER imagery and other satellite data available. NRE also attended the Darwin Core Library for the purpose of conducting XRF and ALS Analysis of cuttings from previously drilled water bores within EL28319.

NRE has met all work and expenditure commitments for EL 28319 for the first term of the licence.
1. Introduction

Natural Resources Exploration (‘NRE’) has conducted extensive office-based studies during the first year of Exploration Licence (EL) 28319, known to NRE as its ‘Bing Bong’ Prospect. It also attended the Darwin Core Library for the purpose of testing water bore cuttings in and around the Bing Bong region.

EL 28319 was granted to NRE on 3 May 2011, consisting of a total of 343 sub-blocks. EL 28319 is situated in the Carpentaria zinc belt within the McArthur Basin. The region is strongly mineralised with a number of prominent commodities including Copper, Lead-Zinc Silver, Uranium, Gold, Iron, Phosphate and Diamonds.

During 2011, NRE’s exploration rationale and objectives for its Bing Bong Prospect considered the evaluation of potential base metal and uranium mineralisation. Investigations were intended to locate any outcropping of mineralisation and any indicators of any sub-surface mineralisation within the tenement based on desktop reviews.

Office-based studies have included desktop reviews of all previous exploration across the tenement, assessment of the geology, radiometrics, aeromagnetics, gravity and ASTER imagery within the Bing Bong Prospect during the first year of grant.

NRE also attended the Darwin Core library with a view to analysing water bore cuttings held at the library. NRE carried out both XRF and ALS Analysis of water bores located in the region.

NRE’s activities during the first year of grant have been a great success and have defined targets for further exploration activities to be conducted during the second term.
2. Tenure

NRE’s exploration licence (EL) 28319, is more commonly known by NRE as its ‘Bing Bong Prospect’. The Bing Bong Prospect consists of 343 sub-blocks in the Carpentaria zinc belt within the McArthur Basin. EL28319 was granted to NRE on 3 May 2011. **Table 1** lists the pertinent tenement details.

**Table 1. Tenement Details**

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Tenement Name</th>
<th>Title No. (EL)</th>
<th>Sub-blocks</th>
<th>Sq. Km</th>
<th>Status</th>
<th>Grant Date</th>
<th>Term (Yrs)</th>
<th>Expiry Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>McArthur</td>
<td>Bing Bong</td>
<td>28319</td>
<td>343</td>
<td>985.03</td>
<td>Granted</td>
<td>3-May-11</td>
<td>6</td>
<td>2-May-17</td>
</tr>
</tbody>
</table>

Native Title

There is currently two (2) Native Title Claims over the area, namely the Boorooloola Region #2 (Coastal) Claim (Tribunal Number DC09/1) and the Lorella Downs Claim (Tribunal Number DC00/15).

Recorded Sacred Sites

There are fifty (50) Recorded Sacred Sites within the Bing Bong Prospect.
2.1 Location and Access

Location

The Bing Bong Prospect area is located approximately 670 kilometres south east of Darwin, near the coast. The location of EL28319 is outlined in Figure 1 below. The tenure is accessible via the sealed Stuart Highway, along the sealed Carpentaria Highway and finally via Robinson road and unsealed station tracks.

An alternative way of reaching the project area would be to access any focus areas via helicopter. Access to the tenements is identified in Figure 2.
Figure 1. Location Map

Figure 2. Access Map
Pastoral Leases

NRE’s Bing Bong Prospect overlies two (2) Pastoral Leases, namely ‘McArthur River’ NT Portion 4319, PPL 1051 and ‘Manangoora’ NT Portion 812 PPL 685. **Figure 3** shows this lease in relation to the Bing Bong Prospect area.

**Figure 3. Cadastral Map**

![Cadastral Map](image)

2.2 Topography and Drainage

The topography of the Bing Bong Prospect is low lying coastal wetlands, with coastal flats a few kilometres inland. There are several estuaries of the McArthur River and the several unnamed creeks. These creeks and the McArthur River generally flow north east through EL28319.

The south east section of the area is nearly entirely coastal flats. There is minor outcrop within EL28319 as well as occasional low lying dunes and mesas. The topography across EL28319 is identified in **Figure 4**.
3. Geology

3.1 Regional Geology

The Bing Bong Prospect lies within the Carpentaria zinc belt consisting of Proterozoic sediments and volcanics. It is located within the unmetamorphosed, relatively undeformed Palaeoproterozoic to Mesoproterozoic succession of carbonate, siliciclastic and volcanic rocks of the McArthur Basin.

The Region is strongly mineralised with a number of prominent commodities including lead-zinc-silver, copper, uranium, gold, iron, phosphate and diamonds. The Regional Geology is depicted in Figure 5 below.
The McArthur Basin lies within the north-eastern portion of the Northern Territory which extends into Queensland. Its sedimentary sequence is interpreted to be up to approximately 12,000 metres in thickness.

The McArthur Basin hosts the major stratiform McArthur River lead-zinc-silver deposit. The Basin also contains marine and non-marine sedimentary rocks. Volcanic and associated intrusive rocks are present in some parts of the Basin.

3.2 Permit Geology

NRE’s Bing Bong Prospect area is situated in the Carpentaria zinc belt within the McArthur Basin. Quaternary sand, silt and clay as part of alluvium or dunes cover a large portion of EL28319 along with Cainozoic soil, sand, ferruginous cemented detritus and residual black soil. Around 5% of the tenure is outcrop or Subcrop, are Early Cretaceous or Mesoproterozoic mainly sedimentary rocks.

There are Early Cretaceous mesas of sandy claystone, quartz sandstone, clayey sandstone occurring as small exposures only they are largely masked by Cainozoic deposits. Mesoproterozoic outcrops are as follows: Roper Group sandstones and shales occur in the central and southern parts of the tenure, In the south is the Karns Dolomite (dolostone and...
sandstone), in the west the Mc Arthur Group - dolostone, shale, sandstone and in the east the Tawallah Group – sandstone, conglomerate and some mafic volcanics.

The permit geology is illustrated in Figure 6 and the changes in the interpreted stratigraphic succession over time are shown in Table 2.

Figure 6. Permit Geology Map
4. NRE’s Exploration Activities during the Reporting Period

To delineate prospective areas for base metal and uranium mineralisation and define the next phase of exploration, Natural Resources Exploration (‘NRE’) has carried out extensive office-based studies of EL28319 and a historic review of previous exploration over the tenure area. NRE also attended the Darwin Core Library for the purpose of conducting XRF and ALS Analysis of cuttings from previously drilled water bores in the region.

Our office-based studies and field visit to the Darwin Core Library have allowed us to delineate prospective areas for base metal and uranium mineralisation.
4.1 Exploration Studies

NRE has conducted an extensive review of historic exploration over its Bing Bong Prospect. A review of all previous exploration within the project area has been completed including:

- Review of previous exploration data from NTGS open file company reports; and
- Review of aeromagnetics, of radiometrics and gravity survey provided by NTGS; and
- Review of satellite imagery, of ASTER imagery, Google Earth Imagery.

Although no mineral occurrences have yet been documented in the region now held by NRE, the Bing Bong Prospect is considered to be situated in a prospective locality between a number of mineralized zones.

Previous exploration has been summarised in Table 3 and location of historic tenements is shown in Figure 7.

**Table 3. Historic Tenures and Previous Companies’ Exploration Reports**

<table>
<thead>
<tr>
<th>TENEMENT</th>
<th>PERIOD</th>
<th>COMPANY REPORTS</th>
<th>COMPANY</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL 8021</td>
<td>1993-1994</td>
<td>CR1994-0802</td>
<td>North Mining</td>
</tr>
<tr>
<td>EL 9544</td>
<td>1996-1997</td>
<td>Not Found</td>
<td>Not Found</td>
</tr>
<tr>
<td>EL 9545</td>
<td>1996-1997</td>
<td>Not Found</td>
<td>Not Found</td>
</tr>
<tr>
<td>EL 25215</td>
<td>2007-2007</td>
<td>CR2007-0613</td>
<td>Brumby Resources</td>
</tr>
<tr>
<td>AP 1973</td>
<td></td>
<td>CR1969-0039</td>
<td>Placer Prospecting</td>
</tr>
</tbody>
</table>
4.2 Water Bore Cuttings Analysis

NRE engaged Terra Search Pty. Ltd. to attend the Northern Territory’s Darwin Core Facility to analyse a number of cuttings available from historically drilled water bores within EL28319.

NRE first delineated all water bores that had been drilled within EL28319. It also received all relevant information recorded at the time of drilling, including geology intersected and water chemistry. The water bore locations within the tenement are shown in Figure 8.
The Department kindly allowed NRE to set-up in the Darwin Core Facility where NRE’s geologists undertook analysis of the water bore cuttings using a hand-held XRF device.

Not all water bores had cuttings available for testing however, NRE was able to test five (5) water bore cuttings within EL28319. Table 4 outlines those water bores tested.

**Table 4. Water Bores Tested using the portable XRF Device**

<table>
<thead>
<tr>
<th>Hole ID</th>
<th>MGA_53_Easting</th>
<th>MGA_53_Northing</th>
</tr>
</thead>
<tbody>
<tr>
<td>RN009906</td>
<td>648621</td>
<td>8240670</td>
</tr>
<tr>
<td>RN009907</td>
<td>653625</td>
<td>8243470</td>
</tr>
<tr>
<td>RN009908</td>
<td>660325</td>
<td>8241470</td>
</tr>
<tr>
<td>RN025711</td>
<td>645905</td>
<td>8268370</td>
</tr>
<tr>
<td>RN025712</td>
<td>645425</td>
<td>8258370</td>
</tr>
</tbody>
</table>

### 5. NRE’s Exploration Activities for next 12 month period

The objective of NRE’s exploration activities over the next 12 month period in relation to its Bing Bong Prospect will be to follow up those targets identified during its first term activities.
In order to do this, a review of all previous diamond sampling work within EL28319 will be completed to determine prospectivity and any areas missed in previous sampling. Follow up work will be conducted if necessary. On review of the radiometrics data over the region, NRE will conduct a field reconnaissance of any uranium anomalies within the tenure in which rock chip and soil samples will be collected for analysis.

Exploration activities for the Bing Bong Prospect will be undertaken in conjunction with NRE’s surrounding tenures in the McArthur region.

6. Reports lodged during the reporting period

NRE lodged an Exploration Report with the Northern Territory Department of Resources’ Geoscience Division on 7 June, 2011.

This report was required in respect of the XRF and ALS Assaying of Water Bore Chips at the Darwin Core Facility. The Exploration Report was titled ‘XRF & ALS Assaying of Water Bore Chips – Core Facility: Darwin’.

NRE believes that no other reports were required to be lodged during this reporting period.

7. Conclusions

Natural Resources Exploration’s exploration activities during the first term of its Bing Bong Prospect have been focused on delineating targets. Natural Resources Exploration’s (‘NRE’) has carried out a first pass assessment of the geology, radiometrics, aeromagnetics, gravity and ASTER imagery within its Bing Bong Prospect, Exploration Licence (EL) 28319 to define initial exploration targets.

During the first term we have been able to conduct extensive desktop studies and a historic review of previous exploration over the tenure area. Our office-based studies and field visit to the Darwin Core Library have allowed us to delineate prospective areas for base metal and uranium mineralisation. The objective of NRE’s exploration activities over the next 12 month period will be to review and follow up those targets identified during its first term activities.

NRE has met all work and expenditure commitments for EL28319 and is looking forward to commencing its exploration activities in the second term in conjunction with NRE’s surrounding tenures in the McArthur region.
8. Bibliography


Appendix I

Water Bore Cuttings XRF Assay Results