

FINAL REPORT 67. 272

27th March, 1981

to

4th February, 1982

**OPEN FILE**

Submitted to: Department of Mines & Energy,  
Minerals House,  
DARWIN.

Ashton Mining Limited,  
83-89 Eagle Street,  
BRISBANE. 4000

CR 82/158

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## SUMMARY

A regional gravel sampling program was undertaken in E.L. 2702 at a density of one sample per 9.79 square kilometres. A total of 42 gravel samples were collected and the heavy mineral fractions examined for kimberlitic indicator minerals.

None of the samples contained any kimberlite indicator minerals.

## INTRODUCTION

Exploration Licence 2702 was granted to Ashton Mining Limited on 27th March, 1981, for a period of twelve months. It covers an area of 411.25 square kilometres and is on the Auvergne 1:250,000 sheet.

The target of exploration was diamonds and the principal exploration technique employed was regional gravel sampling. This report summarizes the results of the regional gravel sampling program undertaken during the period 27th March, 1981 to 4th February, 1982, which is the date of surrender of the licence.

A statement of expenditure is presented in Appendix 2.

EXPLORATION PROGRAM

Prior to the commencement of field work, gravel sample locations were plotted in the office on the Auvergne 1:100,000 sheet so that sample sites tested the available drainage at intervals of approximately five kilometres.

During the field program, individual sample sites were selected on the basis of the quality of the available heavy mineral traps in the vicinity of the preselected site, care being taken to sample the most suitable trap site. Helicopter was the most practical mode of transport as it had the advantage of ease of access and navigation and enabled the geologist to scan the area for suitable trap sites.

Once a suitable sample site was located, approximately 40kg of gravel were gathered, sieved and the minus 4mm fraction collected for laboratory examination. Generally the minus 4mm samples weighed 25 - 30kg. The sample sites were accurately plotted in the field on a prepared 1:100,000 base plan. Within E.L. 2702, a total of 42 samples were collected corresponding to a sample density of one sample per 9.79 square kilometres. Sample locations are given in Plan 1.

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

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

Of the 42 samples collected within the licence, none were found to contain detectable kimberlite indicator minerals.

#### CONCLUSIONS

Laboratory testing failed to give any kimberlite-derived minerals in the samples. As the sampling program was considered to have tested the licence adequately, it was concluded that the likelihood of finding kimberlites in E.L. 2702 was remote and that no further exploration for diamonds should be undertaken. The licence was subsequently surrendered with effect from 5th February, 1982.

APPENDIX 1.

RESULTS OF LABORATORY EXAMINATIONS

REGIONAL GRAVEL SAMPLES

The following fractions of each sample were studied:

-1.0 mm +0.8 mm; denoted by +0.8  
-0.8 mm +0.5 mm; denoted by +0.5  
-0.5 mm +0.425 mm; denoted by +0.4

Sample No	Results	Comments
AUV 850	Nil	
AUV 851	Nil	
AUV 852	Nil	
AUV 853	Nil	
AUV 854	Nil	
AUV 855	Nil	
AUV 856	Nil	
AUV 857	Nil	
AUV 858	Nil	
AUV 859	Nil	
AUV 860	Nil	
AUV 861	Nil	

Sample No	Results	Comments
AUV 862	Nil	
AUV 863	Nil	
AUV 864	Nil	
AUV 865	Nil	
AUV 866	Nil	
AUV 867	Nil	
AUV 868	Nil	
AUV 869	Nil	
AUV 870	Nil	
AUV 871	Nil	
AUV 872	Nil	
AUV 873	Nil	
AUV 874	Nil	
AUV 875	Nil	
AUV 876	Nil	
AUV 877	Nil	
AUV 878	Nil	
AUV 879	Nil	
AUV 880	Nil	



Sample No	Results	Comments
AUV 881	Nil	
AUV 882	Nil	
AUV 883	Nil	
AUV 884	Nil	
AUV 885	Nil	
AUV 886	Nil	
AUV 887	Nil	
AUV 888	Nil	
AUV 889	Nil	
AUV 890	Nil	
AUV 891	Nil	

APPENDIX 2

ADE JOINT VENTURE

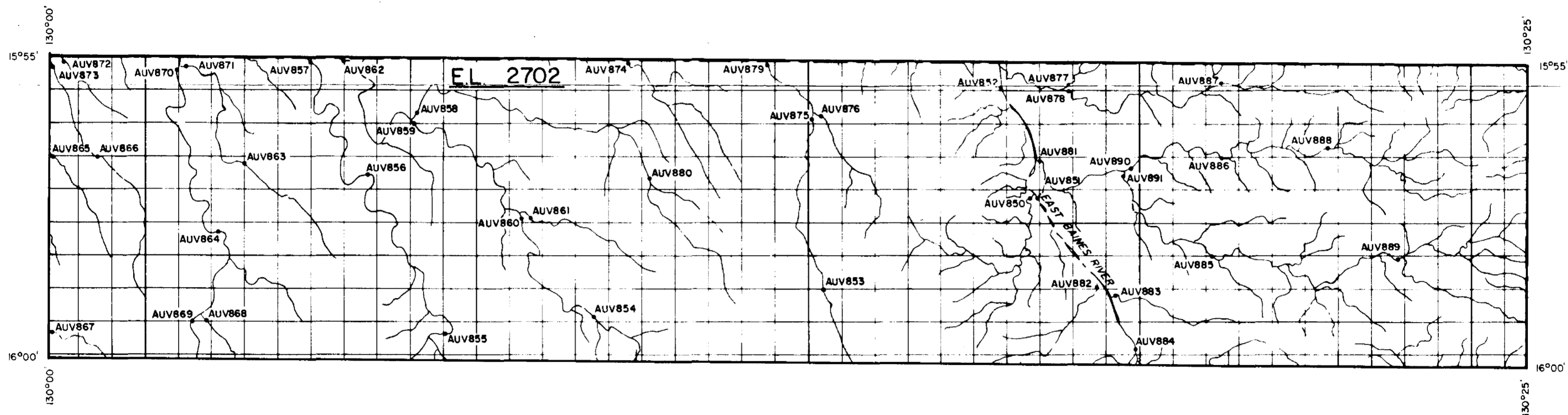
EXPLORATION LICENCE NO. 2702

FINAL EXPENDITURE for the Period 27th March 1981 - 4th February 1982

	\$	
Salaries		1,592
Field & Laboratory Expenses		9,618
Miscellaneous		<u>1,692</u>
Expenditure for year ended	\$	<u>12,902</u>

Date Licence Granted: 27th March 1981

JPC: 9/3/82



ASHTON MINING LIMITED
REGIONAL GRAVEL SAMPLING
EL. 2702 SAMPLE LOCATIONS PLAN 1
 SCALE 1:100 000
Date - FEBRUARY, 1982

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