Annual and Final Report EL 26974
Period: 23/07/2009 to 13/09/2012
Barrow Creek Region, Northern Territory

Fertoz Ltd
40 Balgowlah St.
Wakerley
QLD 4154

Barrow Creek Project
1:100 000 Mapsheets: 5853 Utopia
1:250 000 Mapsheets: SF5310 Alcoota
Commodity: Phosphate

L Szonyi PhD B.E. (Chem.)
Fertoz Ltd
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Abstract:

EL 26974 forms part of Fertoz Pty Ltd’s Barrow Creek Project which consists of 5 granted exploration licences (EL 27036, EL 26974, EL26975, EL26977) covering 2,769 km$^2$ in the Murray Downs area of the Northern Territory, see figure 2. The area is considered to be prospective for phosphate mineralisation. Work conducted in the third year consisted of desk top studies and the submission of a Mine Management Plan for the Barrow Creek Project focussing initially on EL 26915.

Early in 2012 the Mine Management Plan was approved and a bond of $47,222 lodged with the Government. Fertoz does not have the funds to drill EL 26974 in 2013 and has made the decision to relinquish the tenement.

Contact Details:

Tenement Holder:

Fertoz Ltd
40 Balgowah St
Wakerley
QLD 4154
Contact: Dr Les Szonyi
Email: les.szonyi@aus2.com

Report Author:

Fertoz Ltd
40 Balgowah St
Wakerley
QLD 4154
Contact: Dr Les Szonyi
Tel. 07 3396 0024
Email: les.szonyi@aus2.com
1. **LOCATION**

EL 26974 is located some 170km to the northeast of Alice Springs on Alcoota Station. It is located within the 1:250K Mapsheets SF510 Alcoota and the 1:100K Mapsheets 5853 Utopia. The tenement is located between 22° 17’S to 22° 24’S and 134° 34’E to 134° 38’E.

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2. **TITLE HISTORY**

Mineral Tenure
Exploration Licence 26794 was granted to FSL World Holdings on 23rd of July 2009 for a period of 6 years, expiring on 22nd July 2015. Fertoz Ltd purchased the licence in late October 2010. This technical report is the Third Annual and Final Report and covers activities in the period 23/07/2011 to 22/07/2012, being the third year of tenure. The exploration licence consists of 24 graticular blocks (80km²). At the end of the second year an application of waiver of reduction was granted by the Department of Resources and so the area remained at 24 blocks.

EL 26794 forms part of the Barrow Creek Project which consists of 5 granted exploration licences covering a total area of 892 graticular blocks (2,769 km²).

Real Property
The licence is located within PPL 1032 “Alcoota Station” which is owned by the Alcoota Aboriginal Corporation (Alcoota Station PMB 27 Alice Springs NT 0872). Another area is vacant crown land.

Other Stakeholders
Other stakeholders in the licence area consist of the Angarapa peoples who are the identified traditional owners of this area. They are located to the north and east of EL 26974 on a large freehold landholding. The Alcoota Station is owned by the Alcoota Aboriginal Corporation.
PHYSIOGRAPHY

i. Geomorphology

The Barrow Creek area is characterised by sandy and alluvial plains with an average height of about 450 metres above sea level, which pass into hilly country and low ranges with a maximum relief rarely exceeding more than 200 m above the surrounding plain. The most important of these include the Davenport, Crawford, Osbourne and Dulcie Ranges.

ii. Biogeography

Sand plains are covered by thick grasses, particularly spinifex (Triodia), and sparse low shrubs and trees such as mallee, bloodwood, desert currajong, and witchety bush. Major watercourses such as the Hanson and Sandover Rivers and Taylor Creek are lined by eucalyptus, Grevillea and various low trees and shrubs. Ridges support sparse shrubs, low trees and abundant Spinifex. Stands of mulga and mallee occur in some areas.

iii. Hydrology
Barrow Creek township has an annual rainfall of approximately 290 mm, which mostly falls between October and March. There are typically around 30 rainy days per year. The average annual evaporation (as measured at the nearest station in Alice Springs) is 2.9 m. The Hansen river passes through the tenement.

4. ACCESS

Access to the licence from Alice Springs is 60km north via the Stuart Highway, then 30km east on the Plenty Highway, then 125km northeast on the Sandover Highway to Utopia outstation. The EL is located some 15km to the south of Utopia along minor station tracks.

Access around the licence area is relatively slow with few fence lines and station tracks.

5. GEOLOGICAL SETTING

Fertoz’s Barrow Creek Project consists of five granted tenements, totalling 2,769 km². The project lies along the margin between the Palaeoproterozoic to Mesoproterozoic Tennant Creek Inlier to the north and the Aileron Province to the south. These are overlain by Cambrian to Palaeozoic sediments of the Georgina and Wiso Basins in a geological setting that is interpreted to be prospective for phosphate.

Significantly, the Aileron Province hosts a variety of other commodities including:
• metamorphosed volcanogenic massive sulphide and carbonate replacement lead-zinc-copper
• iron-oxide copper-gold
• orogenic gold
• tungsten
• tin and tantalum,
• mafic hosted nickel-copper
• hypothermal uranium
• mafic-hosted vanadiferous magnetite.

i. Regional Geology

EL 26974 is located primarily within the Aileron Province adjacent to an outcropping section of the Georgina Basin. It was applied for to cover a section of Georgina Basin margin to allow for exploration for phosphorite occurring in the middle to lower Cambrian Limestones of the Georgina Basin. It also contains a major northwest to south east trending structural corridor which contains the Stirling fault. The Aileron Province is a poly-deformed and metamorphosed basement terrain along the southern margin of the North Australian Craton. It contains metamorphosed clastic sediments, meta volcanic rocks, calc-silicate rocks, dolerite, mafic rocks and granites. It is unconformably overlain by the Ngalia, Amadeus, Murraba, Georgina and Eromanga basins. It has a largely faulted relationship with the Warumpi and Irindina Provinces and represents a transitional relationship with the Tanami Region. The Aileron Province hosts a variety of economic commodities including metamorphosed VMS and carbonate replacement Pb-Zn-Cu, iron-oxide Cu-Au, orogenic Au, W, Sn, Ta, mafic hosted Ni-Cu, hypothermal U and is a major exploration target for base metals, Ni-Cu, uranium, mafic-hosted vanadiferous magnetite and remains largely unexplored,(Scrimgeour 2003).
ii. Licence Geology

The licence geology consists of Proterozoic and lower Palaeozoic sediments overlain by Tertiary and Cainozoic cover with Quaternary soils and sands.

The uppermost unit found in the licence area is the Tertiary Waite Formation. This unit consists of chaledonic limestone, sandstone, mudstone with minor sandy conglomerate and outcrops sporadically throughout the central part of the EL.

The next youngest outcropping rock unit is the Lower Cambrian Central Mt Stuart Beds, which are composed of chocolate quartz and lithic sandstone with rare dolomite and arkose. Also outcropping are the Proterozoic Utopia Quartzite, which consists of quartzite with rare conglomerate, the Proterozoic Ledan Schist, which consists of micaceous schist, tourmaline quartzite, minor paragneiss, amphibolite, and metamorphosed conglomerate. In the southern portion of the licence the Delny Gneiss outcrops and this unit consists of leucocratic biotite-microcline-muscovite-quartz gneiss, biotite-muscovite schist, meta-psammite and meta-pelite, amphibolite with very minor calc-silicate gneiss.

The metamorphic grade increases from north to south across the licence ranging from schist in the north to gneiss in the southern portion.
6. EXPLORATION AND MINING HISTORY

Exploration
Previous exploration in the licence area has been conducted by Otter Exploration who sought uranium in the area without success, Track Minerals explored for the same commodity, again without success. Tanami Exploration explored the area extensively seeking Tanami-style gold, iron oxide copper-gold (IOCG) and Tennant Creek-style copper-gold mineralisation in the Alcoota district. Tanami Exploration spent 5 years exploring in this area without success. A thorough review of the Tanami Exploration data is warranted as the target is Tanami/Tennant Creek IOCG style gold deposits.

Table 1. Historical Exploration Licences and Open File Reports

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Table 2. Historical Mines and Prospects

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Figure 7. Historical Exploration Licences Mining

EL 26974
There are no Department of Resources recorded historical mines or prospects within the licence area.

7. **EXPLORATION RATIONALE**

Barrow Creek Project comprises of 5 tenements (EL27036, EL26975, EL26977, EL26974, EL26915) is located in the Barrow Creek area on the edge of the Georgina and Wiso Basins 300km North of Alice Springs. Numerous phosphate deposits have been found along the basin margins (Lucy Creek, Ammaroo) where Middle Cambrian sediments occur at shallow depths.

- Tenements are positioned in locations at the edge of the Georgina and Wiso basins which are highly prospective for phosphate occurring at shallow depths.

- 250k Geological maps of the area show Middle Cambrian units outcropping in some areas within tenements or beneath shallow cover. Regional structures cut the area and may uplift sections of Middle Cambrian sediments.

- Tenements are easily accessed from the Stuart highway with a number a station tracks outlined on the 250 Topography allow access to a number of areas.

8. **EXPLORATION INDEX MAP**

No exploration index map has been constructed for EL26974.

9. **GEOLOGICAL ACTIVITIES**

**Office Studies**

During the year a broad scale literature survey was conducted on the whole of the Barrow Creek Project area (5 ELs), which consisted of examining previous explorers data as submitted to the Department of Resources as well as current thinking on phosphate mineralising systems in the Region. The conclusion was that priority should be given to exploring EL 26915 due to its proximity to recent phosphate discoveries by Rum Jungle Resources (ASX Announcement 27 June 2011) and NUPower Resources (ASX Announcement 3 and 24 July 2012).

**Field Studies**

No field work was done during the year.

10. **REMOTE SENSING**

There were no remote sensing surveys done during the year. Included below is an image taken from the Department of Resources Strike dataset, LANDSAT 741.
11. **GEOPHYSICAL ACTIVITIES**

There were no geophysical activities conducted on EL 26974 during the year.

**Radiometrics**
There have been no radiometric surveys conducted during the year.
Included below is an image taken from the Department of Resources Strike dataset, Ternary Radiometrics.
Figure 9. Radiometrics

**Magnetistics**
There were no Magnetic surveys done during the year. Included below is an image taken from the Department of Resources Strike dataset, Magnetics TMI. Red on the image illustrates basement or magnetic highs.
12. **SURFACE GEOCHEMISTRY**

No soil or rock chip samples have been taken on the tenement.

13. **DRILLING**

There were no drilling activities undertaken during the year for any of the tenements comprising the Barrow Creek Project (EL 26915, EL 27036, EL26974, EL26975, EL26977).

There are no drill holes recorded on the DoR drill database for the licence area.

Drilling activities were initially planned for EL 26915 and then subsequently deferred due to the onset of the wet season. The Mine Management Plan for the barrow Creek Project was approved by the Northern Territory in December and a bank guarantee (Ref: 0657-01) of $47,222 was lodged with the Minister of Primary Industry, Fisheries and Resources in early February.

On 8th February Fertoz signed a Heads of Agreement with NuPower Resources Ltd to allow NuPower Resources Ltd to enter into a Farm-in and Joint Venture Agreement for Exploration Licence EL26915. As part of the Agreement NUPOWER Resources Ltd has committed to meet the Northern Territory Covenant expenditure requirements once the Farm-in and Joint Venture Agreement contract is signed. This occurred on 3rd May 2012.
Fertoz has withdrawn the Mine Management Plan and decided not to drill EL 26974.

14. **GEOTECHNICAL STUDIES**

Geotechnical studies conducted during the year consisted of a literature survey and data collection study covering the whole of the Barrow Creek Project area.

15. **RESOURCE AND RESERVE ESTIMATION**

There were no resource or reserve estimations done during the year.

16. **CONCLUSIONS AND RECOMMENDATIONS**

The exploration work done to date has not successfully explored EL 26974 for the presence of phosphate mineralisation. The only effective way to examine the underlying strata is by drilling, firstly using either Aircore (recommended) or Reverse Circulation methods.

Fertoz does not have the funds to carry out drilling in the next twelve months. It has given priority in the Barrow Creek project to EL 26915 which it has entered into a joint venture with NUPower Resources. Consequently it has decided to relinquish EL 26794 and carry out no further exploration.
17. REFERENCES

Open File Company Reports


Published Reports


Company Reports
