

STOCKDALE PROSPECTING LIMITED

Incorporated in the State of Victoria

60 Wilson Street South Yarra Victoria 3141 Australia Telephone (03) 241 7522 Telex Stodal AA39546 Fax (03) 240 0974

Project Name:

EVA VALLEY BHP JV

Title:

STOCKDALE PROSPECTING LIMITED

**EXPLORATION LICENCE 4713** 

ANNUAL REPORT TO 15TH JANUARY, 1989

Edited:

J. JOYCE

Author/s:

P.D. WILSON

Approved:

J. JOYCE

Date:

FEBRUARY, 1989

Place:

DARWIN

1:250,000 Sheet Name/s & No/s.:

KATHERINE SD 53-9

Text Pages No.:

4

Map Nos.:

Table Nos.:

2 Appendices:

2 Plates:

Keywords:

NORTHERN TERRITORY, DIAMOND EXPLORATION, STREAM SEDIMENT SAMPLING,

KIMBERLITIC INDICATOR MINERALS, BULK SAMPLING

2

Abstract:

A bulk sample was collected from the Katherine River at a site that had previously yielded two diamonds. Follow-up stream samples were collected from tributaries of the Katherine River upstream of this site. Results of the bulk sample are awaited. The stream samples produced low numbers of chromites which are attributed to contamination through backwash from the Katherine River. Stream samples were also collected from Terence Creek which had been omitted in previous sampling. These samples produced low numbers of chromite which do not warrant

further work.

Copy to:

BHP, IC, DARWIN, NIDME

Ref:

EIP604.TXT

Circulate to:

STOCKDALE PROSPECTING LIMITED

**EXPLORATION LICENCE 4713** 

EVA VALLEY BHP JV

ANNUAL REPORT TO 15TH JANUARY, 1989

#### CONTENTS

#### SUMMARY

- 1. INTRODUCTION
- 2. LEGAL
- 3. JOINT VENTURE
- 4. ABORIGINAL LIAISON
- 5. SAMPLING
  - 5.1 Follow-up and Infill Sampling
  - 5.2 Bulk Sampling
- 6. RESULTS
  - 6.1 Follow-up and Infill Sampling
  - 6.2 Bulk Sampling
- 7. PERSONNEL
- 8. EXPENDITURE
- 9. FORWARD WORK PROGRAMME

#### TABLES

TABLE 1: Positive Results, EL 4713

TABLE 2: Expenditure Summary, EL 4713

#### <u>MAPS</u>

MAP 1 : EL 4713 Location Map

Scale 1:500,000

MAP 2 : EL 4713 Sample Location 1988 Field Season

Scale 1:100,000

## **APPENDICES**

APPENDIX 1: Aboriginal Liaison

APPENDIX 2: Approval to remove a bulk sample

## SUMMARY

EXPLORATION LICENCE:

4713

DATE GRANTED:

16/ 1/85

JV with BHP approved 2 October 1986

INITIAL AREA:

927 km<sup>2</sup> (294 blocks)

REDUCTION:

564 Km<sup>2</sup> (176 blocks)

CURRENT AREA:

 $316 \text{ km}^2$  (98 blocks) (Deferral of Reduction approved until 15/ 1/90)

OCCUPANT:

BHP

OPERATOR:

Stockdale Prospecting Limited

COMMODITIES SOUGHT:

Diamonds

#### STOCKDALE PROSPECTING LIMITED

#### **EXPLORATION LICENCE 4713**

#### EVA VALLEY BHP JV

#### ANNUAL REPORT TO 15TH JANUARY, 1989

#### 1. INTRODUCTION

Exploration Licence 4713 covers an area of  $564 \text{ km}^2$  centred 75 kilometres north-east of the town of Katherine on the Katherine 1:250,000 map sheet (SD 53-9).

Stockdale Prospecting Limited, jointly with BHP Minerals Limited, has in the past three years conducted a programme of diamond exploration over the area of Exploration Licence 4713 which has included both reconnaissance stream sampling for diamonds and indicator minerals, and bulk sampling for diamonds only.

This report covers work carried out in the year ended 15 January, 1989.

#### 2. LEGAL

Exploration Licence 4713 was granted to BHP Minerals Limited on 16 January 1985 for a term of six years.

Statutory reductions of the original 294 blocks (927 km²) were carried out on 17 March, 1987 and 16 January, 1988. The exploration licence presently occupies 98 blocks (316 km²).

A deferral of further reduction of Exploration Licence 4713 for one year (until 15 January, 1990) was approved by the Director of the Department of Mines and Energy on 28 December, 1988.

Exploration Licence 4714 which had in the past been reported on concurrently with Exploration Licence 4713 was relinquished on 15 January, 1989. A final report on this licence is in preparation.

#### JOINT VENTURE

Stockdale Prospecting Limited entered a joint venture agreement with BHP Minerals Limited covering the area of Exploration Licence 4713 on 2 October, 1986. Under the terms of the agreement Stockdale conducts all exploration for diamonds within this tenement.

#### 4. ABORIGINAL LIAISON

Exploration Licence 4713 lies within the Eva Valley and Waterhouse leaseholds which are subject to a land claim by the Jawoyn Aboriginal Tribe.

Stockdale obtained permission to carry out its 1988 exploration programme at a meeting with the Traditional Owners, the Jawoyn Association, at Eva Valley Station on 11 February 1988. A copy of the letter of approval is appended to this report.

#### 5. SAMPLING

#### 5.1 Follow-up and Infill Sampling

Follow-up samples were collected on seven small tributaries of the Katherine River immediately upstream of sample site V 4803. This site produced two small diamonds in previous sampling (see Annual Report for the period to 15 January 1988). A total of seven samples, each of 30kg of -1 + 0.3mm gravel, were collected, one from each tributary.

Infill sampling was also carried out on Terence Creek, a tributary of the Katherine River, which had been omitted in previous reconnaissance work. Four samples, each of 30kg of -1 + 0.3mm gravel, were collected from the creek and its tributaries.

In addition to the samples noted above, a repeat of an original reconnaissance sample was collected from a small tributary of the Katherine River near the confluence with Snake Creek. The original sample was lost in the Darwin Treatment Plant.

Sample locations are given on Map 2.

#### 5.2 Bulk Sampling

In order to recover more diamonds from the Katherine River the V 4803 stream sample site, which produced two diamonds previously, was selected for bulk sampling.

Permission to upgrade and extend existing access tracks and to remove a bulk sample from the bed of the river was received from the Director of Geology, Department of Mines and Energy, on 18 October, 1988 (Appendix 2).

A 28 kilometre track from Eva Valley airstrip to the Katherine River, opposite Mt Harvey, thence south to Ironbark Creek was upgraded to one blade width, and extended a further 2.5 kilometres south to the bulk sample site.

Excavation of the bulk sample began in late October and was completed in early November. Approximately 300 cubic metres of gravel were excavated from a boulder jumble in the bed of the river down to bedrock. The gravel was screened on-site to produce 55 tonnes of -4+0.5mm sample which was transported to the Darwin Treatment Plant.

#### 6. RESULTS

# 6.1 Follow-up and Infill Samples

Three of the seven follow-up samples collected on tributaries of the Katherine River upstream of sample V 4803 produced chromites. However, their proximity to the Katherine and the low numbers recovered suggest contamination through backwash from the river.

From the four samples collected on Terence Creek two singleton chromites were recovered. While these grains could not be the result of contamination from the Katherine River, their low number does not warrant further attention.

The repeat of the sample lost at the Darwin Treatment Plant was negative for diamonds and indicator minerals. The samples from which indicator minerals were recovered are listed in Table 1 below:

#### TABLE 1 : POSITIVE RESILTS

#### 区 4713

SAMPLE NO.	RESULT
BC 2152 BC 2154 BC 2155 BC 2191 BC 2192	7 chromites 13 chromites 1 chromite 1 chromite 1 chromite

#### 6.2 Bulk Sample

At the date of this report approximately 10 of the 55 tonnes of the bulk sample from the Katherine River had been treated. No examination of the concentrate has yet been carried out.

#### 7. PERSONNEL

Personnel involved in field work during the 1988 field programme were:

Geologist: 1
Field Assistants: 5
Contractor: 1

The project was supported by the staff and facilities of the Regional Office in Darwin and of the Head Office in Melbourne.

#### 8. EXPENDITURE

Expenditure of \$97863 for the period has been allocated as shown in Table 2.

## 9. FORWARD WORK PROGRAMME

Further work in Exploration Licence 4713 is contingent upon the result of the bulk sampling. If significant numbers of diamonds are recovered then further sampling to locate the source of the diamonds would be required. If none, or only a small number are recovered, then no further work would be considered and the licence would be relinquished.

P.D. WILSON Senior Geologist Darwin <u>J. JOYCE</u> Chief Geologist-North

OFG: EIP604

# TABLE 2 : EXPENDITURE SUPPARY TO 31/12/88

# BHP = EVA VALLEY

	EL 1	<b>471</b> 3
OPERATIONAL STAFF COSTS	3	31153
GENERAL OPERATIONAL EXPENSES		5805
TRANSPORT AND TRAVEL		7894
AIR CHARTER		5174
TENEMENT COSTS		3920
CENTRAL TREATMENT PLANT		1725
LABORATORY: TREATMENT: EXAMINATION		1445 788
CONTRACTORS: EARTHMOVING TRACK CUITING OTHER SAMPLE ANALYSIS		2280 4154 1594 70
GEOPHYSICS		774
DRAFTING		366
ADMINISTRATION : REGIONAL : HEAD OFFICE	•	9921 13951
CAPITAL UTILISATION		6849
TOTAL THIS PERIOD	Š	97863
TOTAL PREVIOUSLY REPORTED	10	7999
TOTAL EXPENDITURE TO DATE	20	05862

APPENDIX 1

ABORIGINAL LIAISON



# Northern Land Council

HIGHWAY ARCADE, 47 Stuart Highway, Darwin N.T. 5790 Telephone Enquiries: (089) 81 7011 Telex: AA85042

Facsimile Phone: (089) 81 6899

SPL 18 FEB 1988 NT

P.O. Box 39843, Winnellie, N.T. 5789 Address all Correspondence to: THE CHAIRMAN

IN REPLY PLEASE QUOTE:

16 February 1988

86/230 (M11)

Mr S.C. Verco
Divisional Geologist
Stockdale Prospecting Limited
5 Searcy Street
DARWIN NT 5790

Dear Sir,

Further to our meeting of 11 February 1988 at Eva Valley Station I now confirm that the traditional owners of the Jawoyn Association have given approval for the Prospecting Programme as outlined in your document "Jawoyn, Eva Valley Land Claims, 1988 Stockdale Prospecting Limited Work Programme" to proceed.

This approval is given on the understanding that,

- (1) You will pay a sum \$100 per week for the period during which your work crews are camped on Eva Valley Station.
- (2) That, as directed by CCNT, the access track you propose to open up to access the Ferguson River will be closed following your exploration activities and that the other access tracks you propose to open will be left in a condition that the Jawoyn people may use that track in their management of the area.

Should you have any queries on this matter please contact Mr A. Jackson at our Darwin office.

Yours fatthfully,

Steve Brennan

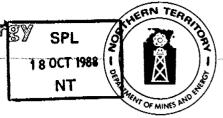
MANAGER LAND MANAGEMENT

APPENDIX 2

APPROVAL TO REMOVE A BULK SAMPLE

# Department of Mines and Energy

CENTREPOINT TOWERS BUILDING, THE MALL, DARWIN N.T. 0800
G.P.O. BOX 2901, DARWIN, N.T. 0801, AUSTRALIA
TELEPHONE: (089) 89 5511 TELEX: AA85766 MINDAR FACSIMILE: (089) 81 4806



PROMOTING GROWTH THROUGH RESOURCES

#### NORTHERN TERRITORY GEOLOGICAL SURVEY

IN REPLY
PLEASE QUOTE EL 4713

Mr J Joyce Stockdale Prospecting Limited 5 Searcy Street DARWIN NT 0800

Dear Mr Joyce

#### Re: Bulk Sampling Exploration Licence 4713

Reference is made to your letter of 6 October seeking approval to remove a bulk sample from the bed of the Katherine River. Subsequent discussions and a field inspection with Government Mining Engineer Kee Hah added to the information provided in your letter.

Permission is given for you to carry out the work outlined in these discussions subject to the conditions agreed on.

## In particular:

- 1) Vegetation clearing and surface disturbance shall be kept to an absolute minimum required to conduct the sampling program.
- 2) The banks of the stream shall not be disturbed by excavation.
- 3) No excavation is to take place within the canopy line of large trees. No tree roots will be exposed.
- 4) The excavation will be located such as not to divert or dam stream flow. Tailings will be returned such that they will be readily distributed by natural flow.
- 5) Particular care will be taken to ensure that there is no spillage of fuel, oils or other petroleum products into the stream system.
- 6) All waste material from the operation must be disposed of in a permanent fashion such that there is no pollution of surface or underground water.

7) On completion of the program the area will be suitably restored and where necessary rock or brush used to ensure that no erosion takes place.

We note that this work has been discussed with the Traditional Landowners and their agreement obtained.

We look forward to receiving the results of the sampling in the next Annual Report on this EL.

Yours sincerely

PAUL LE MESSURIER

17.10-88

Delegate of the Secretary

