

CENTRAL DESERT JOINT VENTURE

**TANAMI REGION
NORTHERN TERRITORY**

FIRST ANNUAL REPORT
For
EXPLORATION LICENCES

EL 8012

EL 9477

EL 9759

EL 9992

6th JULY 1998 to 5th JULY 1999

EL 10188

6th NOVEMBER 1998 to 5TH JULY 1999

**AUTHORS : *Louise Mohammed*
*Helen Burgess***

DISTRIBUTION:

**NT Dept. Mines & Energy
Acacia Resources Ltd
Otter Gold NL**

TITLE: ANNUAL REPORT FOR EXPLORATION LICENCES
EL 8012, EL 9477, EL 9579, EL 9992 and EL 10188

PERIOD: 6 JULY 1998 TO 5 JULY 1999

AUTHORS: LOUISE MOHAMMED
HELEN BURGESS

LOCATION: TANAMI 1:250,000 SE 52-15
GRANITES 1:250,000 SF 52-03

COMMODITY: GOLD

DATE: AUGUST 1999

KEYWORDS: BANJO, BEAVER CREEK, BONSAI, CHARLOTTE, CHEESEMAN,
COOMARIE DOME, DOLPHIN, HINGE, MARLENA, MARLENA'S
NOSE, MONARCH, MT CHARLES BEDS, PENDRAGON,
PERISHER, SNAPPER TANAMI PROVINCE, TANAMI MINE
SEQUENCE, TRANS TANAMI STRUCTURE, TUNA

SUMMARY

The Pendragon Project area is located within the southwestern sector of the Tanami, and the northwestern sector of the Granites, 1:250,000 Sheet areas. Exploration Licences (EL) 8012, 9477, 9759, 9992 and 10188 are held by the Central Desert Joint Venture (Otter Gold NL 60%; Acacia Resources Limited 40%) and are subject to the **Pendragon Deed** executed 15 June 1998.

Exploration work undertaken during the first licence year comprised regional surface and post hole geochemical sampling with local angle RAB and RC follow up of anomalies generated. Exploration expenditure on all 5 licences subject to the Pendragon Deed for the period 6th July 1998 to 5th July 1999 was over \$1,000,000.

A regional surface sampling program utilising low level gold detection analysis (ZARG) comprised the bulk of exploration efforts during this first licence year. A total of 3995 Soil Samples were collected.

Drilling figures for the period were:

988 postholes for 15,187 metres;
177 RAB holes for 15,919 metres;
125 RC holes for 12,949 metres.

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**.

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	LOCATION AND TENURE	1
2.1	LOCATION AND ACCESS	1
2.2	TENURE	1
2.2.1	EL 8012.....	1
2.2.2	EL 9477.....	1
2.2.3	EL 9579.....	2
2.2.4	EL 9992.....	2
2.2.5	EL 10188.....	2
3.0	PREVIOUS EXPLORATION	5
3.1	1995 – 1996 (WEDEKIND, 1996).....	5
3.2	1996 – 1997 (WEDEKIND, 1997).....	6
3.3	1997 – 1998 (SCRIVEN AND WEDEKIND, 1998)	6
3.4	20 TH APRIL - 6 TH JULY 1998 (WEDEKIND AND BURGESS 1998).....	6
4.0	GEOLOGY.....	7
4.1	REGIONAL GEOLOGY	7
4.2	LOCAL GEOLOGY	8
5.0	EXPLORATION: 6 JULY 1998 – 5 JULY 1999.....	9
5.1	SURFACE SAMPLING	9
5.1.1	EL 8012.....	10
5.1.2	EL 9477.....	10
5.1.3	EL 9759.....	17
5.1.4	EL9992.....	17
5.1.5	EL10188.....	17
5.2	DRILLING	24
5.2.1	EL 8012.....	24
5.2.2	EL 9477.....	24
5.2.3	EL 9759.....	24
5.2.4	EL 9992.....	24
5.2.5	EL 10188.....	42
6.0	EXPENDITURE	51
7.0	PROPOSED 1999/2000 WORK PROGRAMME AND BUDGET	51
8.0	ENVIRONMENT	53
9.0	REFERENCES	54

APPENDICES

Appendix 1	Logging and Sampling Codes
Appendix 2	Collar Files and Assays for Soil Sampling
Appendix 3	Collar Files and Assays for Post Hole Drilling
Appendix 4	Collar Files and Assays for RAB and RC Drilling

LIST OF FIGURES

<i>Figure 1</i>	<i>Tenement Location Map</i>
<i>Figure 2</i>	<i>Tenement History Map</i>
<i>Figure 3a</i>	<i>Regional Surface Sampling Location</i>
<i>Figure 3b</i>	<i>Regional Surface Sampling Geochemistry</i>
<i>Figure 4a</i>	<i>EL 8012 Soil Sampling Samples 1 - 600</i>
<i>Figure 4b</i>	<i>Samples 601 - 1000</i>
<i>Figure 4c</i>	<i>Samples 1001 - 1291</i>
<i>Figure 5</i>	<i>EL 9477 Soil Sampling</i>
<i>Figure 6</i>	<i>EL 9759 Soil Sampling</i>
<i>Figure 7</i>	<i>EL 9992 Soil Sampling</i>
<i>Figure 8a</i>	<i>SEL 10188 Soil Sampling Samples 1 - 400</i>
<i>Figure 8b</i>	<i>Samples 401 - 722</i>
<i>Figure 8c</i>	<i>Samples 723 - 1000</i>
<i>Figure 8d</i>	<i>Samples 1001 - 1600</i>
<i>Figure 8e</i>	<i>Samples 1601 - 3324</i>
<i>Figure 9</i>	<i>Bonsai South Postholes</i>
<i>Figure 9b</i>	<i>EL 9992 Postholes</i>
<i>Figure 10</i>	<i>Marlena & Marlena's Nose Postholes</i>
<i>Figure 11</i>	<i>Marlena & Marlena's Nose RAB</i>
<i>Figure 12</i>	<i>Bonsai North RAB Holes</i>
<i>Figure 13</i>	<i>Bonsai North RAB Holes</i>
<i>Figure 14</i>	<i>Beaver Creek RAB Holes</i>
<i>Figure 15</i>	<i>Precinct Target RAB Holes</i>
<i>Figure 16</i>	<i>Bonsai RC Holes</i>
<i>Figure 17</i>	<i>Beaver Creek RC Holes</i>

<i>Figure 18</i>	<i>Banjo & Banjo North RC</i>
<i>Figure 19</i>	<i>Monarch North Postholes</i>
<i>Figure 20</i>	<i>Cheeseman/Henge Postholes</i>
<i>Figure 21</i>	<i>SEL 10188 Postholes</i>
<i>Figure 22</i>	<i>Charlotte Postholes</i>
<i>Figure 23</i>	<i>Monarch RAB/RC Holes</i>
<i>Figure 24</i>	<i>SEL 10188 Hope Prospect</i>

LIST OF TABLES

<i>Table 1</i>	<i>Summary of Soil Sampling</i>
<i>Table 2</i>	<i>Summary of RAB Drilling at the Marlana Prospect</i>
<i>Table 3</i>	<i>Summary of Drilling at Marlana's Nose Prospect</i>
<i>Table 4</i>	<i>Summary of Drilling at Bonsai North Prospect</i>
<i>Table 5</i>	<i>Summary of Drilling at Banjo North Prospect</i>
<i>Table 6</i>	<i>Summary of Drilling at Beaver Creek</i>
<i>Table 7</i>	<i>Summary of Drilling North of BBB Precinct</i>
<i>Table 8</i>	<i>Summary of Drilling Metres</i>
<i>Table 9</i>	<i>Summary of Expenditure 6th July 1998 – 5th July 1999.</i>
<i>Table 10</i>	<i>Table 12 Summary of Proposed Work Programme and Budget</i>

1.0 INTRODUCTION

Exploration Licences (EL) 8012, 9477, 9759, 9992 and 10188 are held by the Central Desert Joint Venture (Otter Gold NL 60%; Acacia Resources Limited 40%). Collectively, the ELs form the CDJV's **Pendragon** Project area.

This report summarises exploration work undertaken by Otter Gold NL (on behalf of the CDJV) during the first licence year for Exploration Licences 8012, 9477, 9579, 9992 and the first 8 months of Exploration Licence 10188. Ongoing tenure of the land means that detail contained within this report should remain **restricted** and **not** available to the general public.

This report outlines proposed exploration activities and expenditure to be completed on the subject licences.

2.0 LOCATION AND TENURE

2.1 LOCATION AND ACCESS

The Pendragon Project area is located within the southwestern sector of the Tanami 1:250,000 Sheet area (SE 52-15). The tenement straddles the Tanami Road some 30km west of the Tanami gold mine and covers approximately 164km² (Fig. 1). Access within the project area is provided via pre-existing exploration tracks.

Access is primarily via the Tanami Track, Haul Roads and existing exploration tracks.

2.2 TENURE

On 6th July 1998 the Northern Territory Department of Mines and Energy (NTDME) granted Exploration Licence Applications covered by the **Pendragon Deed** (ELs 8012, 9477, 9579, 9992, & 10188 (previously 6760 and 7423)). The Pendragon Deed for Exploration Agreement between the CDJV and Central Land Council (CLC) was executed 15 June 1998.

On 19th May 1997 all Western Mining Corporation Limited (WMC) tenements were purchased by the CDJV. These tenements included EL 8012, 9992, SEL 7423, and EL 6760

2.2.1 EL 8012

EL8012 was formerly a WMC tenement and was granted to the CDJV 06/07/98. Transfer of the Title to the CDJV occurred 19/05/97. The EL comprises 11 blocks (35km²) of the Tanami Road

Access is primarily via the Tanami Road.

2.2.2 EL 9477

The Minister's consent for negotiation with the CLC was received 15/05/96 and the EL was granted 06/07/98. EL 9477 covers 13 blocks on the 1:250,000 Tanami Map sheet.

2.2.3 EL 9579

Minister's consent to enter into negotiations with the CLC was given 18 April 1997 and subsequently granted 06/07/98. EL9759 contains 16 blocks on the Granites 1:250000 map sheet.

2.2.4 EL 9992

The area now covered by EL 9992 was previously a WMC tenement ERL 137. It comprises 9 complete blocks and 7 blocks shared with EL9477, the total area being 38.7 km². Otter Gold NL, on behalf of the CDJV, lodged an application 17 October 1997 receiving consent to enter negotiations 6 November 1997. The EL was granted 06/07/98.

With the successful definition of an ore reserve at **Beaver Creek** within EL9992 (ERL 137), the CDJV lodged an application for a Mineral Lease (Molech) on February 24th 1998. The area nominated covered a 40km² within ERL 137-139.

2.2.5 EL 10188

Substitution Exploration Licence 7423 was granted to Western Mining Corporation Ltd (WMC) on 24th April 1991 for a period of four years. A subsequent application for a two-year renewal expired before negotiations under the terms of the Aboriginal Land Rights (NT) Act (ALRA) could be completed. A further renewal application was lodged on 17th January 1997.

On 19th May 1997 SEL 7423 was transferred from WMC to the Central Desert Joint Venture.

On 6th November 1998 an application for a new SEL (10188) incorporating SEL 7423 and EL 6760 was granted.

Figure 1 Tenement Location

FIGURE 2 Tenure History

3.0 PREVIOUS EXPLORATION

Various companies have undertaken exploration in the Tanami area over a thirty-year period. This section summarises the work undertaken by WMC and Otter that has been reported previously in Annual Reports to the NTDME. Exploration undertaken by WMC is summarised in Reports to the NTDME (Norris, 1990, 1991, 1992, 1993, 1994, Barratt, 1995: Wedekind 1995, 1996 1997).

Geopeko Limited undertook the earliest documented exploration in 1969 – 1970 with their quest for both gold and uranium mineralisation. Two anomalies were identified in airborne radiometric and magnetic surveys, but only one was followed up with drilling and this produced negative results (Twiggs, 1970).

Exploration by PNC between 1985 and 1988 was more extensive with the main focus of their effort being the discovery of uranium mineralisation. Work carried out included reconnaissance geological mapping, followed by more detailed mapping (1:25,000) in areas of interest. Airborne magnetic and radiometric surveying was also completed. No areas were targeted for further exploration.

WMC began exploration in the Tanami in 1989, initially in joint venture with PNC, but later in their own right. Exploration targeted gold mineralisation of both the Granites-style iron formation and Callie-style vein array gold mineralisation. Substitute Exploration Licence 7423 was granted to PNC on 24th April 1991 from the amalgamation of EL6457 (WMC) and EL's 4827, 4828 and 4829 (PNC). With PNC opting out of the joint venture and reverting to a royalty position, the SEL 7423 was transferred to WMC on 17th October 1995.

WMC originally targeted the Pendragon area because of the complex structure in the region that is clearly evident in regional aeromagnetic imagery and anomalous geochemistry returned in surface sampling near the south western margin of the Coomarie Dome. Mineralisation was outlined at Bonsai and Perisher but sampling on tenements lying outside of these prospects were ineffective largely to the extensive and often very deep alluvial cover.

Although drilling of the Bonsai prospect intersected gold mineralisation in a high proportion of holes WMC was unable to define continuity on 100m section spacings and concluded the prospect by itself, unlikely to support a stand alone operation. Thus a regional exploration program was implemented. The company identified significant anomalism in a broad zone extending NW of Bonsai for a distance of some 10km.

With mineralisation intersected at Bonsai and Perisher and highly anomalous regional geochemical targets established, WMC applied for four ERL's to secure title and access to the area when the existing EL's were in their final licence year. The grant of four ERLs on 20th April 1995 coincided with a protracted internal reorganisation within WMC which eventually led to the decision to divest its Tanami interests in late 1996.

3.1 1995 – 1996 (Wedekind, 1996)

PNC withdrew from the Western Desert Joint Venture and as a result ERLs 138-140 were transferred to WMC on 17th October 1995.

Exploration included reconnaissance bedrock geochemical drilling and RC drilling of selected targets. Extensive geochemical anomalism was intersected at Cheeseman (peak value 580 Au ppb). Limited drilling at the Beaver Creek Prospect provided promising results.

Despite successful definition of anomalous areas, together with the discovery of potentially ore-grade mineralisation at Beaver Creek, WMC ran out of steam during 1996 and this work was never followed up.

3.2 1996 –1997 (Wedekind, 1997)

Reorganisation within WMC and associated budgetary constraints prevented WMC from mounting any field programmes during 1996 and 1997. However, prior to its decision to divest its Tanami interests, a complete re-evaluation of the Tanami project was undertaken.

Otter completed a review of the data and planned a work programme for the coming year.

3.3 1997 – 1998 (Scriven and Wedekind, 1998)

Exploration continued to focus on areas of known mineralisation within the Pendragon area. A detailed aeromagnetic survey (25m x 25m) was carried out over the tenement area including the Bonsai and Beaver prospects.

RC drilling at Bonsai completed coverage of the prospect down to 50m sections spacing. Results were not spectacular, but an inferred mineral resource of **420,000 Tonnes @ 1.9 g/t** was calculated.

Posthole drilling undertaken to follow-up WMC's paleochannel anomaly confirmed anomalism, but did not repeat the levels previously reported. This result is possibly related to WMC's misinterpretation of the transported/residual unconformity in the regolith profile.

3.4 20th April - 6th July 1998 (Wedekind and Burgess 1998)

Work conducted in the relatively short period between the Annual Report and the relinquishment of the tenements (ERL 137-140) was predominantly focussed within ERL 137.

Drilling activity was concentrated on definition drilling at Beaver Creek, extension drilling at Banjo, and angle RAB and posthole testing of anomalies and structural targets in the immediate vicinity of known mineralisation. The programme to infill WMC's 400m spaced traverses down to 200m was completed. Depths of transported cover vary between 5 and 30m. Results were quite promising with several >100ppb results indicating a continuation of anomalism northwest from Bonsai.

A detailed orientation sampling programme undertaken to evaluate the effectiveness of low-level surface sampling techniques defined coherent low order surface anomalism.

Regional geophysical datasets including WMC's survey over the Pendragon were merged with the new Otter survey.

4.0 GEOLOGY

Subdued topography, deep weathering, scattered outcrop and absence of marker horizons all conspire to limit the understanding of the geology in the Lower Proterozoic Granites-Tanami Block. Thus, current geological interpretations are largely derived from remotely sensed data (notably aeromagnetic surveys) and, locally, from exposures created by mining activity or the ever-expanding drilling database.

4.1 REGIONAL GEOLOGY

The Granites-Tanami Block is bound 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) Killi Killi Beds;
- 2) Mount Charles Beds;
- 3) Nanny Goat Creek Beds;
- 4) Helena Creek Beds;
- 5) 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 and although this still holds true for economic concentrations of gold, several mineralised prospects have since been discovered in other units eg the Kookaburra Prospect hosted by Killi Killi Beds (Doust, 1997).

Tunks (1996) re-evaluated the geological data and further subdivided the Tanami Complex into two domains. His subdivision separates the higher metamorphic grade Ditjiedoonkuna suite (Killi Killi and Davidson Beds) from the low-grade Black Peak formation (Nanny Goat Creek, Helena Creek, Nongra and Mt. Charles Beds).

Unconformably overlying the Black Peak formation is the Birrindudu Group consisting of the Pargee Sandstone, Supplejack Downs Sandstone, Gardiner Sandstone and the Mt. Winneckie Formation. Although none of these units are known to host Au mineralisation, gold-bearing structures in the Tanami Mine Corridor are observed to crosscut the overlying Gardiner Sandstone.

The Proterozoic Browns Range and Coomarie 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 pisolitic 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.

4.2 LOCAL GEOLOGY

The Project area is located over the southwestern margin of the Coomarie Dome, covering predominantly Lower Proterozoic stratigraphy of the Tanami Complex (Blake et al, 1975). The Coomarie granite is interpreted to have intruded into the already tightly folded rocks during a major period of plutonism that occurred between 1820 Ma and 1700 Ma (Page et al, 1976).

Aeromagnetic surveying reveals a well defined package of magnetic stratigraphy that wraps around the margin of the Coomarie dome in what has been interpreted as a southeast plunging syncline (Norris, 1990). Obvious evidence for both truncation and folding of the magnetic units attests to the complex tectonic history of the area. Two fault orientations are observed; a dominant WNW to NW structural trend which is characteristic of the Granites-Tanami province in general and a local pattern of NE trending faults on which relatively minor displacements of the stratigraphy are observed. The latter orientation is possibly related to the intrusion of the Coomarie granite.

Recent mapping within the CDJV areas (Large, 1998), has subdivided the Black Peak formation into several units, which are continuous with the Pendragon stratigraphy. The Tanami mine sequence (**Mine Basalts**), comprising basalts with intercalated thin to thick bedded turbidites are traced through the Jim's Find area into Pendragon where they host the mineralisation at Bonsai, Beaver Creek and Banjo. Marginal to the Mine Basalts is the **Lower Sequence** that is interpreted to comprise undifferentiated sediments below the mine sequence. Two west northwest trending structures separate the Mine Basalts and Lower Sequence from the **Wild Turkey Sandstone** to the south and the **Flores Complex** to the north.

Detailed examination of rocks found around the margin of the Coomarie Dome indicates that they are variably metamorphosed from greenschist facies through to amphibolite facies. The metamorphic fabrics described are interpreted to describe a transitional sequence from regional metamorphism into a contact metamorphic environment. Thus the distinction of "upper" and "lower" sequences possibly relates to differing degrees of metamorphism.

South and west of the Coomarie Dome, the magnetic character of the rocks is subdued and generally lacking in contrast. Limited drilling and scattered outcrop indicates that

these rocks are similar to the Killi Killi Beds (Blake et al., 1975), which are regionally extensive in the west of the Granites-Tanami Block. Locally, these sediments are unconformably overlain by flat lying cover rocks comprising conglomerate and quartzite (Pargee Sandstone).

Shallow reconnaissance drilling and prospect-sale RC drilling undertaken on the ERLs suggests that the sequence is dominated by deeply weathered wacke and shale that are probably derived from a mafic source. These rocks are steeply dipping and display a prominent foliation that is typically defined by the preferential alignment of biotite. Locally, mapping indicates complex deformation with evidence of syn-sedimentary slump folds, tectonic isoclinal folding and regional tight-to-open folds (Norris, 1990).

Basaltic rocks have been intersected in drilling and there is a general correlation between these rocks and magnetic units within the sequence. However, drilling at Beaver prospect also indicates that at least some of the magnetic units are correlated with coarse wacke units that contain a significant iron oxide component. The mafic units are more deeply weathered than the adjacent sedimentary rocks, but are typically less deformed; an observation that is probably related to the competency contrast compared to the adjacent sediments.

Mineralisation

The Tanami Mine Sequence has yielded over 1,000,000oz Au that was mined from numerous pits that are commonly developed on high-grade ore shoots. These shoots are localised at the intersection of 020° and 060° trending structures and plunge ~60° to the southeast. In section, the orebodies display an en-echelon array of one or more sub-parallel shoots dipping to the east at a high angle to stratigraphy (Marsh, 1996).

The mineralisation tends to occur in clusters of deposits where the total gold content is of the order of 250,000 oz of gold. Individual deposits typically range from 5,000 oz to 200,000 oz.

Local Mineralisation

Mineralisation intersected at two prospects (Cheeseman and Perisher) is localised within rocks correlated with the Tanami mine sequence and is similar to mineralisation at Bonsai, Banjo and Beaver Creek immediately to the south. Structurally controlled quartz veins containing gold and minor sulphides are hosted within a sequence of basaltic units intercalated with 'volcanic-derived' sedimentary rocks.

The style, size and clustering of mineral deposits observed to date in the whole Pendragon area is very similar to those developed in the Mine Sequence and by analogy, the discovery of additional resources at Pendragon is expected.

5.0 EXPLORATION: 6 JULY 1998 – 5 JULY 1999

5.1 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 3a & 3b), as for regional posthole, was 400m x 400m, which is considered, appropriate for typical Tanami mineralisation. Sample spacing is increased to 800m x 800m over areas of granite where prospectivity is likely to be less.

3995 soil samples for ZARG analysis were collected between January and June.

5.1.1 EL 8012

Cursory examination of the first pass surveys over EL 8012 generated two targets, Snapper and Tuna (Figure 4).

The Snapper prospect extends 3 km² over a well-defined northeast trending break in magnetic stratigraphy and shows considerable promise.

Promising first pass geochemical results (a peak value of 6.8 ppb) from approximately 7.5 kilometres east-southeast of Beaver were followed up in April-May 1999. These results were even more impressive returning a peak value of 765 ppb.

The infill sampling programme was designed to complete coverage to 50m x 25m (913 samples). Replication of previous levels of anomalism failed to be achieved. Variable proportions of quartz sand in the area of sampling may in part explain the erratic results.

A further 200 samples surrounding the main area of anomalism was collected as a separate programme as part of an offer by Amdel to trial their new low level gold analytical technique developed to rival ALS's ZARG technique.

First stage sampling at Tuna fabricated a gold anomalism of 0.8 to 2.2 ppb. Infill sampling around the weak anomalism detected in regional sampling has failed to define coherent areas of anomalism and the target has since been downgraded.

5.1.2 EL 9477

A total of 53 soil samples on an 800 X 800m grid for ZARG analysis were collected in January (Figure 5). The results ranged from .05 to 0.2 ppb.

figure 3a soil Location

figure 3b Regional Soil Geochem

figure 4a

4b

figure 4c

figure 5 EL9477 soils

5.1.3 EL 9759

342 soil samples were taken during January 1999 (Figure 6). The SW corner of the EL was sampled on 800x 800 metre grid whilst the bulk of the EL was on a 400 X 400 metre grid.

Peak values attained consisted of a 2.4, 1.9, and 1.5, 1.1 ppb. The majority of the results however were generally 0.5 to 0.2ppb.

5.1.4 EL9992

43 soil samples were taken from the region outside the granted ML 180 (Figure 7). Results ranged from 0.05 to 0.3 ppb.

5.1.5 EL10188

2266 soil samples taken with some promising results. Peak values were 22.3 and 14.3 ppb. Figures 8a,b,c,d and e illustrate the location in plan of the sample sites.

TABLE 1 Summary of Soil Sampling

	Soil samples
EL 8012	1291
EL 9477	53
EL 9759	342
EL 9992	43
EL 10188	2266
<i>TOTAL</i>	<i>3,995</i>

figure 6

EL 9759 Soils

figure 7

EL9992 Soils

figures 8a-e EL 10188 Soils

5.2 DRILLING

5.2.1 EL 8012

No drilling

5.2.2 EL 9477

No drilling

5.2.3 EL 9759

No drilling

5.2.4 EL 9992

Post Hole Drilling

Bonsai South

Six traverses of 50m spaced postholes (Figure 9) were completed over selected geophysical targets south of the Bonsai Fault (PGPH608-611, 777-807). The traverses targeted flexures in relatively weakly magnetic units where major fault splays from Bonsai Fault are interpreted. The structures are thought to represent the continuation of the Galifrey (or a parallel) faults with the flexures mimicking the setting of the Galifrey mineralisation. The results of this drilling yielded only low order anomalism with highs of 10ppb.

Banjo North, Bonsai North and South Hinge Areas

Eight lines of infill postholes (Figure 9b) were undertaken during July and August 1998. A total of 95 postholes for 1862m generated a couple of encouraging results with a peak value of 143ppb from PGPH612.

Marlena/ Marlena's Nose

A programme of posthole drilling was completed between Bonsai and Marlena, infilling between existing WMC posthole lines. This programme of drilling straddles both EL7423 and EL9992 (see figure 10 and appendix for both ELs), and comprised of 111 postholes (PGPH666-776).

ANGLED RAB and RC

Marlena & Marlena's Nose

Marlena and Marlena's Nose prospects are located approximately 2-2.5km along strike from Bonsai in what is considered to be analogous geological setting. The stratigraphy forms part of an almost continuous package extending some 6km along strike from Beaver Creek.

Mineralisation at Bonsai, Beaver Creek and Banjo all lie within magnetic stratigraphy close to the prominent northwest trending Bonsai fault. The continuation of both features northwest and southeast of the known mineralisation constitutes a relatively straightforward exploration play. Work commenced on infilling the WMC 400m spaced posthole traverses during June 1998. Encouraging results provided the impetus for additional posthole drilling and the testing of selected targets with angle RAB.

Ten angle RAB fences, comprising 57 angled RAB holes were drilled at the Marlana prospect following anomalous geochemistry generated from the posthole drilling (refer to Table 2). A further 3 RC holes (PGRC221-223) were drilled to test the continuity of mineralisation around [4m@11.0g/t Au](#) (PBRG272).

Table 2 Summary of RAB Drilling at the Marlana Prospect

Angled RAB Fence	Significant Intercepts ($\geq 0.5\text{g/t Au}$)
PGRB181-187	No Significant Intercepts
PGRB188-192	PGRB191 4m@1.63 PGRB191 2m@0.54 PGRB191 2m@0.60 PGRB191 4m@0.58
PGRB193-200	PGRB200 4m@1.13
PGRB210-220	No Significant Intercepts
PGRB268-270	No Significant Intercepts
PGRB271-274	PGRB272 4m@10.98 PGRB272 2m@0.52 PGRB272 2m@0.56 PGRB273 12m@0.80
PGRB276-278	No Significant Intercepts
PGRB325-329	PGRB328 2m@1.80
PGRB330-334	PGRB334 4m@0.71
PGRB335-339	No Significant Intercepts

The geology at Marlana comprises interbedded sediments and basalt's of the Mt Charles Beds. The low-grade (0.2g/t) mineralized envelopes are stacked, trending NW-SE with a strike length of approximately 100m. The results from the RC drilling indicate that the low-grade gold envelopes are associated with a basalt/sediment contacts. The narrow low-grade intercepts are indicative of being on the fringe of an economic system. Further exploration will concentrate on surrounding structures which potentially host economic mineralisation.

Marlena's Nose

Five angled RAB traverses were completed at Marlana's Nose, comprising of 30 angled RAB holes. Three RC holes were drilled at the prospect (PGRC218-220) to test the strike extent and depth potential of 4m @ 4.17g/t Au (PGRB201). The following results were received:

Figure9a

figure 9b

Figure 10

Table 3 Summary of Drilling at Marlena's Nose Prospect

Angled RAB Fence	Significant Intercepts ($\geq 0.5\text{g/t}$)
PGRB201-204, PGRB252-254	PGRB201 4m@4.17 PGRB252 2m@0.77 PGRB252 4m@0.61 PGRB252 3m@0.61 PGRB253 2m@1.13 PGRB253 8m@0.72 PGRB253 6m@1.34 PGRB254 2m@0.90 PGRB254 2m@0.81 PGRB254 2m@0.91
PGRB255-257	PGRB255 7m@0.98 PGRB256 2m@0.74 PGRB256 8m@0.74 PGRB257 2m@0.51
PGRB258-262	PGRB258 2m@0.56 PGRB258 2m@0.53
PGRB263-267, PGRB315-319	PGRB265 2m@3.05
PGRB320-324	PGRB320 2m@0.70 PGRB321 2m@1.12 PGRB322 2m@0.86

The geology at Marlena's Nose comprises of interbedded sediments and basalts of the Mt Charles Beds. The major Bonsai fault bounds the southern margin of the prospect, marking the contact between the Mt Charles and the pale micaceous Killi – Killi Beds. This contact is often silicified with evidence of brittle and ductile deformation.

The results confirm a north east trend of anomalism with an envelope of 0.2 g/t Au. It appears that the anomalism may have been offset by a dextral north south trending fault. Also there appears to be anomalism between 35-40m suggesting a degree of supergene enrichment. The high-grade mineralisation intercepted in the RC drilling, 11m @ 3.22g/t Au (PGRC218, 63-74m) was associated with minor quartz veining hosted within a quartz rich sediment.

Figure 11

Bonsai, Banjo and Beaver Creek Angled RAB

Prior to the grant of ML180 twenty-six angled RAB fences were drilled peripheral to the Bonsai, Banjo and Beaver Creek prospect areas. This targeted mineralisation trends along strike from known mineralisation; anomalous geochemistry and geophysical targets derived from aeromagnetic data and favourable geological controls.

Bonsai North

Five fences of angle RAB drilling (Figure 12) were completed to the North of the Bonsai prospect with the following significant intercepts;

TABLE 4 Summary of Drilling at Bonsai North

Angled RAB Fence	Significant Intercepts ($\geq 0.5\text{g/t Au}$)
PGRB205-209	No Significant Intercepts
PGRB411-414	PGRB411 2m@0.52 PGRB411 6m@1.12 PGRB413 2m@0.53
PGRB415-418	No Significant Intercepts
PGRB432-437 408, 409, 410	PGRB435 2m@0.60 PGRB437 2m@1.51 PGRB437 2m@0.98 *sig int for 408
PGRB438-444	PGRB440 2m@0.78 PGRB441 6m@0.98 PGRB443 6m@1.42

Banjo North

Six fences of angle RAB drilling were completed to the north west of Banjo North prospect (Figure 13). The following results were received.

TABLE 5 Summary of Drilling at Banjo North

Angled RAB Fence	Significant Intercepts ($\geq 0.5\text{g/t Au}$)
PGRB239-243	No Significant Intercepts
PGRB244-246	No Significant Intercepts
PGRB357-365	PGRB360 4m@1.60 PGRB362 12m@1.14
PGRB366-371	No Significant Intercepts
PGRB372-375	No Significant Intercepts
PGRB419-431	PGRB421 6m@0.59 PGRB431 2m@0.52

Figure 12

Figure 13

Beaver Creek

Ten fences of angle RAB drilling were completed around the Beaver Creek pit area. The location of these RAB holes are illustrated in figure 14.

TABLE 6 Summary of Drilling at Beaver Creek

Angled RAB Fences	Significant Intercepts ($\geq 0.5\text{g/t Au}$)
PGRB221-225	No Significant Intercepts
PGRB306-314	No Significant Intercepts
PGRB376-382	No Significant Intercepts
PGRB383-391	No Significant Intercepts
PGRB392-398	PGRB394 2m@0.73 PGRB397 2m@0.50 PGRB398 2m@0.77
PGRB399-402	No Significant Intercepts
PGRB403-407	No Significant Intercepts
PGRB445-451	PGRB450 4m@0.82
PGRB452-457	PGRB455 3m@4.09 PGRB457 6m@2.84
PGRB458-472	No Significant Intercepts

Lithologies consisted predominantly of haematitic siltstones interbedded with sandstones and minor amounts of volcanoclastic sandstones.

Angled RAB drilling around Beaver Creek resulted in the following significant intercepts 6m @ 2.84g/t Au (PGRB 457, 78-84m) was discovered within the margins of the Beaver Creek pit and further towards the east 3m @ 4.1 g/t Au (PGRB 455, 66-69m) was discovered. PGRB 455 ended in mineralisation and is open along strike parallel to the Beaver mineralisation trend.

Precinct Targets

Five fences of Angle RAB drilling were completed to the north of Bonsai and Banjo North.

TABLE 7 Summary of Drilling North of BBB Precinct

Angled RAB Fence	Significant Intercepts ($\geq 0.5\text{g/t Au}$)
PGRB247-251	No Significant Intercepts
PGRB279-287	PGRB285 4m@0.53
PGRB288-289	No Significant Intercepts
PGRB290-296	No Significant Intercepts
PGRB297-305	No Significant Intercepts

Figure 14

Figure 15

Bonsai

Bonsai Prospect was the first mineralisation discovered by WMC in the Tanami, but despite more than 100 RC and diamond drill holes continuity to the mineralisation was not demonstrated. Further drilling by Otter to infill down to 50m line spacing failed to significantly improve the situation and a meagre resource of 25,000 oz. At the marginal grade of 1.9 g/t Au was defined in 1997.

Three RC holes (Figure 16) were drilled at the Bonsai prospect (PGRC163-165) for a total of 330m. The drilling was targeting high-grade shoots with the following significant intercepts:

PGRC163 [7m@1.32](#) g/t Au
PGRC164 [6m@3.04](#) g/t Au
PGRC164 [15m@7.82](#) g/t Au
PGRC165 [4m@4.38](#) g/t Au

Geology

The stratigraphy at Bonsai comprises of two thin basaltic units intercalated with a package of sedimentary rocks. A major WNW trending fault zone at the southern margin (Bonsai fault) separates this package from a distinctive, buff-coloured package of micaceous sedimentary rocks of the Killi Killi Beds. Units on both sides of the fault and the fault itself are disrupted by a series of late-stage cross faults.

Mineralisation

The gold mineralisation is associated with quartz veining but the continuity of the mineralised pods is poor. The mineralisation strikes WNW-ESE, roughly sub-parallel to the stratigraphy. The mineralisation appears to be associated with shearing along the basalt/sediment contacts. Competency contrasts of the basalt and sediment units has resulted in bedding parallel shears. These shears appear to be the primary structural control on the distribution of gold mineralisation at Bonsai. Intersection of these shears with NE-SW trending faults may control the high-grade mineralisation.

Beaver Definition Drilling

Resource definition drilling at the Beaver Creek prospect comprised of an additional 30 RC holes. Drilling was testing the continuity of mineralisation along strike and at depth on both the main and eastern lodes of mineralisation.

Previous exploration work at Beaver Creek has delineated two lodes of mineralisation referred to as the "main lode" and the "eastern lode". The resource calculated at the end of June 98 was:

570,000 tonnes @ 3.9 g/t Au comprising 71,471 oz.

Geology

The geology of Beaver Creek comprises interbedded sediments and basalt's of the Mt Charles Beds. The package strikes approximately WNW- ESE dipping to the SW. One major basalt unit has been mapped through the southern portion of the Beaver Creek pit area. The basalt unit strikes roughly 135, dips 55-60 to the southwest. The basalt is conformable with the sediments and is approximately 20-30m in thickness. The sediments comprise of interbedded sandstones, siltstones and volcano-clastic units.

Mineralisation

The gold mineralisation at Beaver Creek is associated with massive milky quartz veining with minor pyrite and traces of chalcopyrite. The mineralised lodes are approximately 7-10m in width, sub-vertical, with a NE-SW strike.

“Claw”

Interpretation of the geology and mineralisation in the area referred to as the *Claw* has resulted in the theory that the mineralisation is intimately associated with shearing along the sediment/basalt contact.

Structure

Previous drilling has demonstrated that significant offset of the mineralisation is occurring due to sinistral movement along north south trending faults. This offset is particularly evident on the main zone where the mineralisation swings from the Beaver NE trend to a more northerly trend.

Banjo & Banjo North Definition Drilling

Resource definition drilling continued at the Banjo and Banjo North prospects with 80 RC holes drilled and two diamond tails (PGDH011-012). The location of the drill collars can be seen on figure X. The structural setting of Banjo and Banjo North appears to be in a higher strain zone than Beaver Creek. As a consequence the faulting, shears and dilatational structures have a primary control on the distribution of the gold mineralisation.

The geology of Banjo and Banjo North can be summarised together. The geology comprises interbedded sediments and intercalated basalts of the Mt Charles Beds. Sediments consist of inter-bedded medium to coarse grained sandstones and siltstones with sedimentary textures such as graded bedding being evident. The basalt units vary in thickness, roughly 20m thick, with patchy sheared ferruginous quartz veining throughout. The entire package of rocks strikes roughly WNW-ESE and dips steeply to the SW.

Banjo and Banjo North prospects lie on a major fault corridor which trends NW-SE, referred to as the Banjo structure. This fault corridor is evident on the aeromagnetic images of Pendragon as a low, which truncates the magnetic stratigraphy. Within this fault zone the Mt Charles beds have been intensively fault and sheared with strong pervasive hematite alteration of both the sediments and basalts. The incompetent basalt units appear to be preferentially sheared.

The gold mineralisation is associated with quartz veining along sheared basalt/sediment contacts. These sheared contacts are characterised by brecciated milky quartz veining, pervasive silicification, localised intense chlorite + sericite alteration with disseminated pyrite and minor chalcopyrite. Massive quartz veining is also present which may be associated with NE-SW trending dilational cross structures (Beaver Creek). The massive quartz veining is mineralised in places, but not always, and some of the high-grade intercepts have been from sediments with only minor quartz veining and a subtle alteration.

Figure 16

Figure 17

Figure 18

The orebodies are discrete mineralised pods, which lie en echelon style within the Banjo structural corridor. The size and shape of the pods are controlled by a plethora of faults/shears, which are probably pre, syn and post mineralisation. The complex structural regime within the Banjo structure has required high density drilling to define the orebodies. The results of this drilling have been mixed, with delineation of the orebodies extremely difficult.

Bonsai Sterilisation

A programme comprising 5000m of sterilisation drilling commenced in November 1998. Only two holes (PGRB1000-1001) had been drilled prior to the grant of ML180. Lithologies consisted predominantly of the quartz-micaceous Killi-Killi Beds and resulted in no significant mineralisation.

5.2.5 EL 10188

POSTHOLE DRILLING

Monarch North

Four posthole traverses were drilled with 50m spacing over a north – south trending magnetic anomaly to the north of the Pendragon Leases. The fences targeted breaks and indentations in the magnetically high unit.

A total of 69 holes were drilled (PGPH 1472-1540) for 1434m.

The southern most fence drilled determined a channel setting with the initial cover being approximately 8m of calcrete followed by 10m of transported gravels into a mottled upper saprolite. The depth of cover increased from approximately 10m in the west and gradually thickened to greater than 20m in a channel zone to the northeast. Silcrete and calcrete was encountered in the channel region with plentiful fresh water beneath. The geology was logged as a combination of sandstones and siltstones weathered to mottled upper saprolite in the north and lower saprolite in the south.

The results of this posthole programme ranged between 1-8ppb Au, highest anomalism of 8, 6, 6 and 5ppb Au were from the residual-transported boundary. The higher anomalism is predominantly on the edge of the channel. Residual results ranged from 1-4 ppb Au and sit within the channel edge but also cluster at the breaks in the magnetic unit. Calcrete/silcrete samples returned the highest numbers with a spot high of 56ppb and lower anomalous results of 8, 8, 6, 6, and 5ppb clustering around this result.

Figure 19

Hinge/Cheeseman

The Hinge zone covers the axis of a broad plunging fold (wavelength of 3-5km), which was identified in aeromagnetic imagery. The fold is faulted along its axis and represented a conceptual target ('a la Callie). The Hinge area extends northwest from what used to be the Pendragon satellite camp. Original WMC posthole drilling at 800m spacing defined scattered anomalism (maximum 51ppb) and this was infilled to 400m line spacing, with 200m spacing in the fold closure. The postholes were generally spaced between 50 & 100m and gradually spaced out to 400m where areas of Gardiner sandstone were encountered. A total of 341 holes (PGPH1132-1471) were drilled for a sum of 5228metres. The average depth of the holes was approximately 15m. The depth of the transported cover varied across the region from 3 to 20m, averaging probably 5 - 10m in the central area of the fold.

Geology logged in the area suggests a large component of inter-bedded sediments, namely siltstones and sandstones. Several units of basalt were logged and appear to coincide with the low-level anomalism in the area. In the south west of the Hinge, a zone of consolidated Gardiner sandstone was defined, which correlates with the edge of the Channel.

Results returned were disappointing and reflected the initial wide pass of geochemistry by WMC. Four areas of anomalism were realised and included bottom of hole values of 22, 16, 12, 9, 8, 7, 6, and 5 ppb, as well as sample 2 (transported – residual boundary) values between 5 & 10 ppb.

Isabella Prospect

Two posthole fences were drilled to test the continuity of an 1100ppb residual gold anomaly previously identified by WMC drilling. The anomaly is located on the margin of the main channel that passes through the Pendragon region. The two fences, 538300E & 537950E, consisted of twenty-six holes (PGPH 1568-1593) with an average depth of 28m for a total of 741m drilling. The minimum thickness of transported material was 18m. Lithologies consisted of undifferentiated sandstones with minor haematitic siltstone and sandstone component.

Anomalous results include 37ppb, 11ppb, and 7ppb Au, which were clustered in the first six holes.

Charlotte

The Charlotte area covers the interpreted along strike continuation of the magnetic stratigraphy found 4km to the southwest at Marlana. In this area the Bonsai fault changes strike from NW to WNW and truncates the northwest trending stratigraphy. Original 800m spaced posthole drilling traverses undertaken by WMC between Charlotte and Marlana were infilled to 400m. A total of 284 postholes were drilled (PGPH848-1131) with 50m spacings. Broad areas of low level anomalism were defined (maximum bedrock value 83ppb) – most samples were less than 10ppb. A more detailed account may be found in Wedekind 1999.

Figure 20

Figure 21

Fig 22

*RAB and RC DRILLING***Monarch**

The Monarch area lies within the “channel” anomaly where an extensive area of gold anomalism is associated with a large palaeodrainage system. Monarch was a coherent low-level gold anomaly (3-10ppb Au) that showed a remarkable mimicking of interpreted basement structure. The anomaly was defined from low level Zarg analysis of surface samples in an area of up to 25m of cover.

An angled RAB traverse over a northeast trending break in magnetic stratigraphy under shallow cover (PGRB226-238) failed to detect mineralisation. Similarly unsuccessful, a RC traverse across a major northwest trending structure under deeper cover (PGRC159-162).

Hope

A programme of 27 infill post holes was implemented north of the Hope Prospect (Figure 24). Results ranged from 0 to 7 ppb. West of the prospect ten angled RAB holes (PGRB 347-356) were drilled and intersected Basalts.

Table 8 *Drilling Summary for Pendragon Exploration Licences*

	RABm	RCm	POST HOLEm	DDHm
EL 8012				
EL 9477				
EL 9759				
EL 9992	15,062	12,511	4,034	
EL 10188	857	438	11,153	
<i>TOTAL</i>	15,919	12,949	15,187	

Fig 23

fig 24

6.0 EXPENDITURE

Total expenditure on all Pendragon tenements during the first Licence Year was \$ 1,106,352 .

Expenditure on individual tenements is summarised in Table 9

TABLE 9 Pendragon Expenditure 6th July 1998 to 5th July 1999.

	EL 8012	EL 9477	EL 9759	EL 9992	EL 10188
Geology	900	1,500	1,500	37,000	15,165
Geophysics	913	1,618	1,297	5,068	4,363
Drilling	---	---	---	443,332	83,600
Geochemistry	5,912	530	3,420	5,872	27, 108
Assays	14,245	463	4,348	253,546	22,995
Computing	1,082	170	349	23,349	11,131
Field Logistics	12,969	1,303	7,158	39,559	26,393
Administration	5,929	348	350	23,349	18,218
<i>Covenant</i>	<i>30,000</i>	<i>22,500</i>	<i>72,400</i>	<i>82,200</i>	<i>120,000</i>
TOTAL	\$ 41,950	\$ 5,932	\$ 18,422	\$831,075	\$208,973

7.0 PROPOSED 1999/2000 WORK PROGRAMME AND BUDGET

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 Pendragon Mine Lease area will continue to be the primary focus for our exploration efforts with RC and RAB drilling defining new resources at Pablo, Orion, Cheeseman and Dolphin. Infill soil sampling programmes have been concentrated in the area peripheral to the defined deposits at Beaver Creek, Bonsai and Banjo. A significant proportion of our exploration budget (Table 10) is likely to be spent within ML180 in the forthcoming year in our quest to define further resources. We will endeavour to continue exploration within the surrounding exploration licenses as long as potential for gold mineralisation remains. The forecast work programme for the exploration licenses covered by the Pendragon Deed are as follows.

EL9992

There is a limited amount of work scheduled for EL9992 for the forthcoming year, as exploration will be focussed in ML180. The mining lease covers all of the prospective Mt Charles stratigraphy. The geology of the SW half of EL9992 comprises non-magnetic sediments of the Killi-Killi Beds. Historically no significant mineralisation has been found in these units and they remain relatively untested. Due to current budgetary constraints this area remains a low priority at this stage, but given favourable economic conditions more work is required. The geology in the NE corner of EL9992 is at this stage is unknown, as there has been no drilling in the area. The aeromagnetic data suggests that it is either granite or Killi-

Killi beds. This area, particularly the contact with the Mt.Charles warrants exploration drilling and remains a good conceptual target.

EL10188

The forecast work programme will involve infill soil sampling to define anomalies for angled RAB drilling. Infill soil sampling will be used to further define the Au geochemistry at the Perisher prospect. WMC has defined and drill tested several geochemical anomalies generated from their surface lag sampling. Subsequent angle RAB drilling at Perisher by Otter in 1997 failed to intercept the mineralisation. The area still has good potential with favourable lithologies and known gold mineralisation. A compilation of the data with geological mapping, rock chipping and detailed soil sampling should generate several angled RAB targets at Perisher. Infill soil sampling at Bloodwood and subsequent resampling has resulted in some confusing geochemistry and more work is required. More work is also anticipated at Monarch and Monarch North.

EL8012

First pass soil sampling on a 400X400m spaced sampling grid has been completed over the entire lease. Infill soil sampling at the Snapper and Tuna prospects has resulted in some spurious geochemistry. Exploration will continue to target the magnetic stratigraphy, which strikes roughly east west through the southern portion of the lease. This stratigraphy is considered to be the along-strike equivalent of the units which host the mineralisation at Bonsai and Beaver Creek. Soil sampling has not been very successful in this area and a renewed effort with some more orientation work and possible posthole drilling is envisaged.

EL9477

First pass regional soil sampling on an 800X800m grid has been completed over the entire EL. The Au geochemistry from the first phase of sampling does not provide us with any obvious follow up targets. The forecast work programme for this exploration license may involve some small soil sampling programmes based on geological/geophysical targeting. In this current economic climate is likely that we will not incur any in ground expenditure for EL9477 and exploration within this area will be purely from remote sensed data.

EL9759

The nature of the regolith in this area is posing a few problems for the soil sampling technique, which although used successfully in the Bonsai/Beaver Creek areas, does not seem to work in this terrain. The forecast work programme for this area will involve soil sampling orientation with the possibility of shallow posthole drilling. Defined geochemical targets will be followed up by angle RAB drilling. The aeromagnetic data will be used to generate targets for both soil sampling and drilling.

TABLE 10 Proposed Work Program and Budget July 1999 to July 2000.

	EL 8012	EL 9477	EL 9759	EL 9992	EL 10188
Geology	1,200	800	1,200	8,000	10,000
Geophysics	1,000	550	1,800	1,000	2,000
Drilling	5,000	-	12,000	-	40,000
Geochemistry	6,000	1,800	8,000	5,000	15,000
Assays	8,000	2,300	12,000	5,000	15,000
Computing	1,000	500	1,000	500	5,000
Field Logistics	1,290	900	9,000	1,200	18,000
Administration	1,800	700	2,400	700	15,000
TOTAL	\$ 25,290	\$ 7,550	\$47,400	\$21,400	\$120,000

8.0 ENVIRONMENT

In the main, exploration activity has had a low to moderate environmental impact on the Pendragon Licences. Tracks existing from previous exploration work were utilised except for a few new tracks on EL 9759. The recent establishment of the Molech Haul Road (TMJV) has enabled tracks that are no longer required to be rehabilitated “naturally”.

All regional postholes were backfilled. Much of the regional soil sampling was achieved with the use of a small helicopter so that environmental impact was minimal.

DGPS grids were marked in and no clearing was engaged.

Drill pads were cleared manually.

The Pendragon Camp site has been cleared of all rubbish and left to rehabilitate “naturally”.

Summary Sheets are included behind the Reference section of the report.

9.0 REFERENCES

- Barratt R. M.**, 1994. Annual Report for SEL7423 – Coomarie, Year Ending 23rd April 1994. Western Mining Corporation Limited NTDME Annual Report.
- Barratt R. M.**, 1995. Annual Report for SEL7423 – Coomarie, Year Ending 23rd April 1995. Western Mining Corporation Limited NTDME Annual Report.
- Blake D.H., Hodgson I.M. and Smith P.A.**, 1975. Geology of the Birrindudu and Tanami 1:250,000 Sheet Areas, Northern Territory. Report 174, Bureau of Mineral Resources, Geology and Geophysics, pp. 54.
- Blake D.H., Hodgson I.M. and Muhling P.C.**, 1979. Geology of the Granites-Tanami Region, Northern Territory and Western Australia. Bull. 197, Bureau of Mineral Resources, Geology and Geophysics, pp. 91.
- Doust G.**, 1997, The Kookaburra Discovery – a paradox or appointment? *in* New Generation Gold Mines '97. AMF Conference November 1997.
- Henderson S.M.**, 1998. Annual Report for Exploration Licence 7423. 24 April 1997 – 23 April 1998. Otter Gold NL NTDME Annual Report.
- Large C.**, 1998. Annual Report for Exploration Licences 1271, 1276, 1277 Tanami Region, NT. March '97 – March '98. Otter Gold NL NTDME Annual Report.
- Marsh S.**, 1996. Geological and Structural Controls on Magnetism in the Tanami Mine Corridor, Tanami Desert, NT. M.Sc. Thesis (Unpublished), University of Tasmania.
- Norris, M.S.**, 1990. Annual Report – EL6458 for Year Ending 22nd May 1990. Western Mining Corporation Limited NTDME Annual Report.
- Norris M.S.**, 1992. Partial Relinquishment Report for SEL7423 – Coomarie, Year Ending 23rd April 1992. Western Mining Corporation Limited NTDME Annual Report.
- Norris M.S.**, 1992. Annual Report for SEL7423 – Coomarie, Year Ending 23rd April 1992. Western Mining Corporation Limited NTDME Annual Report.
- Norris M. S.**, 1993. Annual Report for SEL7423 – Coomarie, Year Ending 23rd April 1993. Western Mining Corporation Limited NTDME Annual Report.
- Norris M. S.**, 1993. Partial Relinquishment Report for SEL7423 – Coomarie, Year Ending 23rd April 1993. Western Mining Corporation Limited NTDME Annual Report.
- Norris M. S.**, 1994. Partial Relinquishment Report for SEL7423 – Coomarie, Year Ending 23rd April 1994. Western Mining Corporation Limited NTDME Annual Report.
- Page R.W., Blake D.H. and Mahon M.W.**, 1976. Geochronology and related aspects of acid volcanics, associated granites and other Proterozoic rocks in The Granites-Tanami region, northwestern Australia. BMR J. Aust. Geol. Geophys., p. 1 – 13.

- Scriven N. and Wedekind M. R.,** 1998. Annual Report for Exploration Retention Licences 137,138,139, & 140, Tanami Region, N. T. April 1997 - April 1998. Otter Gold NL NTDME Annual Report.
- Tunks A.J.,** 1996. Geology of the Tanami Gold Mine, Northern Territory. Ph.D. Thesis (Unpublished), University of Tasmania.
- Twiggs A.R.,** 1970. Final Report on A>P. 2336 (Claypan Well). Geopeko Ltd. Open File Report CR 70/22.
- Wedekind M.R.,** 1996. Annual Report for Substitute Exploration Licence 7423, Area External to ERL's 138-140, Year Ending 30th April 1996. Western Mining Corporation Limited, Exploration Division.
- Wedekind M.R.,** 1996. Annual Report for Coomarie Exploration Retention Licences 137 – 140. Year ending 20th April 1996. Volume 1. Western Mining Corporation Limited, Exploration Division.
- Wedekind M.R.,** 1997. Annual Report for Exploration Licence 7423 and Exploration Retention Licences 137 – 140. Otter Gold NL NTDME Annual Report.
- Wedekind R. & Burgess H.,** 1998. Final Report for Exploration Retention Licences 137, 138, 139 & 140. Otter Gold NL NTDME Annual Report.
- Wedekind M.R.,** 1999. Final Report for Exploration Licence 6760. Otter Gold NL NTDME Final Report.
- Wedekind M.R.,** 1999. Final Report for Substitute Exploration Licence 7423. Otter Gold NL NTDME Final Report.

CENTRAL DESERT JOINT VENTURE

FIRST ANNUAL REPORT
For
EXPLORATION LICENCES
EL 8012
EL 9477
EL 9759
EL 9992

6th JULY 1998 to 5th JULY 1999

EL 10188

6th NOVEMBER 1998 to 5TH JULY 1999

APPENDICES

LOGGING CODES
SAMPLING CODES
SOILS DETAILS
RAB / RC DETAILS