SAVANNA MINERAL RESOURCES PTY LTD

A wholly owned subsidiary of

MT GRACE RESOURCES NL

BATCHELOR PROJECT

E.L. 10143 – CASTLEMAINE HILL

ANNUAL REPORT FOR PERIOD

12 March 1999 to 11 March 2000

1st Year of Tenure

Compiled by:
B J UREN
March 2000

Copies:
1. *Perth Office*
2. *Batchelor Office*
3. *Dept of Mines & Energy*
4. *Spare copy*

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1. SUMMARY

Mt Grace Resources NL through its wholly owned subsidiary Savanna Mineral Resources Pty Ltd has been exploring the Batchelor District for magnesite for use in the manufacture of magnesium metal.

A significant resource of good quality magnesite has been discovered on nearby E.L. 9501. Currently the focus is on locating good quality dolomite or limestone for use as a flux in the proposed furnace process to manufacture magnesium metal.

No new data has been collected in the first year of the licence but compilation of previous exploration indicates that carbonate underlies a significant portion of the licence at shallow depth. The nature of this carbonate needs to be established. Minor base metal anomalies previously discovered also require investigation.

2. *INTRODUCTION*

Savanna Mineral Resources Pty Ltd hold an extensive package of mineral titles in the Batchelor District. The titles have potential to host significant deposits of magnesite, base metals, uranium, gold and phosphate. The primary focus in recent times has been magnesite with the view to establish a magnesium metal production facility.

Having established a magnesite resource at the Winchester Prspect in nearby E.L. 9501 the main aim of the current exploration is to locate a supply of good quality dolomite or limestone for use as a flux in the furnace process proposed to manufacture magnesium metal. Nevertheless the Company is very mindful of the possibility of any of the other commodities mentioned above being present.

E.L. 10143, Castlemaine Hill, is centred 3 km WSW of Batchelor (see figure 1). The E.L. covers freehold land and constitutes most of two graticular blocks 44-11 Batchelor and 44-40 Rum Jungle. The licence was granted on 12th March 1999 and this report covers the first year of tenure. The Company has an application pending on block 43-11 Batchelor as AN-515 which abuts E.L. 10143.

3. *PHYSICAL GEOGRAPHY*

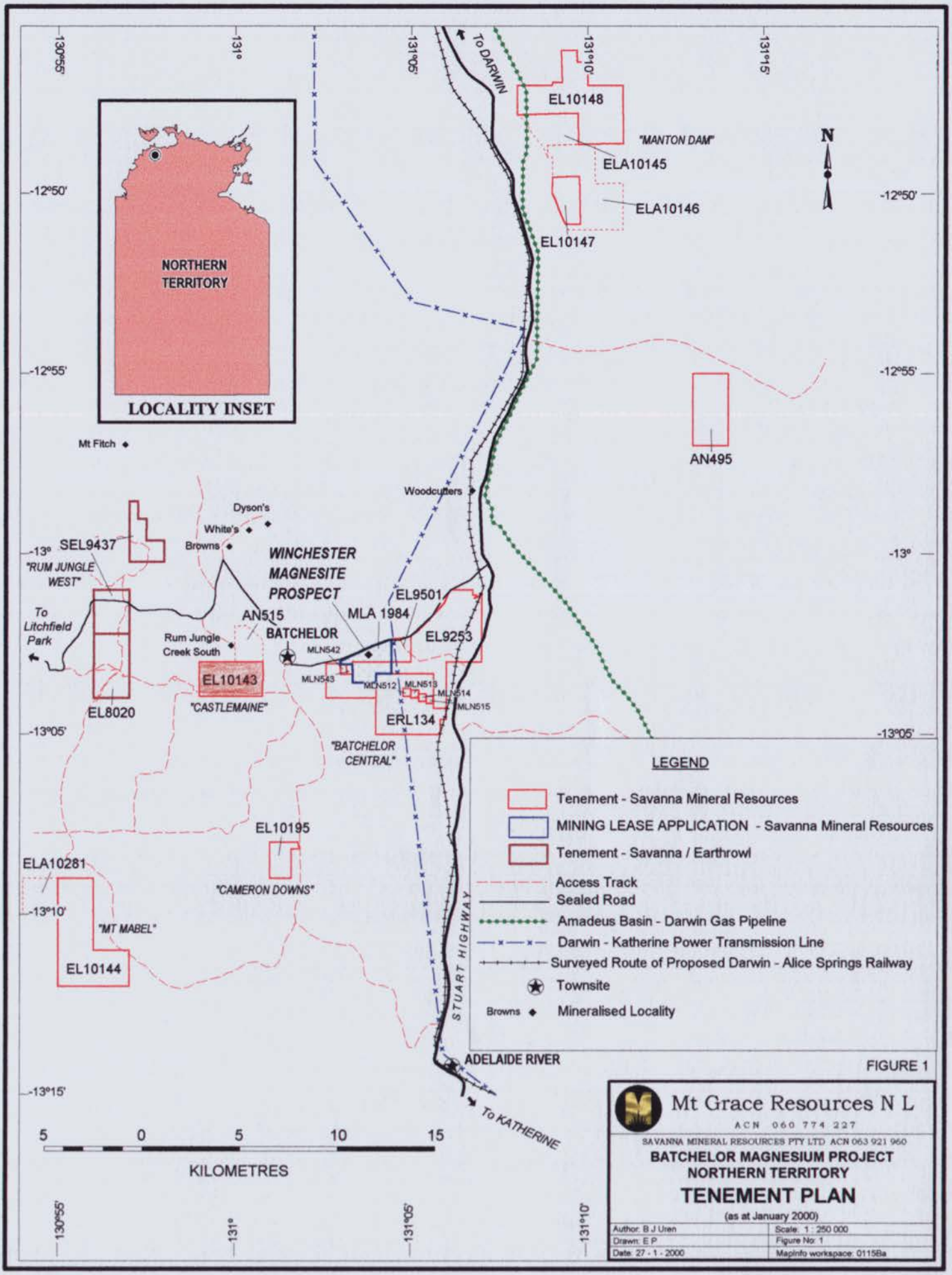
The licence covers dominantly cleared gently undulating paddocks surrounding the Meneling abattoir and export cattle yards. On the western side of the block is uncleared bush covering a low ridge of Crater Formation sandstone and conglomerate, Beeston's Formation sandstone and conglomerate and Archaean basement rocks. In the NE corner of the block is a significant ridge composed of Tolmer Group sandstone.

The licence is just west of the divide between the east and north draining Adelaide River system and the west draining Finniss River.

4. *REGIONAL GEOLOGY & MINERALISATION*

The E.L. covers rocks of Proterozoic age in the Pine Creek Geosyncline and minor Archaean basement. The regional geology of the district is shown on figure 2 and on the excellent quality BMR 1:100,000 scale map entitled "Geology of the Rum Jungle Uranium Field" (Crick 1984). The stratigraphic column for the district is shown on Table 1.

The Lower Proterozoic rocks are draped around two Archaean domes, the Waterhouse and Rum Jungle domes. The domes are ovoid in shape with their long axes oriented N-S. The licence covers rocks between the two domes which are dominantly belong to the Mt Partridge Group (Crater Formation, Coomalie Dolomite and Whites Formation). An outlier of Tolmer Group occurs in the NE corner of the licence.


LOCALITY INSET
NORTHERN TERRITORY
To DARWIN
EL10148
"MANTON DAM"
ELA10145
ELA10146
EL10147
AN495
Mt Fitch
Woodcutters
Dyson's
White's
Browns
SEL9437
"RUM JUNGLE WEST"
WINCHESTER MAGNESITE PROSPECT
EL9501
MLA 1984
EL9253
AN515
BATCHELOR
MLN542
MLN543
MLN512
MLN513
MLN514
MLN515
To Litchfield Park
Rum Jungle Creek South
EL10143
"CASTLEMAINE"
EL8020
ERL134
"BATCHELOR CENTRAL"
EL10195
"CAMERON DOWNS"
ELA10281
"MT MABEL"
EL10144
STUART HIGHWAY
ADELAIDE RIVER
To KATHERINE
N
130°55'
131°
131°05'
131°10'
131°15'
-12°50'
-12°55'
-13°
-13°05'
-13°10'
-13°15'
5 0 5 10 15
KILOMETRES
LEGEND
Tenement - Savanna Mineral Resources
MINING LEASE APPLICATION - Savanna Mineral Resources
Tenement - Savanna / Earthrowl
Access Track
Sealed Road
Amadeus Basin - Darwin Gas Pipeline
Darwin - Katherine Power Transmission Line
Surveyed Route of Proposed Darwin - Alice Springs Railway
Townsite
Browns Mineralised Locality
FIGURE 1
Mt Grace Resources N L
ACN 060 774 227
SAVANNA MINERAL RESOURCES PTY LTD ACN 063 921 960
BATCHELOR MAGNESIUM PROJECT
NORTHERN TERRITORY
TENEMENT PLAN
(as at January 2000)
Author: B J Uren
Scale: 1 : 250 000
Drawn: E P
Figure No: 1
Date: 27 - 1 - 2000
MapInfo workspace: 0115Ba

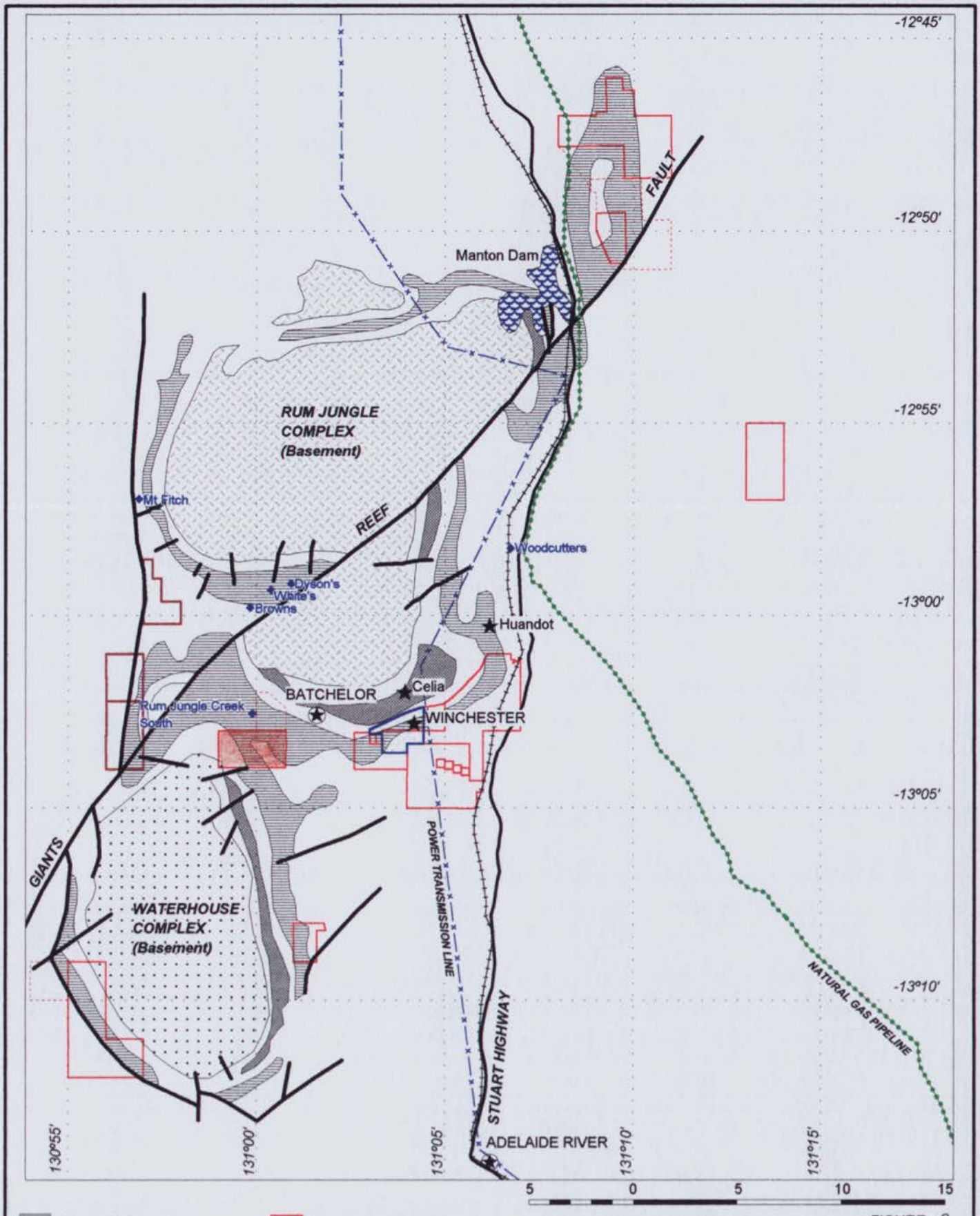


FIGURE 2

Mt Grace Resources N L
SAVANNA MINERAL RESOURCES PTY LTD

BATCHELOR PROJECT N T
TENEMENT & REGIONAL GEOLOGICAL MAP
(as at January 2000)

Author: B J Uren	Scale: 1 : 250 000
Drawn: E P	Figure No: 2
Date:27 - 1 - 2000	MapInfo workspace: 0116Ba

TABLE 1

BATCHELOR AREA STRATIGRAPHIC COLUMN

Age	*Group*	*Formation*	*Lithology*
Upper Proterozoic	Tolmer Group	Depot Creek Sandstone	Orthoquartzite, Sandstone, Pebble Conglomerate
		Zamu Dolerite	Dolerite
Lower Proterozoic	Finniss River Group	Burrell Creek Formation	Siltstone, Shale, Pebble Conglomerate
	South Alligator Group	Mt Bonnie Formation	Red-Brown Siltstone & Shale
		Gerowie Tuff	Siliceous Tuffaceous Shale & Siltstone
		Koolpin Formation	Shale & Siltstone – Commonly carbonaceous
	Mt Partridge Group	Wildman Siltstone	Shale-Commonly colour banded
		Acacia Gap Quartzite Member	Orthoquartzite
		Whites Formation	Calcareous, Carbonaceous & Pyritic Argillite
		Coomalie Dolomite	Stromatolitic Dolomite & Magnesite
		Crater Formation	Siltstone Shale & Conglomerate
	Namoona Group	Celia Dolomite	Stromatolitic Dolomite & Magnesite
		Beeston's Formation	Quartz Congolomerate, Arkose, Sandstone, minor Banded Iron Formation
Archaean	Rum Jungle & Waterhouse Complexes	Archaean Basement	Granitoids, Dolerite, Metasediments, Gneiss

No mining has occurred on the licence but the Rum Jungle Creek South open cut U mine was located just 800m N of the northern boundary of the licence. This was the largest producer of the Rum Jungle Uranium Mines producing 653,000t @ 0.4% U_3O_8 (Spratt, 1965).

The R.J.C.S. orebody occurred in highly sheared chloritic schist of the White's Formation. An axial plane shear is postulated with down throw to the south-west and the orebody is contained in a tightly folded syncline in the down thrown slates. Unlike the other orebodies in the district, the R.J.C.S. orebody is not localised at a dolomite contact although dolomite has been intersected in drill holes within 60m of the orebody,

In the oxidised zone, that is to 30m depth, only one pod of ore was discovered. This pod was approximately 5 cubic metres containing saleeite of ore grade was discovered south and east of the orebody, at the interface of weathered rock and soil. Saleeite was also noted in shears just below the soil cover north of the orebody. Both of these occurrences gave ground radiometric anomalies.

The orebody was contained within a flat tabular zone, 230m long by 50m wide by 40m thick, of which the top coincides with present day base of oxidation, at 30m depth. The long dimension is parallel to the 330° strike of the sediments and of a postulated axial shear. The eastern wall was steeply dipping tightly folded black graphitic slate. The western wall was steeply E dipping chloritic slate with black slate lenses; the transition from schist to slate was gradual and this wall of the orebody was an assay wall. Ore terminated to the south and south west where the chloritic beds are completely oxidised to a depth of at least 60m in a shear zone. In the north the orebody diminished to small widely separated pods. The deposit is thought to have been wholly or partly a secondary concentration.

Mineralisation consisted of sooty pitchblende in shears and joints in the pyritic chloritic schist. Clay filled joints in black slate at the schist – black slate contact carried minor ore. Base metals were absent.

The contact between the Coomalie Dolomite and the overlying White's Formation black shale is the locus of the other Uranium ore deposits in the district and also the very significant base metal deposits of Woodcutters Zn (recently closed after producing 7 million tons of ore averaging 14% Zn) and the Brown's polymetallic deposit which is currently under feasibility. On the same contact three minor gold prospects occur east of Batchelor. These are the Sundance, Sundance East prospects and two significant intersections have been made at the Winchester Magnesite Prospect. Although these are minor occurrences the grades can be very attractive and the occurrences demonstrate a mineralisation style that may be present elsewhere in the district with economic significance.

The Upper Proterozoic Tolmer Group rocks which in part occur in the NE corner of the licence are underlain by a haematite, quartz breccia (HQB) known as the Buckshee Breccia. This breccia commonly occurs over the Coomalie Dolomite and its origin remains a matter of debate. It may have a hydrothermal origin or it may be the product of weathering. The Buckshee Breccia is the host to phosphate mineralisation at several prospects. The Castlemaine Prospect occurs within the licence. The principal phosphate mineral is fluorapatite. The occurrences are associated with fine disseminated iron and are often associated with radiometric anomalies. Individual intersections can make ore grade. A thorough investigation of the work done on these prospects remains to be made.

5. *PREVIOUS EXPLORATION*

A search of the historical tenement plans held at the Department of Minerals & Energy revealed that the following titles had previously been held, at least in part, over blocks 11-43 and 11-44 Batchelor 1:50,000 and 40-44 Rum Jungle 1:50,000. Against each title the technical reports relating to the tenement are shown. These report numbers were derived from the Department's "Industry Reports Management System Database" updated to December 1999.

Title	Holder	Reports
E.L. 1181	International Mining Corporation & Marathon Petroleum Australia	CR 1979 – 117 CR 1979 – 151 CR 1980 – 55 CR 1980 – 188 CR 1981 – 279 CR 1982 – 305 CR 1983 – 239
E.L. 2725	C.S.R. Ltd	CR 1985 – 163
E.L. 4435	Blake Investments	CR 1986 – 191
E.L. 7092	Square Gold & Minerals	CR 1992 – 257
E.L. 9257	Aztec Mining Company	CR 1996 – 744 CR 1998 – 51

Block 11-43 was included in this search as the Company has applied for this block, which is adjacent to E.L. 10143, as AN-515. The authority has not yet been granted.

The only work of significance was undertaken by Marathon Petroleum and Aztec. The data from these two explorers is compiled onto a 1:10,000 plan which is presented as Figure No. 3.

Marathon Petroleum was searching for uranium and started exploration with an airborne magnetic and radiometric survey over this and other nearby areas in the district. Various ground surveys designed to detect radioactive minerals such as track etch and radon gas were conducted. These lead to several campaigns of drilling adjacent to the Meneling Road immediately south of the extensive outcrop of Tolmer Group rocks which form Castlemaine Hill. In addition a limited number of stratigraphic holes were drilled NW and SE of this area. Most of these holes are shown on the 1:10,000 plan with their abbreviated log. A more detailed drill hole location plan is included as an insert to the 1:10,000 plan. These holes indicated a very complicated distribution of lithologies which Marathon explained by a series of faults.

Marathon seem to have considered the HQB (Hemetite – Quartz Breccia or Buckshee Breccia) to be synonymous with the Tolmer Group. This is contrary to the view of most workers who consider this enigmatic rock to unconformably underlie the Tolmer Group. Consequently the interpretation by Marathon of their results is rather dubious.

Only weak uranium mineralisation was intersected by Marathon. The best intersection had values ranging from 40 – 248ppm over 52m in hole 1B-i. In further drilling the maximum individual assay was 340 ppm U. However, some interesting phosphate and base metal intersections were made. The best of these are listed below.

Hole No.	Intersection	Interval
61	3800ppb Hg,	99-100m
67	32.7% P_2O_5	70-71m
69	1.25% Cu	33-34m
99	23.0 – 27.8% P_2O_5	64-65.5m
103	8% P_2O_5	69-70m

The dolomites intersected by Marathon were mostly not described in sufficient detail to indicate if they are likely to be Ca or Mg rich. Experience by Savanna elsewhere in the district indicates that coarsely crystalline carbonate is usually Mg rich whilst cryptocrystalline carbonate is to date always found to be Mg poor – i.e. approximately with equal Mg to Ca. It should be understood however that this may not be the case throughout the district. Below is a list of holes for which the grainsize was sufficiently well described as to allow an interpretation of the composition to be made:

67	Magnesite
69	Dolomite
70	Dolomite
100	Magnesite
101	Magnesite
102	Magnesite
103	Magnesite

Several stratigraphic holes were drilled by the B.M.R. in the area as part of an extensive programme. These are located on the 1:100,000 map of Crick (1984) and the logs are provided in Johnson et al (1979). Figure 3 shows the holes located in the area of the licence.

Aztec Mining Company held area of the current licence as E.L. 9257. Aztec were exploring for base metals of similar geological character to the Woodcutters Zn mine. Aztec's exploration was limited to the drilling of shallow, average 6m deep, RAB holes at 50m spacings on lines 200m apart. This programme covered the majority of the licence which was interpreted to be underlain by White's Formation/Coomalie Dolomite. Only something less than half of the holes reached recognisable bedrock. The location of the holes and the bottom of hole lithology is shown on figure 3. Unfortunately carbonate rocks were simply logged as "dolomite" without any description of the physical properties of the chips and personal contact with the geologist supervising the programme failed to ascertain whether the carbonate was likely to be magnesite or truly dolomite. There is however shallow dolomite logged in many holes. Elevated base metal values were intersected in several holes. Many of these were associated with high Mn levels which indicates that the base metals are likely to have been absorbed by Mn oxides in the weathered profile and not reflect base metal mineralisation. The elevated values are annotated on figure 3 and the relevant sample numbers are shown on the face of the same figure. The most significant results are:

Sample No.	Result – all values ppm	Lithology
677870	2060 Pb, 3700 Mn	Probably Carbonate
677877	1400 Cu, 1500 Mn	Probably Whites
677906	1421 Cu, 397 Pb, 274 Zn, 1060 Mn	Chlorite Schist
677917	2040 Pb, 690 Mn	Chlorite Schist
677920	436 Cu, 758 Pb, 192 Zn, 930 Mn	Unknown

These values are not considered to be very exciting but the elevated Pb values are interesting and probably deserve follow up. Aztec did not analyse for U or scan the chips with a scintillometer.

6. CONCLUSIONS & RECOMMENDATIONS

Compilation of the previous exploration data indicates that carbonate rocks occur at shallow depth on the E.L. The nature of these is unknown.

The RAB drilling undertaken by Aztec should be used as a guide o the location of shallow carbonate and a limited number of RAB or R.C. holes should be drilled to ascertain the nature of the carbonate. Simultaneously the weak geochem anomalies obtained by Aztec should be tested by drilling. All cuttings should be scanned with a scintillometer.

7. EXPENDITURE FOR 1999 – 2000

During the first year of tenure a total of $3,652.46 was expended on the licence. This was constituted of:

Geologist	2,337.50
Drafting	160.00
Vehicle	134.50
Tenement Administration	160.00
Logistics	384.05
Sub Total	3,176.05
+ Overhead @ 15%	476.41
TOTAL	$3,652.46

The covenant for the year was $10,000. Work during the 1999 dry season was very much concentrated on E.L.s 9501 and 9253, especially the former where the Winchester Magnesite Prospect was drilled out. For the last report period for those two E.L.s expenditure was $629,226 and $222,176 respectively. Now that the Winchester Prospect has been drilled out it is anticipated that the Company's resources will be more evenly spread over the titles in the forthcoming dry season.

8. PROPOSED EXPENDITURE FOR 2000 - 2001

It is proposed to undertake drilling of the Coomalie Dolomite to ascertain its suitability as a flux for the proposed magnesium metal production plant in the second year of tenure. In addition some minor effort will be spent on testing the geochemical anomalies located by previous explorers.

It is proposed to spend $10,000 constituted of:

Geologist	2,500
Drilling Contractor	5,500
Analytical	1,000
Drafting	500
Logistics	500
Total	$10,000

9.. BIBLIOGRAPHY

Crick I.H. 1984. Geology of the Rum Jungle Uranium Field 1:100,000 Geological Map & Commentary (1987); Bureau of Mineral Resources, Geology & Geophysics, Canberra.

Johnson K., Hone, I.G., Ingram, J.A. & Crick, I.H. 1979.
Stratigraphic Drilling in the Rum Jungle Area, N.T. 1973-74: Geological & Geophysical Results; Record 1979/89 of Bureau of Minerals Resources, Geology & Geophysics, Canberra.

Spratt, R.N., 1965, Uranium Ore Deposits of Rum Jungle in Eighth Commonwealth Mining & Metallurgical Congress – Australian & New Zealand Volume 1, Geology of Australian Ore Deposits. Australasian Institute of Mining & Metallurgy.

- RAB Hole by Aztec 1996. E.L. 9257 Report CR 96/706 - No lithological or mineralisation indicators hole did not penetrate cover.

Dol. Dolomite - No detailed description available. Personal Contact with logger indicated that 'dolomite' was any carbonate rock - some could be magnesite & some could be carbonaceous shales.

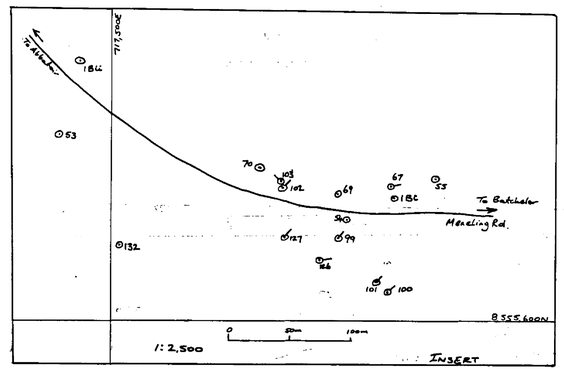
Cal Sch. Calcite Schist
Ser Sch. Sericite Schist
Cal-Trem Sch. Calcite-Tremolite Schist
Hem-Cal Sch. Haematite-Calcite Schist
Si Dol. Silicified Dolomite
No annotation indicates that bedrock was not reached.
Holes mostly ~ 6m deep. - No significant Au assays

Significant Base Metal Values are listed below :- (All values ppm unless otherwise indicated)

677861	1830 Cu
677870	2060 Pb, 3700 Mn
677877	1600 Cu, 1500 Mn
677906	4.2% Cu, 397 Pb, 270 Zn, 1960 Mn
677917	2046 Pb, 610 Mn
677920	436 Cu, 788 Pb, 1922 Zn, 930 Mn
679701	410 Cu, 304 Pb, 337 Zn, 1460 Mn
679702	479 Cu, 1445 Mn
677883	23 ppb Au -

⊙ Marathon Drill Hole

⊙ R.J. - BMR Stratigraphic Drill Hole - See B.M.R. Record 1979/89



Czl Laterite
Etd Tolmer Group - Sandstone & Argyle
Pyb Burkshaw Breccia
Epi Whites Formation - Black Siltstone - Shale
Epa Coomalie Dolomite - Magnesite & Dolomite
Epr Crater Formation - Sandstone & Conglomerate
Cnb Beestons Formation - Sandstone & Conglomerate
A Archaean - Granites, Gneiss, Dolerite

Legend for R.A.B. holes as shown in top, right hand corner of this plan.

Geology from 1:100,000 'Geology of the Rum Jungle Uranium Field' Crick I.H. 1984

Grid: A.G.D-66.

CR2000-0171

MT. GEIKE RESOURCES N.L.	
BATCHELOR PROJECT N.T.	
CASTLEMAINE HILL TENEMENTS	
E.L. 10143 & A.N. 515	
COMPILATION OF GEOLOGY & DRILLING	
Date Drawn: March 2000	Drawn by: B.J.WEIR
SCALE: 1:10,000	PLAN N°