Annual Report

EL 27027

Roper Region, Northern Territory

Fertoz Pty Ltd
40 Balgowlah St.
Wakerley
QLD 4154

Roper Project

1:100 000 Mapsheets: 5864 October, 5964 OT Downs, 5863 Buloonungroo
250 000 Mapsheets: SE5302 Tanumbarini, SE5303 Bauhinia Downs, SE5306 Beetaloo
Commodity: Phosphate

JM Draper B.Sc (Geol.)
Minesite Services Australia
November 2011
Contents

1. Executive Summary
2. Contact Details
3. Introduction
4. Tenure
   a. Mining
   b. Real Property
   c. Other Stakeholders
5. Location and Access
6. Regional Geology
7. Licence Geology
8. Previous Exploration
9. Work Done in Year 2 (2010-2011)
   a. Field Work
   b. Desktop Surveys
   c. Exploration Targeting
   d. Prospect Generation
11. Expenditure Covenants
12. References

List of Figures

Figure 1. Location Map
Figure 2. Real Property Tenure
Figure 3. Licence Access
Figure 4. Regional Geological Setting
Figure 5. Licence Geology
Figure 6. Magnetic image of Roper project area
Figure 7. Historical Exploration Licences
Figure 8. Georgina Basin Phosphate Prospectivity

List of Tables

Table 1. Historical Exploration Reports

List of Appendices

1. **EXECUTIVE SUMMARY**

In the latter part of October 2010 EL 27027 was purchased by Fertoz Pty Ltd from the previous titleholders FSL World Holdings Pty Ltd. The Exploration Licence consists of 482 graticular blocks, (1,590km²) located in the Roper River Region of the Northern Territory. The licence was applied for to search for phosphate deposits located in the eastern Carpentaria Basin. Field exploration conducted in 2011 has shown that the licence area is completely covered by Cretaceous sediments with no windows through to the underlying lithologies. It has been decided that geophysical prospecting methods will be used to examine the underlying strata in the coming year.

2. **CONTACT DETAILS:**

**Tenement Holder:**
Fertoz Pty Ltd
40 Balgowlah St
Wakerley QLD 4154
Contact: Mr Les Szonyi
Email: lszonyi@bigpond.com

**Tenement Manager:**
Complete Tenement Management
PO Box 2515
Darwin NT 0801
Contact: Mrs Wendy Jettner
Tel: 08 8981 1880
Email: contact@completetenement.com.au

**Geological Consultant:**
Minesite Services Australia
13 Mander Rd
Holtze NT 0831
Contact: Mr Andrew Jettner
Tel: 08 8931 1461
Email: andrewjettner@yahoo.com.au
3. INTRODUCTION

EL 27027 was granted on the 3rd of September 2009 for a period of 6 years and this annual report covers work done in the second licence year (3/09/2010 – 2/09/2011). It has an area of 482 graticular blocks and is located on the eastern extents of the Carpentaria Basin. The licence was applied for with the intention of exploring for phosphate. EL 27027 is located 150km to the northeast of Elliott township on Beetaloo Station.

Figure 1. EL 27027 Location Map
4. Tenure

a. Mining
Exploration Licence 27027 was granted to FSL World Holdings on 3rd of September 2009 for a period of 6 years, expiring on 2nd September 2015. Fertoz Pty Ltd purchased the licence in late October 2010. The exploration licence consists of 482 graticular blocks (1,590km²) and is located within the Tanumbirini, Beetaloo and Bauhinia Downs 1:250 000 Mapsheets.

b. Real Property
The licence is located within PPL 1059 “Beetaloo Station” which is owned by Yarabala Pty Ltd (Beetaloo Station, Elliott NT 0862) and PPL 1018 “Mungabroom Station” which is also owned by Yarabala Pty Ltd (Beetaloo Station, Elliott NT 0862).

c. Other Stakeholders
Other stakeholders in the licence area consist of the Alawa peoples who own Cox River Station to the north, and the Wampaya peoples who own Anthony Lagoon Station to the south.

Figure 2. Real Property Tenure
5. LOCATION AND ACCESS

EL 27027 is located 140km to the east of Daly Waters, some 580km to the south of Darwin. Access to the general area from Darwin is via the Stuart Highway southwards to Newcastle Waters Station, thence approx 35km to the east along the Beetaloo Homestead access road to the main station Homestead. Beetaloo Station comprises 2 pastoral leases, PPL1059 “Beetaloo” and PPL 1018 “Mungabroom” and is currently undergoing a massive infrastructure build-up consisting of major fencing operations and the construction of a total of 400 stock watering points. They are currently carrying 60,000 head of cattle.

The vegetation of the licence area varies between open treeless black soil plains to heavily wooded lancewood and bulwaddy forests. As part of their rangelands management the station has constructed a number of fire and stock management pathways through the forests. These greatly aid access but unless re-cleared regularly they are quickly overgrown and access again becomes impossible after 2-3 years.

As can be seen from the accompanying map the Carpentaria Highway is to the north of the licence.

Figure 3. EL 27027 Access
6. **REGIONAL GEOLOGY**

The youngest rocks in the licence area are the sandstones, mudstones and limestones of the Carpentaria Basin. This basin has an age of between 205 and 65Ma. It unconformably overlies the sedimentary rocks of the MacArthur and Georgina Basins.

In the licence area the Cretaceous shales and mudstones form an opaque cover which effectively masks the underlying basinal contact between the Carpentaria, Georgina, and MacArthur basins. For our search for phosphorite we need to be concentrating on the Cambrian Top Springs limestone which probably represents the equivalent of the Tindal limestone in the Daly Basin and Wonarah Formation in the Georgina Basin. The Top Springs limestone is unconformably underlain by the Antrim Plateau Volcanics.
7. **Licence Geology**

The outcrop geology of EL 27027 consists of Cretaceous claystones of the Carpentaria Basin which are overlain by Tertiary laterite and Quaternary black soils. These effectively mask the view of the underlying geology, making geophysical examination of the area the only effective way of studying the underlying geology. There were no rocks located on the licence area other than the Cretaceous claystones during 2011. This is due to the entire licence being covered by the Cretaceous. Several traverses were made across the licence seeking windows through the Cretaceous, however none were found.

![Figure 5. Licence Geology](image-url)
8. Previous Exploration

Previous exploration has been primarily focussed towards diamonds as each of the major diamond explorers have continued their search across the Australian landscape. CRA Exploration were the first of the diamond explorers in the area in 1984, their efforts led to the discovery of 1 microdiamond to the north of the licence area. Follow up of this result by loam sampling produced generally negative results. This sample has tantalised subsequent explorers and the source has not been located as yet.

Other diamond explorers in the area have been Aberfoyle Exploration as part of the ADE Joint Venture with Ashton Mining. Helix Resources on their own in 1990 to 1991, and Ashton Mining for the ADE JV from 1993 to 1996. CRA Exploration re-entered the area in 1993 and stayed to 1995.

It seems that De Beers had 2 strategies, one was to lead the pack as Stockdale Exploration in the 1980s and 90s, and the second was to come back as De Beers in the 2000s and re-evaluate everyone else’s work. This was probably as a result of the findings at Merlin where the kimberlites did not exhibit a magnetic response (ie a deep seated dipole response). It was the magnetic response that was used to quickly examine large areas with ground follow up as necessary. This exploration strategy was proven to be flawed and so most of the ground was re-examined in the late 1990s and early 2000s.

<table>
<thead>
<tr>
<th>Licence No</th>
<th>Tenure Period</th>
<th>Open File Company Reports</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL4552</td>
<td>20/06/84 – 19/06/90</td>
<td>CR1985-0218</td>
<td>CRA Exploration Pty Ltd</td>
</tr>
<tr>
<td>EL 6806</td>
<td>21/06/90 – 24/06/91</td>
<td>CR1991-0349</td>
<td>Helix Resources NL</td>
</tr>
<tr>
<td>EL 7558</td>
<td>19/12/91 – 16/12/92</td>
<td>CR1993-0155</td>
<td>CRA Exploration Pty Ltd</td>
</tr>
<tr>
<td>EL 8120</td>
<td>26/05/93 – 19/04/95</td>
<td>CR1994-0422</td>
<td>CRA Exploration Pty Ltd</td>
</tr>
<tr>
<td>EL 8121</td>
<td>26/05/93 – 19/04/95</td>
<td>CR1995-0520</td>
<td>CRA Exploration Pty Ltd</td>
</tr>
<tr>
<td>EL8123</td>
<td>26/05/93 – 19/04/95</td>
<td>CR1995-0520</td>
<td>CRA Exploration Pty Ltd</td>
</tr>
<tr>
<td>EL 23022</td>
<td>24/02/03 – 7/01/04</td>
<td>CR2004-0019</td>
<td>De Beers Aust. Exploration</td>
</tr>
<tr>
<td>EL 23026</td>
<td>7/03/03 – 16/02/04</td>
<td>CR2004-0045</td>
<td>De Beers Aust. Exploration</td>
</tr>
</tbody>
</table>

Table 1. Historical Exploration Reports
Figure 6. Historical Exploration Licences

**a. Field Work**

**Year 2**

In 2011, field work consisted of the ground traversing of the licence area along fence lines and station tracks. The area of the licence is the least developed part of the station and so compared with other areas on Beetaloo and Mungabroom, and certainly Tanumbirini, it is quite difficult to access.

We were able to get several sections through the licence along fencelines but unfortunately none of our target lithologies were encountered.

**b. Desktop Surveys**

**Year 2**

Research done included the review of scientific journal articles and current GIS maps of the area in question. This was mainly done with regards to exploration targeting and updating the base of literature with which teams use to navigate when out in the field.

**c. Exploration Targeting**

Phosphate - It has been demonstrated that phosphorite deposits are usually to be found in restricted basin margins and may exhibit a subtle radiometric signature associated with the replacement of Ca in the phosphate lattice by Uranium. Palaeogeographic basin margins, or basin shorelines in the Cambrian represent the primary targets. These will be masked by the Cretaceous sediments of the Carpentaria Basin so aeromagnetics will be used to define the basin margin, which is our exploration “fairway”.

**d. Prospect Generation**

Prospect generation in the licence area will depend on the remote sensing data that is able to be acquired.

At the present time there have been no targets generated by the current study.

The picture below shows that this exploration licence is still in the area seen as being prospective for phosphate exploration by the geologists of the Northern Territory Geological Survey.
Figure 7. Georgina Basin Phosphate Prospectivity (Dunster JN, Kruse PD, et al.)

The proposed work program for the third year of tenure (2011-2012) will consist of the following:

- Interpretation of open file aeromagnetic, radiometric and gravity geophysical data.
- Field follow-up of data generated by the above methodology. With particular emphasis on Iron, phosphate and base metal targets.
- Preparation of the Third Annual Report.
11. **Expenditure Covenants**


The expenditure report for Year 2 (2010 – 2011) is included as Appendix 1 to this annual report.

b. **Proposed Expenditure for Year 3 (2011 – 2012)**

The proposed expenditure for Year 3 is as follows:

- Geophysical Interpretation $100,000
- Field follow-up of the above data $145,000
- Annual report preparation $5,000

**Total Proposed Expenditure** $250,000
12. REFERENCES

Open File Company Reports


Roiko HJ, (1993), EL7586 Newcastle Creek, EL 7587 Mundah, EL 7588 Bulloonungaroo Creek, EL 7589 Beetaloo East, EL 7590 Wallhollow West, EL 7591 Tudinny Creek, EL 7594 Billycan Creek Combined First and Final Report for Period ending 28 October to 15 December 1992, CRA Exploration Pty Ltd unpublished company report, CR1993-0155.


Published Reports


Company Reports