# PARTIAL RELINQUISHMENT REPORT FOR EXPLORATION LICENCE 26197 VICTORY DOWNS

HELD BY: QUASAR RESOURCES PTY LTD 100%

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## **CONTENTS**

Sun	nmary	.3			
	Proponent Details				
	Location and Access				
2.	Tenement Details	.5			
3.	Geology	.5			
	Exploration Work Completed				
	Gravity Survey				
	Surface Sampling				
	Conclusions				
	References				

# **Figures**

- 1 Tenement Locality Plan
- 2
- 3
- Relinquished Area locality plan
  Gravity Survey Points on Relinquished Area
  Surface Sample Locations on Relinquished Area 4

# **Tables**

- Landholders over EL 26197 Victory Downs Analytical method and element suite 1
- 2

# **Appendices**

- Α
- Gravity Data Geochemical Data В

# Summary

Quasar Resources Pty Ltd relinquished 50% of EL26197 on the 28<sup>th</sup> February 2011.

During 2008 the primary 'on ground' activity was the collection of 1,791 gravity stations using helicopter support. This was followed up in 2009 with the collection of 998 surface samples for multi-element geochemical analysis. There has been no exploration activity since 2009.

Quasar picked up the licence to explore for IOCGU and palaeochannel hosted uranium deposits.

# **Proponent Details**

The operator for the exploration licence is Quasar Resources Pty Ltd.

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# **Contact Person**

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#### 1. Location and Access

EL 26197 Victory Downs is located on the NT/SA border approximately 80km west of the Stuart Highway. The tenement is situated on the Kulgera SG5305, 1:250,000 map sheet of Northern Territory. The licence covers 498 blocks for approximately 1,534 km² (Figure 1).

Access from Alice Springs is via the sealed Stuart Highway, the gravel Gunbarrel Highway and pastoral station tracks.

#### 2. Tenement Details

QSR holds 100% interest in EL 26197 which was granted on the 28 February 2008. As the licence was in its 3<sup>rd</sup> year Quasar completed a 50% reduction as per the statutory requirement (Figure 2). The land tenure of the licence is Perpetual Pastoral leases (Table 1).

NT Portion	Type No	Owner's Name	Owner's Address		
03350	PPL 1088	John Garnaut Stanes	Lyndavale Station, PMB, Alice		
			Springs NT 0872		
00324, 00898	PPL 1055	Colin Bruce Morton	Victory Downs Station via Alice Springs NT 0870		
04471	PPL 1146	Colin Bruce Morton as Trustee of the Morton Family Trust	Victory Downs Station via Alice Springs NT 0870		
02869, 04007, 04017, 04018, 04020	PPL 999	Umbeara Holdings Pty Ltd	Umbeara Station, PMB 66 Alice Springs NT 0872		

Table 1 Land holders over EL 26197 Victory Downs.

## 3. Geology

Quasar is primarily targeting uranium in Mesozoic and younger sedimentary cover sequences where the Eromanga Basin sediments on-lap the south-eastern margin of the Amadeus Basin and Musgrave Block. There is also potential for IOCGU mineralisation in Mesoproterozoic basement rocks.

The Mesozoic and Cainozoic sedimentary successions are bounded by metamorphic and igneous rocks of the Musgrave Block which are potential source rocks for uranium. These basement rocks are dominated by felsic gneisses, protolith age 1590-1540 Ma. Intruding these are a suite of 1190-1120 Ma granites (Pitjantjatjara Supersuite/formerly Kulgera Suite) dated 1190-1120 Ma (Edgoose et al., 2004).

## 4. Exploration Work Completed

## 4.1 Gravity Survey

A precision GPS-Gravity survey was conducted by Daishsat Geodetic Surveyors between 18 November and the 4 December 2008. A total of 1,533 stations were collected over the tenement at a nominal station spacing of 1km. In addition to the 1km spaced a total of 258 infill stations were collected in an area of 7 x 8 km covering the largest gravity anomaly identified in the 1x1km survey. Infill stations were at 250m and 500m spacing. The entire survey consists of 1,791 gravity stations.

This survey was conducted as part of a larger survey covering three exploration licenses operated by Quasar Resources. The gravity data covering the relinquished area is presented in Appendix A. Figure 3 shows the location of the survey stations within the relinquished area of the exploration licence.

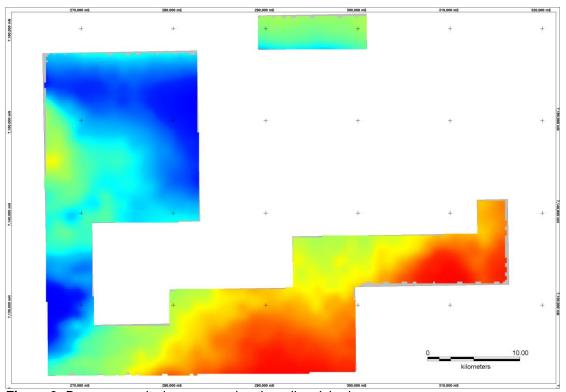


Figure 3: Bouguer gravity image covering the relinquished area.

Gravity measurements were made using Scintrex CG-3, Scintrex CG5 and LaCoste & Romberg Type-G gravity meters. Position and level data was obtained using Leica 1230GG geodetic grade GPS receivers collecting GPS and GLONASS positional information operating in post-kinematic mode. Data was processed by Daishsat using standard reductions to the ISOGAL84 gravity network using Geosoft GRAVRED software.

The 1km x 1km survey was the result of the NTGS's "Bringing Forward Discovery" initiative for collaboration in geophysics surveys. The infill survey work was not part of the collaboration.

# 4.2 Surface Sampling

Surface samples were collected on an 800 x 800 m grid over approximately half of EL 26197 Victory Downs (Figure 4). Sample locations were moved off the square of the grid where they were outside any traditionally significant areas (such as salt lakes) and sand dunes. Areas of extensive sand dunes outside this programme were not sampled.

Preferentially, calcrete samples were collected, followed by ferricrete. If neither were available for sampling, a soil sample was collected from the base of a 1m hole. The presence of calcrete was tested using 10% HCl. Where nodular or sheet calcrete was intercepted the samples were sieved to collect the nodules, otherwise whole soil samples were taken. Samples were approximately 1.0 kg.

Details of the samples which fall within the relinquished area are shown in Appendix B.

A total of 502 surface samples submitted for geochemical analysis fall within the relinquished area. Three different preparation/analytical techniques, each with a specific suite of elements, were used (Table 2). ME-MS62 is a whole rock near-total four acid digest with ICP-AES finish. ME-ICP61 is a four acid digest with ICP-MS finish. ST44 is a gold analysis by agua regia extraction with ICP-MS finish.

Metho	od ME-M	S62	Method ME-ICP61			Method ST44		
Element	Unit	LLD	Element	Unit	LLD	Element	Unit	LLD
U	ppm	0.1	Zn	ppm	2	Au	ppm	0.001
Th	ppm	0.2	Mn	ppm	5			
Cu	ppm	0.2	Co	ppm	1			
Pb	ppm	0.5	Ce	ppm	50			
Ag	ppm	0.02	Al	%	0.01			
As	ppm	0.2	K	%	0.01			
Bi	ppm	0.01	Ca	%	0.01			
Ga	ppm	0.05	Fe	%	0.01			
La	ppm	0.5	Mg	%	0.01			

**Table 2:** Analytical method and element suite. LLD is the lower level of detection.

#### **Uranium**

The highest uranium result for EL 26197 Victory Downs was 4.4 ppm in a ferricrete sample (V325). The highest results for calcrete and soil samples were 3.2 ppm (V1774) and 2.6 ppm (V561) respectively.

Two zones of elevated uranium are seen from this programme, one in the north and one in the south (Figure 3). The northern zone coincides with outcropping Jurassic De Souza Sandstone, the southern zone overlies Kulgera Granite of the Musgrave Block.

#### Gold

The highest gold result for EL 26197 Victory Downs was 6.4 ppb in a calcrete sample (V993). The highest results for ferricrete and soil samples were 5.3 ppb (V319) and 3.2 ppb (V561) respectively.

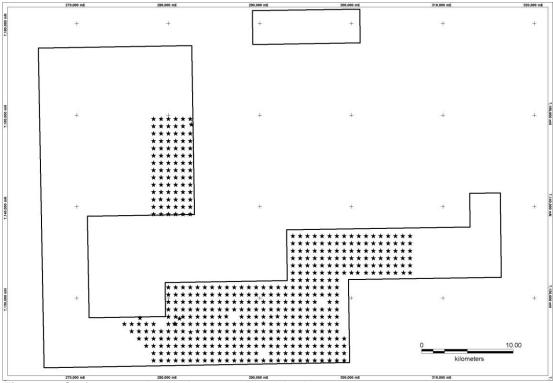


Figure 4: Surface sample locations on relinquished area.

#### 5. Conclusions

The areas being relinquished are considered to either have lower prospectivity for sediment-hosted uranium or are relatively inaccessible due to sand dunes. The area adjacent to the Woodroffe thrust is being retained due to its proximity to potential uranium source rocks. The proximity of potential source rocks from the adjacent Musgrave Block points to a possibility of sandstone hosted uranium mineralisation. A gravity anomaly in the west of the tenement is also included in the retained area due to its potential as an IOCGU target.

Suggested exploration work for the retained tenement area includes:

- Infill surface sampling over areas with anomalous uranium, zinc, copper and silver.
- Further sampling around known outcrops of De Souza Sandstone to the north of this programme.
- Modelling of the gravity and magnetic data including 3D inversions
- Airborne EM to map any palaeochannels identified
- Detailed mapping of the tenement to locate smaller occurrences of outcropping sandstone, and to investigate associations between sandstone and granite.
- Reconnaissance aircore drilling to investigate the nature of sub-surface geology and prospectivity.

# 6. References

Edgoose, C.J., Scrimgeour, I.R., & Close, D.F., 2004, *Geology of the Musgrave Block*, Northern Territory. NTGS Report 15

