REPORT EEE 93/12

FINAL REPORT

for

EL6400 AND EL6401

12 July 1989 to 11 July 1993

by

TG SHELDON BSc(Hons)

of

EUPENE EXPLORATION ENTERPRISES PTY LTD

for

BEN HALL

Helen Springs SE53-10
Brunchilly 5760

November 1993
Darwin NT
# TABLE OF CONTENTS

1. INTRODUCTION ........................................................................................................... 3

2. TENURE ....................................................................................................................... 4

3. PREVIOUS EXPLORATION ......................................................................................... 4

4. GEOLOGY ..................................................................................................................... 4

5. WORK CARRIED OUT
   5.1 Year One .................................................................................................................... 5
   5.2 Year Two
   5.3 Year Three
   5.4 Year Four

6. EXPENDITURE ............................................................................................................. 6

7. REFERENCES ................................................................................................................. 7
1. INTRODUCTION

Exploration Licences 6400 and 6401 are located approximately 950 kms south-southeast of Darwin on the Muckatty and Banka Banka Pastoral Leases (Figure 1). The exploration licences are accessed by the Stuart Highway and station tracks. The Muckatty Manganese deposits are located approximately 12 kms north-east of Banka Bank homestead.

The licences were granted to Mr Ben Hall in July 1989. Until July 1991 the licences were explored by Mr Hall. From July 1991 to July 1992 exploration was conducted by MIM Exploration Pty Ltd under a Joint Venture Agreement. This report discusses the work undertaken during the term of the licences which were relinquished on 11 July 1993.
2. **TENURE** (see Figure 1)

Exploration Licence 6400 was granted to Mr Ben Hall on 12 July 1989 for a period of six years and originally comprised an area of 477 square kilometres consisting of 148 blocks. At the completion of Year One, 49 blocks were voluntarily relinquished and at the end of Year Two a further 25 blocks were relinquished, leaving a total of 74 blocks (240 square kilometres). EL6400 is located within the southern portion of the Banka Banka Pastoral Lease.

Exploration Licence 6401 was granted to Mr Ben Hall on 12 July 1989 for a period of six years and originally covered an area of 1,169 square kilometres consisting of 363 blocks. At the completion of Year One, 76 blocks were voluntarily relinquished and at the end of Year Two a further 105 blocks were relinquished, leaving a total of 183 blocks (585 square kilometres). EL6401 is located on both Banka Banka and Muckatty Pastoral Leases.

As of 26th July 1991 the exploration licences became subject to the terms of a joint venture agreement between Mr Ben Hall and MIM Exploration Pty Ltd. The agreement was in the form of a staged option over two years with MIM Exploration being the operators.

After exploring the ELs during the third year MIM Exploration decided to withdraw from the joint venture. Muckatty station which covers much of EL6401 was purchased by Aboriginal interests in 1990 and is now under land claim.

3. **PREVIOUS EXPLORATION**

A summary of exploration conducted over EL6400 and EL6401 prior to 1989 is presented by Hickey (1990) and Butler (1991).

4. **GEOLOGY**

The geology of the licence areas is presented on the Helen Springs 1:250 000 scale geological map sheet (SE 53-10) published in 1969 by the Bureau of Mineral Resources. For further summaries the reader is referred to Hickey (1990), Butler (1991) and Simpson (1992).
5. WORK CARRIED OUT

5.1 Year One

Exploration in the first year of tenure aimed at evaluating the regional gold and base metal potential of the area and was conducted by Eupene Exploration Enterprises Pty Ltd on behalf of the tenement holder. A total of 65 BLEG stream sediment samples, 98 x -40 mesh stream sediment samples and 45 rock chip samples were collected. Some rock chip sampling was conducted in the vicinity of the Muckatty manganese deposits to confirm grades. For details, results and conclusions the reader is referred to Hickey (1990).

5.2 Year Two

During the second year of tenure work involved literature research, seeking a joint venture partner and prospecting in the vicinity of geochemically anomalous streams defined during Year One. The work resulted in a Joint Venture Agreement being signed between Ben Hall and MIM Exploration Pty Ltd. For details the reader is referred to Butler (1991).

5.3 Year Three

MIM Exploration Pty Ltd conducted an intense stream geochemistry programme targeting base metals during the third year of tenure. Initially 194 samples were collected and assayed for Cu, Pb, Zn, Ag, As, Fe, Mn and Au in three size fractions (-200 mesh, +200 to -80 mesh and +20 to -35 mesh). This work defined several Cu and Au anomalies which were followed up with a further 123 stream sediment samples being collected. Only the -200 mesh fraction was assayed. Full details are provided by Simpson (1992).

5.4 Year Four

No field exploration was conducted during the fourth year of tenure. Efforts were directed to finding a joint venture partner following the withdrawal of MIM Exploration Pty Ltd from the joint venture at the end of the third year of tenure.
6. EXPENDITURE

The expenditure for Year Four of tenure was:

- Joint Venture negotiations: $2320.00
- Report preparation: $396.00
- Administration (10%): 272.00

Total: $2998.00

The expenditure covenant for Year Four of tenure was $5000.

7. REFERENCES


