### SAVANNA MINERAL RESOURCES PTY LTD

ACN 063 921 960

A wholly owned subsidiary of MT GRACE RESOURCES NL ACN 060 774 227

## **BATCHELOR PROJECT NORTHERN TERRITORY**

# ERL 134

## ANNUAL REPORT FOR PERIOD

# 11<sup>th</sup> October 1999 to 10<sup>th</sup> October 2000

# 6<sup>th</sup> Year of Tenure

*NB:* All co-ordinates quoted are related to the AGD-66 datum.

Compiled by: B J UREN November 2000

Copies:

- (1) Batchelor
- (2) Perth
- (3) Department of Mines & Energy

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## LIST OF PLANS

Figure No.	Name	Plan No.	Scale
1	Tenement Plan (Bound in Text)	0077Ba	1:250,000
2	Tenement & Regional Geological Map (Bound in Text)	0078Ba	1:250,000
3	Winchester MLA (Bound in Text)	0060Ba	1:50,000
4	Total Magnetic Intensity Image	-	1:25,000

#### **SUMMARY**

ERL 134 forms part of a block of mining titles centred 6km E of the town of Batchelor. Within this block of titles a resource of in excess of 16mT of high grade magnesite has been located at the Winchester Prospect. The resource is located E.L. 9501 very close to the boundary of E.L. 9253. An application for a mineral lease has been lodged to cover the magnesite resource. This M.L.A. abuts ERL 134. Work on the block of titles as a whole has exceeded \$273,000 in the last twelve months.

During the last twelve months work on ERL 134 has been confined rock chip sampling the Occidental Prospect and preparation of it for drilling. Since the close of the report period this prospect has been drilled and an additional 3 holes have been drilled at the White Bomb Prospect. This had been intended to be done during the report period but was unavoidably delayed.

During the report period the newly acquired airborne magnetics from the NT DME has been processed and presented for the project area.

#### 1. INTRODUCTION

This report covers the period of tenure of ERL 134 from  $11^{\text{th}}$  October 1999 to  $10^{\text{th}}$  October 2000 being the  $6^{\text{th}}$  year.

ERL 134 is located within a block of titles centred 6km E of the town of Batchelor. The ERL covers Lower Proterozoic rocks of the Mt Partridge and South Alligator Groups on the southern flank of the Rum Jungle Dome. See figures 1 and 2.

The licence is prospective for base metal and gold mineralisation with several significant Pb/Zn intersections being obtained at the White Bomb Prospect during past exploration. The principal locus for mineralisation in the district is however the White's Formation/Coomalie Dolomite contact which is stratigraphically below the rocks covered by the licence.

The title is 100% held by Savanna Mineral Resources Pty Ltd which is a wholly owned subsidiary of Mt Grace Resources NL.

Although very little work has been undertaken on the ERL 134 during the last twelve months in excess of \$273,000 has been spent on the 3 titles which constitute a continguous block (E.L.s 9501 and 9253 and ERL 134).

#### 2. TENEMENT STATUS

ERL 134 was granted to Giants Reef Exploration Pty Ltd on 11<sup>th</sup> October 1994 for a period of 6 years. It covers an irregular shaped area of 971.3 ha which enclose MLNs 512 to 515.

During 1998 Savanna Mineral Resources Pty Ltd, a wholly owned subsidiary of Mt Grace Resources NL became the sole holder of the licence following Savanna's acquisition of the interest held by Giants Reef Exploration Pty Ltd.

An application has been made for a mineral lease (MLN 1984) which abuts the N.W. corner of the ERL. This lease application covers the Winchester magnesite prospect. The location of this lease application is shown on figure 3.







#### 3. **REGIONAL GEOLOGY**

The licence covers rocks of Lower Proterozoic Mt Partridge and South Alligator Groups on the southern flank of the Archaean Rum Jungle Dome. These rocks include, from the bottom, Wildman Siltstone (siltstone and sandstone), Koolpin Formation (siltstone), Gerowie Tuff, Mt Bonnie Formation (siltstone) and Burrell Creek Formation (siltstone). The regional geology is represented on the excellent quality B.M.R. 1:100,000 map entitled "Geology of the Rum Jungle Uranium Field" 1984.

In the area covered by the licence the rocks dip south off the Rum Jungle Dome at moderate angles. The area includes the White Bomb Prospect where significant intersections of Zn mineralisation have previously been made in carbonaceous siltstones.

#### 4. **PREVIOUS EXPLORATION**

Previous exploration undertaken by Savanna Mineral Resources Pty Ltd has consisted of:

- Construction of a 1:10,000 scale geological map over the entire Central Batchelor tenements including ERL 134.
- Construction of a 1:2,500 scale geological map over the Glen Lucky Prospect area which enclosed the White Bomb Prospect which was mapped at 1:1,000.
- Comprehensive soil sampling at 40 x 100m spacings in part and 40 x 200m spacings in the remainder with multi clement analysis and compilation of results.
- Rock chip sampling.
- Detailed evaluation by drilling at the White Bomb Prospect. Significant intersections have been obtained from the prospect. The best of these are:

4m @ 10.9% Pb in WBD-6 2m @ 5.1% Zn and 1.8% Pb in WBP-3 13m @ 4.7% Zn and 13m @ 3.1% Zn in BRC-12 30m @ 3.8% Zn (including 6m @ 11.7% Zn) in WBP-1

All intersections occur in carbonaceous siltstone except that intersection in WBP-1 which is hosted in dolerite.

#### 5. CURRENT WORK

Compilation of the previously acquired soil geochemical data highlighted two extensive soil anomalies hosted by the Koolpin Formation. These are located in the S.W. portion of the ERL. These confirmed and extended anomalies previously identified by Occidental Minerals. The anomalies are known as Occidental N, centred at 8,554,200N 724,600E (AGD-66) and Occidental S, centred at 8,553,600N 724,500E. The compilation plan was presented in the last annual report.

Prospecting of these two anomalies located gossanous material which was rock chip sampled. The results of these analyses are presented as Table 1. Whilst the results are not spectacular some samples are elevated in one or more elements. The elevated Zn values which are present with high Mn are not considered to be significant as Mn is well know to absorb and accumulate Zn in the weathering process.

Drill pads were prepared within the report period and it was intended to drill these gossans in the report period but unavoidable delays caused them to be not drilled until after the close of the report period. Since the close of the report period 7 R.C. holes have been drilled, 4 at Occidental and 3 at White Bomb Prospect for a total of 614m advance. These will be reported in the next annual report.

During the report period the newly available airborne magnetics was obtained from the NT DME and processed. A copy of the resulting image is presented as figure 4.

# TABLE 1ERL 134 OCCIDENTAL PROSPECTROCK CHIP GEOCHEMICAL LEDGER

			NOCK		GLUCI			JOLK	1	
Sample No.	Location (AMG-66)		As ppm	Co ppm	Cu ppm	Mn ppm	Ni ppm	Pb ppm	Zn ppm	Description
7882	8,554,130N	724,615E	245	35	127	2150	146	62	470	Purple Earthy Porous Rock – dark weathered surface
7883	8,554,160N	724,580E	196	34	166	885	270	77	1220	Dark Purple Earthy Porous Rock with some fine brecciated texture
7884	8,554,155N	724,625E	385	37	151	2370	139	65	290	Dark Purple Earthy Porous Rock
7885	8,554,170N	724,600E	310	33	102	620	111	59	250	Dark Purple Earthy Porous Rock
7886	8,554,190N	724,630E	275	97	207	1670	1170	39	2150	Dark Purple Fine, Even Grained Earthy Rock with rough pitted surface
7887	8,554,205N	724,640E	420	125	320	3110	515	148	1100	As above – This rock is perhaps a shale breccia which weathers to give a very rough surface. A single outcrop with large rounded very loosely pcked pebbles was observed.
7888	8,553,650N	724,500E	216	75	725	600	325	82	204	Dark Brown Hard Boxworked IRONSTONE
7889	8,553,653N	724,503E	99	57	280	1880	150	29	143	Dark Brown Porous IRONSTONE with common Vein Quartz
7890	8,553,653N	724,503E	188	55	925	365	540	86	224	Massive heavy Iron rich IRONSTONE – some banded with shaly material ~ dip 60°E
7891	8,553,680N	724,510E	94	460	395	1.50%	325	48	68	Dark Brown Porous metallic lustred Ironstone
7892	8,553,690N	724,515E	149	134	575	1.01%	187	87	100	Dark Brown Porous metallic lustred Ironstone
7893	8,553,750N	724,530E	166	410	715	1.26%	515	82	86	Dark Brown Massive Fe rich Ironstone
7894	8,553,790N	724,540E	71	76	590	1860	230	32	69	Dark Brown Fe rich & earthy porous Ironstone – on E side of ridge
7895	8,553,890N	724,560E	80	158	315	8070	171	53	57	Dark Red-Brown Fe rich IRONSTONE . This is an isolated boulder between common boulders of weathered siltstone/shale.
7896	8,553,930N	724,570E	129	232	390	8050	365	76	44	Dark Brown Fe rich IRONSTONE
7897	8,553,480N	724,480E	74	1080	725	17.6%	770	81	2160	Heavy black metallic lustred Mn rich Ironstone – single small subcrop
7898	8,553,480N	724,460E	405	227	525	3.79%	380	1520	1810	Heavy black metallic lustred Mn rich Ironstone 8m x 8m area of subcrop
7899	8,553,420N	724,420E	1600	151	202	1.04%	635	320	1210	Dark Red-brown Fe rich Ironstone with Mn rich weathered surface
7900	8,553,440N	724,440E	1120	100	370	3160	515	61	790	Dark Brown slightly Porous Ironstone – Single Sub cropping boulder

#### 6. CONCLUSIONS & RECOMMENDATIONS

Many geochemical anomalies remain to be assessed the field. Previous work has demonstrated that very significant base metal mineralisation can occur in the rocks covered by the ERL despite the fact that they are stratigraphically above the position which hosts the bulk of the mineralisation in the district.

It is recommended that these be field checked and followed up with infill soil sampling and if targets can be defined tested by R.C. drilling.

#### 7. EXPENDITURE

Very little expenditure has been incurred during the period. This is due in part to the need to concentrate effort on the Winchester Magnesite Prospect Also a planned drilling programme in ERL 134 was delayed due to other commitments and since the end of the report period seven R.C. holes have been completed for a total of 614 m and a direct cost to the drilling contractor of \$23,337.09.. In the last twelve months in excess of \$273,000 has been spent on E.L. 9501, E.L. 9253 and ERL 134. These constitute a contiguous block of titles. The combined covenants on these titles was \$86,000.

	\$
Geologist & Geophysicist	2,532.75
Drafting	427.50
Plan Printing & Stationery	290.00
Vehicle	76.73
Accommodation	333.44
Delivery	169.29
Tenement Administration	250.00
Access Pad Preparation	360.00
	4,439.71
Overhead @ 15%	665.96
Total	5,105.67

#### 8. **PROGRAMME FOR 2000 – 2001**

Work in the forthcoming year will consist of field inspection and follow up of geochemical anomalies identified to date. The exact nature of this work will be determined following initial inspection of the areas of the anomalous areas.

It is likely that expenditure will be incurred in the following way:

	\$
Salaries & Wages	8,000
Drilling	23,000
Analytical	4,000
Earthmoving	2,000
Drafting	1,000
Overheads	2,000

\$40,000