FINAL REPORT

FOR EXPLORATION LICENCE 9661

FOR THE PERIOD 23/10/1996 TO 29/12/2000

TENNANT CREEK DISTRICT, NORTHERN TERRITORY

PICASSO PROSPECT

TENNANT CREEK 1:250,000 SHEET

VOLUME 1 OF 1

OPEN FILE

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DATE: APRIL 2001

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SUMMARY

REPORT NO: TENNANT CREEK: 00301 ADELAIDE: 28028
TITLE: FINAL REPORT FOR EXPLORATION LICENCE 9661, FOR THE PERIOD 23/10/1996 TO 29/12/2000, TENNANT CREEK DISTRICT, NORTHERN TERRITORY, PICASSO PROSPECT.
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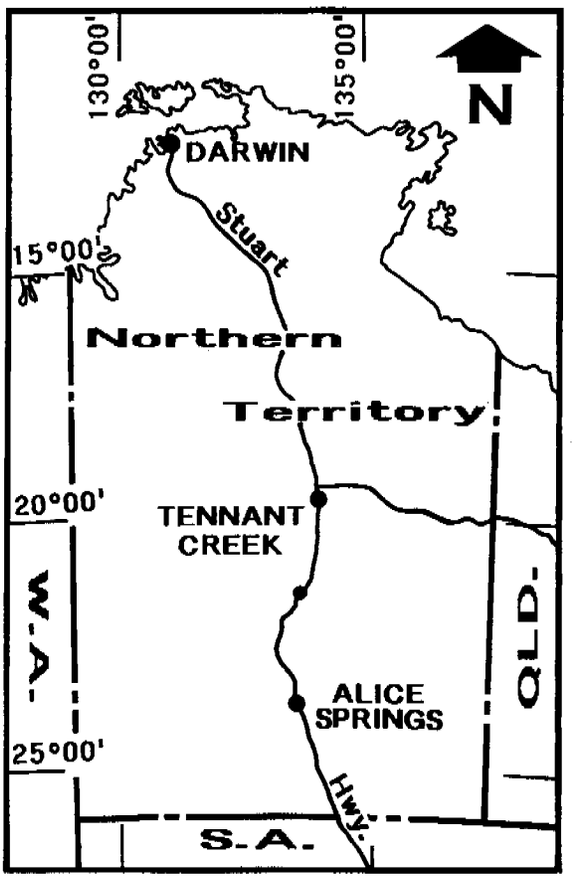

Exploration Licence Picasso (EL 9661) is located approximately 22 km NNW of Tennant Creek township. Access to the licence can be gained from tracks leading west from the Stuart Highway.

EL 9661 (Picasso) was granted to Normandy Gold Pty Limited (Normandy) on the 23 October 1996 for a period of six years. The tenement comprises two blocks. Normandy lodged a request for a deferral of reduction at the end of the second and third year of tenure.

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1 INTRODUCTION

This report details the work conducted by Normandy on EL 9661 from 23/10/1996 to 29/12/2001.

2 LOCATION & ACCESS

Exploration Licence 9661 Picasso is located approximately 22 km NNW of Tennant Creek township (Figure 1).

Access to the licence can be gained from tracks leading west from the Stuart Highway. The climate of the Tennant Creek district is mild and dry through most of the autumn to spring months. The summer period is hot with seasonal heavy rainfall between January and March making access very difficult during these periods.

3 TENURE

Exploration Licence 9661 was granted to Normandy on 23 October 1996 for a period of six years. The tenement comprises of two blocks. Normandy lodged a request for a deferral of reduction at the end of the second and third year of tenure.

4 REGIONAL GEOLOGY

The geological understanding of the Tennant Creek Inlier has been recently advanced by detailed geological mapping over the Tennant Creek and Flynn 1:100,000 map sheets (Donnellan, 1995), precision dating of stratigraphic components of the region (Compston, 1995) and regional geophysical interpretations.

The oldest exposed Proterozoic lithofacies in the Tennant Creek Inlier are the metasedimentary rocks of the Warramunga Formation, which are the hosts to the ironstone Au-Cu-Bi mineralisation of the Tennant Creek Goldfield. These Palaeoproterozoic metasediments were deposited approximately 1860 Ma. Deformation and intrusion of the Warramunga Formation by volumous porphyries and granitoids occurred during the Barramundi Orogeny (1858 Ma to 1845 Ma).

Following deformation and uplift the volcanics and volcaniclastics of the Flynn Sub-Group were erupted (1845 Ma to 1827 Ma), with intrusion of porphyries and minor granitoids into the Warramunga Formation. An additional deformation event preceded the deposition of the Hatches Creek Group/Tomkinson Creek Sub-Group (1820 Ma to 1785 Ma) and the intrusion of late-stage granitoids and porphyries into both the Warramunga Formation and Flynn Sub-Group at 1650-1712 Ma.

5 LOCAL GEOLOGY

The licence includes an outcropping magnetite/hematite ironstone, several large quartz outcrops and minor outcrops of red/brown oxidised siltstone, thought to be chloritically altered units of the Warramunga Formation.

The licence is located within a mineralised corridor which includes the Gecko Mine, and a series of uneconomic deposits of copper and/or gold found trending south east from there through the Horner Zone, Bishops Creek and TC35. This overall southeast trend

is intersected by a crosscutting structure oriented at 065° magnetic, defined on regional aeromagnetic data.

Peripheral outcropping lithologies include Flynn Subgroup Bernborough Formation sediments and quartz veining associated with the Tennant Creek Granite Complex to the south (Ward, 1997).

6 WORK CARRIED OUT FROM 23/10/1996 TO 29/12/2001

Historical exploration on the area subjected to this exploration licence is described in Mouchet (1998).

Work completed by Normandy during the first year of tenure included a regional aeromagnetic interpretation, a regional gravity interpretation and a rock chip sampling program. A total of 21 rock chip samples were taken, best results were 235ppb Au, 87 ppm Cu, 66ppm Bi. All results are presented in Ward (1997).

A reassessment of the prospectivity of EL9661 was carried out over the second year of tenure with the most important aspect being the location of results for two old Explorer 85 GeoPeko drill holes. The drillhole data added corroborative evidence to the rock chips taken the previous year (Ward 1997) that indicated the ironstones on EL9661 have Au mineralisation. The use of upward continuance of 250m highlighted the large relative size of the dominant magnetic anomaly on the licence, and indicates the possibility of large but deep (>350m) mineralised ironstones.

An AAPA sacred site clearance was expedited, with the project geologist responsible accompanying the AAPA anthropologist and the designated tribal elder on an extensive reconnaissance of the entire licence, including significant quartz and ironstone outcrops, on 1 September 1998. Clearance has been given for exploration activities up to and including diamond drilling.

Kevron flew a high resolution 100 line km aeromagnetic survey in October 1998 covering Picasso, EL 9661 (Figure 2). The survey was flown on north south lines at 40m height with 100m spacing. Digital data is attached in Appendix 1.

Limited rock chipping (4 samples) and field mapping were completed over outcrop areas of EL 9661, excluding the previously rock chipped Explorer 85 ironstone (Figure 3). The main sampling areas were sediment outcrops with moderate to strong chlorite alteration in the northern part of the tenement, and one area of ironstone lag was sampled. Magnetic susceptibility of 0.1 SI units was indicated from ironstone lag collected at the site.

Results from the rock chipping carried out in December had peak values of 15ppb Au and 91ppm Bi. These values were recorded from the hematite ironstone lag located over a magnetic anomaly (Trinity Prospect) located in the far north west of the lease. The anomalous Au and Bi results support peak rock chip values of 235ppb Au and 66ppm Bi from rock chipping in the same area completed in 1996. Digital data of the rock chip sampling program is presented in Appendix 1.

Geological and geophysical data for the EL 9661 was compiled. The data from the high resolution aeromagnetic survey was used to refine magnetic modeling over the Trinity magnetic anomaly with a possible large ironstone at 200m depth. Modeling of the main anomaly striking east-west through the center of the tenement indicated >300m depth to the source or a wide disseminated magnetic source.

7 EXPENDITURE STATEMENT FOR THE PERIOD 23/10/1996 TO 29/12/2001

From 23/10/1996 to 29/12/2001, EL 9661 incurred an exploration expenditure of $57,231. A breakdown of this expenditure follows (Table 1):

Table 1: Exploration Expenditure for EL 9661 from 23/10/1996 to 29/12/2001

EXPENSE	COST
Employee Costs	$ 30,811
Overheads	$ 5,291
Drilling	$ 0
Assays	$ 263
Operating Costs	$ 3,742
Specialist Services	$ 13,317
Tenement Management Costs	$ 230
Research	$ 3,577
TOTAL	**$ 57,231**

The Tenement Rental Costs incurred were $380; Normandy total expenditure on EL 9661 is $57,611.

8 ENVIRONMENTAL / REHABILITATION REPORT

Normandy commenced an active rehabilitation program over much of the Tennant Creek field. This commitment was reinforced within the Normandy Group with the appointment of a Group Environmental Engineer to oversee and implement the Group's guidelines and objectives. In addition to this, an Environmental Superintendent was engaged at Tennant Creek to design and implement the Group's objectives throughout the Tennant Creek area.

The Group's commitment to environmental issues include several active rehabilitation programs that were undertaken in the Tennant Creek field. These include programs at Nobles Nob, Eldorado, Orlando, White Devil, Gecko and Warrego.

Environmental Management Plans for the Company's Tennant Creek Operations (Fowler, 1993; Fowler et al., 1998) have been submitted to the Department of Mines and Energy under separate cover. These plans detail the strategies to be implemented over various areas following completion of exploration programs and mining operations.

Environmental rehabilitation has been completed over EL 9661 and all rubbish removed. All historical drill holes have been capped and sites rehabilitated.

9 REFERENCES

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Ward, B (1997): *First Annual Report for Exploration Licence 9661 for the Period 8/12/96 to 7/12/97, Tennant Creek District, Northern Territory, Picasso Prospect.* Normandy Gold Pty Limited, Report to the NTDME 97161.

APPENDIX ONE

DIGITAL DATA FOR ROCK CHIP SAMPLING AND AEROMAGNETIC SURVEY

APPENDIX TWO

BIBLIOGRAPHIC DATA SHEET

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PROSPECT NAMES:	PICASSO
TENEMENT NUMBERS:	EL 9661
OWNER/JV PARTNERS:	NORMANDY TENNANT CREEK PTY LTD
AGREEMENT:	
COMMODITIES:	GOLD, COPPER
TECTONIC UNITS:	TENNANT CREEK INLIER
STRATIGRAPHIC UNITS:	WARRAMUNGA FORMATION BERNBOROUGH FORMATION TENNANT CREEK GRANITE
1:250,000 MAP SHEET:	TENNANT CREEK SE53-14
1:100,000 MAP SHEET:	FLYNN 5759
KEYWORDS:	EXPLORATION REVIEW, AEROMAGNETIC SURVEY, GEOPHYSICS, EXPLORATION PROPOSAL