OTTER GOLD NL

CENTRAL DESERT JOINT VENTURE

2\textsuperscript{nd} ANNUAL REPORT

for

EXPLORATION LICENCES
EL7799, EL7803, EL7837, EL8479

COOMARIE AGREEMENT

13 OCTOBER 1998 TO 12 OCTOBER 1999

COMPILED BY HELEN BURGESS

DISTRIBUTION:
NT Dept Mines & Energy
Acacia Resources Ltd., Melbourne
Acacia Resources Ltd., Darwin
Otter Gold NL, Sydney
Otter Gold NL, Darwin
Exploration Licences (EL) 7799, 7803, 7837 and 8479 were granted to the Central Desert Joint Venture partners (Otter Gold NL 60% and Acacia Resources Ltd 40%) on October 13th 1997. The four exploration licences are subject to a Deed (Coomarie) between the CDJV and the Traditional Owners executed 01/08/97.

The Coomarie tenement group comprises a large area of the Granites-Tanami Province where there has been minimal previous exploration. The tenements are viewed as a single project and exploration efforts have primarily focussed upon generating targets. To date work programmes have primarily constituted data compilation, airborne surveying and regional soil sampling.

Utilising a Robinson 2-seater helicopter and a Kawasaki Motorbike a regional geochemical survey was conducted earlier this year. The sampling program employed low level gold detection analysis (ZARG) and comprised the bulk of exploration efforts during this second licence year. A total of 1887 Soil Samples were collected.

Exploration expenditure on all 4 licences subject to the Coomarie Deed for the period 13th October 1998 to 12th October 1999 was over $240,000.

Only low impact exploration was undertaken during the licence year.

All of the area covered by the subject ELs remains under CDJV title and therefore details covered in this report should remain on CLOSED FILE.
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1.0 INTRODUCTION

As required by the Department of Mines and Energy (DME), this report contains details of exploration activities conducted within EL7799, EL7803, EL 7837 and EL8479 for the period 13th October 1998 to 12th October 1999. The four exploration licences are covered by a Deed between Otter Gold NL and the Traditional Owners, dated 1st August 1997. The tenements are viewed as a single project and were granted this status by the DME on the 13th October 1997. The Coomarie Agreement comprises tenements within the Central Desert Joint Venture (CDJV) between Otter Gold NL (60% and managers) and Acacia Resources (40%).

1.1 Location and Access

The CDJV tenements are located approximately 650km northwest of Alice Springs, and 300km southeast of Halls Creek. The Coomarie Agreement comprises four Exploration Licences covering a large area (569 km²) of the Granites-Tanami Province due southeast and north of the Tanami mine site (Figure 1).

Access to the tenements is by the Tanami Track, and the Lajamanu Road. Within the CDJV, access is via exploration tracks and gridded baselines. Access to most areas is limited during the wet season (December to March).

1.2 Tenement Status

Permission to explore within the Comarie tenements EL 7799, EL 7803, EL 7837 and EL 8479 was granted to Otter Gold NL on the 13th October 1997 for a period of six years. This report represents the second year of exploration.

1.3 Exploration History

Previous exploration of this region has been minimal. Initial investigation of the Tanami area was conducted by Davidson (1905). Davidson discovered gold-bearing quartz reefs. The reefs were mined between 1902 and 1908. Mining was restricted to the wet season due to lack of permanent water.

A gold rush was precipitated by the discovery of slab of stone containing an estimated 180oz of gold in 1909. The rush continued until 1913 and up to 200 men were working the field. Intermittent exploration and mining was conducted between 1913 and 1938, including the construction of an amalgamation plant in 1927. No official exploration was conducted in the Tanami Desert between 1938 and 1965.

In 1985, Harlock Pty. Ltd. commenced exploration within the Tanami mining leases which led to the commencement of open pit mining in mid-1987. Zapopan NL. acquired the ground and continued mining until March 1994. Otter Gold Mines Pty. Ltd. was granted access to explore around the mine site in 1989. Low-level Au anomalias was discovered in late 1989 which lead to the identification of the Redback Rise area as highly prospective. The Otter screening process also identified the Dogbolter and Jim's Find prospects.
In September 1990, the Shell Company of Australia Ltd. (Shell) entered into a joint venture with Otter. Management of the project was entrusted to Shell. In August 1993, Shell completed its earning phase (50%) by spending $5 million on exploration. In October 1994, a new joint venture was formed between Otter Gold NL and Acacia Resources Ltd. as a result of Shell divesting its mineral assets. The new joint venture is known as the Central Desert Joint Venture (CDJV), with participating interests 60% Otter and 40% Acacia. Otter Gold NL has management of the project.

1.4 Central Land Council

In accordance with the Mining Act and the Aboriginal Land Rights (N.T.) Act 1976 (ALRA), Otter Gold NL negotiated an agreement with the relevant traditional owners via the CLC. This agreement is a "conjunctive" agreement, a copy of which is held by the DME.

2.0 GEOLOGY

The Granites-Tanami Block is bounded to the west by the Canning Basin and to the east by the Wiso Basin. It is considered to be one of the western-most Palaeoproterozoic inliers of the North Australian Orogenic Province, developed during the Barramundi Orogeny (Blake et al., 1979).

Hodgson (1975) and Blake et al. (1975) divide the Lower Proterozoic Tanami Complex sequence into five informal units:

1) the Killi Killi Beds;
2) the Mount Charles Beds;
3) the Nanny Goat Creek Beds;
4) the Helena Creek Beds;
5) the Nongra Creek Beds.

No stratigraphic distinctions are made between these units, as they are inferred to be lateral equivalents of one another. Blake et al. (1979) stated that the Mt. Charles Beds were the only unit to host Au mineralisation. Since then, numerous Au deposits have been identified in units other than the Mt. Charles Beds.

Tunks (1996) re-evaluated geological data to further subdivide the Tanami Complex into two domains. Domain 1 (Dijjiedookuna Suite) includes the Killi Killi and Davidson Beds which have been metamorphosed to amphibolite facies. Domain 2 (Black Peak Formation) comprises the Nanny Goat Creek, Helena Creek, Nongra and Mt. Charles Beds which are all low-grade metamorphic rocks.

Unconformably overlying the Black Peak Formation is the Birrindudu Group consisting of the Pargee Sandstone, Supplejack Downs Sandstone, Gardiner Sandstone and the Mt. Winnecke Formation. Although none of these units are known to host Au mineralisation, the Pargee Sandstone has been observed to host considerable quartz veining, and the Au-
bearing structures in the Tanami Mine Corridor have been observed in the overlying Gardiner Sandstone.

The Proterozoic Browns Range and Coomalie Granites are observed to intrude the Killi Killi and Mt. Charles Beds, and are overlain by the Gardiner Sandstone. These relationships would suggest that the granites were Lower Proterozoic in age (Hodgson, 1975). Overlying the Gardiner Sandstone are the Carpentarian Talbot Well Formation and the Coomarie Sandstone. The contact between the Talbot Well Formation and the Coomarie Sandstone is inferred to be conformable.

The Cambrian Antrim Plateau Volcanics consist of intensely weathered basalt capped by pisolithic laterite. The basalts are mainly sub-aerial, extrusive basalts, although the occurrence of pillow structures south of Browns Range Dome suggests that some basaltic extrusion occurred in sub-marine conditions. Unnamed Cambrian sediments are also observed in the Tanami region. These include chert, and carbonates which are more prevalent in Western Australia.

Cainozoic laterite, silcrete, calcrete, and Quaternary debris cover 60 - 70% of the Tanami Desert. The Quaternary sediments are generally unconsolidated, representing the most recent phase of erosion and deposition of sands, gravels and lithic fragments.

3.0 EXPLORATION

Surface Sampling

The application of low level surface sampling to generate tight anomalies that reflect primary mineralisation directly underneath is an obvious bonus in difficult exploration terrains. The ZARG (Zeeman Aqua Regia Gold) technique detects gold to a 0.1ppb detection limit in drainage and regolith samples. Otter has focussed much of its efforts into utilising this unique analytical method to implement a relatively cheap and effective first pass exploration strategy. The importance of understanding the regolith in these areas is essential to ensure that the ‘correct’ level of anomalism is identified in each domain.

Fieldwork commenced in mid-January in the hope that a significant proportion of the sampling program might be completed before the field season proper commenced (mid-March). However, the general lack of access to regional areas and continuing wet weather prompted the adoption of a helicopter sampling strategy for the regional areas.

Sample spacing selected for the program (Figures 2), was 400m x 400m, which is considered, appropriate for typical Tanami mineralisation. Sample spacing is increased to 800m x 800m over areas of granite were prospectivity is likely to be less.

1,887 soil samples for ZARG analysis were collected between January and July. First pass geochemical results are low level but remain inconclusive so far. Gold values are low (0.1 to 0.7 ppb) but anomalies are relatively coherent.
3.1 EL7799 (Ware Range)

During the June-July 1999, a comprehensive grass roots soil survey was undertaken over EL7799. This involved the use of a small (two passenger) Bell helicopter to negotiate the combined 400x400m and 800x800m grid. The programme covered 432 square kilometres with a total of 1063 soil samples being taken for ZARG analysis. The soil samples were described as orange brown sandy loam with zones of gravels and pisolites and minor quartz. The samples were taken initially in bulk and then transported back to the Camp to be later sieved with the ¾” sieve. These were placed in the standard soil sample packets and sent to ALS for analysis. Overall the results appear low (between 0.2-1.7 Au ppb). However there are areas where the low results correspond with areas of geological interest and given that the grids are broadly spaced, the results should not be looked on without some encouragement. Figure 3 shows the results and areas targeted for further infill soil sampling. Currently, the plan would be to specify areas in the targets for more intense soil sampling – probably at the 50mx50m grid spacing, during the course of next year. Orientation drilling is also warranted to determine depth of cover and rock types of the region. A review of the Landsat TM image across the Tanami provided by the CRCLEME should proceed to appreciate the landform.

The geology of the area is assumed to be outcropping Gardiner Sandstone (Pdg), the Gardiner Sandstone being considered as an exclusion zone by the Traditional owners, combined with older Proterozoic folded felsic (?dacite), sediment and magnetic (?basalt) packages (possibly part of the Nongra Ck Beds (Atn)). The south western portion, covered by the 800x800m grid is thought to be a possible granite. The aeromagnetics show a prominent North west structure cross-cutting several magnetic units. Disappointingly the soil samples across this region showed very little anomalism (a high of 0.2 Au ppb).

3.2 EL 7803

Surface samples retrieved from EL 7803 (Figure 4) were described as sandy loam and gravels with sporadic zones of clay pan material. 703 soil samples were assayed with single peak values of 0.7ppb and 0.5 ppb. Values of 0.05ppb predominated but a significant proportion returned 0.3-0.1 ppb.

3.3 EL 7837

A total of 49 surface samples were taken from EL 7837 during February (Figure 5). The samples were primarily described as orange-brown sandy loam with areas of pisolites. Assay results included single peak values of 0.3 and 0.2 ppb but more commonly 0.05 ppb, a few values returned 0.1ppb.

3.4 EL 8479

72 soil sites were sampled from EL 8479 (Figure 6). The samples were commonly described as sandy loam and gravels. Assay results were similarly low, predominantly 0.05. Several values reached 0.2 and 0.1ppb.
4.0 EXPENDITURE ON ELS 13/10/98 TO 12/10/99

Table 1 summarises the work programme for the second licence year and the associated costs.

TABLE 1  Expenditure Summary for Exploration Licences

<table>
<thead>
<tr>
<th></th>
<th>EL 7799</th>
<th>EL 7803</th>
<th>EL 7837</th>
<th>EL 8479</th>
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<tr>
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<td>--</td>
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<td>Assays</td>
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5.0 PROPOSED WORK PROGRAMME

5.1 Proposed Work Programme

Exploration efforts have been, and remain, largely focussed on advanced project areas to deliver a resource inventory sufficient to maintain economic mining operations. Consequently, the exploration efforts remain in the “grass-roots” phase.

The forecast work programme will involve infill soil sampling to generate anomalies for angled RAB drilling.
5.2 Proposed Expenditure

The proposed programme and expenditure commitment is summarised in Table 2.

**TABLE 2 Proposed Expenditure 1999-2000**

<table>
<thead>
<tr>
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<th>EL 8479</th>
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</table>
6.0 REFERENCES


APPENDIX 1

ENVIRONMENT REGISTER
Project: Otter Gold NL
Tenement Name: Coomarie
Tenement No's: EL's 7837, 7803, 8479 & 7799
Registered Holder(s): Otter Gold NL and Acacia Resources.
Date Granted: 13/10/97 Term: 6 years
Area: EL 7837 - 7 blocks 23 sq. km
       7803 - 65 blocks 209 sq. km
       8479 - 14 blocks 45 sq. km
       7799 - 133 blocks 428 sq. km
Bond/Security: None
JV Partners(if any): Acacia Resources Station:
Land Classification: Aboriginal Land
Land Holder/Occupier: Central Desert Aboriginal Land Trust Station:
Address: C/- Central Land Council Phone: (08) 895516335
           PO Box 3321
           Alice Springs NT 0871
Contacted By: Richard Exploration / Admin Date:
Pastoral Notes:
Environmental Notes: May contain some rare and uncommon plants / wildlife
Groundwater:
Aboriginal Notes: Area subject to Coomarie Deed
Historic Relics:
Previous Activity:
Tenement Names: Coomarie
No's: 7837, 8479, 7803 & 7799

Exploration Activity Area: Tanami Desert (refer to map references)

Shafts/Pits/Dumps: None

Track/Access: Tanami Track runs through EL 7803

Line Clearing: None

Costeaming: None

Drill Sites: None

Other: None (Camp sites, Cultivation, Forestry, Pastoral)

Location Data: 1:250,000 Tanami SE 52-15 & 1:250,000 The Granites SF 52-3

Compiled by: Barbara Cameron
Date: 12/10/99
Tenement Name: Coomarie

Report Ref No's: Coomarie Annual Report – Year Two

Exploration Activities: Low impact regional ‘Chopper’ geochemical sampling

Grid & Traverses: None

Soil Sampling: EL 7837 - 49 samples taken
EL 8479 - 70 samples taken
EL 7803 - 596 samples taken
EL 7799 - 1064 samples taken

Costeans/pits:

Drilling:

Drill Traverses:

Drill Pads:

Ground Geophysics:

Access Tracks:

Camps:

Other:

Compiled by: Barbara Cameron

Date: 12/10/99
OTTER GOLD NL
TENEMENT ENVIRONMENTAL MANAGEMENT REGISTER
REHABILITATION RECORD

Tenement Name: Coomarie

No(s): EL 7837, 8479, 7803 & 7799

Disturbance: Regional Exploration

Rehabilitation Date: 30/9/99

Grids & Traverses:

Soil Sampling: Surface holes backfilled

Costeans/Pits:

Drilling:

Drill Traverses:

Drill Pads/Access:

Ground Geophysics:

Access Tracks:

Camps:

Other:

Inspected / Clearances:

Bond/Security released:

Compiled by: Barbara Cameron

Date: 12/10/99

Follow-up Inspection Report: 12/10/2000
APPENDICES
2 to 5

SOIL REGISTER

On Floppy Disk enclosed

APPENDIX 2  EL7799
APPENDIX 3  EL7803
APPENDIX 4  EL7837
APPENDIX 5  EL8479