## FINAL REPORT

## EXPLORATION LICENCE 8908

"Leila Creek - Clark Creek"

19th August, 1996 to 18th August, 1998

Licensee:

Ashton Mining Limited

Operator:

Ashton Mining Limited

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Sheet Reference:

Submitted to:

1:250,000 Bauhinia Downs (SE53-03)

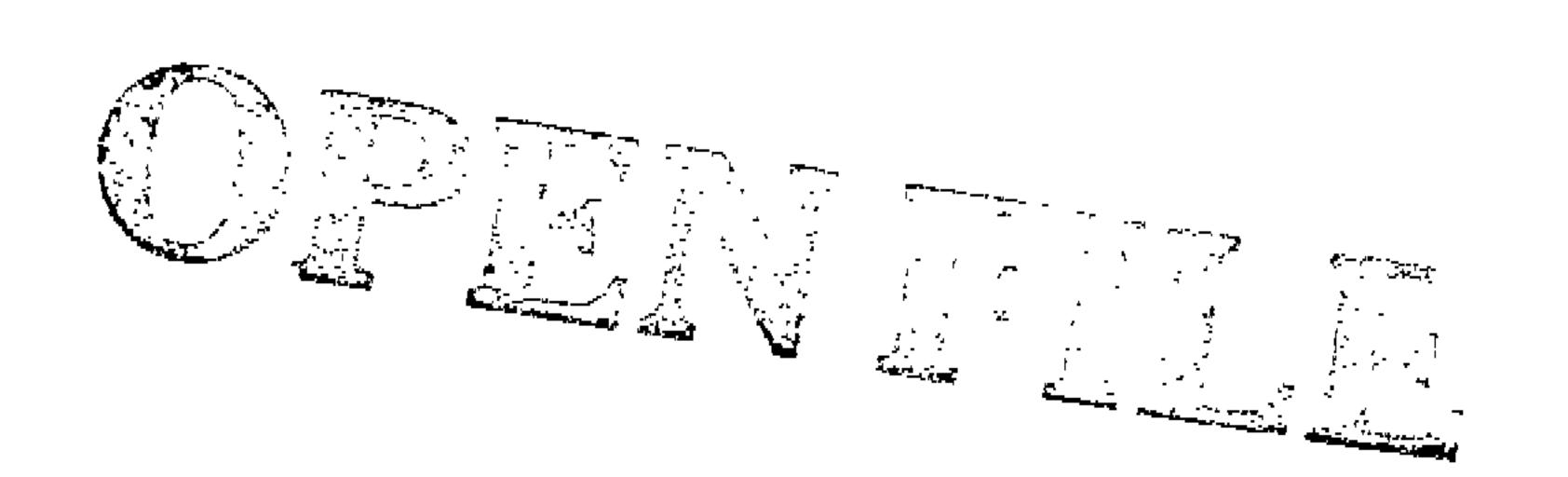
Submitted to:

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Author:

D. Pang
ASHTON MINING LIMITED
21 Wynyard Street
BELMONT WA 6104

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#### **SUMMARY**

During the period 19th August, 1996 to 18th August, 1998, Ashton Mining Limited, on behalf of the Australian Diamond Exploration Joint Venture (ADE JV), carried out an exploration programme over Exploration Licence 8908. This report provides details of work undertaken on the licence from the date of grant through to the surrender of the title in August 1998.

Following review of available data, reconnaissance stream and loam sampling was undertaken on EL 8908 during the first year of tenure. One loam and ten stream samples were collected and forwarded to Ashton's Perth laboratory for analysis. Processing of these samples returned negative results.

As part of Ashton's reconnaissance bulk sampling programme, a 50 tonne bulk sample was excavated from within the boundaries of EL 8908. This sample was processed through the HMS plant located at the Merlin project site. The concentrate was forwarded to Ashton's Perth laboratory for x-ray sorting and microdiamond observation. One macrodiamond was recovered.

Exploration expenditure for the term of the licence amounted to \$54,565.

#### 1.0 INTRODUCTION

This report details exploration activities carried out by Ashton Mining within EL 8908 for the period 19th August, 1996 to the 18<sup>th</sup> August, 1998. Ashton Mining Limited is manager of the licence on behalf of the Australian Diamond Exploration Joint Venture (ADEJV).

Exploration licence 8908 was granted to Ashton Mining Limited on the 19<sup>th</sup> August, 1996 for a period of 6 years. At the time of grant, EL 8908 covered an area of 31 blocks, but was reduced to 16 blocks in July 1998. The current tenement is located on the Bauhinia Downs (SE53-03) 1:250,000 map sheet and the Batten 1:100,000 map sheet. A location map showing the original and final extent of the licence is provided as Figure 1.

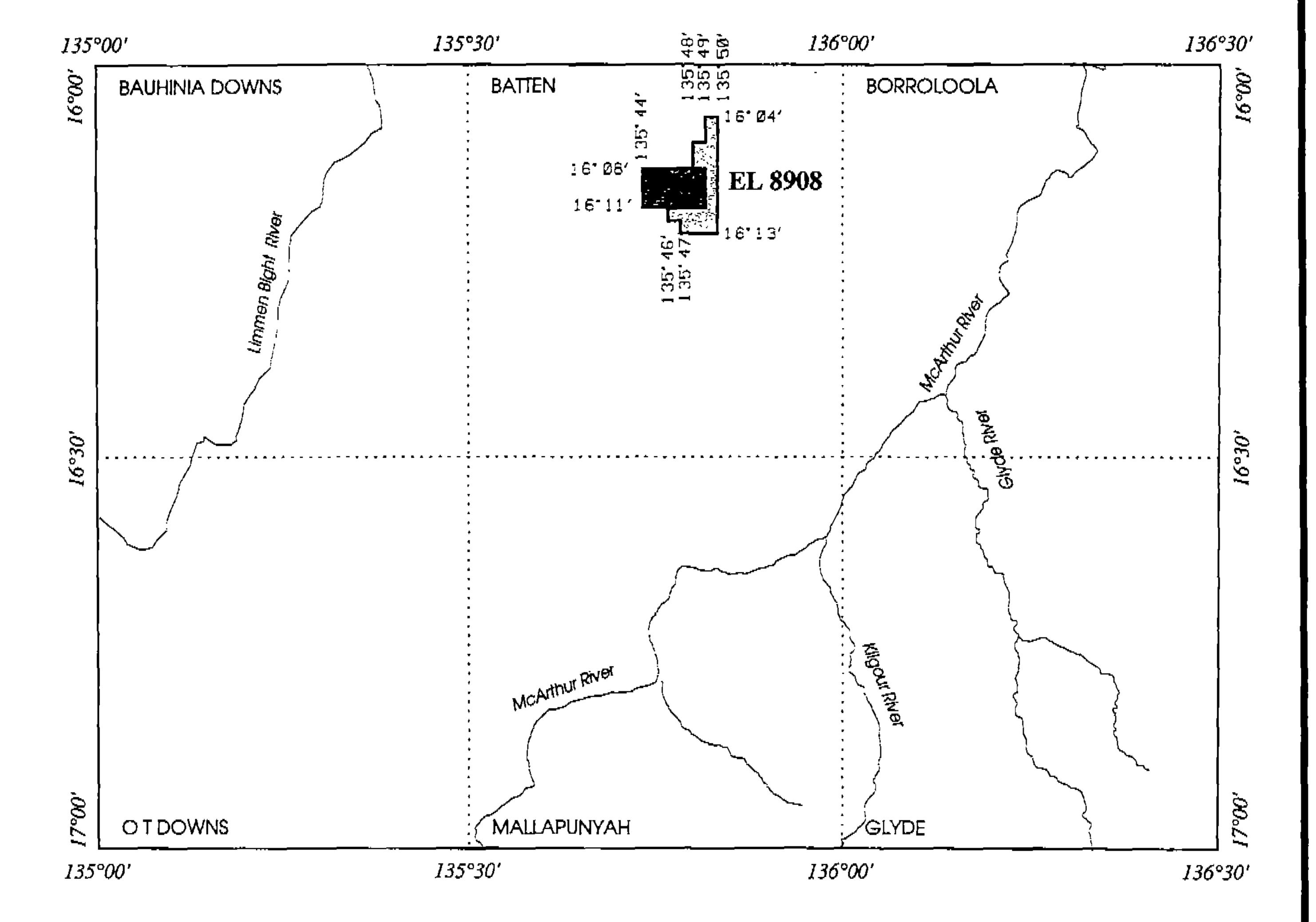
A statement of expenditure is included in this report.

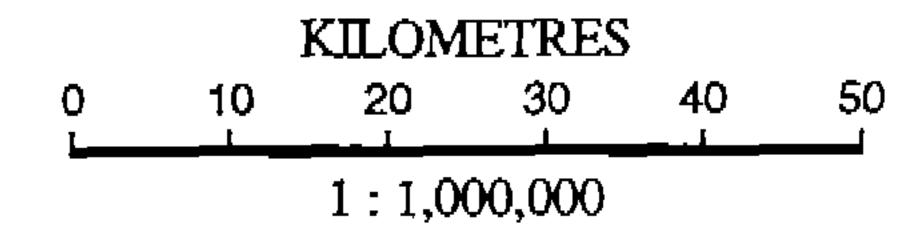
#### 2.0 DIAMOND EXPLORATION

## 2.1 Data Review

Prior to commencing field work, a comprehensive data review of results and previous exploration in the tenement area was undertaken. This highlighted areas that had not been adequately explored. Proposed sample locations were selected and plotted in the office on the Batten 1:100,000 map sheet.



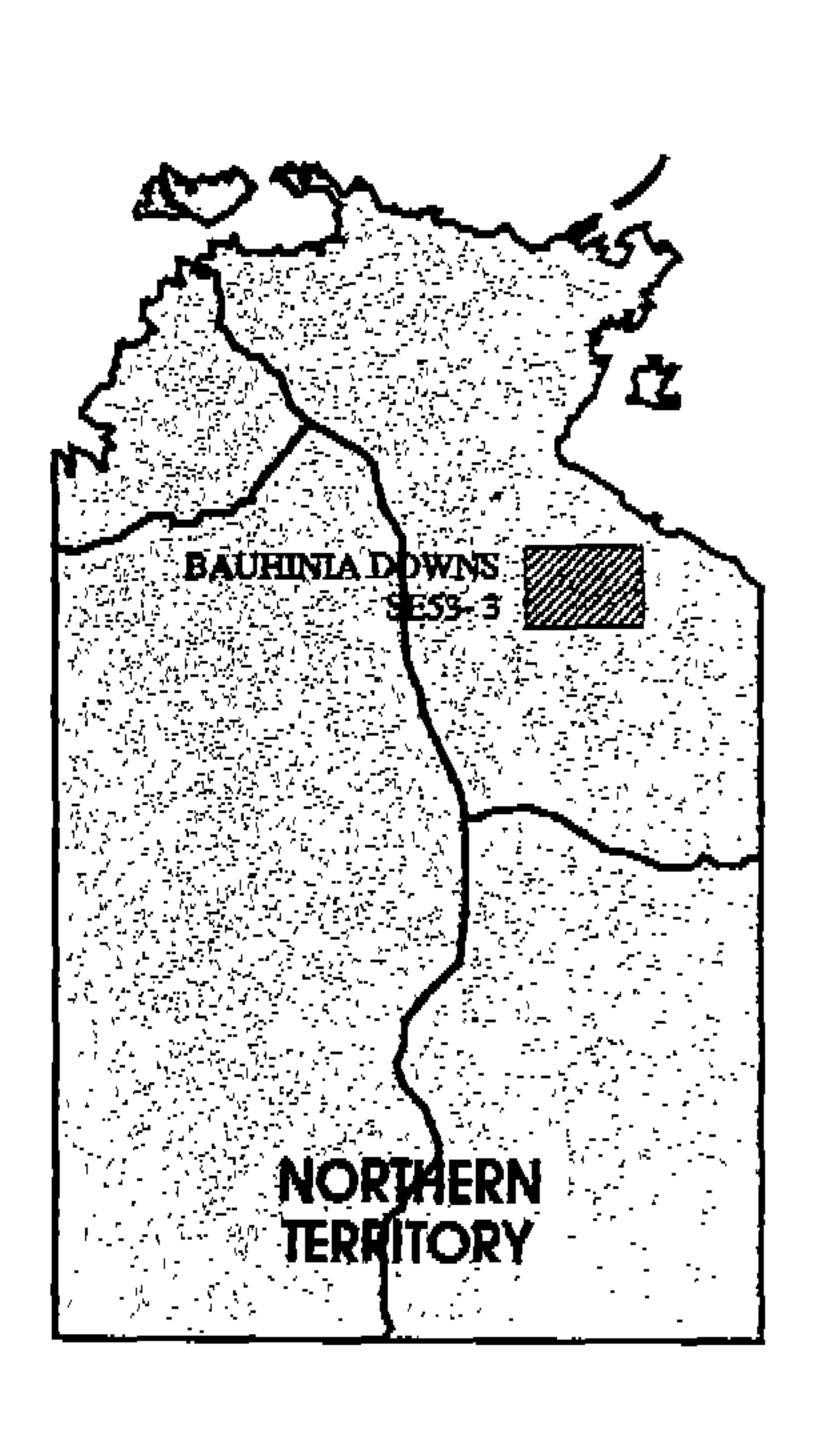






FINAL EXTENT OF LICENCE

ORIGINAL EXTENT OF LICENCE



ASHTON MINING LIMITED A.D.E. JOINT VENTURE

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FIGURE 1
LOCATION MAP

NOVEMBER, 1998

## 2.2 Sampling Programme

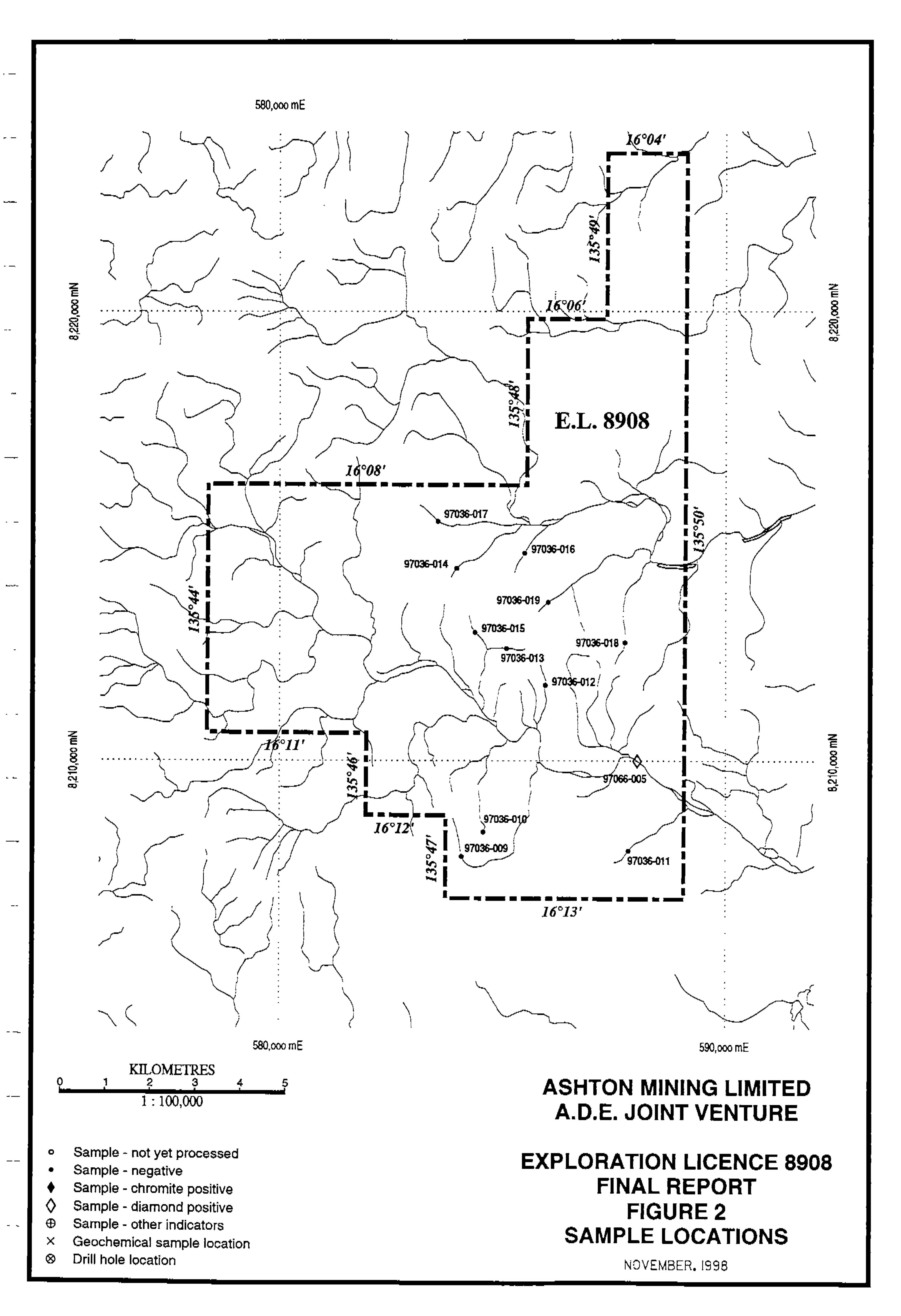
Following review of available data, a reconnaissance sampling programme was implemented within the boundaries of EL 8908. One loam and ten stream samples were collected for indicator and microdiamond analysis. All samples were forwarded to Ashton's Perth laboratory. Processing of samples was undertaken in the second year of tenure, with each sample reporting a negative result.

Sample locations are shown in Figure 2. A listing of final results is provided in Appendix 1.

## 2.3 Bulk Sampling

As part of a reconnaissance bulk sampling programme, a 50 tonne bulk sample was excavated from within EL 8908 during the reporting period. A substantial disturbance notice was submitted to the Department of Mines and Energy and sacred site locations checked prior to collection.

An access track, approximately 1km in length, was cleared by front end loader, to gain access to the bulk sample site. The collection of the bulk sample involved cutting into the river bank to allow access to the sample site. Gravel was removed from the gravel bar and screened, and the fine material trucked away for processing at Ashton's Heavy Media Separation plant, located at the Merlin project site. The oversized screenings were pushed back into the sample site and also used to rehabilitate the cut made in the river bank.



Following processing through the HMS plant, concentrate was forwarded to Ashton's Perth laboratory to undergo x-ray sorting and microdiamond analysis. One macrodiamond was recovered. The location of this sample is shown in Figure 2.

## 2.4 Sampling Method

Sampling was completed using helicopters as they are the most practical mode of transportation with the ease of access and navigation. The area was scanned for prospective trap sites, with the best quality, heavy mineral trap in the vicinity of the preselected site being chosen for sampling.

Once a suitable site was located, approximately 40kg of gravel was gathered, sieved and the minus 4mm fraction collected in calico bags for laboratory examination. This fraction generally weighs between 25 and 30kg and is usually contained within two bags. The bags were sent to Ashton's Perth laboratory for diamond and indicator analysis.

#### 2.5 Laboratory Procedure

The samples were processed by the Ashton Mining Limited Laboratory in Perth, where they were concentrated by Wilfley Table and heavy liquid separation techniques.

The heavy liquid used is tetrabromethane with a specific gravity of 2.96. The concentrates were then screened into various size fractions, further concentrated by magnetic and electrostatic separation techniques and a comprehensive grain by grain examination carried out on the minus 1.0mm plus 0.425mm fractions.

#### 3.0 EXPLORATION EXPENDITURE

Exploration expenditure for the life of the licence amounted to \$ 54,565. A detailed breakdown of final expenditure is given in Appendix 2.

#### 4.0 CONCLUSIONS AND RECOMMENDATIONS

The target of exploration within EL 8908 was diamond bearing kimberlitic intrusives. Results obtained from reconnaissance samples collected in the first year of tenure were discouraging with all samples reporting negative results. No follow-up work was required, and as a consequence, surrender of the title was recommended.

## 5.0 REFERENCES

Pang, D. (September 1997) Annual report, Exploration Licence 8908, "Leila Creek-Clark Creek" 19<sup>th</sup> August, 1996 to 18<sup>th</sup> August, 1997. Ashton Mining Limited. Report No. 52134.

APPENDIX 1

Sample Results

## Sample Results for EL 8908

Final Report for the period 19/08/96 to 18/08/98

	Diamond						
Sample	SampleType	Result	Micro	Macro	Chromite	Other	
				'			
97036-009	G	Negative	_	_	-	-	
97036-010	G	Negative	_	_	-	-	
97036-011	G	Negative	_	-	_	-	
97036-012	G	Negative	_	_	-	-	
97036-013	G	Negative	_	_	_	_	
97036-014	G	Negative	-	-	-	_	
97036-015	G	Negative	-	-	-	-	
97036-016	G	Negative	-	_	-	_	
97036-017	G	Negative	_	_	_	-	
97036-018	G	Negative	-	_	<u>-</u>	_	
97036-019	Ĺ	Negative	_	-	_	-	
97066-005	BG	Positive	_	1	_	-	

APPENDIX 2

Statement of Expenditure

## STATEMENT OF EXPENDITURE

## **EXPLORATION LICENCE 8908**

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# For the period 19th August, 1996 to 18th August, 1998

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Geoscientist/Professional Staff	6,110
Field Support/Office Staff	3,799
Other Contractors	3,869
Travel/Accommodation/Meals	4,809
Field Supplies	1,583
Equipment	7,444
Earthmoving Hire/Mobilisation	3,137
Vehicles	3,679
Freight/Storage	1,603
Helicopter Charter	5,200
HMS	3,841
Laboratory	3,799
Drafting/Computing	732
Sub-Total	49,605
Overheads	4,960
Total:	S 54,565