ANNUAL REPORT FOR
MCCs 115-116 AND
MLCs 656 TO 663
FOR THE YEAR ENDING 25 DECEMBER 1999

WHITE DEVIL SMELTER LEASES
WHITE DEVIL REPORTING GROUP
TENNANT CREEK MAP 1:250,000 SHEET SE53-14

VOLUME 1 OF 1

AUTHOR:
V ORTON
TENEMENT MANAGEMENT GEOLOGIST

DATE:
JANUARY 2000

AUTHORIZED BY:
B CLIFFORD
SENIOR GEOLOGIST

DISTRIBUTION:
☐ NT DEPARTMENT OF MINES AND ENERGY
   - TENNANT CREEK/DARWIN OFFICE
☐ NORMANDY TENNANT CREEK PTY LIMITED
   - TENNANT CREEK OFFICE
☐ NORMANDY EXPLORATION LIMITED
   - KENT TOWN LIBRARY

OPEN FILE

The contents of this report remain the property of Normandy Tennant Creek Pty Limited and may not be published in whole or in
part nor used in a company prospectus without the written consent of the Company.

Tennant Creek Library No: 20003
Kent Town Library No: 25862

F:\MS Office\dmr\2000\20003.doc
This annual report details work undertaken on the White Devil Smelter Leases (MCCs 115-416 and MLCs 656 to 663) for the year ending 25 December 1998.

The claims and leases are located approximately 40 km west of Tennant Creek township. Access is via the sealed Warrego Road and then along the graded White Devil Mine road and bush tracks. MCCs 115-116 and MLCs 656-663 are located in the vicinity of the old Peko smelter along Warrego Road.

Work completed during the reporting period included remodeling of the 1998 helimagnetics.
CONTENTS

1 CONCLUSIONS & RECOMMENDATIONS 1
2 INTRODUCTION 1
3 LOCATION & ACCESS 1
4 TENURE 1
5 REGIONAL GEOLOGY 2
6 LOCAL GEOLOGY 2
7 PREVIOUS WORK 2
8 WORK CARRIED OUT DURING THE REPORTING PERIOD 3
9 EXPENDITURE STATEMENT FOR THE PERIOD 26/12/1999 TO 25/12/1999 3
10 RECOMMENDED WORK PROGRAM & PROPOSED EXPENDITURE FOR THE PERIOD 26/12/1999 TO 25/12/2000 4
11 ENVIRONMENTAL / REHABILITATION REPORT 4
12 REFERENCES 5

LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure No</th>
<th>Title</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MCCs 115-116 and MLCs 656 to 663, Location Plan</td>
<td>1:100,000</td>
</tr>
</tbody>
</table>

LIST OF TABLES

<table>
<thead>
<tr>
<th>Table No</th>
<th>Title</th>
<th>Page No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tenure Summary for the White Devil Smelter Leases.</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Exploration Expenditure for the White Devil Smelter Leases Group for the period 26/12/1998 to 25/12/1999.</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Proposed Exploration Expenditure for MCCs 115-116 and MLCs 656 to 663</td>
<td>4</td>
</tr>
</tbody>
</table>

LIST OF APPENDICES

<table>
<thead>
<tr>
<th>Appendix No</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bibliographic Data Sheet</td>
</tr>
</tbody>
</table>
1 CONCLUSIONS & RECOMMENDATIONS

Further analysis of the helicopter borne magnetic survey has not delineated any more targets. Work on the ground would be mainly rehabilitation of the tenements for the year 2000.

2 INTRODUCTION

This report details exploration undertaken on MCCs 115-116 and MLCs 656-663 forming the Smelter Leases of the White Devil Leases reporting group for the year ending 25 December 1999.

3 LOCATION & ACCESS

The claims and leases are located approximately 40 km west of Tennant Creek township (Figure 1). Access is gained via the sealed Warrego Road and then along the graded White Devil Mine road and bush tracks. MCCs 115-116 and MLCs 656-663 are located in the vicinity of the old smelter along Warrego Road.

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.

4 TENURE

The White Devil Smelter Leases Group are formed by the following claims and leases MCCs 115-116 and MLCs 656 to 663.

A tenure summary for these claims and leases is presented in Table 1 below.

Table 1: Tenure Summary for the White Devil Leases.

<table>
<thead>
<tr>
<th>Title</th>
<th>Tenement Name</th>
<th>Area (ha)</th>
<th>Date Granted</th>
<th>Date Expires</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCC 115</td>
<td>Smelter</td>
<td>33.00</td>
<td>03/01/1984</td>
<td>31/12/2000</td>
</tr>
<tr>
<td>MCC 116</td>
<td>Smelter</td>
<td>33.00</td>
<td>03/01/1984</td>
<td>31/12/2000</td>
</tr>
<tr>
<td>MLC 656</td>
<td>Smelter 1</td>
<td>17.00</td>
<td>19/10/1970</td>
<td>31/12/2000</td>
</tr>
<tr>
<td>MLC 657</td>
<td>Smelter 2</td>
<td>17.00</td>
<td>19/10/1970</td>
<td>31/12/2000</td>
</tr>
<tr>
<td>MLC 658</td>
<td>Smelter 3</td>
<td>17.00</td>
<td>19/10/1970</td>
<td>31/12/2000</td>
</tr>
<tr>
<td>MLC 659</td>
<td>Smelter 4</td>
<td>17.00</td>
<td>19/10/1970</td>
<td>31/12/2000</td>
</tr>
<tr>
<td>MLC 660</td>
<td>Smelter 5</td>
<td>17.00</td>
<td>10/08/1971</td>
<td>31/12/2012</td>
</tr>
<tr>
<td>MLC 661</td>
<td>Smelter 6</td>
<td>17.00</td>
<td>10/08/1971</td>
<td>31/12/2012</td>
</tr>
<tr>
<td>MLC 662</td>
<td>Smelter 8</td>
<td>17.00</td>
<td>12/02/1974</td>
<td>31/12/2004</td>
</tr>
<tr>
<td>MLC 663</td>
<td>Smelter 7</td>
<td>17.00</td>
<td>12/06/1975</td>
<td>31/12/1995</td>
</tr>
</tbody>
</table>
Figure 1: Location Map
5 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 et. al. 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 voluminous 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.

6 LOCAL GEOLOGY

Mapping in the general Navigator fault area indicates the licence to be Warramunga Formation sediments intruded by late stage quartz-feldspar porphyries. Mineralisation is typically a mineralised ironstone with a quartz-porphyry hangingwall (Ward, 1997a). The leases have been renewed due to the presence of a small magnetic anomaly that is located on a NW trending structure along strike from the nearby Smelter prospect. A field inspection of MCCs 115-116 was carried out prior to their renewal to confirm the lack of outcrop in MCC 115 and accurately locate the lease boundaries with the differential GPS.

7 PREVIOUS WORK

Little exploration history has been recorded over these claims and leases.

MLCs 656-663 cover the disused Peko Smelter built in 1973. MLCs 660-661 was renewed in 1991 (Schusterbauer, 1991), MLC 662 in 1994 (Lowe, 1994) and MLC 663 in 1995 (Lowe, 1995). The smelter produced copper from the concentrate of ore from Warrego and Gecko between 1973 and 1975. Economic factors forced the closure of the smelter in 1975 and the plant was put on care and maintenance. It was recommissioned in 1980 following modifications but closed again in 1981. The smelter produced a total of 13,037 tonnes of blister copper containing 12,933 tonnes of copper and 29,276 ounces of gold (Lowe, 1995).

In 1990, Peko Wallsend Operations Limited made the decision to decommission the smelter and commence rehabilitation of the leases. Disposal of the plant equipment was undertaken through public auction in mid 1990. PosGold Limited (PosGold; formerly Poseidon) purchased the remaining infrastructure and equipment in June 1991. As part of PosGold’s rehabilitation program the smelter was disassembled in 1995. The prominent tower serves now as a communications antenna for the Warrego site facilities (Lowe, 1995). In 1998, Normandy commenced final rehabilitation of the Peko site.
MCCs 115-116 were renewed in 1993 (Hunter, 1993). Exploration undertaken during the period 13 May 1996 to 12 May 1997 on MCCs 115-116 (belonging to the former Warrego Reporting Group) is presented in Ward (1997b).

Normandy flew a regional helimagnetics survey of the White Devil Smelter Leases during January 1998 (Mouchet, 1999). The survey was completed by Normandy's in-house geophysics department on a 50m NS line spacing and with a 30m sensor height. The helimagnetic data over the Smelter prospect indicated that there was a magnetic body located 300m west of the known shallow ironstone body.

The western extension of the Smelter prospect ironstone was tested with a 348m RC hole during August 1998 from MLC 660. No ironstone was intersected. Best results were 558ppm Cu from 210m and 89ppm Bi from 342m.

SMDD-014 targeted the centre of the model and at a downhole depth of 423m intersected a thin Cu mineralised ironstone within 50m (true thickness) zone of strong shearing and chlorite-magnetite-sericite altered siltstone and sandstone. Best results are 3.3m @ 1.2% Cu 0.04g/t Au from 420.7m in chalcopyrite mineralised chlorite-magnetite ironstone. All drilling data was presented in Mouchet (1999).

8 WORK CARRIED OUT DURING THE REPORTING PERIOD

Further analysis of the helimagnetic data was performed in 1999 but no new targets were determined. The majority of exploration from May 1999 to December 1999 was on the Chariot prospect.

9 EXPENDITURE STATEMENT FOR THE PERIOD 26/12/1998 TO 25/12/1999

During the reporting period, MCCs 115-116 and MLCs 656 to 663 incurred an expenditure of $. A breakdown of this expenditure follows (Table 2):

Table 2: Exploration Expenditure for the White Devil Smelter Leases for the period 13/5/1998 to 25/12/1999

<table>
<thead>
<tr>
<th>EXPENSE</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Costs</td>
<td>$3,582</td>
</tr>
<tr>
<td>Overheads</td>
<td>$100</td>
</tr>
<tr>
<td>Drilling</td>
<td>$0</td>
</tr>
<tr>
<td>Assays</td>
<td>$824</td>
</tr>
<tr>
<td>Operating Costs</td>
<td>$1,167</td>
</tr>
<tr>
<td>Specialist Services</td>
<td>$0</td>
</tr>
<tr>
<td>Tenement Costs</td>
<td>$0</td>
</tr>
<tr>
<td>Research</td>
<td>$0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$5,673</strong></td>
</tr>
</tbody>
</table>

Tenement rental and renewal fees for the year to December 1999 is $2,020 and the Total Expenditure is $7,693.
RECOMMENDED WORK PROGRAM & PROPOSED EXPENDITURE FOR
THE PERIOD 26/12/1999 TO 25/12/2000

With the completion of mining at White Devil mine, most of the work to be carried out is in the rehabilitation of the site. The proposed exploration expenditure for MCCs 115-116 and MLCs 656 TO 663 is as follows (Table 3):

Table 3: Proposed Exploration Expenditure for MCCs 115-116 and MLCs 656 to 663.

<table>
<thead>
<tr>
<th>EXPENSE</th>
<th>COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Costs</td>
<td>$1,200</td>
</tr>
<tr>
<td>Overheads</td>
<td>$100</td>
</tr>
<tr>
<td>Drilling</td>
<td>$0</td>
</tr>
<tr>
<td>Assays</td>
<td>$0</td>
</tr>
<tr>
<td>Operating Costs</td>
<td>$1,000</td>
</tr>
<tr>
<td>Specialist Services</td>
<td>$0</td>
</tr>
<tr>
<td>Tenement Costs</td>
<td>$100</td>
</tr>
<tr>
<td>Rehabilitation</td>
<td>$2,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$4,400</strong></td>
</tr>
</tbody>
</table>

Tenement rental and renewal fees for the year to December 2000 is $2,020 and the Total Expenditure is $6,420.

10 ENVIRONMENTAL / REHABILITATION REPORT

Normandy has commenced an active rehabilitation program over much of the Tennant Creek field. This commitment has been 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 has been engaged at Tennant Creek to design and implement the Group's objectives throughout the Tennant Creek area.

The Group's commitment to environmental issues has initiated several active rehabilitation programs are currently being undertaken in the Tennant Creek field. These include programmes at Nobles Nob, Eldorado, White Devil, Gecko, Orlando 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.
REFERENCES


APPENDIX ONE

BIBLIOGRAPHIC DATA SHEET
BIBLIOGRAPHIC DATA SHEET

REPORT NUMBER: TENNANT CREEK: 20003 ADELAIDE: 25862

REPORT NAME: ANNUAL REPORT FOR MCCs 115-116 AND MLCs 656 TO 663 FOR THE YEAR ENDING 25 DECEMBER 1999, WHITE DEVIL SMELTER LEASES, WHITE DEVIL REPORTING GROUP, MAP SHEET NO 53-14 (TENNANT CREEK), VOLUME 1 OF 1.

PROSPECT NAMES: SMELTER

TENEMENT NUMBERS: MCCs 115-116 and MLCs 656 TO 663

OWNER/JV PARTNERS: NORMANDY TENNANT CREEK PTY LIMITED

AGREEMENT:

COMMODITIES: GOLD, COPPER

TECTONIC UNITS: TENNANT CREEK INLIER

STRATIGRAPHIC UNITS: WARRAMUNGA FORMATION

1:250,000 MAP SHEET: TENNANT CREEK SE53-14

1:100,000 MAP SHEET: SHORT RANGE 5659

KEYWORDS: EXPLORATION REVIEW, LITERATURE REVIEWS