ANNUAL REPORT - EL 7341

24th May, 1991
to
23rd May, 1992

Submitted to: Department of Mines & Energy
Mineral House
Darwin

23/6/92

Ashton Mining Limited
Perth, Western Australia

June, 1992
# CONTENTS

<table>
<thead>
<tr>
<th>Summary</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>EXPLORATION PROGRAMME</td>
<td>2</td>
</tr>
<tr>
<td>a) Data Review</td>
<td>2</td>
</tr>
<tr>
<td>b) Field Programme</td>
<td>3</td>
</tr>
<tr>
<td>c) Base Metal Exploration</td>
<td>4</td>
</tr>
<tr>
<td>EXPLORATION EXPENDITURE</td>
<td>4</td>
</tr>
<tr>
<td>CONCLUSIONS AND RECOMMENDATIONS</td>
<td>4</td>
</tr>
<tr>
<td>PROPOSED PROGRAMME AND BUDGET</td>
<td>5</td>
</tr>
</tbody>
</table>

## FIGURES

1. Location of Exploration Licence 7341

## APPENDICES

1. Statement of Expenditure
SUMMARY

Ashton Mining Limited is exploring EL 7341 for diamond bearing kimberlitic intrusives. A joint venture with BHP Minerals has also been agreed upon for base metal exploration in the area. All available information over the area has been reviewed in preparation for a sampling programme which had to be abandoned when attempted in late 1991 due to wet conditions. It is recommended this be rescheduled for the next field season.
INTRODUCTION

Exploration licence 7341 was granted to Ashton Mining Limited on 24th May, 1991, for a period of 12 months. It covers an area of 1014km² and is located on the Mount Young and Roper River 1:250,000 map sheets (Figure 1).

As this tenement is situated in what is a recognised base metal province a joint venture was negotiated with BHP Minerals which will allow them to earn up to 80% of the base metal rights to EL 7341.

Ashton's primary target of exploration within the licence is diamond bearing kimberlitic intrusives.

EXPLORATION PROGRAMME

a) Data Review

Open file data were reviewed to determine the extent of, and results from, previous sampling programmes in the area.

A photogeological study of available photography covering the Mount Young and Bauhinia Downs 1:250,000 sheets by Dr R. Russell has selected structural and geomorphic features which could represent kimberlitic intrusives. Areas of low relief and poor drainages
ASHTON MINING LIMITED
A.D.E. JOINT VENTURE
FIGURE 1
LOCATION MAP
E.L. 7341

JUNE, 1992
including the Wave Hill Planation surface were also highlighted since these areas could contain preserved intrusives which have not shed significantly into the present drainages.

A prospectivity map of the area has been completed, which shows poorly drained areas, and low lying areas with transported overburden, and actively eroding areas. This has been merged with known chromite and microdiamond occurrences, all previous sampling and photo-features. From this data, poorly drained areas with previous inadequate sample coverage have been targeted for sampling.

Gravel sample locations were subsequently plotted over these areas on the Towns and Roper 1:100,000 sheets so that sites lie approximately 10km apart and are uniformly distributed in preparation for the sampling programme.

The Northern Territory Geological Survey (NTGS) aeromagnetic survey over the tenement was acquired. Non digital data for other surveys in the area is also on hand.

The NTGS aeromagnetic survey data has been processed and aeromagnetic anomalies assessed by R.K. Jones for possible follow-up. No significant targets were found in EL 7341.
b) **Field Programme**

A field inspection of EL 7341 was made in late 1991 as part of a regional reconnaissance sampling programme. Unfortunately, the streams in the area were found to be flooded, preventing satisfactory samples being collected and the sampling programme was abandoned.

Several days were spent in the licence area checking features highlighted in the air photograph study and aeromagnetic survey.

c) **Base Metal Exploration**

BHP Minerals are currently collating and reviewing all previous exploration on the tenement prior to undertaking field work.

**EXPLORATION EXPENDITURE**

The total exploration expenditure for this reporting period was $19,096. A detailed break down of costs is shown in Appendix I.

**CONCLUSIONS & RECOMMENDATIONS**

Extensive office based investigations have been made to assess the potential of EL 7341 for diamond bearing kimberlitic intrusives. Unfortunately the sampling programme planned for the area had to be abandoned due to wet conditions.
It is recommended that the planned work be undertaken in the next reporting period.

**PROPOSED PROGRAMME & BUDGET**

a) **Programme**

- Complete drainage sampling programme.
- Follow-up sampling (loam and/or drainage) to back track any apparent anomalies.
- An airborne EM survey to be flown over the area to identify possible base metal targets.
- Possible drilling to test selected EM targets.

b) **Budget**

It is envisaged that a budget of at least $15,000 will be required to complete this work.
APPENDIX I

STATEMENT OF EXPENDITURE
EL 7341

STATEMENT OF EXPENDITURE

For the Period
24th May, 1991 to 23rd May, 1992

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labour</td>
<td>5,260</td>
</tr>
<tr>
<td>Field Support</td>
<td>2,300</td>
</tr>
<tr>
<td>Air Charter</td>
<td>2,400</td>
</tr>
<tr>
<td>Vehicles</td>
<td>1,850</td>
</tr>
<tr>
<td>Analyses</td>
<td>-</td>
</tr>
<tr>
<td>Geophysics</td>
<td>3,800</td>
</tr>
<tr>
<td>Laboratory</td>
<td>-</td>
</tr>
<tr>
<td>Drafting</td>
<td>500</td>
</tr>
<tr>
<td>Photostudy</td>
<td>1,250</td>
</tr>
<tr>
<td>Overheads</td>
<td>1,736</td>
</tr>
</tbody>
</table>

**TOTAL:** $19,096