# SOUTHWESTERN MINING COMPANY PTY LIMITED

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# EXPLORATION LICENCE 24869 OORATIPPRA

# FIRST ANNUAL REPORT

7th July 2006 -6th July 2007

LICENSEE: Southwestern Mining Company Pty Limited

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October 2007

SF53-11 ELKEDRA 1:250 000

6154 Ooratippra 1:100 000

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SOU003 1:450.000 EL 26993 PROJECT LOCATION PLAN

SOU005 1:100,000 SAMPLE LOCATIONS

#### **SUMMARY**

Southwestern Mining Company Pty Limited (ACN 104 649 774) (Southwestern) was granted EL 24869 on the 7th July 2006. Principal reason for the acquisition was the Company's belief that the area is highly prospective for diamonds.

Southwestern has also applied for and been granted Exploration Licence 24993 which adjoins EL 25019, EL 24822 and the much earlier EL 22488.

The ELs are worked as one project known as the "Ooratippra Diamond Project".

While EL 24869 is still considered prospective for diamonds, other targets in the Ooratippra Project area appear to have more potential and it was decided to surrender the EL and concentrate on those other areas.

This Report covers the exploration work carried out on EL 24869 during the first and final year of tenure from the 7th July 2006 to the 5th July 2007.

### Work done includes:

- Research
- Photo interpretation
- Geophysical Interpretation
- Sampling of magnetic anomaly
- Processing for diamond and key indicator minerals
- Assaying for base and noble metals
- Land-owner liaison

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#### 1. INTRODUCTION

Southwestern Mining Company Pty Limited (ACN 104 649 774) (Southwestern) was granted Exploration Licence 24869 on the 7th July 2006. Principal reason for the acquisition was the Company's belief that the area was highly prospective for diamonds.

This Report summarises the exploration work carried out on EL 24869 during the first and final year of tenure from the 7th July 2006 to 5th July 2007.

#### 2. LOCATION AND ACCESS

Exploration Licence 24869 is situated approximately 350kms southeast of Tennant Creek. The Licence is within the Elkedra 1:250 000 scale map sheet and is located on the Ooratippra (6154) 1:100 000 scale map sheet.

Access to the Licence area from Tennant Creek is south via the Stuart Highway and then east onto the Ali Curung Aboriginal Community road. This leads to the Sandover Highway which is then followed approximately 80kms east to the northwest portion of the Licence area. Most of the EL has little relief and vegetation, and is quite accessible via good station tracks servicing the water bores in the area.

Alternatively, the Licence area can be accessed via the Sandover Highway from Mount Isa or Alice Springs, and south using the Lucy Creek Station roads.

The Licence can also be accessed by air as Ooratippra Station has a good landing strip capable of being used by twin engined aircraft

Plan SOU003 shows the Exploration Licence and the landing strip in relation to the Sandover Highway.

#### 3. TENURE

Exploration Licence 24869 was granted to Southwestern on the 7th of July 2006 for a period of 6 years and surrendered on the 5th July 2007

The Licence was worked as part of the Ooratippra Diamond Project and adjoins EL 22488 which was granted on the 3rd December 2001. ELs 24822. and 24993 were granted on the 4th April and 11th August 2006 respectively.

The Licence lies within NT Portion 2891, being Ooratippra Station, Perpetual Pastoral Lease 921.

Plan SOU003 shows the Licences within the current Project Area.

#### 4. GEOLOGY

# 4.1 Regional Geology

The reader is referred to AusIMM Monograph 14 (Geology of the Mineral Deposits of Australia and Papua New Guinea), Volume 1, pp. 829-861, to gain a good introduction to the regional geology and styles of gold-copper mineralization of the area.

# 4.2 Local Geology

The Sandover River flows east through the Project Area, within which are extensive flood-out areas and tributaries. North of the Sandover River, there is little outcrop and much of the area is covered by alluvial outwash cover.

South of the Sandover River, where EL 24869 is situated, areas of Cambrian outcrop have diverted southerly flowing drainage channels. The outcropping Cambrian Arrinthrunga Formation sediments of the Georgina Basin Sequence are generally flat-lying throughout the western parts of the Licence Area. The Ooratippra fault strikes northwest–southeast throughout the central portion of the Project Area.

#### 5. WORK DONE DURING THE YEAR

#### Review

An extensive open file research programme was carried out, as well as a review of the results achieved by previous explorers. This work was then correlated with the geophysical and photographic interpretation carried out by Southwestern.

#### Geophysics

Lindeman Geophysics Pty Ltd were commissioned to carry out a detailed interpretation of NTGS and open file magnetics to identify any magnetic anomalies considered to be possible kimberlites. Additional anomalies were identified by Southwestern.

Each anomaly was given the identification of CKA, followed by sequential numbering.

In EL 24869, one low order magnetic anomaly was identified from NTGS airborne magnetics and assessed for its potential to be a kimberlite.

The location of this anomaly in GDA 94 is:

MGA\_E MGA\_N CKA 93 648100 7574750

This location is shown on the accompanying plan SOU005.

#### Sampling

A fuel dump was established at number 14 bore, north of the Sandover River, in preparation for the sampling programme. Fuel was delivered by Russell Dehne Enterprises of Alice Springs.

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#### **Diamonds**

A JetRanger helicopter from Alice Springs Helicopters was used to transport the personnel sampling and to drop samples off at a pre-determined collection point. A three-man crew from Arnhem Exploration Services carried out the sampling.

From anomaly CKA93, a 20kg sample of surface loam was collected through a 1mm mesh sieve. At the end of the programme, Russell Dehne Enterprises brought the samples to Alice Springs from where they were sent to Diatech Heavy Mineral Services of Welshpool, WA, for processing for diamonds and key indicator minerals.

Northline Freight Management Pty Ltd of Alice Springs were used to transport the samples from Alice Springs to Welshpool.

#### Other minerals

Also from CKA93, a 2kg sample of surface loam sieved to 1mm, was collected and sent to North Australian Laboratories, Pine Creek, to be analysed for: copper, lead, zinc, cadmium, nickel, cobalt, chromium, vanadium, molybdenum, arsenic, bismuth, barium, iron, manganese, titanium, thorium, silver, gold (both to one ppb) and uranium. Also, cerium, lanthanum and yttrium to check for rare earths.

ABC Transport Pty Ltd of Alice Springs were used to transport the sample(s) to Katherine, and from there, Nighthawk Couriers took the samples to Pine Creek.

#### Results

The results of the work carried out have not yet been received and will be forwarded when received from the laboratories.

#### 6. LANDOWNER LIAISON

Prior to commencing field work, the co-ordinates and a 1:100,000 Rasta plan showing the proposed sample locations were given to the Central Land Council to enable them to show the landowners. The detailed topography on the plan enabled the landowners to clearly identify the work areas in relation to sites of significance.

Despite the considerable delays which this process caused, it was a worthwhile exercise as it ensured that unintentional damage to sites could be avoided. A plan showing a small area which the landowners wanted designated as a no-go area was provided by the CLC.

# 7. REHABILITATION

The scraping up of surface loam samples did not create significant disturbance and consequently no field work carried out by Southwestern on EL 24869 during the year requires any rehabilitation measures.

#### 8. CONCLUSIONS

While EL 24869 appears to be in a significant structural position and the area is considered by the Company to have potential for diamonds, anomalies and circular features identified in the Company's adjoining Licences are considered to have a higher priority and it was decided to relinquish the ground and concentrate the Company's resources on other targets.

Results from the sampling carried out are not yet available, however the large number of untested magnetic anomalies and circular features elsewhere in the Project Area resulted in a decision not to proceed with exploration over EL24869 and as reported elsewhere in this document, it was relinquished.

# 9. YEAR 1 EXPENDITURE

Proposed expenditure for the first year of tenure was \$38,104. Actual expenditure was as follows:

1.	Geophysical interpretation	\$500
2.	Aerial Photo interpretation	\$800
3.	Sampling	\$200
4.	Processing for diamonds and key indicator minerals "estimated"	\$300
5.	Micro Probing for diamonds and key indicator minerals "estimated"	\$600
6.	Helicopter hire	\$500
7.	Geochemical analysis "estimated"	\$100
8.	Freight	\$80
9.	Drafting	\$50
10.	Landowner liaison	\$100
11.	Administration and overheads	\$390
	Total	\$3,620

The work carried out did not meet the covenant because results of the geophysical, geological and photographic assessment did not warrant spending further money at this stage, consequently the ground was dropped.

Nick Byrne *Principal*