

ST. JOE - AQUITAINE - MIMETS JOINT VENTURE

E.L. 1708 - MILLIGANS LAGOON

ANNUAL REPORT

FOR THE YEAR ENDING 8 FEBRUARY, 1983

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Compiled by: R.H. Ingebritsen
Date: February, 1983

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STJOE

BONAPARTE PTY. LIMITED
(INCORPORATED IN N.S.W.)

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7th March, 1983

Department of Mines and Energy,
Esplanade,
DARWIN N.T. 5790

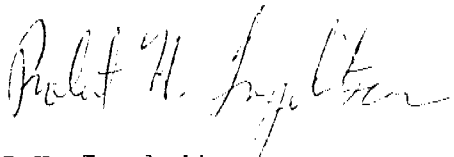
Dear Sirs,

R. noted

Re: E.L. 1708 "Milligans Lagoon"

Enclosed, please find the annual report for E.L. 1708 for the year ended the 8th February, 1983.

Yours faithfully,



R.H. Ingebritsen
EXPLORATION MANAGER

*This is from part of the
total area currently being
worked on for investment
recovery*

enc.

CONTENTS

1. INTRODUCTION
2. GEOLOGY
3. CONCLUSIONS AND RECOMMENDATIONS
4. EXPENDITURE
5. REFERENCES

FIGURES

- Figure 1 Bonaparte Gulf Basin. Northern Territory
Tenements.
Scale 1:500,000

PLATES

- Plate 1 Location and Regional Geology, The Fences
E.L. 2169 and Milligans Lagoon E.L. 1708.
Scale 1:50,000

1. INTRODUCTION

The 'Milligans Lagoon' E.L. 1708 was originally granted on 8th February, 1978. After three subsequent 50% reductions in February, 1980, 1981, and 1982 the residual licence area presently covers approximately 6.59 square kilometres as shown in Figure 1.

E.L. 1708 is located on the south western part of the Spirit Hill outcrops. The licence lies approximately 3.5 kilometres from the Western Australia - Northern Territory border and is 15 kilometres south east of the Sorby Hills exploration base and 40 kilometres north easterly of the township of Kununurra.

Access to the E.L. is possible from the Western Plains road just east of Sorby Hills along the border fence track. Alternatively access from Kununurra is via station tracts through Martin Gap past Milligans Lagoon.

Exploration in E.L. 1708 during 1981 was undertaken in conjunction with work on the adjacent "Keep A" mineral claims, Rocky Knob E.L. 2168 and Kneebone E.L. 2377. In these areas follow-up investigation during 1982 included the drilling of two stratigraphic diamond holes for a total drilled meterage of 749 metres.

2. GEOLOGY

The geology and stratigraphy of the south western portion of the Spirit Hill area covered by E.L. 1708 has been described in some detail by Veevers and Roberts (1968). The geology of the area is shown on Plate 1 which is a modified geological map after Veevers and Roberts.

In the southern area of the licence three stratigraphic bores, Spirit Hill Nos. 1, 2 and 3 were drilled to a depth of up to 90 meters during early oil exploration work in the Spirit Hill area. Veevers and Roberts describe the sequence penetrated by the Spirit Hill bores as a hard grey shale sequence with thin sandy limestone and siltstone interbeds which has been identified as Milligans Beds. Just to the north of the Spirit Hill bores at B.M.R. Locality 73 Veevers and Roberts measured a section across the outcrops where shale of the Milligans Beds is unconformable overlain by a high turreted cliff forming sequence of sandstone and conglomerate which is identified as the Border Creek Formation. At Locality 73 the Border Creek Formation attains a thickness in excess of 100 meters.

Stratigraphic drilling by the joint venture in the Cuesta Ridge (Spirit Hill) area during 1982, was located approximately three kilometers north east of E.L. 1708 in adjacent "Rocky Knob" E.L. 2168, and Kneebone E.L. 2377. These holes were drilled to test for a northward and westward extension of Pb-Zn mineralization in the Burt Range Fm., indicated by previous drilling. NBB 1003 intersected minor but significant, apparently strata bound Pb-Zn mineralization in the Burt Range Fm. The western most hole, NBB 1002, was drilled west of the Spirit Hill fault to test for Pb-Zn in the Burt Range Fm. on the down dip side of the fault. The hole was abandoned at 300 metres in the Milligans shale due to drilling problems.

3. CONCLUSIONS AND RECOMMENDATIONS:

The potential for discovery of commercially significant Pb - Zn mineralization within the Burt Range Fm. is limited by the thick cover of Border Creek and Milligans Formations which occur over much of E.L. 1708. Additional work in this licence during the 1983 field season will be dependent on the results of exploration work in adjacent tenements of the Cuesta Ridge area.

Work proposed for the Cuesta Ridge area in 1983 includes:

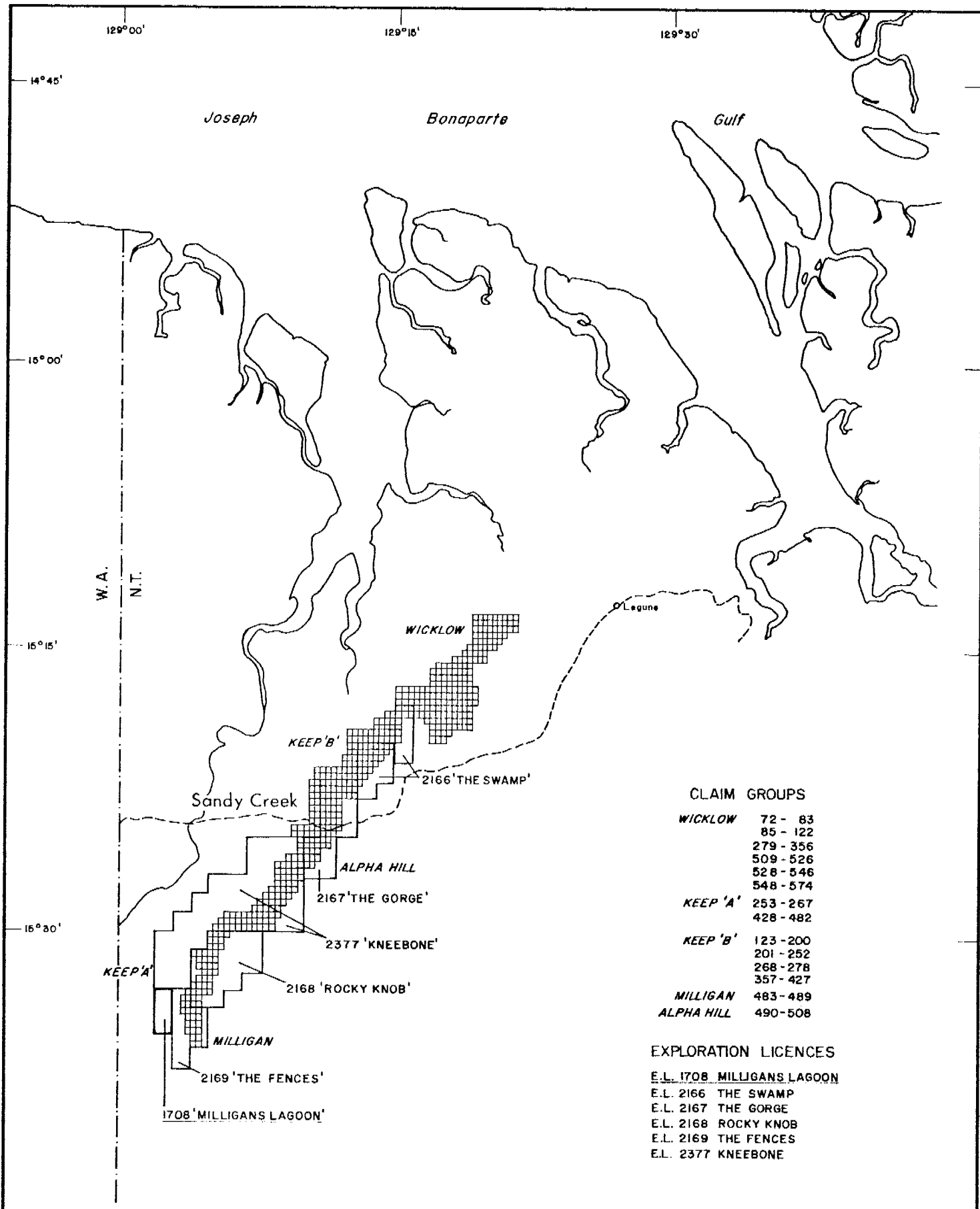
1. Relogging and reinterpretation of drill cores from previous year's drilling.
2. Detailed field mapping to establish relationships of surface mineralization with stratigraphy and local structural features.
3. Regional and detailed structural mapping, using air photo interpretation and analysis of landsat data, combined with field checking.
4. Geophysical surveys. A trial MIP survey performed late in 1982 in the Western Australia part of the basin produced anomalous results which appeared to be associated with mineralization at depth. If drill testing of these anomalies confirms that the technique is effective, then MIP surveys will be run over selected areas in the Northern Territory, including the Cuesta Ridge area, to locate drill targets.
5. A drilling program for the 1984 season will be planned during 1983 after the completion of the reassessment of data.

4. EXPENDITUREANNUAL EXPLORATION REPORT - MILLIGANS LAGOON - E.L. 1708SUMMARY OF EXPENDITURE FOR THE YEAR ENDED FEBRUARY 8, 1983

Service Fees - Direct	307.43
Service Fees - On Cost	46.00
Service Fees - Overheads	3154.10
Service Fees - Vehicles	668.73
Seconded Staff - Aquitaine	568.75
Seconded Staff - M.I.M.	230.00
Seconded Staff - St. Joe	2880.67
Communications	36.30
Freight	29.40
Exploration Rights	6.00
General Operating Expenses	312.42
Leasing Costs	122.49
Rent - Real Property	453.99
Repairs & Maintenance	768.36
Taxes - Property	10.63
Travel - Local	555.42
Vehicle Expenses	81.87
	<hr/>
TOTAL EXPENDITURE TO 8/2/83	10232.56
	<hr/> <hr/>

5. REFERENCES

- Thomas, G.A., 1961: Well Completion Report. Spirit Hill Well No. 1. Private Report to Oil Development NL (19 December, 1961)
- Veevers, J.J. and Roberts, J., 1968: Upper Palaeozoic Rocks, Bonaparte Gulf Basin of Northwestern Australia. Bureau of Mineral Resources, Geology and Geophysics, Bulletin 97.

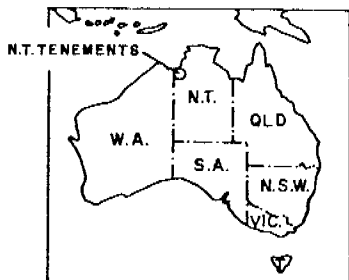


CLAIM GROUPS

WICKLOW	72 - 83
	85 - 122
	279 - 356
	509 - 526
	528 - 546
	548 - 574
KEEP 'A'	253 - 267
	428 - 482
KEEP 'B'	123 - 200
	201 - 252
	268 - 278
	357 - 427
MILLIGAN	483 - 489
ALPHA HILL	490 - 508

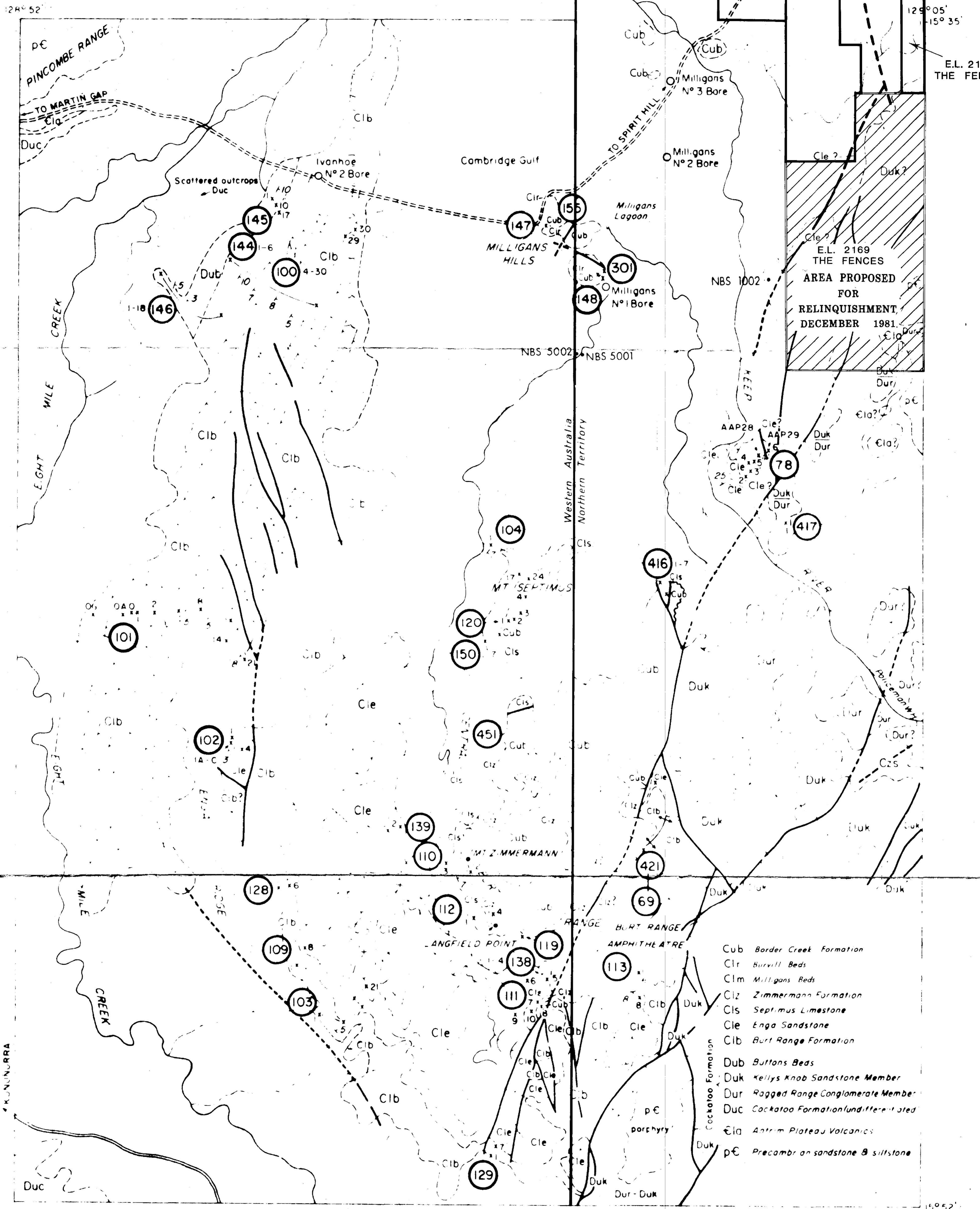
EXPLORATION LICENCES

- E.L. 1708 MILLIGAN'S LAGOON
- E.L. 2166 THE SWAMP
- E.L. 2167 THE GORGE
- E.L. 2168 ROCKY KNOB
- E.L. 2169 THE FENCES
- E.L. 2377 KNEEBONE

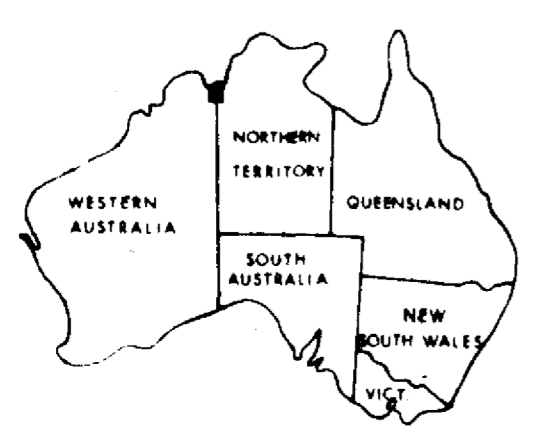


ST. JOE - A.A.M. - MIMETS			
BONAPARTE BASIN			
NORTHERN TERRITORY TENEMENTS			
Author: M. ROWLEY	Date: MARCH, 1983	Scale: 1:500,000	FIG. 1
Drawn: GJF	Report No.: SJB83-1	Cat. No.: 750-M-2	

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- Cub Border Creek Formation
- Clr Burvill Beds
- Clm Milligans Reds
- Clz Zimmermann Formation
- Cls Septimus Limestone
- Cle Enga Sandstone
- Cib Burt Range Formation
- Dub Buttans Beds
- Duk Kellys Knob Sandstone Member
- Dur Ragged Range Conglomerate Member
- Duc Cockatoo Formation (undifferentiated)
- Clv Antrim Plateau Volcanics
- pC Precambrian sandstone & siltstone



NBS 5001 • DRILL HOLE

SCALE APPROX. 1:50,000
 (slight distortion due to photographic enlargement)

CR33/52
 Aquitaine Australia Minerals Pty Ltd
 THE FENCES - E.L. 2169
 &
 MILLIGANS LAGOON - E.L. 1708
LOCATION & REGIONAL GEOLOGY

Author	Date MARCH, 1983	Dwg No 10352C	Plate 1
Drafting JC	Report No SUB 83-1	Base Plan	