EL 24547
NONOUBA

PARTIAL RELINQUISHMENT REPORT

17 August 2007 – 16 August 2009

Holder/Operator: Deep Yellow Limited
Tenement Manager: N/A
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Commodity: Uranium
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SUMMARY

Exploration Licence 24547 was granted to Deep Yellow Ltd (DYL) on 17 August 2007. The Nonouba tenement, covering 200 blocks, is located approximately 70 kilometres southwest of Alice Springs.

The Nonouba ground was previously explored for uranium by Uranerz from 1972-1983. Uranerz identified two prospects, Daria and Nonouba, and returned assays up to 1,900 ppm U3O8 over 0.5m, hosted by carbonaceous-pyritic Undandita Sandstone. The target is roll front uranium mineralisation as delineated at the Angela-Pamela project of Paladin/Cameco.

Throughout the first reporting period exploration work was limited to planning a drilling programme and conducting a reconnaissance visit in preparation for the programme.

An Authority Certificate with 11 Exclusion Zones was issued on 30 August 2008 and an Authorisation under the Mining Management Act was granted on 1 September 2008 allowing the drilling programme to commence.

DYL relinquished an area of 22 blocks within EL 24547 at the end of the second year of term and sought a partial waiver from relinquishment in order to retain 178 blocks for the third year of term.
1. **INTRODUCTION**

1.1. **Tenure**

Exploration Licence 24547 was granted to DYL over 200 blocks on 17 August 2007 (Figure 1). Pursuant to the requirements of the Mining Act, 100 blocks were due to be relinquished at the end of the second year of term. A relinquishment of 22 blocks was lodged together with a partial waiver from relinquishment in respect of 78 blocks. The partial waiver was approved allowing DYL to retain 178 blocks for the third year of term. A plan showing the retained and relinquished blocks is included as Figure 2.

1.2. **Location and Access**

The Nonouba tenement, covering 605km2, is located approximately 70 kilometres southwest of Alice Springs on the 1:250,000 Hermannsburg geological and topographic sheets (Figure 1). The Exploration Licence is located within the Owen Springs Reserve.

EL 24547 is directly along strike from and contains similar host rocks to the Angela and Pamela uranium deposits in the adjacent tenement, Exploration Licence 25767 ( Paladin/Cameco).

Access to the tenement from Alice Springs is via Larapinta Drive (~50km). A network of station tracks provides access within the tenement.
Figure 1  Nonouba Tenement Location
Figure 2. Blocks Retained and Relinquished
2. GEOLOGY AND URANIUM MINERALISATION

2.1. Regional Geology

EL 24547 is along the northern margin of the Amadeus Basin (Figure 3), an arcuate, east-trending intra-cratonic basin (Lally, Bajwah 2006). The stratigraphy of the basin includes a Neoproterozoic succession of shallow-marine and continental fluvioglacial sediments, disconformably overlain by Cambrian shallow marine sediments. These are overlain disconformably and unconformably by Late Cambrian – Ordovician and Devonian-Carboniferous sediments (Lally, Bajwah 2006).

Sandstone-type uranium mineralisation has occurred on the northern margin of the basin in the Late Devonian Undandita Member. This consists of fluvialite pebbly sandstone, minor siltstone and conglomerate (Lally, Bajwah 2006). Although overall the member is generally oxidised, it contains a regionally extensive zone of reduced sedimentary rocks.

2.2. Uranium Mineralisation

Mineralisation of the adjacent Angela deposit (Figure 3) is associated with gently north dipping upper and lower redox boundaries within medium to coarse grained feldspathic, lithic sandstone of the Undandita Member. Both upper and lower redox boundaries can be mineralised but concentrations are generally higher on the upper boundary (Lally, Bajwah 2006). These boundaries are broadly planar but on a prospect scale they step across bedding to both higher and lower stratigraphies. This is controlled by permeability contrasts within the Undandita Sandstones.

2.3.Tenement Geology

EL 24547 is directly along strike from and contains similar host rocks to the Angela and Pamela uranium deposits in the adjacent tenement, EL 25767. The Nonouba tenement contains two prospective uranium prospects; Nonouba and Daria, 62 and 58km due west of EL 25767 respectively (Figure 3). The uranium is hosted by carbonaceous-pyritic Undandita Sandstone. The sediments are finer-grained compared to their counterparts in the Angela and Pamela deposits, hence the potential for fluid focusing will have been lower, potentially causing weaker uranium mineralisation.
3. PREVIOUS EXPLORATION

Uranium exploration of the Amadeus Basin began in 1972 with Uranerz Australia Pty Ltd (UAL). Airborne radiometrics identified several small anomalies near the northern margins of the basin. Scout drilling in 1973-1974 identified the Angela and Pamela deposits which were drilled in detail by UAL during 1975-1979 (Lally, Bajwah 2006).

Initial drilling west of Angela discovered minor mineralisation, identifying the potential deposits within EL 24547 of Nonouba (grades from 0.004-0.41% U3O8) and Daria (grades less than 0.1% U3O8). Exploration of the Nonouba ground by UAL continued through to 1983.

Various companies other than UAL have performed drilling programmes across EL 24547 from 1954 through to 1998, including AGIP, CRA, LENI and NLC (National Lead Company).

4. EXPLORATION COMPLETED

No exploration work was completed within the relinquished blocks of the tenement as the areas were identified as exclusion zones during a clearance survey by the Aboriginal Areas Protection Authority.

5. REHABILITATION

No ground disturbing activities took place.
6. BIBLIOGRAPHY

