

**ANNUAL REPORT FOR SUBSTITUTE EXPLORATION LICENCE 8748 FOR THE  
PERIOD 29/8/1999 TO 28/8/2000**

**1 CONCLUSIONS & RECOMMENDATIONS**

The Vivid prospect, which is covered by SEL 8748 was extensively explored by Newmont Australia Ltd as part of SEL 5066, between 1987 and 1991 this area. RC and diamond drilling defined a significant ironstone and associated Au mineralisation (best intersections of 10m @8.9g/t Au and 8m @4.8g/t Au). The ironstone remains open towards the surface. Normandy also carried out a TDEM survey over the prospect. A surface conductor paired with a resistor at depth, similar to the pattern observed over Northern Star and Gecko Anomaly 3, was revealed by this survey, and remains untested.

Also of interest are the two western most remaining graticular blocks. In this area Warramunga sediments outcrop, and there are numerous magnetic anomalies. The magnetic signature has previously been attributed entirely to dolerite dykes. However the magnetic fabric of the area is more reminiscent of ironstone/dolerite dyke complexes such as the Gecko Anomaly 3 & 4 area, rather than the mafic dyke dominated terrain defined on the previously surrendered areas of SEL 8748 further to the west. The area has been insufficiently drilled to resolve the issue either way.

A renewal has been applied for renewal on 26 May 2000 for two years to facilitate new exploration and any potential sale of the tenement.

**2 INTRODUCTION**

This annual report details exploration undertaken on SEL 8748 during the period 29/8/1999 TO 28/8/2000.

**3 LOCATION & ACCESS**

Substitute Exploration Licence 8748 is located approximately 30 km NNW of Tennant Creek and approximately six kilometres NE of the Gecko Mine (Figure 1). Access to the licence is via a dirt road between the Gecko and the Northern Star Mines, which traverses N-S through the central part of the licence. From this road, several station tracks lead to most of the licence area.

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.

**4 TENURE**

In 1994 an application for SEL 8748, which comprised of Exploration Licences 7451, 7526, 7609, 7766, 7898, 8086, 8234 and 8391, was lodged with the Department of Mines and Energy. Substitute Exploration Licence 8748 consisted of 64 graticular blocks and was granted to Normandy Gold Pty Limited on 29 August 1994 for a period of four years.

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SEL 8748 was partially reduced to 48 graticular blocks on 25 July 1995 in accordance with Section 28 of the Mining Act. SEL 8748 was further reduced to 24 graticular blocks on 30 July 1996 and to twelve graticular blocks on 21 July 1997 in accordance with Section 26 of the Mining Act.

Within SEL 8748, Normandy Gold Pty Limited hold MCC 155 to 161 (SR 606/607) which occur in the southeastern portion of the licence and MCCs 1249 to 1252 in the central eastern portion of the licence.

A renewal was submitted on the 29 April 1998 and on the 15 December 1998, SEL 8748 was renewed for a further two years, expiring on the 28 August 2000. Only three graticular blocks have been retained.

A renewal has been applied for renewal on 26 May 2000 for two years to facilitate new exploration and any potential sale of the tenement.

## **5 LOCAL GEOLOGY**

Within the boundaries of SEL 8748, a broad stratigraphic section is exposed through the central part of the Warramunga Group and the Flynn Sub-Group with the Tomkinson Creek Beds exposed to the west. Variably hematized sandstones, siltstones and shale represent the Warramunga Group sediments, which cover the eastern portion of the licence. The boundary between the Flynn Sub-Group and the Warramunga Group is difficult to locate in the field, but is interpreted to form a NE-SW contact through the central section of the licence.

The Flynn Subgroup rocks outcrop in the western and northwestern areas of the tenement, forming ridges and hills of low to moderate relief. These rocks dominantly comprise massive sandstone with weak discernible bedding, and minor cleaved siltstones and shales. Rare northeast trending late stage quartz veins outcrop throughout the tenement.

The most northern blocks of the tenement cover east-west trending dolerite sills, which intrude the sediments of the Flynn Subgroup. Felsic porphyries and volcanics of the Bernborough Formation are exposed on the eastern side of the tenement. In the SE corner of the SEL this formation's lower boundary with the greywackes of the Carraman Formation trends N-S adjacent to the Bernborough Prospect. Further to the west the Carraman Formation includes a sequence of haematitic shales, greywackes, siltstones and ironstones. This sequence is overlain by turbidities of the upper Carraman Formation in the area west of the Gecko Mine. In much of the central and western parts of the licence area the Proterozoic geology is obscured by alluvial and aeolian sand.

A broad open NNW plunging syncline related to the warping of the overlying Tomkinson Creek Beds dominates the licence area. The sequence is cut by axial planar and N-S trending shear zones and NW trending faults related to the Quartz Hill Fault deformation event.

## 6 PREVIOUS WORK

An extensive review of previous work carried out on SEL 8748 is presented in the annual report by Mouchet (1998) and the relinquishment report by West (1999).

The remaining three blocks of SEL 8748 contain parts of former EL 7609 and EL 7451.

All data generated by Normandy on EL 7451 (Vivid Prospect) is detailed in Lowe (1992, 1993a) and Hunter (1994). All data generated by Normandy on EL 7609 (Toms Thumb Prospect) is also detailed in Lindsay-Park & Lowe (1993), Hunter (1994b, 1994e) and Mujdrica (1994a).

No on-ground exploration was undertaken on SEL 8748 during 1988 and 1999.

## 7 WORK CARRIED OUT DURING 29/8/1999 TO 28/8/2000

A review of Austirex and Aerodata regional airborne magnetic surveys was processed and merged to provide contour and image processed plans at 1:50,000 scale (West, 1999). Results of this review indicate that the blocks of SEL 8748 retained are prospective for ironstone related gold deposits (West and Mouchet, 1998). A review of the Vivid prospect and modelling of magnetic anomalies in the western blocks was also completed.

No on-ground exploration was carried out on SEL 8748 in 1999/2000 as the majority of the work was spent rehabilitating the White Devil and Gecko mines and other exploration sites. With the above mines now closed, exploration will revert back to finding new mines.

## 8 EXPENDITURE STATEMENT FOR THE PERIOD 29/8/1999 TO 28/8/2000

During the reporting period, SEL 8748 incurred an expenditure of \$5,747. A breakdown of this expenditure follows (Table 1):

Table 2: Exploration Expenditure for the SEL 8748 for the period 29/8/1999 to 28/8/2000

EXPENSE	COST
Employee Costs	\$ 1,641
Overheads	\$ 394
Drilling	\$ 0
Assays	\$ 0
Operating Costs	\$ 1872
Specialist Services	\$ 1840
Tenement Costs	\$ 50
Research	\$ 0
<b>TOTAL</b>	<b>\$ 5,747</b>

As the commitment of \$34,600 was not met a variation of covenant will be lodged within 3 weeks.

## 9 RECOMMENDED WORK PROGRAM & PROPOSED EXPENDITURE FOR THE PERIOD 29/8/2001 TO 28/8/2001

Exploration will comprise of target generation using the available Vivid drilling and magnetics data followed by drilling of the generated targets, most likely the near-surface extensions of the mineralised ironstone.

Exploration will then comprise of further drilling at Vivid prospect and evaluation of data. If the prospectivity of SEL 8748 is determine to be low, this tenement would be relinquished. If further significant mineralisation is defined at Vivid prospect then an MLC will be applied for.

The proposed exploration expenditure for SEL 8748 is as follows (Table 2):

Table 3: Proposed Exploration Expenditure for SEL 8748.

EXPENSE	COST
Employee Costs	\$ 4,000
Overheads	\$ 400
Drilling	\$ 15,000
Assays	\$ 2,000
Operating Costs	\$ 3,000
Specialist Services	\$ 500
Tenement Costs	\$ 1,000
Rehabilitation	\$ 0
<b>TOTAL</b>	<b>\$ 25,900</b>

## 10 REFERENCES

- Hunter, T (1994a): *Final Report for Exploration Licence 7451 for the period 12/8/91 to 28/8/94, Tennant Creek District, Northern Territory*. Report to the NTDM 94013. PosGold Limited.
- Hunter, T (1994b): *Annual Report for EL 7609 for the Period 28/2/93 to 24/2/94, Toms Thumb Prospect, Volume 1 of 1*. Report to the NTDM 94038. PosGold Limited.
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- Mujdrlica, S (1994a): *Final Report for Exploration Licence 7609 for the period 28/2/92 to 29/8/94, Toms Thumb, Volume 1 of 1*. Report to the NTDME 94115. PosGold Limited.
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