

2011

# Annual Report

## EL 26915

Period: 08/04/2010 to 07/04/2011  
Barrow Creek Region, Northern Territory

**Fertoz Pty Ltd**  
19 Livingston Ave.  
Baulkam Hills  
NSW 2153

### Barrow Creek Project

1:100 000 Mapsheets: 5855 Murray Downs, 5755 Taylor, Urapunga  
1:250 000 Mapsheet: SF6306 Barrow Creek  
Commodity: Phosphate

WA Jettner B.Sc (Geol.)  
Minesite Services Australia  
April 2011



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## **1. EXECUTIVE SUMMARY**

In the latter part of October 2010 EL 26915 was purchased by Fertoz Pty Ltd from the previous titleholders FSL World Holdings Pty Ltd. The EL consists of 236 graticular blocks, (800km<sup>2</sup>) located in the Barrow Creek Region of the Northern Territory. The area of interest occurs within and adjacent to the boundary of the Georgina Basin and the new titleholders consider the licence area to be favourable for the discovery of phosphate deposits of a similar nature to that found to the east of this locality. The Arthur Creek Formation is the target rock unit in this locality as it represents the calcareous unit deposited in the Cambrian. This Formation has a lower anaerobic limestone and an upper aerobic limestone which represents near shore conditions. This aerobic limestone unit is fossiliferous, with phosphatic occurrences throughout the region. Exploration Licence No 26915 is located immediately to the west of the EL hosting the recently located Barrow 1 phosphate prospect of Rum Jungle Resources.

## **2. CONTACT DETAILS:**

### **Tenement Holder:**

**Fertoz Pty Ltd**

19 Livingston Ave

Baulkham Hills

NSW 2153

Contact: Mr James Chisholm

Email: chisholmj@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

### **Operator:**

**Minesite Services Australia**

PO Box 96

Palmerston NT 0831

Contact: Mr Andrew Jettner

Tel: 08 8931 1461

Email: minesiteservices@bigpond.com

### 3. INTRODUCTION

EL 26915 was granted on the 8th of April 2009 for a period of 6 years and this annual report covers work done in the second licence year (2010-2011). During this period there was effectively no field work done on the licence due to the very wet and prolonged wet season. The licence consists of 236 graticular blocks and is located near Barrow Creek NT.

This exploration licence, along with ELs 26974, 26975, 26977 and 27036 form a total area of 2,890km<sup>2</sup> for the Barrow Creek Project Area. The licences are arranged in a north-westerly trending line covering the postulated western margin of the Georgina Basin.

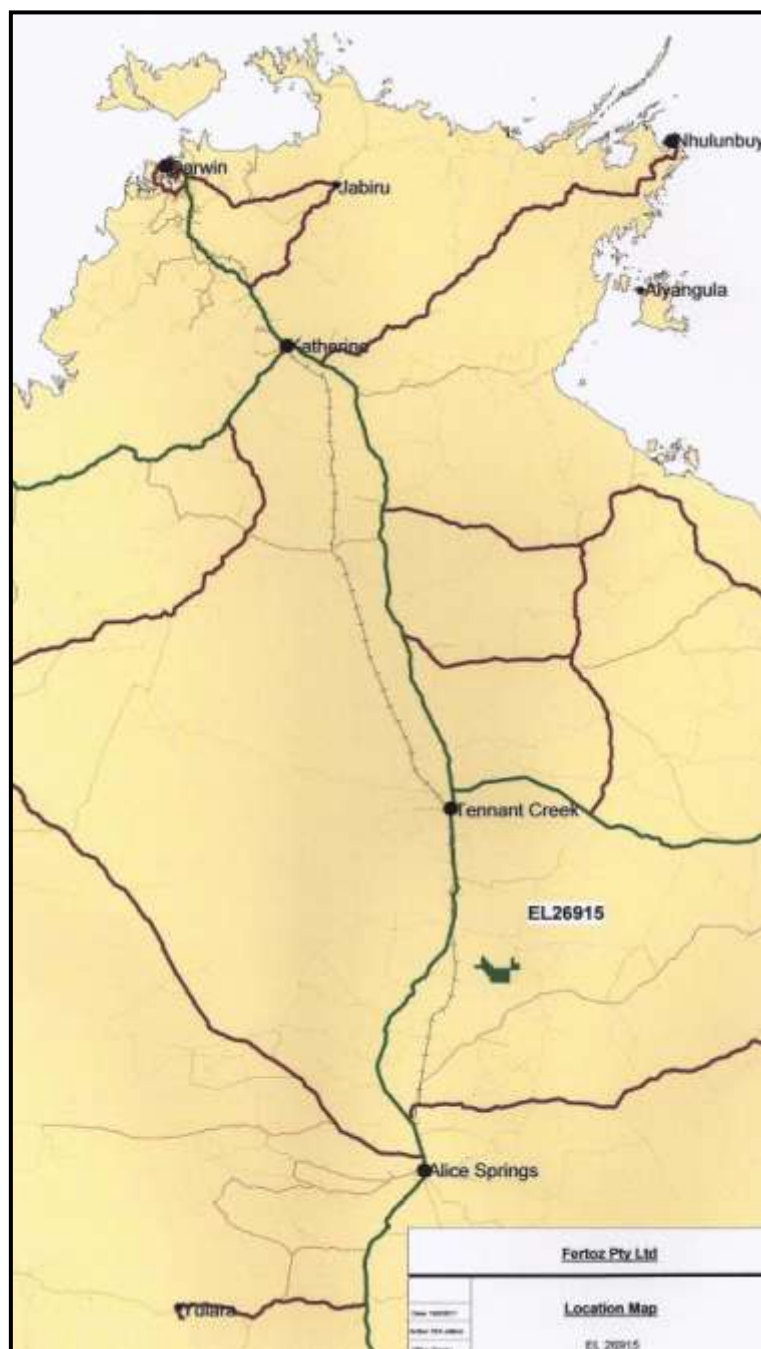


Figure 1. EL 26915 Location Map

## 4. TENURE

### a. Mining

Exploration Licence 26915 was granted to FSL World Holdings on the 8<sup>th</sup> of April 2009 for a period of 6 years, expiring on the 7<sup>th</sup> of April 2015.

Fertoz Pty Ltd purchased the licence in late October 2010.

The exploration licence consists of 236 graticular blocks (800km<sup>2</sup>) and is located within the Barrow Creek 1:250 000 mapsheet.

### b. Real Property

The licence is located within PPL 1139 "Murray Downs Station" which is owned by L & S Nominees Pty Ltd (PO Box 2311 Alice Springs NT 0871), and PPL 1105 "Ammaroo Station" which is owned by Ammaroo Pty Ltd (PMB 39 Alice Springs NT 0872)

### c. Other Stakeholders

There is a large area of Aboriginal freehold land located immediately to the south of the licence and this is owned by the Alyawarra Aboriginal Land Trust.

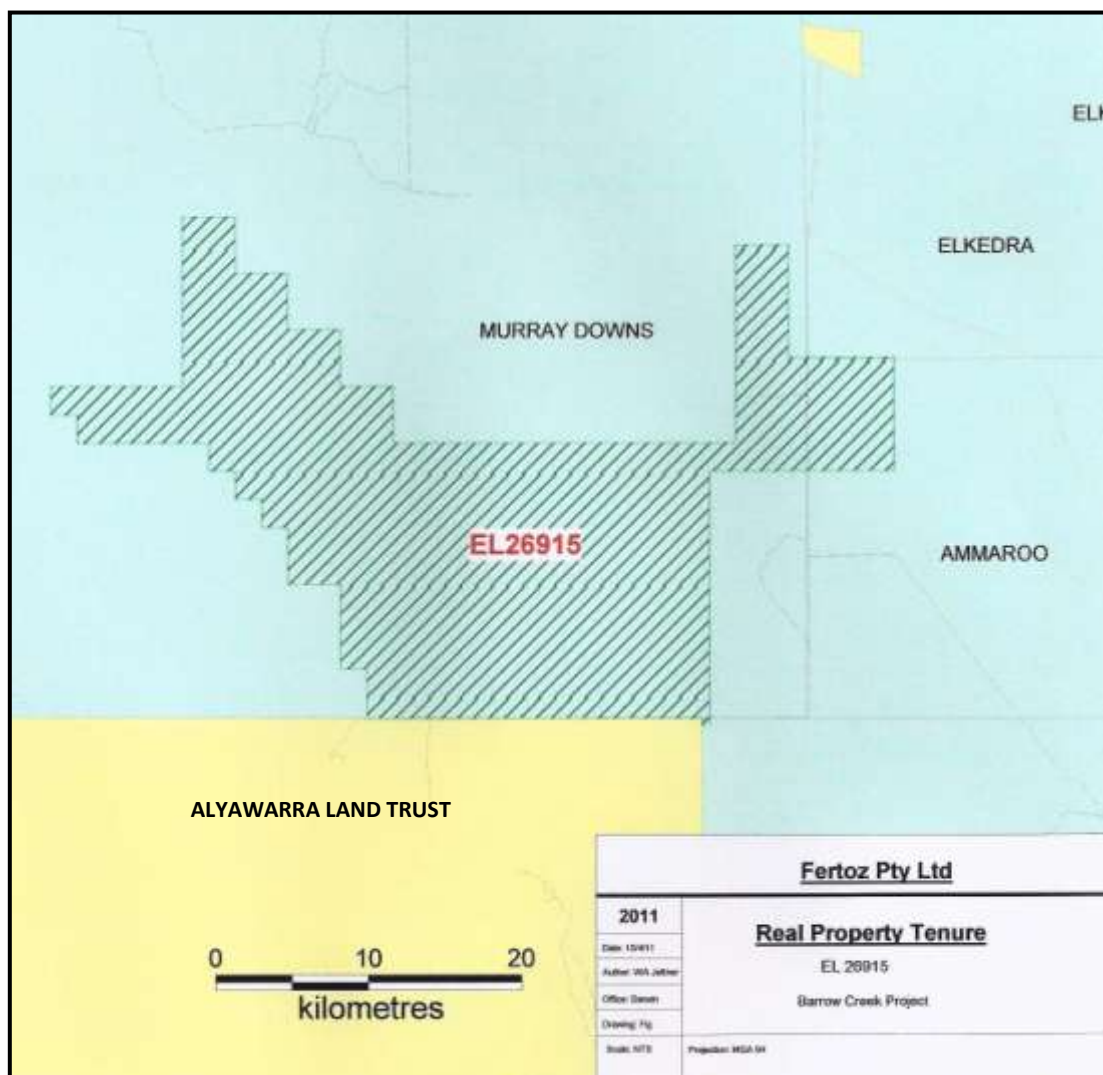


Figure 2. Real Property Tenure

## 5. LOCATION AND ACCESS

EL 26915 is located some 260km to the north of Alice Springs on Murray Downs and Ammaroo Stations. Access to the EL from Alice Springs is 460km north via the Stuart Highway to the Ali Curung turnoff, then to the Murray Downs Homestead. From the homestead another 50km east to a north-south fenceline on the Murray Downs/Ammaroo Station boundary. Southwards along this fenceline for 24km lies the eastern portion of exploration licence 26915. The licence covers an irregular shape and consists of some 236 graticular blocks having an area of 800km<sup>2</sup>.

Access around the licence area is slow with very few fencelines and station tracks. The licence is covered by sands and vegetation consists of gidgee, mulga, acacia with very few eucalypts. Groundcover is spinifex.

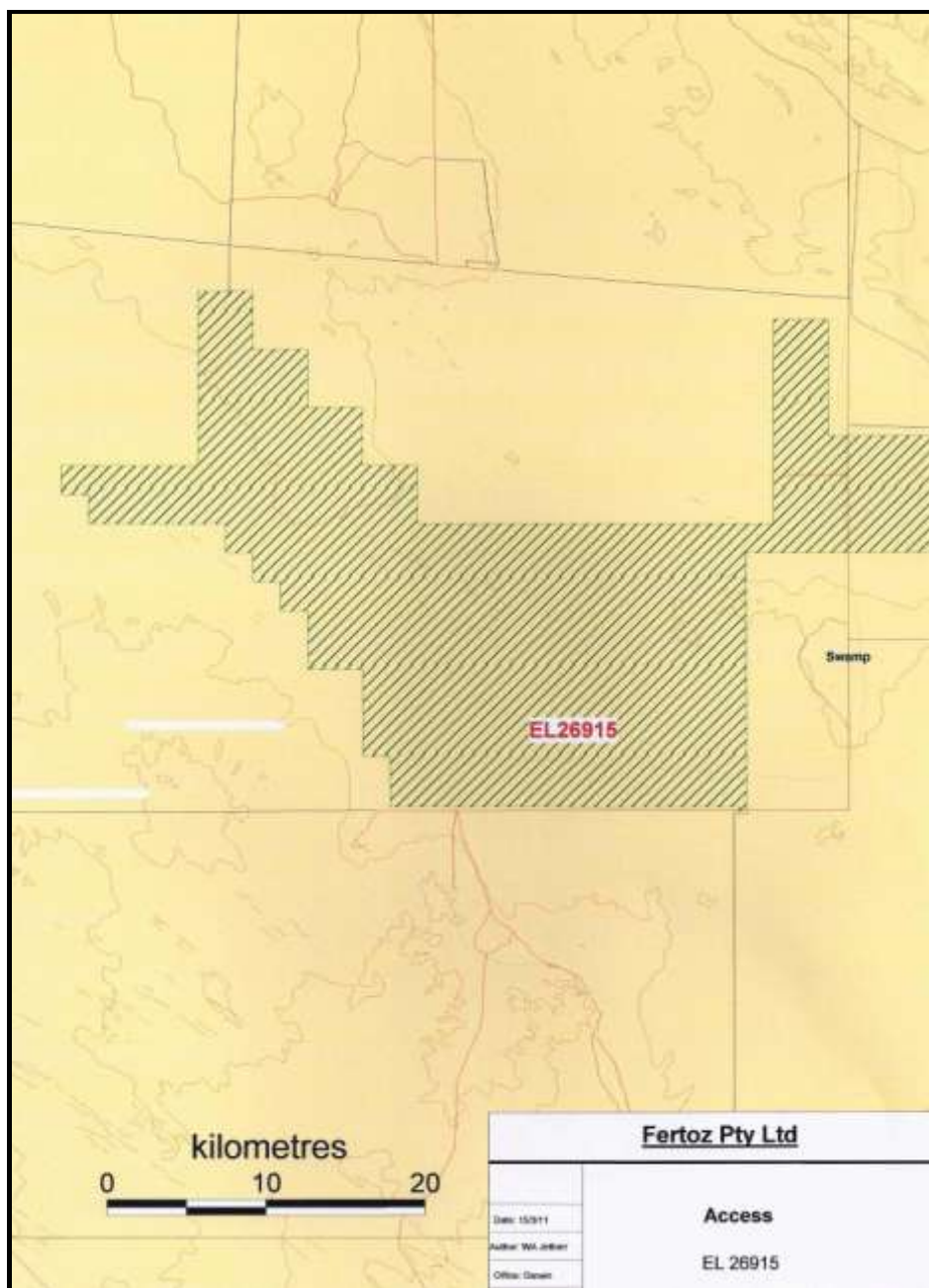


Figure 3. EL 26915 Access

## 6. REGIONAL GEOLOGY

EL 26915 is located primarily within the Georgina Basin. It was applied for to cover a section of the Georgina Basin margin to allow for exploration for phosphorite occurring in the middle Cambrian limestones of the Georgina Basin, specifically the Upper and Lower Arthur Creek Formation units. The Arthur Creek Formation is present on the eastern side of the Dulcie Syncline, a major NW-SE trending trough but is thought to laterally tongue out to the west. Further work to track and elucidate its equivalents is required.

A small part of the licence area is located in the Davenport Province as shown by the figure below. This consists predominantly of undifferentiated Proterozoic metasediments and the Andegarra Formation.

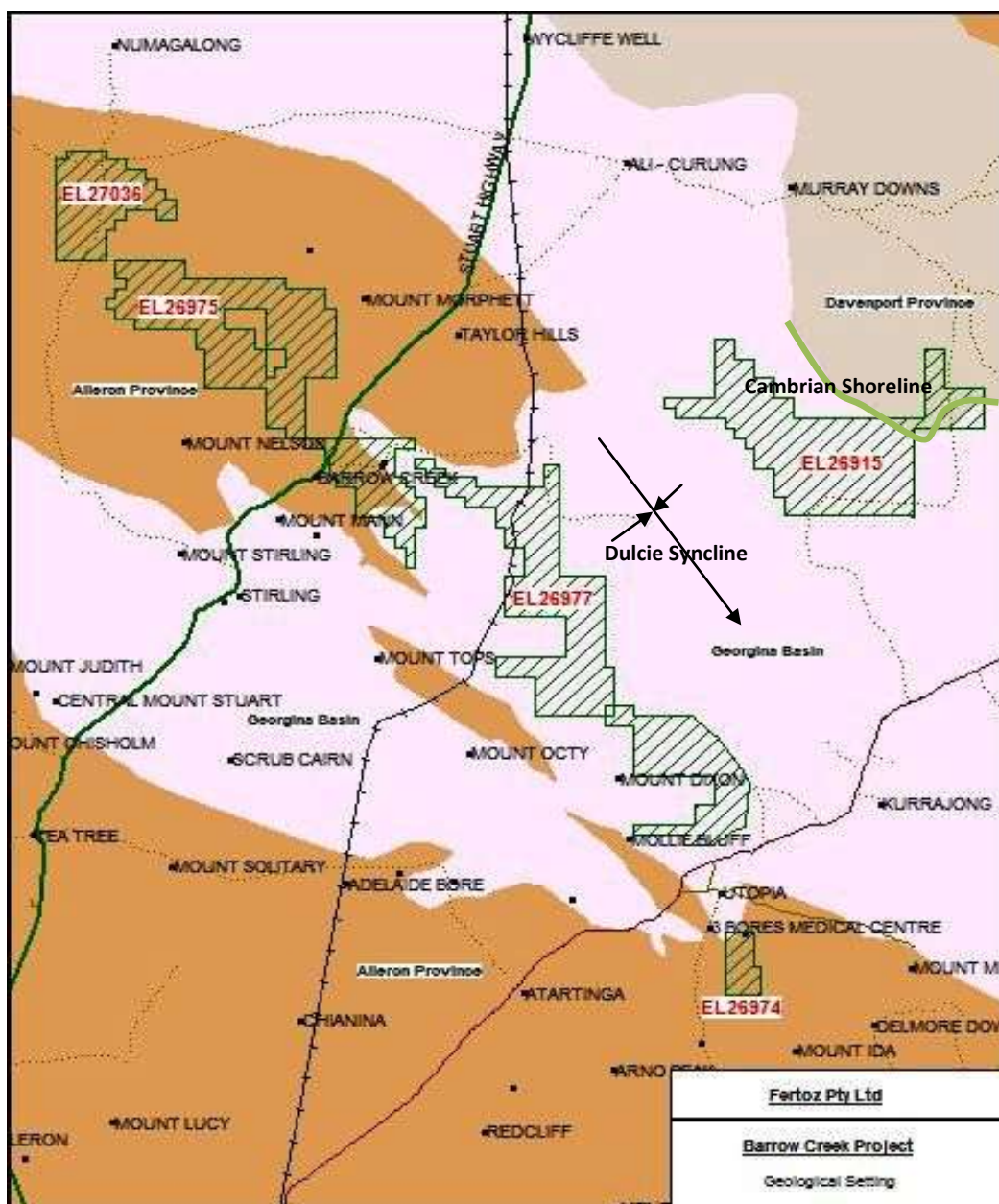


Figure 4. Regional Geological Setting

## 7. LICENCE GEOLOGY

The outcrop geology of EL 26915 consists predominantly of sands derived from the underlying Cambrian geology. Immediately to the northeast of the licence is a SE plunging syncline containing outcropping Chabalowe Formation at its core. This would tend to indicate that the area to the southeast of these outcrops would be a good place to explore for the Arthur Creek Formation under the sands.

In this area the Arthur Creek Formation consists of a Lower Unit which contains a foetid pyritic-carbonaceous black shale and laminated dolostone overlain by an Upper unit containing an aerobic sequence containing dolostone and limestones. It is the contact between these two units that forms the target horizon for the current exploration program.

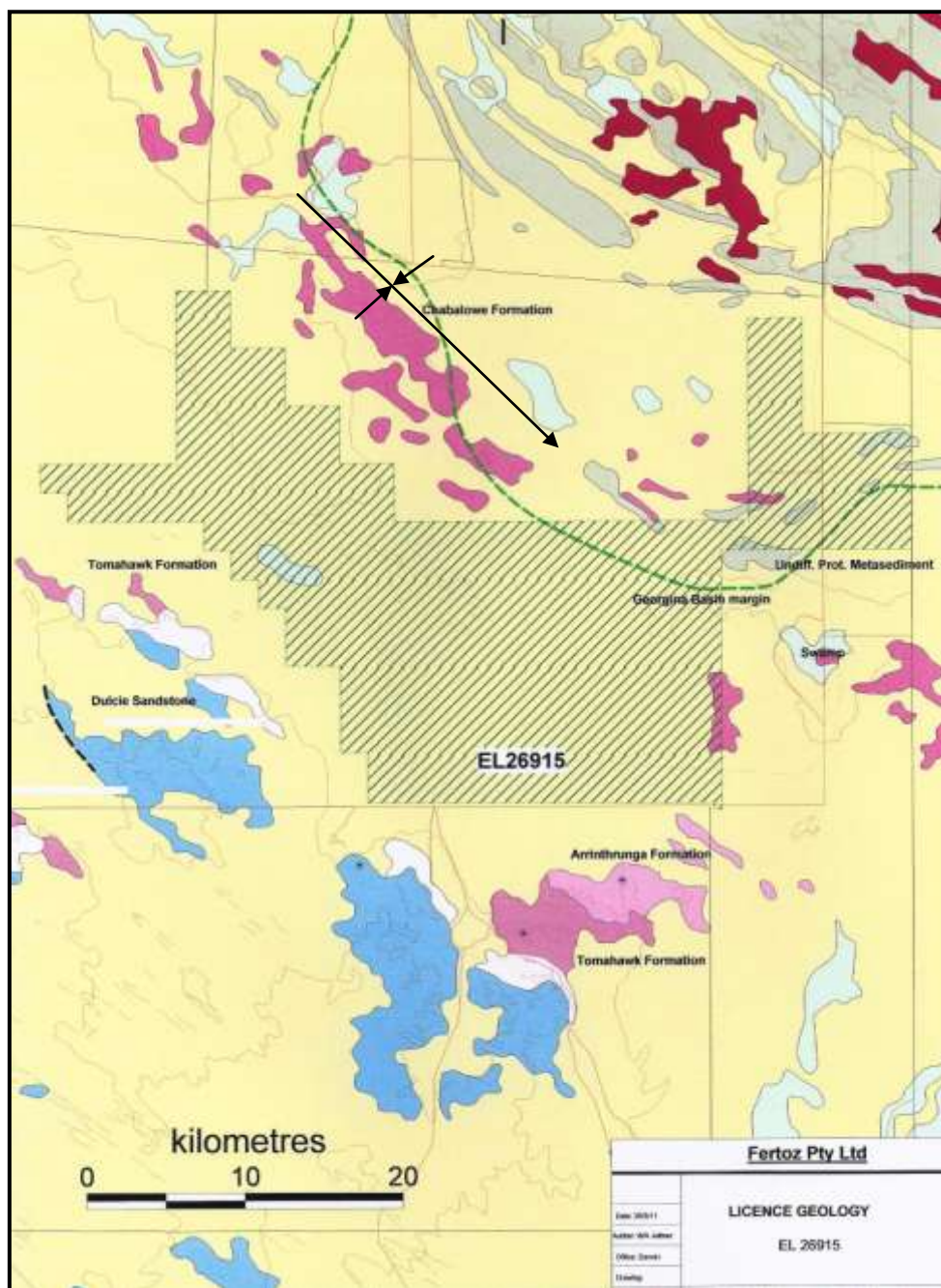


Figure 5. EL 26915 Licence Geology



## **8. PREVIOUS EXPLORATION**

Previous exploration in the area has minimal due to the difficulties of field operations in this area. The terrain is predominantly loose sands populated by gidgee, mulga and acacia with a groundcover of spinifex. Access throughout the licence is minimal and so exploration is a high cost exercise in this area. Until the recent discoveries of phosphate at the nearby Barrow 1 Prospect by Rum Jungle Resources the area has received scant attention, with minimal exploration for base metals and diamonds, both sets of commodities that are conducive to geophysical and remote sensing prospecting methods.

### **EL 26915**

<b>Licence No</b>	<b>Tenure Period</b>	<b>Open File Company Reports</b>	<b>Company</b>
<b>AP 2192</b>	24/02/1969-23/02/1971	CR1970-0090	Vam Ltd
<b>AP 2742</b>	12/10/1970-11/10/1971	CR1972-0072	Kawanee Australia
		CR1973-0064	Kawanee Australia
<b>EL 6113</b>	28/09/1988-26/09/1991	CR1989-0780	CRA Exploration
		CR1990-0650	CRA Exploration
<b>EL 23383</b>	22/04/2003-19/03/1990	CR2004-0333	Astro Diamond Mines
		CR2005-0524	Astro Diamond Mines
		CR2006-0199	Astro Diamond Mines
		CR2006-0324	Astro Diamond Mines
		CR2007-0262	Astro Diamond Mines
		CR2008-0189	Astro Diamond Mines
		CR2008-0562	Quantum Resources
		CR2009-0304	Quantum Resources
<b>EL 24208</b>	19/12/2004-18/11/2005	CR2005-0606	J Benger & R Cleaver

Table 1. Historical Exploration Reports

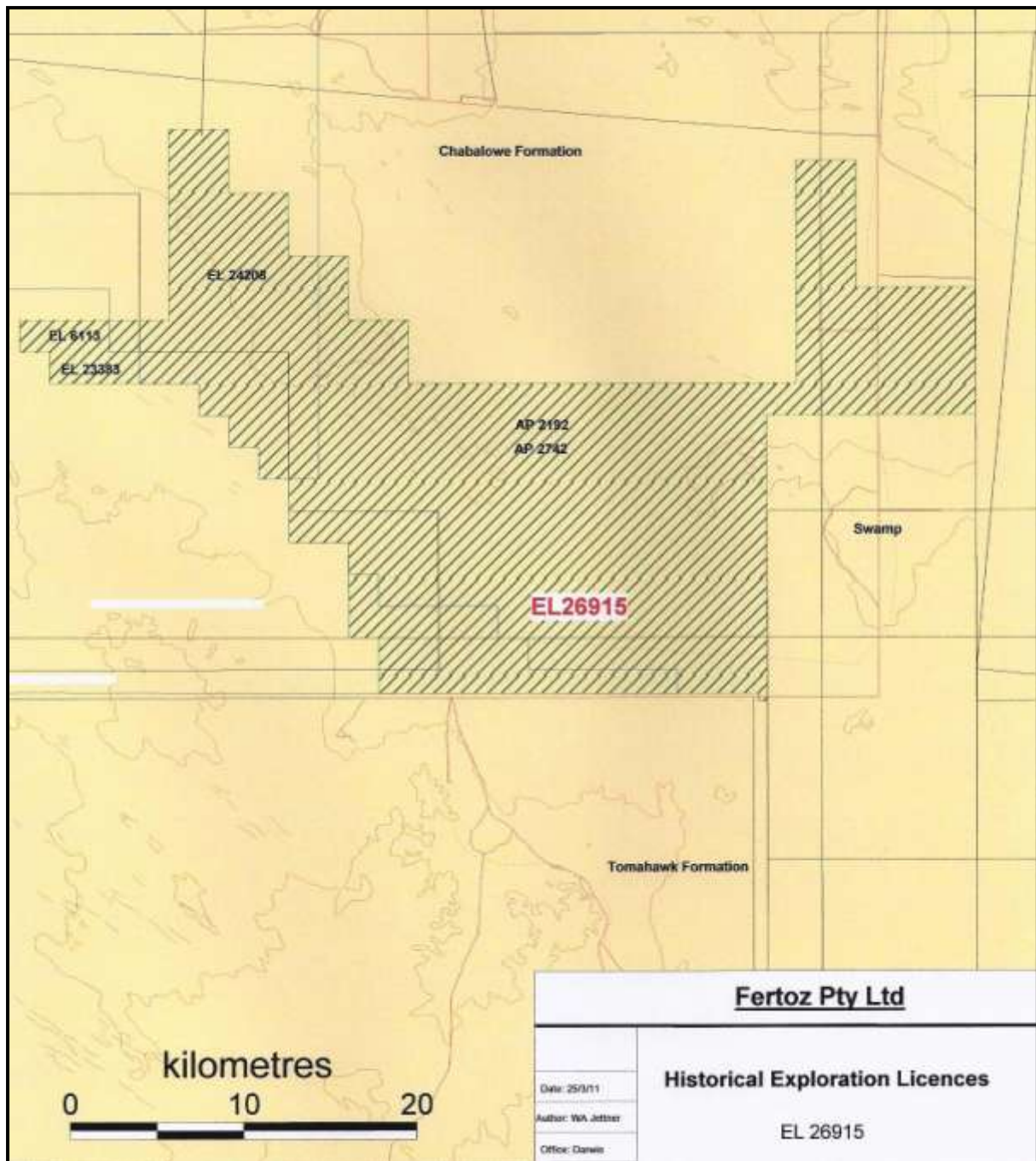


Figure 6. Historical Exploration Licences

## **9. WORK DONE IN YEAR 2 (2010 – 2011)**

### **a. Field Work**

There was little field work done on the licence in the second year of tenure. Fertoz began actively working on this and other licences in 2011. There was a field trip undertaken in late March/early April 2011 in which contact was made with the manager at Ammaroo Station. Access to the licence from the west (Murray Downs) was blocked by flooding and access from the east (Ammaroo) was blocked by a large flooded swamp. A second field trip was undertaken in late April/early May where contact was made with the manager at Murray Downs Station and access gained to the northern part of the EL. Access to the southern part of the licence was blocked by the same swamp that had restricted access the month before.

### **b. Desktop Surveys**

Construction of an exploration database containing all available open file data and data from the public domain was constructed for use in the exploration of this licence, data will be added as generated.

### **c. Exploration Targeting**

Exploration models target organic-rich carbonate rocks on depositional basin margins where upwelling and favourable palaeogeography would have brought cold phosphate-rich waters onto the shelf. Francolite formation takes place close to the sediment-water interface during times of low overall sedimentation and is intimately connected with the dynamics of diagenetic redox fronts, (Dunster, Kruse et al 2007).

The location of the middle Cambrian shoreline is the first target in the search for phosphorite with the location of the contact between the Upper and Lower Arthur Creek Formation the followup target.

### **d. Prospect Generation**

Phosphorite prospect generation would be dependant on the location of the basin margins using aeromagnetics in the project area with the next step being examination of radiometrics for the location of subtle signatures that may indicate the presence of uranium associated with the phosphate due to substitution for Ca in the phosphorite crystal lattice. Follow up work on prospects generated by this model would be direct examination by drilling, working away from the basin margins into deeper areas of sediments.

We also plan to try a program of soil sampling in this area to see if we can locate appropriate targets using this methodology.

We also plan to drill a number of drill fences through the licence in the next year to allow direct examination of the results generated by the above methods.

## **10. PROPOSED WORK PROGRAM FOR YEAR 3 (2011 – 2012)**

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

First pass exploration program: rockchip survey, geochemical survey, mapping activities, (incl. assays) - 4 men, 2 vehicles, 3 days

Exploration Reporting – 1 man, 2 days

MMP Preparation – 1 man, 5 days

Drill Program: clearing of existing station tracks for access, clearing of new drill access tracks, drilling of aircore drill holes, drillsite rehabilitation - 4 men, 2 vehicles, 14 days

Exploration Reporting – 1 man, 2 days

Preparation of the third annual report – 1 man, 3 days

Field activities in this area will be conducted in conjunction with operations on the adjacent Exploration licences of the Barrow Creek Project, (ELs 26974, 26975, 26977 and 27036).

## **11. EXPENDITURE COVENANTS**

### **a. Expenditure Report for Year 2 (2010 – 2011)**

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:

First pass exploration program	\$ 15,000
Exploration reporting	\$ 3,500
Drilling Program (incl prep and rehab)	\$ 73,500
Exploration reporting	\$ 3,500
Annual report preparation	\$ 4,500
<b>Total Proposed Expenditure</b>	<b>\$ 100,000</b>

## **12. REFERENCES**

### **Open File Company Reports**

Agnew PD, (1990) Final Report, Shirley Creek, year ending 26/09/1990, CRA Exploration unpublished company report, CR1990-0650.

Benger J, (2005) Annual and Final Report for EL 24208, Year Ending 17/11/2005, Imperial Granite and Minerals unpublished company report, CR2005-0606.

Bowyer L & Washburn K, (2005) Annual Exploration Report for EL 23383, for the period 22/04/2004 to 21/04/2005, Astro Diamond Mines unpublished company report, CR2005-0524.

Bowyer L, (2006) Combined Partial relinquishment Report for ELs 22298, 23390, 23383, 23511 and 23116, Astro Diamond Mines unpublished company report, CR2006-0199.

Bowyer L & Washburn K, (2006) Annual Exploration Report for EL 23383, for the period 22/04/2005 to 21/04/2006, Astro Diamond Mines unpublished company report, CR2006-0324.

Bowyer L & Farrell N, (2007) Annual Exploration Report, for the period 22/04/2006 to 21/04/2007, Astro Diamond Mines unpublished company report, CR2007-0264.

Brown BD, (1973) Final Report on Exploration Taylor Well, Kawanee Australia unpublished company report, CR1973-0064.

Cogar PE et al, (1972) Geological Report DA Copper, Nickel Project, Kawanee Australia unpublished company report, CR1972-0072.

Hamdorf DJ, (1989) Annual Report, year ending 27/09/1989, Shirley Creek, CRA Exploration unpublished company report, CR1989-0780.

Washburn CA, (2004) Exploration Licence 23383 Barrow Creek Project Annual report for period 29/04/2003 to 28/04/2004, Astro Diamond Mines unpublished company report, CR2004-0333.

McGoldrick G, (2008) Annual Exploration Report for EL 23383, for the period 22/04/2007 to 21/04/2008, Astro Diamond Mines unpublished company report, CR2008-0189.

McGoldrick G, (2008) Partial Relinquishment Report for EL 23383, for the period 22/04/2003 to 21/04/2008, Quantum Resources unpublished company report, CR2008-0562.

Vam Ltd, (1970) Final Report on AP 2192 Barrow Creek, Vam Ltd unpublished company report, CR1970-0090.

White B, (2009) Final Report for EL 23383, for the period 22/04/2003 to 19/03/2009, Quantum Resources unpublished company report, CR2009-0304.

## **Published Reports**

Ambrose G, (2006), Northern Territory of Australia Onshore Hydrocarbon 2006, NTGS Report 2006-003.

Khan M, Ferenczi PA, *et al*, (2007), Phosphate testing of waterbores and diamond drillcore in the Georgina, Wiso and Daly basins, Northern Territory NTGS Report 2007-004

Robertson IDM, Graig MA, *et al*, (2006), Atlas of Regolith Materials of the Northern Territory Northern Territory Geological Survey

Shaw RD and Warren RG, (1975), 1:250000 Geological Series Explanatory Notes, Barrow Creek Northern Territory, Bureau of Mineral Resources, Geology and Geophysics.