

# OPEN FILE

STOCKDALE PROSPECTING LIMITED

BULLO RIVER AREA

EXPLORATION LICENCE 7134

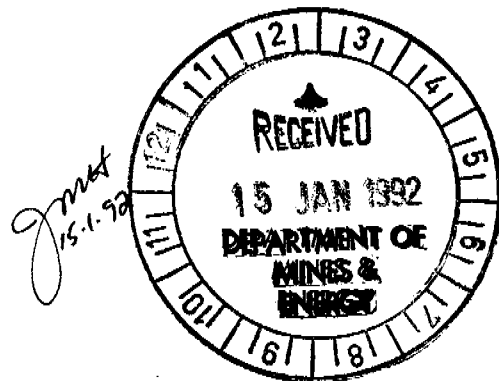
ANNUAL REPORT

FOR THE PERIOD ENDING 16th JANUARY 1992

A.K. BERRYMAN  
PROJECT GEOLOGIST

NOVEMBER, 1991

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**STOCKDALE  
PROSPECTING  
LIMITED**

Incorporated in the State of Victoria

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Project Name: Bullo River

Title: Exploration Licence 7134  
Bullo River Area  
Annual Report for the period ending 16th January, 1992

Author: A.K. Berryman Edited/Approved: J. Joyce

Date: November, 1991 Place: Darwin

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Abstract: Samples collected in EL 7134 during the reporting period were negative. However, further sample work is proposed for the area.

Copy to: NTDME, Darwin, IC

Circulate: RVD, JJ

**SUMMARY**

Exploration Licence: 7134

Dated Granted: 16th January 1991

Area: 155 sq km 48 blocks

Occupant: Stockdale Prospecting Limited

Operator: Stockdale Prospecting Limited

Commodities sought: Diamonds

Exploration: Samples collected in EL 7134 during the reporting period were negative. However, further sample work is proposed for the area.

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**STOCKDALE PROSPECTING LIMITED  
EXPLORATION LICENCE 7134  
ANNUAL REPORT  
FOR THE PERIOD ENDING 16th JANUARY, 1992**

1. **INTRODUCTION**

Exploration Licence 7134 is situated near Keep River on the Victoria Highway. The licence covers an area of 155 sq km on the Auvergne (SD 52-15) and Waterloo (SE 52-03) 1:250,000 mapsheets (Map 1).

Limited samples were taken on this licence during an exploration programme covering EL 7134 and surrounding licences (7272, 7273, 6810). This report details the findings of work carried out to date.

2. **TENURE**

Exploration Licence <sup>not 7134?</sup> 7154 was granted on the 16th of January 1991 for a period of six years. Tenement details are included in this report in Appendix 1.

3. **ACCESS**

Vehicle access to the tenement area is via the Victoria Highway which passes through the southern part of the licence. Very few tracks exist so that helicopter sampling is required for reconnaissance exploration on this EL.

4. **PHYSIOGRAPHY, VEGETATION AND CLIMATE**

The tenement area lies entirely within the Victoria River Plateau physiographic subdivision. This unit has in turn been further subdivided into 5 subdivisions (Paterson, 1970).

Exploration Licences 7134 lies within the "Tablelands" subdivision of the Victoria River Plateau. These Tablelands consist of rugged dissected plateau, mesas and cuestas up to 150m high. Most of the area is underlain by sandstones which are well drained by deeply incised streams.

Vegetation consists of sparse, open woodland, which becomes considerably thicker near major drainages. Vegetation on the sandstone plateaus and over the Moonlight Valley Tillite is sparse, consisting of spinifex grass and the occasional stunted shrub.

Climate is typically monsoonal, with a short hot wet season between November and April, and a warm dry season for the remainder of the year. Rainfall ranges between 750 and 900mm, and falls mainly during the wet season.

5. **GEOLOGY**

5.1 **Geological History/Stratigraphy**

The tenement areas are made up of rocks from the Victoria Basin. This basin consists of thick sedimentary sequences, layed down on the relatively stable Sturt Block.

A short local geological summary is as follows:

#### ARCHAEAN/LOWER PROTEROZOIC

Basement in the region probably consists of the low to moderate grade metamorphics of the Halls Creek Group.

#### CARPENTARIAN/ARCHAEAN

The oldest sediments in the area make up the Fitzmaurice Group. These sediments crop out to the north of the tenement area, and to the north of the Victoria River Fault. They were formed in a relatively shallow water depositional environment. These sediments form what is known as the Fitzmaurice Mobile Zone.

#### ADELAIDEAN

Further shallow conditions laid down both the Bullita Group and the Auvergne Group. The Bullita group represents a period of calcareous precipitation. The Auvergne Group underlies all of the tenement area. It consists of massive quartz sandstones, dolomites and some siltstone. The Auvergne Group unconformably overlies the Bullita Group.

The sea later receded, leading to the deposition of the fluvial Bullo River Sandstone. This sandstone is a massive reddish brown quartz unit, and unconformably overlies the Auvergne Group, and is in turn unconformably overlain by the Duerdin Group.

Following a period of folding and faulting (probably centred at the Victoria River Fault), cooler temperatures led to the deposition of both the Moonlight Valley Tillite and the Fargoo Tillite. The Moonlight Valley Tillite overlies a large percentage of the Auvergne Group and the Bullo River Sandstone in the tenement area. Other sediments of the Duerdin Group, deposited after the tillites, are possibly lacustrine in origin.

#### LOWER CAMBRIAN

The Antrim Plateau Volcanics is a vesicular basalt which crops out in the southern part of the tenement area. When initially extruded, it was thought to have covered much of the Victoria River region.

#### PALAEOZOIC

Later marine and non marine sedimentation occurred regionally, along with upwarping, erosion and laterization, but this had little bearing on the tenement area.

#### 5.2 Tectonic History/Structure

The Victoria River Basin (VRB) consists of a maximum thickness of 3.5km of relatively stable carbonate and ferruginous sequences, covering an area of some 160,000 sq km on the Sturt Block. Folds are generally broad, and faulting is rare. It is believed the VRB has been relatively undeformed since Carpentarian time. Deformation has been less severe with time.

The VRB is bounded to the north west by the Fitzmaurice Mobile Zone, to the south west by the Ord Basin, to the south by the Carpentarian Birrindudu Basin, to the south east by the Paleozoic Wiso Basin, to the north east by the Cambrian/Ordovician Daly River Basin, and to the north by the Pine Creek Geosyncline and Litchfield Block.

The tenement area is dominated by the Spencer Range Fault. This fault runs parallel with the nearby Victoria River Fault, which marks the boundary between the Victoria River Basin, and

the Fitzmaurice Mobile Zone. These faults strike roughly northeast, and have many associated minor faults, often running either parallel or perpendicular to the large faults.

6. **EXPLORATION**

A total of four samples have been collected from EL 7134.

V 7823	10 bags	screened -2mm
V 7837	11 bags	screened -4.75mm
V 7838	7 bags	screened -2 + 0.5mm
V 7839	7 bags	screened -2mm

The results of this sampling were negative. A map showing sample locations is enclosed (Map 2).

7. **SUMMARY**

Little can be said about sampling results obtained so far and further work in the licence area is planned.

8. **PERSONNEL**

The field team for this work consisted of the following staff:

Geologists	1
Prospecting Hands	1
Cook	1
Helicopter Pilot	1
Helicopter Engineer	1

Total	5
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9. **EXPENDITURE**

Total expenditure for the reporting period ending January 16th is \$3192. A breakdown of expenditure is shown in Table 1.

10. **FORWARD WORK PROGRAMME**

As the sample density within the tenement area is particularly poor, further reconnaissance sampling, particularly on the Newry 1:100,000 mapsheet is required. This will be done along with further sampling within EL's 6810 and 7272.

11. **FUTURE EXPENDITURE**

Proposed expenditure for the second year of tenure is as follows: EL 7134: \$10,000.

**TABLE 1: PROJECT EXPENDITURE**

EL

OPERATIONAL STAFF COSTS	910
GENERAL OPERATIONAL EXPENSES	66
TRANSPORT AND TRAVEL	766
TENEMENT COSTS	17
SAMPLE ANALYSIS	9
CENTRAL TREATMENT PLANT	373
LAB TREATMENT	73
LAB EXAMINATION	161
DRILLING	0
GENERAL CONTRACTORS	29
GEOPHYSICAL CONTRACTS	0
REMOTE SENSING	68
GEOPHYSICS	4
DRAFTING	34
COMPUTER SERVICES	30
MINERALOGY	6
REGIONAL ADMINISTRATION	212
HEAD OFFICE ADMINISTRATION	288
CAPITAL EXPENSES	146
TOTAL EXPENDITURE	3192

**A.K. BERRYMAN**  
**PROJECT GEOLOGIST**  
**DARWIN, N.T.**

**APPENDIX 1**

# Department of Mines and Energy



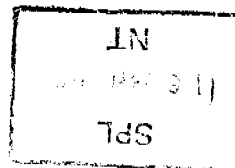
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G.P.O. BOX 2901, DARWIN, N.T. 0801, AUSTRALIA  
TELEPHONE: (089) 89 5511 TELEX: AA85766 MINDAR FACSIMILE: (089) 81 4806

PROMOTING GROWTH THROUGH RESOURCES

## TITLE REGISTRATION BRANCH

EL 7134

Mr T R Fried  
District Geologist  
Stockdale Prospecting Limited  
PO Box 3152  
DARWIN NT 0801



B. no. R

Dear Mr Fried

I am pleased to advise that I, as delegate of the Minister for Mines and Energy have granted Exploration Licence 7134 over a reduced area consisting of 48 blocks. The relevant licence document is enclosed.

This licence is granted subject to the *Mining Act 1980* and its Regulations and all other laws of the Northern Territory as are applicable. Before any field work is commenced, it is essential that all persons to be employed on the licence area be fully conversant with the conditions on which the licence is granted.

Guidelines are attached for submitting annual and final reports under section 32 and 34 of the *Mining Act* and applications for exploration expenditure certificates under section 7 and 8 of the *Mineral Royalty Act 1980*.

You are reminded that exploration licences are granted with the expectation that you will *inter alia* comply with the expenditure covenant. Failure to honour this obligation could result in the licence being liable for cancellation.

Strict compliance with the enclosed "Code of Conduct" of the Northern Territory Chamber of Mines is expected. Any deviation from this code which has an adverse impact on the landowner may jeopardise your title holding and tarnish the mining industry's image and relationship with other land users and interested groups. In the interest of public relations, you should renew your contact with the landowner/s whose land is likely to be affected by any exploration or mining activity (including access) to provide details of your programs and to exchange contact names and addresses, particularly where you engage contractors.

Please note item 3 in the Explanatory Notes on Reporting, whereby transparencies must be provided for any plans larger than A3 size. Transparencies are less susceptible to damage or fading and are easier to reproduce for future records.

The area over which this licence has been granted is subject to an Aboriginal land claim. In the event that the claim is upheld and the land subsequently becomes Aboriginal land, the grant of any consequential mining rights will be subject to the provisions of the *Aboriginal Land Rights (Northern Territory) Act*.

Please note that this licence is granted in your favour after comparison of your technical qualifications and financial commitments with that of competitors for the same area. Continuation of this licence will depend on proven compliance with the conditions of the licence, particularly the covenant and your programme.

Yours sincerely

  
C.P. SMITH  
Principal Registrar

16/1/91

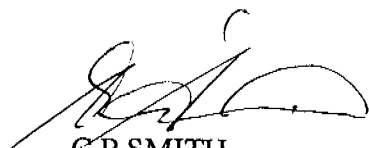
**NORTHERN TERRITORY OF AUSTRALIA**

**MINING ACT**

**EXPLORATION LICENCE**

EL No. 7134

Stockdale Prospecting Limited is hereby licensed, for a period of 6 years from the date hereof, to explore in accordance with the provisions of the *Mining Act*, the regulations thereunder and the terms and conditions specified in the First Schedule, all the area of land delineated in red in the Second Schedule excluding therefrom all land vested in the Commonwealth and all radio repeater sites held by the Australian Telecommunications Commission.



C P SMITH  
Principal Registrar  
as delegate of the Minister

DATE 16/1/91.

**FIRST SCHEDULE**

**Terms and Conditions**

1. The licensees shall ensure that a minimum amount of \$10 000 is expended in carrying out exploration on the licence area during year one (1) of the licence.
2. The licensees shall comply with the provisions of and directions lawfully given under this Act and all other laws in force in the Territory in relation to his activities on the licence area.
3. Not later than one (1) month after the expiration of each 12 month period of this licence, the holder shall submit in writing a statement specifying the details of the exploration programme reflecting expenditure for the next year of the licence.

SECOND SCHEDULE  
(Plan of Area)

