# BARFUSS CORPORATION PTY LTD

# HARTS RANGE PROJECT

## NORTHERN TERRITORY OF AUSTRALIA

## ANNUAL REPORT FOR

## EXPLORATION LICENCE EL 24552

## FOR THE PERIOD ENDING 25th AUGUST 2008.

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Flagstaff GeoConsultants Pty Ltd

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Date: 10 September, 2008

Licensee: Barfuss Corporation Pty Ltd

A.C.N. 006 917 666

1:250,000 MAP SHEETS: Alcoota SF 53-10, Huckitta SF 53-11,

Alice Springs SF 53-14, Illogwa Creek SF 53-15

1:100,000 MAP SHEETS: Riddoch 5851, Delny 5852, Quartz 5951, Dneiper 5952

KEYWORDS: Harts Range, Arunta Block, Harts Range Group,

Riddock Amphibolite, Copper Queen, Kongo,

copper-gold, uranium, thorium, rare earth elements, niobium,

tantalum, samarskite, ruby

## LICENCE DETAILS:

Licence Number: EL 24552

Project Name: Harts Range

Licensee: Barfuss Corporation Pty Ltd

Licensee ACN: 006 917 666

Licence details:

Area: 642.1 square kilometres

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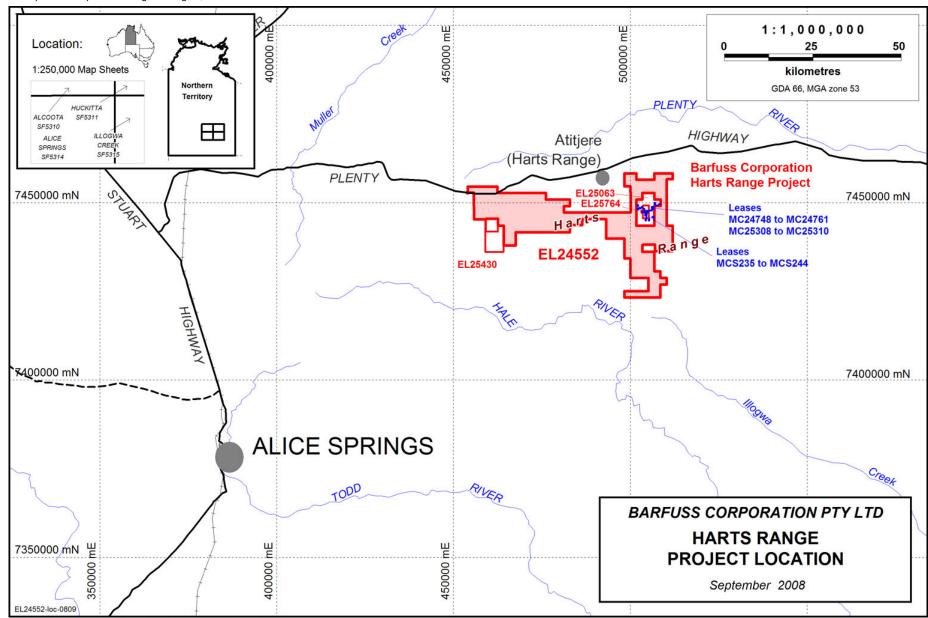
Project Location Map

1:1,000,000

( EL24552-loc-0809.wor )

## **DIGITAL REPORT FILES**

EL24552\_2008\_A\_01\_ReportBodyText.pdf EL24552\_2008\_A\_02\_ FileList.txt



#### 1. SUMMARY

Barfuss Corporation's Harts Range Project is comprised of EL 24552, ELs 25063 and 25430, EL application 25764, and a number of Mineral Claims within the area of ELs 25063 and 25764. The total area under title or application is approximately 677 square kilometres, of which EL 24552 comprises the bulk, at 642 square kilometres.

The Harts Range Project lies in the southeast of the Northern Territory, roughly 100 to 140 kilometres northeast of Alice Springs (170 to 260 km by road, via the Plenty Highway). The project covers much of the central Harts Range, which is dominated by the Riddock Amphibolite Member of the Proterozoic Arunta Block. The geology includes other high-grade metamorphics, predominantly gneisses, of Divisions 1 and 2 of the Arunta Block. Topography is frequently rugged.

The Harts Range was a major area of pegmatite-related mica mining in the early 20<sup>th</sup> century. Other mining in the lease area has generally been very small scale, targeting semi-precious gem minerals. High-grade copper-gold mineralisation was investigated by Tanami Gold NL at its Copper Queen group of prospects in 2001-2005, and Power Nuclear Corporation of Japan ("PNC") explored the area for uranium in the 1990s. The Oonagalabi copper-lead-zinc deposit, just south of EL 24552, was extensively investigated in the 1970s. The Jervois copper deposit(s), more than 100 km to the northeast, occurs in similar or related rocks to those in some parts of the tenement area and were mined intermittently from the 1960s to 1980s.

The Harts Range ruby deposit was found in the late 1970s and mined from then into the early 1980s by Hillrise Properties and Mistral Mines. Barfuss Corporation has mineral claim coverage of the ruby mine, which is surrounded by EL 25764, and has its site office and camp located there.

During its first two years of tenure of EL 24552 (2005 to 2007), Barfuss Corporation conducted a substantial amount of non-invasive work, pending the results of discussions with the Central Lands Council regarding the establishment of an ILUA covering all of the company's Harts Range Project leases. Several prospect areas were identified in different areas of the licence. Investigations included analysis of available geophysical data, geological mapping, rock-chip sampling and ground spectrometer surveys. Several areas were identified as significantly prospective, requiring further investigation. Rock-chip assays include some highly anomalous results. This work is documented in detail in previous Annual Reports.

Very little work was conducted in the current reporting period. Since early in the period (circa September 2007), the company has been in a protracted legal dispute with its principal financial backer, a company based the USA. All funds intended for the current year's expenditure were legally "frozen" at the start of this dispute, which effectively halted all proposed field operations and other exploration-targeted work until the dispute was resolved. Legal and contractual details have prevented Barfuss Corporation spending its own funds on the project or seeking other funding or partners.

This matter is to be discussed elsewhere between Barfuss Corporation and the Northern Territory Government Department's Titles Division, and is not the subject of this report. At the time of this report's preparation, the other party in this dispute appears to have resiled from the prospect of taking the matter to court and is seeking a commercial settlement. It is hoped that the matter will be resolved within the next few months, permitting a resumption of active exploration of the Project.

Despite the legal dispute discussed above, the company was able to continue a certain amount of field activity in 2007. This did not target EL 24552, but was directed at prospective areas of the much smaller licences EL 25430, at the west end of EL 24552, and EL 25063, at the east end of EL 24552 (Figure 1).

- Expenditure on EL 25430 (only 32 square kilometres) was \$43,000 for the year ending 13
   March 2008.
- Expenditure on EL 25063 (only 40 square kilometres) was \$46,000 for the year ending 19 November 2007.

This expenditure is not attributable to EL 24552, but is included here as an indication of Barfuss Corporation's commitment to continued active exploration of its Harts Range Project licences.

Expenditure attributable to EL 24552 includes fairly minor costs involved in several site visits during the period, plus a substantial proportion of \$170,000 paid for the spectrometer and 'stinger' ordered previously for the proposed "in-house" helicopter-borne geophysical surveying of the whole project area

Proposed work for the coming reporting period is as it was for the current one. The company plans to fly a detailed geophysical survey (magnetic and radiometric) over much or all of the project area. This will help identify areas warranting more detailed investigation, and will aid in the geological interpretation of areas already of interest. A low-level, helicopter borne, 50-metre-line-spaced magnetic and radiometric survey is planned. To save time and reduce costs — thereby allowing for surveying of a larger area — Barfuss Corporation plans to purchase its own geophysical equipment for the surveying.

In addition to the proposed survey, certain prospect areas warrant more immediate field investigation. Among these are

- In the east of the licence: The area between the Cusp prospect (EL24552) and Bobs prospect (EL25063). These two prospects contain high-grade uranium-niobium-tantalum-yttrium-REE (rare earth element) mineralisation hosted by similar pegmatite bodies, along strike from one another. The intervening 1.6 kilometre strike length has not yet been investigated.
- In the northeast of the licence:

  The "Pearly Gates" prospect was identified by PNC in the mid-1990s but has not yet been investigated by Barfuss Corporation. It is in the northeast of EL 24552, between the old Eastern Chief mica mine and Mt Bruna (several kilometres from each). PNC reported euxenite crystals (inferred to be similar to the mineralisation at Cusp and Bobs) "in two distinct ellipsoidal pegmatoid bodies" and "five uranium anomalies (up to 3,000 cps) along a . . . pegmatite dyke of more than 500m in length".
- In the west of the licence:- The Spinifex Gully prospect is part of the Spinifex Gully group of prospects, most of which are in the adjoining EL 25430. Spinifex Gully was the first investigated, but has received less attention than the others. The area appears highly prospective for thorium-REE mineralisation. It is adjacent to the Tanami Gold's Copper Queen group of copper-gold prospects (which are now mostly within Barfuss' EL 24552).
- In the west of the licence:- "Ultramafic Plugs 1 & 2" received a cursory field investigation in the previous reporting period. Corundum crystals found at Plug 1 may indicate potential for gem-quality material (sapphire or ruby).
- In the east of the licence:- A new ruby occurrence was discovered in the previous reporting period, but has not yet been further investigated.

#### 2. INTRODUCTION

Barfuss Corporation's Harts Range Project is comprised of

EL 24552 (642.1 square kilometres)
EL 25063 (15 square kilometres)
EL 25430 (14 square kilometres)
EL 25764 (application) (6 square kilometres)

Mineral Claims MC 24748-24761 & 25308-25310 (621 hectares)

The exploration licences are contiguous and MCs are within the area of ELs 25063 and 25764. The company also has granted Mineral Claim coverage of the Harts Range Ruby Mine (MCS235-244, 172 hectares) which is also surrounded by EL 25764.

The Harts Range Project lies in the southeast of the Northern Territory, roughly 100 to 140 kilometres northeast of Alice Springs (170 to 260 km by road, via the Plenty Highway) (Figure 1). The project extends roughly 50 km east-west and 10 km north-south, except at the eastern end where it is just over 30 km north-south. It covers much of the central Harts Range, which is dominated by the Riddock Amphibolite Member of the Arunta Block.

Topography and terrain in the Harts Range is frequently rugged, with relief up to 300 to 400 metres in some areas. Access is predominantly from the north via station tracks running south from the Plenty Highway. The rugged terrain generally restricts vehicle access to established tracks.

The lease area is underlain by gneisses and amphibolites of the Riddock Amphibolite, part of the Early Proterozoic Harts Range Group, in Division 2 of the eastern Arunta Block. The project also covers adjacent rocks, predominantly schist, gneiss and some calcsilicates which also belong to the Harts Range Group. In the southwest of EL 24552 are older Division 1 metamorphic rocks (Strangways Metamorphic Complex).

The Harts Range has probably received less modern minerals exploration than many parts of Australia. It is best known for unusual mineral occurrences, including semi-precious gemstones, commonly in or related to pegmatite dykes which are common in much of the area. The region is popular with fossickers. It was a major area of pegmatite-related mica mining in the early  $20^{th}$  century, with crystals of mica and other minerals up to metres in diameter. Other mining has generally been very small scale, targeting semi-precious gem minerals. Small-scale base metals mineralisation occurs in several areas, however, and some larger deposits have been identified. The Jervois copper deposits, more than 100 km to the northeast, occur in similar or related rocks to those of the Harts Range Project. Copper mineralisation was first identified at Jervois in the 1920s, but not properly recognised and mined (by a number of open cuts) until the 1960s and later. There is also scheelite (tungsten) mineralisation in the Jervois area and at the Molyhil Mine (scheelite-molybdenite) closer to the Harts Range Project. The Oonagalabi copper-lead-zinc deposit, just south of the centre of EL 24552, was extensively investigated in the 1970s.

Most recently, copper-gold mineralisation was investigated by Tanami Gold NL at its Copper Queen group of prospects in 2001-2005, and Power Nuclear Corporation of Japan (PNC) explored the area for uranium in the 1990s (company reports are listed in the References at the end of this report). Tanami Gold followed-up anomalous copper-gold-silver-platinum-palladium results from PNC's surface sampling and found very extensive and high grade, though narrow and probably discontinuous, copper-gold mineralisation in what is now the southwest corner of EL 24552. The company was discouraged by

its first round of RAB drilling in late 2001, however, and shifted its focus to other parts of its extensive Northern Territory tenement holdings. Little more work, and no more drilling, was done in the Copper Queen area. The lease was relinquished in 2005.

The Harts Range ruby deposit was found in the late 1970s and mined from then into early 1980s by Hillrise Properties and Mistral Mines. Barfuss Corporation has mineral claim coverage of the ruby mine, which is surrounded by EL 25764, and has its site office and camp located there.

In addition to gemstones and base and precious metals, the Harts Range is also prospective for a variety of industrial minerals. The Mud Tank vermiculite mine is 30 km west of EL 24552, and Chambigne Garnet has identified a substantial garnet sand resource in the lower Spriggs and Entire Creeks east of EL 24552. Other potential garnet sand and vermiculite deposits are known in the area. Barfuss Corporation has a vermiculite-rich deposit within its Ruby Mine mineral claims, within the Riddock Amphibolite unit, and considers that there is potential for more such mineralisation within the project area.

#### 3. WORK CONDUCTED DURING THE REPORT PERIOD

As noted in the Summary section of this report:

Very little work was conducted in the current reporting period. Since early in the period (circa September 2007), the company has been in a protracted legal dispute with its principal financial backer, a company based the USA. All funds intended for the current year's expenditure were legally "frozen" at the start of this dispute, which effectively halted all proposed field operations and other exploration-targeted work until the dispute was resolved. Legal and contractual details have prevented Barfuss Corporation spending its own funds on the project or seeking other funding or partners.

This matter is to be discussed elsewhere between Barfuss Corporation and the Northern Territory Government Department's Titles Division, and is not the subject of this report. At the time of this report's preparation, the other party in this dispute appears to have resiled from the prospect of taking the matter to court and is seeking a commercial settlement. It is hoped that the matter will be resolved within the next few months, permitting a resumption of active exploration of the Project.

Despite the legal dispute discussed above, the company was able to continue a certain amount of field activity in 2007. This did not target EL 24552, but was directed at prospective areas of the much smaller licences EL 25430, at the west end of EL 24552, and EL 25063, at the east end of EL 24552 (Figure 1).

- Expenditure on EL 25430 (only 32 square kilometres) was \$43,000 for the year ending 13 March 2008.
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The principal of Barfuss Corporation Pty Ltd, Mr Uwe Barfuss, has been obliged to neglect his other business interests owing to the demands of this legal dispute, and has incurred very substantial legal costs in seeking to resolve the matter and resume active exploration of the licence by its holder, Barfuss Corporation. These expenses are not attributable, however, to the tenement's statutory expenditure requirements.

Several visits have been made to the project, but very little active field work has been conducted. The company has paid \$170,000 during the period, however, for some of the geophysical equipment required for the proposed detailed helicopter-borne geophysical surveying of the whole project area. The bulk of this expense is attributable to EL 24552.

#### 4. EXPENDITURE.

Active exploration of EL 24552 was prevented during the reporting period owing to legal matters discussed in previous sections of this report.

Expenditure of over \$100,000 may be attributed, however, as part of the sum paid for geophysical equipment purchased for proposed helicopter-borne surveying:. The company plans to survey all or most of its Harts Range Project, of which EL 24552 comprises more than 90 %. The company paid \$170,000 for a spectrometer and "stinger" for this work, during the current period. Most of this expense is attributable to EL 24552.

Additional minor expenses include access costs (fuel, vehicle expenses, camp maintenance) and limited office work (literature research, report preparation, general office overheads). These are estimated to total no more than \$10,000 to \$20,000 for the period.

#### 5. WORK PROGRAM FOR THE NEXT TWELVE MONTHS.

The principal work planned for the next reporting period is a detailed helicopter-borne radiometric and magnetic survey. At commercial geophysical contract company rates, Barfuss has been quoted in the order of \$1,000,000 for the planned survey. For such a large, expensive, survey, Barfuss considers the purchase of its own equipment to be an economical alternative. Geophysical surveying equipment costing \$250,000 has been ordered from *Radiation Solutions Inc.*, an Ontario, Canada -based company. *Geoz Pty Ltd*, in Western Australia, will install and commission the equipment and *Alice Springs Helicopters* has quoted approximately \$200,000 to fly the survey. Processing and interpretation of the survey results will be additional costs, in the order of tens of thousands of dollars, and follow-up in the field will be more again. It is planned to commence the surveying late in the 2007 calendar year, but its completion may not be until the following reporting year.

In addition to the proposed survey, certain prospect areas warrant more immediate field investigation. Among these are

- In the east of the licence:- The area between the Cusp prospect (EL24552) and Bobs prospect (EL25063). These two prospects contain high-grade uranium-niobium-tantalum-yttrium-REE (rare earth element) mineralisation hosted by similar pegmatite bodies, along strike from one another. The intervening 1.6 kilometre strike length has not yet been investigated.
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  gem-quality material (sapphire or ruby).
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Work may include drilling – using the drill rig purchased by Barfuss Corporation in 2006 – and possible costeaning.

#### Principal expenses for the next twelve months:-

Geophysical - detailed helicopter-borne survey

(magnetic and radiometric)

Office & Administration - research, literature search

- database, inc. GIS,

compilation & maintenance

- report preparation

- general office overheads

Field Work - geological mapping

- reconn. & prospect scale

drillingcosteaning

- ground geophysical surveying

- sample analysis

- drill core & rock-chip

General - Access - travel

- airfares

accommodationvehicle expenses

- fuel

Total: \$ 200,000 +

Ross Caughey (Flagstaff GeoConsultants Pty Ltd) 10 September, 2008

#### Disclaimer

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#### **REFERENCES**

Caughey, R. (Flagstaff GeoConsultants Pty Ltd.)

- 2002 to 2008: various unpublished reports for Barfuss Corporation Pty. Ltd.
- 20/09/2006: Annual Report for Exploration Licence EL 24552 for the period ending 25<sup>th</sup> August 2006.
- 12/11/2007: Annual Report for Exploration Licence EL 24552 for the period ending 25<sup>th</sup> August 2007.
- 29/01/2008: Annual Report for Exploration Licence EL 25063 for the period ending 19<sup>th</sup> November 2007.
- 21/04/2008: Annual Report for Exploration Licence EL 25430 for the period ending 13<sup>th</sup> March 2008.

PNC Exploration (Australia): various open-file tenement annual, final and partial relinquishment reports, 1994 to 1997; Report Numbers CR1994-0325, CR995-0298, CR1995-0525, CR1995-0697, CR-1996-0285, CR1996-0286, CR-1997-0611. \*

Tanami Exploration NL: various open-file tenement annual, final and partial relinquishment reports, 2002 to 2005; Report Numbers CR2002-0290, CR2004-0015, CR2004-0649, CR2005-0445. \*

\* Open file company reports sourced from the Northern Territory Mineral Industry Reports Management System (IRMS) (http://apps.minerals.nt.gov.au/irmsmin/).