



TANAMI
EXPLORATION NL
ACN 063 213 598

SIXTH
ANNUAL REPORT

EL 10139

SW PARGEE

For Year Ending 16 October 2008

Author
J Rohde

October 2008

Distribution:

- ☐ Department of Primary Industry, & Fisheries and Mines (1)
- ☐ Central Land Council (1)
- ☐ Tanami NL, Perth (1)

File: jr08dpifmAR2008_SW Pargee

CONTENTS	Page
1.0 Summary	1
2.0 Introduction.....	1
3.0 Tenure	1
4.0 Geology	2
4.1 Regional Geology	2
4.2 Local Geology.....	3
5.0 Previous Exploration.....	3
6.0 Exploration Completed Year 6.....	4
7.0 Exploration Expenditure Year 6	5
8.0 Proposed Exploration Program Year 7	5
9.0 Bibliography.....	6

TABLES

Table 1	Tenement Details
Table 2	Exploration Expenditure Year 6
Table 3	Proposed Exploration Program Year 7

FIGURES

Figure 1	Tenement Location Plan	1 : 1,000,000
Figure 2	Tenement Locality Plan	1 : 500,000
Figure 3	Surface Sampling	1 : 100,000

DIGITAL APPENDICES (supplied on CD)

FILE	DESC
SWP_WASG3_SSASSAY_2008A	Surface Sampling Assay Method
SWP_WASG3_SURF_2008A	Surface Sampling Geology, Coordinates, Assay Results

1.0 SUMMARY

EL 10139 'SW Pargee' is centred approximately 660 kilometres northwest of Alice Springs in the Tanami Region, Northern Territory (**Figure 1 & 2**).

The tenement was granted to Tanami Exploration NL (TENL), a wholly owned subsidiary of Tanami Gold NL (TGNL) on 17 October 2002 and formed part of the Tanami (NT) JV, a Joint Venture agreement between Tanami Gold NL (TGNL) and Barrick Gold of Australia Limited (BGAL) from 2002 to 30 June 2004. This report describes exploration by TENL for the period 17 October 2007 to 16 October 2008.

Exploration during the sixth year of tenure included a reconnaissance trip and surface sampling. A total of 5 rock chip samples were taken (**Figure 3**). No significant results were received. The best gold assay value returned was 4ppb from rock chip sample PGK 0041 taken of a 5m wide, 320 trending zone of metasediments with vein quartz.

2.0 INTRODUCTION

EL 10139 is situated approximately 660 kilometres northwest of Alice Springs and 150 kilometres northwest of The Granites Gold Mine in the Tanami Region, Northern Territory at the border to Western Australia (**Figure 1**).

The tenement is explored together with TENL's Western Tanami Project in Western Australia. Access from Halls Creek, 250 kilometres to the northwest, is provided via the unsealed Tanami Highway. Access from Alice Springs is northwest via the Tanami Highway for approximately 700km. The highway bisects the tenement area, with the exploration base camp 30 kilometres inside the WA border, approximately seven kilometres south of the road. The tenement is traversed by historic exploration tracks that come off the highway to the north and south. The Balgo community is the nearest established town and is approximately 100km, by road to the west of the project.

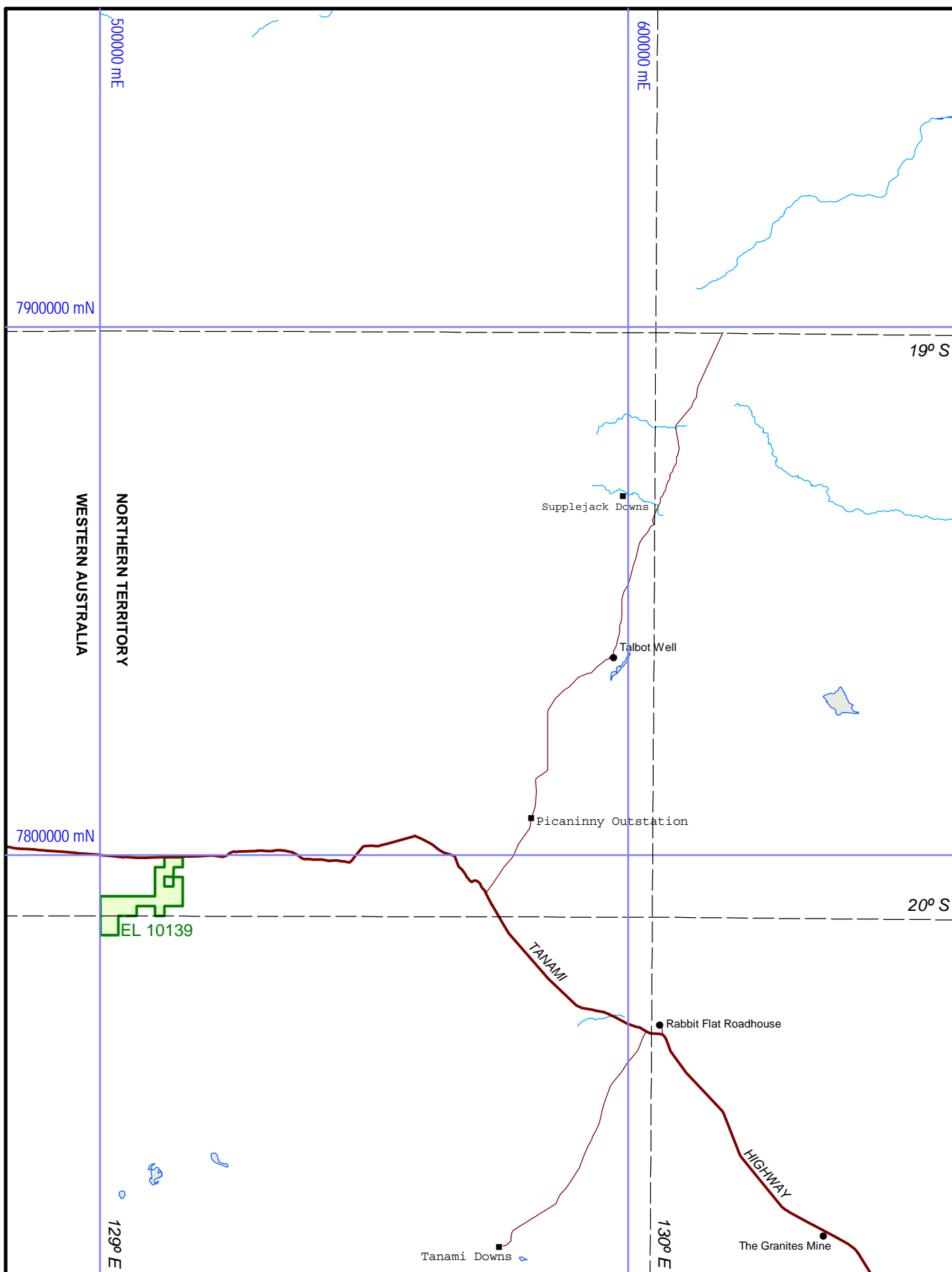
The area is affected annually by high temperatures and seasonal rainfall associated with the northern monsoon, which generally extends from November to April. During this time access via road may be restricted due to wet conditions.

The project covers an area of gently undulating hills and aeolian sand plains, dominated by spinifex, acacia thickets and sparse stands of eucalypts. To the north of the project area, the plains are surrounded by high scarps (20m - >100m) of flat lying Proterozoic sandstones that support little but spinifex and sparse acacia scrub. Occasional springs and ephemeral waterholes occur close to these scarps (Purcell, 2004).

This report documents exploration on EL 10139 carried out by TENL in its sixth year of tenure. Previous exploration has been mainly carried out by BGAL, including rock chip sampling and vacuum drilling.

3.0 TENURE

EL 10139 'SW Pargee' was granted to Tanami Exploration NL (TENL), a wholly owned subsidiary of Tanami Gold NL (TGNL) on 17 October 2002 and formed part of the Tanami (NT) JV, a Joint Venture



TANAMI GOLD NL

SW PARGEE

ORIGINATOR:
J. Rohde

DATE:
Aug 2008

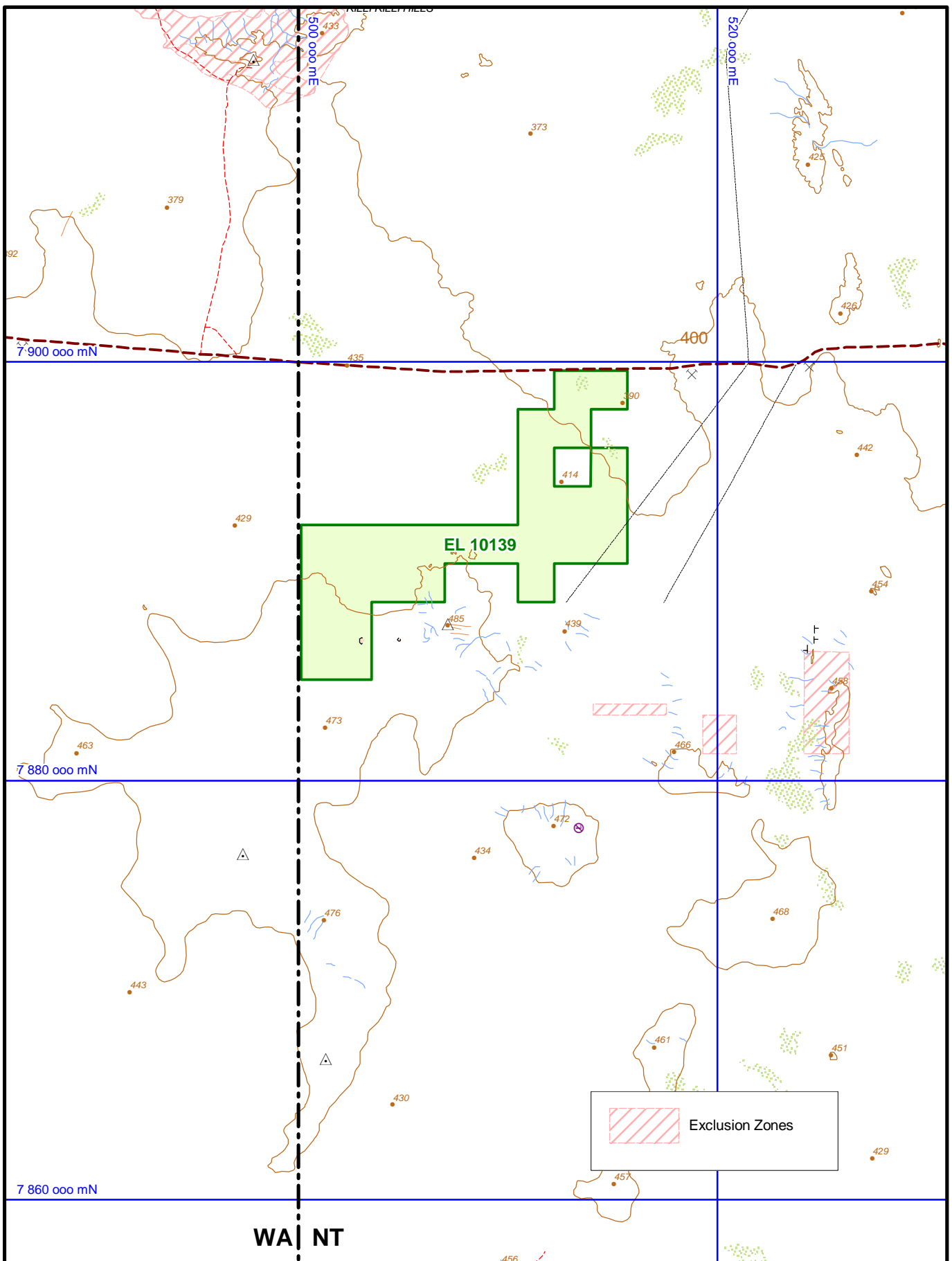
DRAWN:
M.H.Bailey

PLAN No: **ETP_SP_SW_1_0_011**

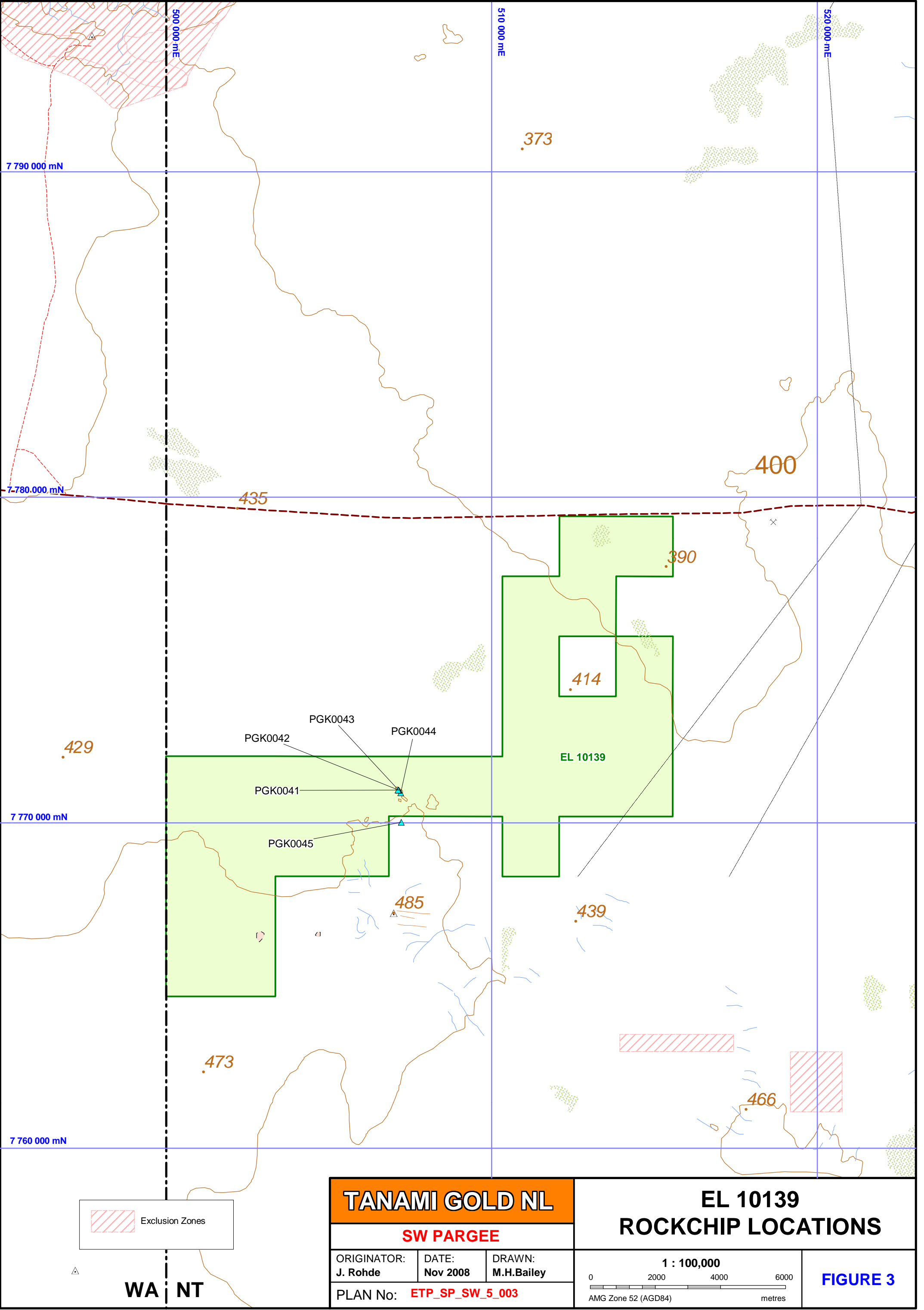
**EL 10139
TENEMENT LOCATION**

1 : 1,000,000
0 20 40 60
MGA Zone 52 (GDA94) kilometres

FIGURE 1



TANAMI GOLD NL			EL 10139 TENEMENT LOCALITY	
SW PARGEE				
ORIGINATOR: J. Rohde	DATE: Aug 2008	DRAWN: M.H.Bailey	<div>1 : 250,000</div> <div><div>051015</div><div></div></div> <div>MGA Zone 52 (GDA94)kilometres</div>	FIGURE 2
PLAN No: ETP_SP_SW_1_0_012				



agreement between Tanami Gold NL (TGNL) and Barrick Gold of Australia Limited (BGAL) from 2002 to 30 June 2004.

EL 10139 'SW Pargée' was granted over an area of 110 blocks. After three years of tenure a partial relinquishment was performed in 2005, with a second partial relinquishment completed in 2007.

EL 10139 'SW Pargée' details are listed in **Table 1** and illustrated in **Figure 2**.

Table 1: Tenement Details

Tenement Name & Number	Grant Date	Expiry Date	Blocks Granted	Blocks Relinq 2005	Blocks Relinq 2007	Blocks Retained 2007	Covenant
SW Pargée	17 Oct 2002	16 Oct 2010	110	55	28	27	\$25,300

TENL, a wholly owned subsidiary of TGNL, is the registered title-holder of this tenement. Barrick Gold of Australia Limited (BGAL) managed exploration through the Tanami (NT) JV Agreement with TGNL, commencing 13 December 2000. On 30 June 2004, EL 10139 was withdrawn from the Joint Venture.

4.0 GEOLOGY

4.1 Regional Geology

EL 10139 lies on 1:250,000 geological map sheets Tanami (SE52-15) and The Granites (SF52-03). The regional and local geology is discussed in detail in Purcell, 2004, as repeated below.

The project area lies within the Granites - Tanami Block, a 250km x 100km NW trending, Palaeoproterozoic window comprising various packages of multiply deformed sediments and volcanics. It is bound to the south by the Arunta Province, to the northeast by the Tennant Creek Inlier and Wiso Basin, to the northwest by the Hall's Creek Mobile Zone and to the southwest by the Canning Basin.

Basement is rarely exposed and is composed of Archaean granites and gneisses. Basement rocks have SHRIMP U-Pb zircon dates of $2504 \pm 4\text{Ma}$ and $2514 \pm 3\text{Ma}$. The basement was subjected to the Barramundi Orogeny ($1882 \pm 14\text{Ma}$), prior to the deposition of the overlying sediments.

Post-Barramundi rifting led to deposition of mafic volcanics, volcanoclastics and subordinate clastics and calc-silicates of the McFarlane Peak Group. This was succeeded by the deposition of the Tanami Group in a passive margin environment. These rocks include carbonaceous siltstone, minor banded ironstone and calc-silicates of the Dead Bullock Formation, which is conformably overlain by several thousand metres of turbiditic sandstones of the Killi-Killi Formation.

The sedimentary pile was later intruded by doleritic sills, prior to and during the subsequent deformation of the Tanami Orogenic Event. The Tanami Orogenic Event occurred between 1830-1845Ma and was a period of regional deformation and metamorphism across the Tanami Inlier. The Pargée Sandstone, a thick molasse of interbedded conglomerate, sands and minor silts, was deposited unconformably on the Tanami Group in a sub-basin created during the Tanami Orogenic Event.

Local intracontinental rifting (1825 to 1815Ma), led to subaqueous and subaerial sedimentation and felsic to mafic volcanism, forming the Mount Charles Formation, Mount Winnecke Group and the Nanny Goat Volcanics.

Three overlapping periods of I-type granitic plutonism occurred at this time producing the Winnecke Suite (1830-1820Ma), the Inningarra-Coomarie Suites (1820-1810Ma) and the Granites-Frederick Suites (1810-1790Ma). The Palaeoproterozoic basement was then exhumed, eroded and covered by the Neoproterozoic Birrindudu Group sediments comprising the Gardiner Sandstone, Talbot Well Formation and Coomarie Sandstone.

The region has been cut by large west-northwest trending faults. These structures manifest themselves as large prominent quartz ridges or as drainages. Recent field mapping indicates that these structures were long lived with various episodes and orientations of movement.

Gold mineralisation in the Tanami is extensive. The endowment of the region exceeds 13Moz of gold with the Callie system being the largest single deposit, which contains more than 6Moz of gold. Mineralisation in the Tanami region is diverse, ranging from epithermal styles at the Tanami group of mines, to the deeper lode gold deposit at Groundrush. Locally some deposits favour certain lithologies, however it is clear that gold mineralisation is lithologically indiscriminate and occurs in almost all rock types across the Tanami region.

4.2 Local Geology

The bulk of EL 10139 'SW Pargee' comprises deformed and metamorphosed sediments of the Killi-Killi Formation. Lithologies include shales, siltstones, greywackes, carbonaceous sediments and doleritic sills. Massive granitic stocks intrude the sediments. The southeast portion of the tenement is interpreted to comprise undifferentiated Palaeoproterozoic sediments and segments of Archaean basement, in part overlain by Killi-Killi Formation. Adjacent to the north of the tenement are thick sequences of flat lying Gardiner Sandstone of the Birrindudu Group. The sandstone forms elevated plateaus, which unconformably overlie Tanami Complex rocks, and rise from 20 - 100m above the surrounding topography.

Aeromagnetic interpretation suggests numerous structures traverse the tenement, dominated by WNW trending trans-Tanami style fault zones and later smaller-scale brittle faults. The package has been multiply deformed giving rise to a well-developed fold interference pattern. Evidence suggests that thrusting has occurred within the package, giving rise to stratigraphic thickening and repetition.

Outcrop is limited to the southwest portion of the tenement. Subcrop is more common though limited to slight topographic rises. Deflationary lag is well developed around these areas. Elsewhere, stratigraphy is commonly overlain by a transported horizon of variable thickness with localised palaeochannel development. A veneer of aeolian sand from 1-3m thick covers the majority of the tenement.

5.0 PREVIOUS EXPLORATION

BGAL carried out a detailed investigation into previous exploration activity, which is detailed in Purcell, 2004, and summarised below:

- Early explorers Davidson and Talbot passed through the area in 1901 and 1909 respectively, where they recorded the presence of gold at a number of locations, including The Granites, Tanami and Larranganni Bluff (Kookaburra/Sandpiper mineralised system).

- Exploration work for a variety of minerals and deposit styles, including Au, Cu-Au, base metals and U was conducted since the early 1970's by several exploration companies, including PNC, WMC, CRA, Otter Gold, Acacia Resources, Normandy NFM and Pechiny (Longmire, et al., 1998; Large, C., Sinclair, J., 1999; Wedekind, M. R., 1997; Wedekind, M. R., 1996; Valsardieu, et al., 1974; Norris, M. S., 1991; Palmer, D. C., 1990 and Kendall, B., 1998).

Work conducted in the first year by Barrick included compilation and interpretation of data, geological field mapping, rock chip sampling and limited vacuum drilling (102 holes). These programmes were designed to test areas of sparse historical exploration, previously identified low-level Au-As anomalism and interpreted litho-structural targets. No significant mineralisation or anomalism was identified.

During the second year work by TENL consisted of an assessment of BGAL's work and further exploration potential in conjunction with TENL's Western Tanami Project, which includes the Coyote, Kookaburra and Sandpiper deposits.

During the third year a detailed review of past exploration was completed together with an interpretation of geochemistry. BGAL exploration results showed only sporadic low-level gold-arsenic anomalism. A lag and rock chip sampling programme was planned covering the 'gaps' in previous sampling. A total of 25 rock chip samples and 55 lag samples were collected within the tenement area. Best value was 7ppb Au in PGK0022.

During the fourth year a total of 8 lag samples were taken as part of the lag program testing the trend of the Nero prospect within the Coyote triangle in Western Australia. No significant results were received. An additional 10 rock chip samples were taken as follow-up work in the area. Results were pending at that time but are now included in this report.

Work carried out during the fifth year was limited to office based studies and assessment following the results of the previous year's lag sampling program.

6.0 EXPLORATION COMPLETED - YEAR 6

A ground reconnaissance field trip was carried out in March 2008 to check the access, to inspect the previous work and to further assess the viability and the requirements for a proposed drilling program at SW Pargee.

During the reconnaissance a total of five rock chip samples (PGK 0041-0045) were collected mainly at locations where outcropping metasediments are associated with quartz veining. No significant results were received. The best gold assay value returned was 4ppb from rock chip sample PGK 0041 taken of a 5m wide, 320 trending zone of metasediments with vein quartz.

All sample locations are shown on **Figure 3** and assay results and geological descriptions are included in the digital Appendix.

A re-interpretation of geological and aeromagnetic data was undertaken to assist targeting. Several drill targets were identified in areas which are undrilled, or in which drilling has been limited to shallow ineffective methods. A drilling program was designed and a work program was submitted to the CLC, which advised that a new on-ground anthropological / cultural clearance would be required.

The CLC advised that it was unlikely that this could take place in 2008 due to other existing commitments. The planned drilling program was subsequently deferred until 2009.

7.0 EXPLORATION EXPENDITURE YEAR 6

TENL exploration costs for the year ending 16 October 2008 are summarised below in **Table 2**. They cover the period 17 October 2007 to 16 October 2008.

Table 2: EL 10139 Exploration Expenditure Year 6

Item	Expenditure \$
Salaries and Wages	17,685
Contractors and Consultants	1,038
Computing / Drafting	1,769
Assay	150
Travel/Accommodation	291
Field, Camp, Safety & Communication	987
Vehicle & Fuel	297
Administration/Overheads	3,332
Total	\$25,549

8.0 PROPOSED EXPLORATION PROGRAM YEAR 7

The planned 2008 drilling program has been deferred until 2009. A work program will be re-submitted to the CLC with the aim to conduct on-ground anthropological / cultural clearances mid-year, followed by drilling shortly thereafter.

The proposed program as shown in Table 3 below was submitted in July 2008 with the application for renewal for EL10139, with the addition of an estimated cost for the CLC clearance.

Table 3: Proposed Exploration Program Year 7

Item	Expenditure
CLC Clearance	5,000
Salaries and Wages	3,000
Drilling	10,000
Assaying	1,000
Drafting and computing	500
Camp / Field costs	1,000
Vehicles and fuel	1,500
Travel and accommodation	1,000
Administration	2,700
Total	\$25,700

9.0 BIBLIOGRAPHY

Blake, D.H., Hodgson, I.M. and Muhling, P.C., 1979 - Geology of the Granites-Tanami Region, Northern Territory and Western Australia. Bureau of Mineral Resources, Geology and Geophysics, Bulletin 197.

Davidson, A.A., 1905 – Journal of explorations in central Australia by the Central Australian Exploration Syndicate Ltd. South Australian Parliamentary Paper 27.

Dean, A.A., 2001 – Igneous rocks of the Tanami region. Northern Territory Geological Survey Record GS2001-003: 78pp. (electronic pre-release).

Hendrickx, M., et.al., 2000 - Palaeoproterozoic stratigraphy of the Tanami region: Regional correlations and relation to mineralisation – preliminary results. Northern Territory Geological Survey Record GS2000-013: 71pp. (electronic pre-release).

Kendall, B., 1998; Final Report for Exploration Licence EL7666 – Coomarie West. Acacia Resources. Unpublished.

Large, C., Sinclair, J., 1999; Final Report for EL7921, Tanami Region NT, March 1993-1999., Otter Gold. Unpublished.

Longmire R.A. and Adrichem, S. M., 1998; Fifth and Final Report for EL8302 (Killi-Killi) for the period 22-11-1998. Normandy NFM. Unpublished.

Norris, M. S., 1991; Final Report Tanami Complex, 10 December 1985 to 24 April 1991., PNC Exploration (Australia) Western Desert Joint Venture, Western Mining Corporation. Unpublished.

Page, R.W., et.al., 1995 - Geochronology of an exposed late Archaean basement terrane in the Granites-Tanami region. AGSO Research Newsletter, 22: 21-22.

Palmer, D. C., 1990; Final Report EL 6455 South Pargee Hills pre 11 June 1990., CRA Exploration. Unpublished.

Purcell, G., 2004, Annual Report on EL 10139 'Southwest Pargee' for the period 1 January 2003 to 31 December 2003, Barrick Gold of Australia Limited. Unpublished report to NT Department of Industry and Resources.

Rohde, C., 2004, Second Annual Report for EL 10139 'SW Pargee' for the year ending 16 October 2004. Unpublished report to NT Department of Industry and Resources.

Rohde, C., 2005, Third Annual Report for EL 10139 'SW Pargee' for the year ending 16 October 2005. Unpublished report to NT Department of Industry and Resources.

Rohde, C., 2006, Fourth Annual Report for EL 10139 'SW Pargee' for the year ending 16 October 2006. Unpublished report to NT Department of Industry and Resource Development.

Talbot, H.W.B., 1910 – Geological observations in the country between Wiluna, Halls Creek and Tanami. Geological Survey of Western Australia, Bulletin 39.

Valsardieu, Morabito, Reimer, Pearson, J., Cocquio, D. S., 1974; Geological reconnaissance field trips and ground follow-up of aerial magnetic anomalies, Tanami 3. Pechiney Australia. Unpublished.

Wedekind, M. R., 1997; Annual report for EL7423 and ELR's 137-140, 20 April 1996 to 19 April 1997., Otter Gold. Unpublished.

Wedekind, M. R., 1996; Annual Report for SEL7423 area external to ELR's 138-140 year ended 30-04-1996., Western Mining Corporation. Unpublished.

Wygralak, A.S., et.al., 2001 – Gold mineral systems in the Tanami Region: New insights from NTGS-AGSO research. AGSO Research Newsletter, 34: 2-14.