

MT GRACE RESOURCES NL

ANNUAL REPORT

EXPLORATION LICENCE 10421

FENTON

Year Ended 29 August 2002

12002-0217

S H Robinson September 2002

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EXECUTIVE SUMMARY

The area covered by EL 10421 was identified as being prospective for limestone flux to be used in the production of magnesium metal near Batchelor. The results of all relevant previous exploration were compiled and assessed. A programme of field sampling of outcropping limestone was carried out. Eight rock chip samples were taken for geochemical analysis. Equally importantly the extensive field reconnaissance established that significant areas of the EL do not have any outcropping limestone and the few floaters and sub-crops that are present appear to be of low quality and unsuitable for use as a flux to process magnesite to magnesium metal in the Batchelor Magnesium Project.

Some of the samples from areas of outcropping limestone do exhibit good quality characteristics and are likely to be suitable for use as a flux. More detailed evaluation of the limestone has been postponed pending the completion of metallurgical testwork relating to the Batchelor Project, grant of environmental approvals for the Project and further progress on the definitive Feasibility Study for the Project. For these reasons the expenditure commitment has not been met in full. However the tenement has been voluntarily halved in size relinquishing those areas considered to have low potential for limestone of the requisite quality.

INTRODUCTION

Fenton EL 10421 was applied for in mid 1999 because the process technology that Mt Grace was then intending to utilise required a feedstock of approximately equal quantities of magnesite and limestone. At that time Mt Grace had outlined a magnesite resource at Batchelor but had not yet located a limestone resource.

A review of the regional geology revealed that there were significant quantities of limestone known in the Daly River Basin. Three criteria were adopted in land selection:

- outcropping and/or near surface limestone/dolomite
- reasonably close to Batchelor i.e. northern part of Basin
- well serviced by existing roads

The Fenton area is part of one of two suitable areas identified. As the general area is partly freehold land and partly leasehold land it was decided to make two separate applications; one covering leasehold land, EL 10421 and one over the freehold land, EL 10422.

Mt Grace has since decided to utilise a separate, although similar process technology. This process technology requires much less limestone in the feedstock, less than 10%. Hence these limestone areas are of interest to Mt Grace but are not as crucial as they may have been for the earlier process approach.

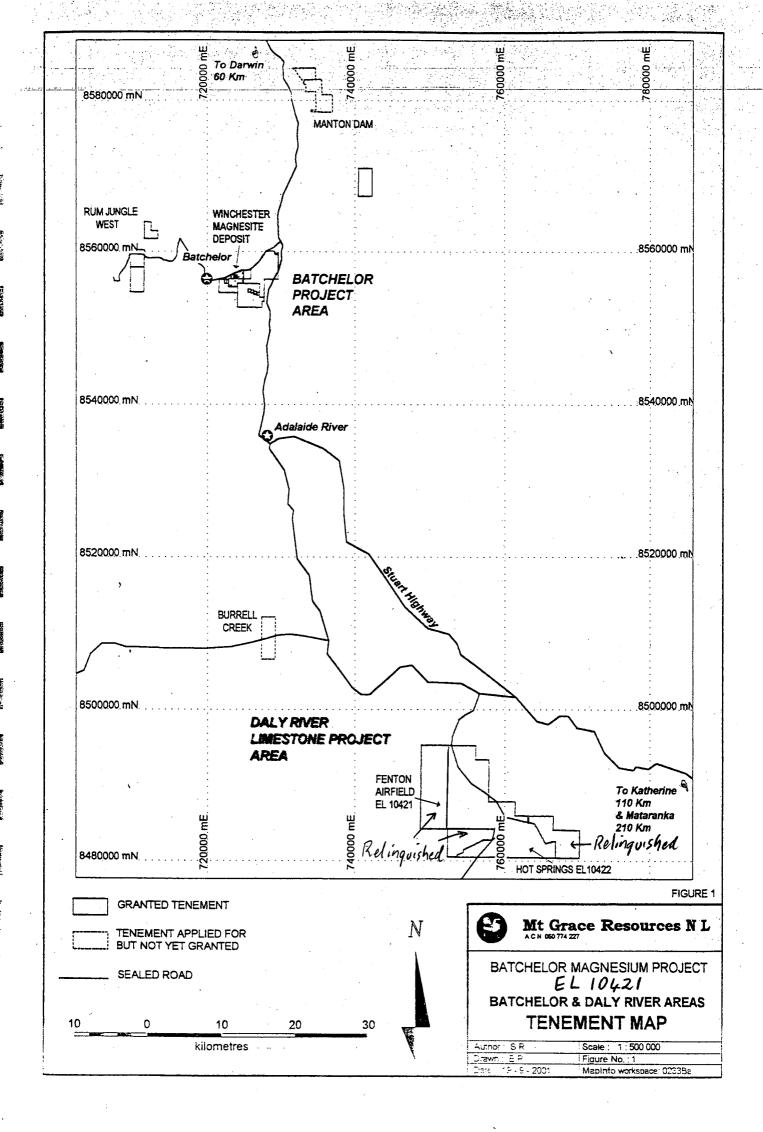
TITLE PARTICULARS

Exploration Licence 10422 was granted over 49 graticular blocks on 30 August 2001 as shown in Figure 2. It covers 140.7 square kilometres. The expenditure commitment for the first year was set at \$26,000. As a consequence of the change to the Australian Geodetic Datum it was subsequently determined that EL 10421 actually covered portions of 51 graticular blocks (Figure 3). The company has elected to relinquish 27 of these blocks prior to the end of the first year. The retained portion covers 24 blocks Figure 3 also shows the blocks retained and those relinquished.

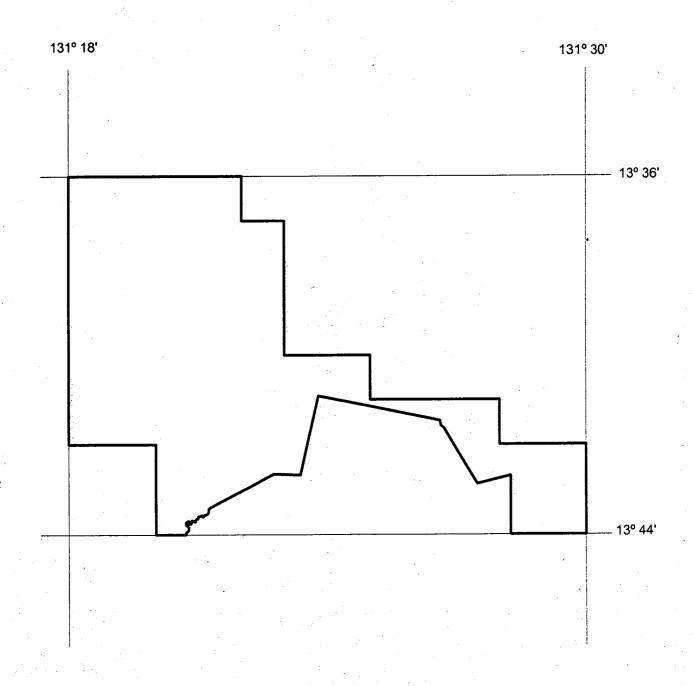
GEOLOGICAL SETTING

The Daly River Basin is a sedimentary basin of Cambrian age which unconformably overlies the Proterozoic metamorphic basement. It stretches from southwest of Adelaide River to well south of Katherine. The main stratigraphic unit of interest is the Tindall Limestone It has been explored as a source of limestone for cement manufacture but areas in the northern part of the basin are generally a little too high in MgO content to be suitable for cement. This is not an issue for the process technology proposed to be used by Mt Grace. Generally the Daly River Basin is relatively undeformed and gently dipping.

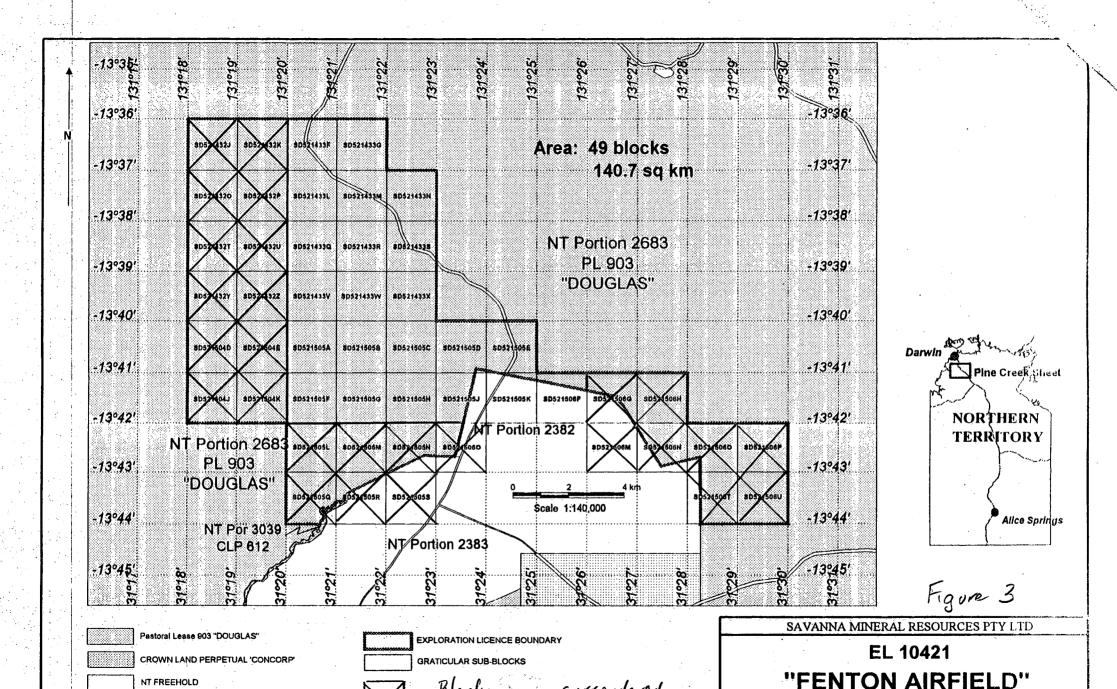
SR436



THIRD SCHEDULE (Plan of Area)



EL 10421 49 BLOCKS 140.7 sq kms Figure 2



Blocks surrendered

Date:

June 2002

Reference:

Pine Creek SD52-08

NT FREEHOLD

ABORIGINAL FREEHOLD LAND

PREVIOUS EXPLORATION

A comprehensive search of the NTDME records of previous exploration was made to identify those containing references to exploration for limestone in the northern part of the Daly River Basin, particularly within the Tindall Limestone. Those reports that appeared to be relevant were checked. As was expected some of these did not contain useful data and some contained potentially useful data but the location of samples taken was unclear.

The following reports contain relevant data

CR 1982 – 0332	Report on Cambrian Limestones, Daly River Basin NT – B. Daily, University of Adelaide.
CR 1981 – 0189	Amended Report for year ending 11-06-1981 EL 2067, 1373, 1747, 1748 – L.G.B. Nixon.
CR 1981 – 0009	Final Report on Exploration EL 2052 – Adelaide Brighton Cement.
CR 1980 – 0187	Annual Report EL 1748 – W.J. Fisher.
CR 1979 – 0158	Final Report EL 1748 – Northern Cement Ltd.
CR 1977 – 0145	NT Fenton Geological Report EL 1322 – International Mining Corporation.
CR 1979 – 0154	Final Report Sandy Creek EL 1754 – W.J. Fisher.
CR 1979 – 0015	Final Report EL 1373 – W.J. Fisher Northern Cement Ltd.
CR 1973 – 0261	Annual Report EL 477 - Northern Cement Pty Ltd.
CR 1972 – 0020	Final Report PA 2829 – Northern Cement Pty Ltd.
CR 1986 – 0269	Relinquishment Report EL 2118 – Pancontinental Mining Ltd.
CR 1978 – 0131	Final Report EL 1426 – W.J. Fisher for Northern Cement Pty Ltd.

All of the above exploration programmes, to the extent that limestone was targeted, were abandoned after only preliminary work. Conclusions were that the limestone either carried too high a silica content or that the MgO levels were too high for the material to be suitable for cement manufacture. Mt Grace also requires a low silica content but will be happy to accept material with an MgO content of up to 10 to 12%.

Unfortunately none of the samples taken and assayed, as reported in the above listed reports were located within the boundaries of EL 10421.

WORK COMPLETED

A further review of the previous work was undertaken primarily for familiarisation purposes. A search of the register of aboriginal sites was undertaken to ensure that any recorded sites were not accidentally damaged or intruded upon. There are no recorded sites within the boundaries of EL 10422.

Several days were spent traversing the area using a vehicle on existing tracks and traverses on foot across other areas not well served by tracks. Eight samples (32651 – 32656, 32665 and 32666) were collected and sent to Analabs in Perth for analysis using XRF. The Appendix to this report contains a listing of sample locations by AMG coordinates and a copy of the analytical report. The location of each sample is plotted on Figure 4.

Samples 32651 and 32666 appear to be suitable for use as a flux with silica content of less than 3%. However nearby to 32666, sample 32665 has a high silica content and this may be an indication that the silica levels in this area are variable. Silica levels are too high in all other samples.

Both samples have the advantage of being close to the existing bitumen road. There is no discernible evidence at surface of possible caving in the limestone in these areas. However given that the annual tonnage of limestone required is less than 15,000 for Stage 1 of the Batchelor Project and only about 55,000 tonnes per year for Stage 3 of the Project it is thought reasonably likely that sufficient resources essentially free of caves can probably be identified.

EXPENDITURE

Expenditure on EL 10421 during the year ended 29 August, 2002 is stated below.

	\$
Geologist - Data assessment, field reconnaissance 14 days	8,400
Geochemical analysis	573
Vehicles, fuel and freight	884
Travel and accommodation	626
Tenement costs	-1,469
Overhead and administration	1285
TOTAL	\$13,237
	911,768

This expenditure is less than the commitment set down for this tenement. The main reason for the under-run is that the purpose for holding this tenement is to possibly provide a source of flux for the Batchelor Magnesium Project if it should proceed. The

work to date has established that there is limestone on the tenement that is likely to be suitable for the purpose. However the holder has the view that a limestone resource of sufficient size can be very quickly proved up and that there is no need to expend funds on this until it is reasonably certain that the Batchelor Project will proceed. It is not expected that significant additional work would be justified on the limestone resource until the Batchelor Project has received environmental approvals, the metallurgical tests in South Africa are complete, there is a commitment to develop a new natural gas source in Darwin and the definitive feasibility study is further advanced.

PLANNED EXPLORATION PROGRAMME

Once it appears that most of the impediments to the development of the Batchelor Magnesium Project have been resolved the most likely sites for limestone suitable as flux in the process at Batchelor will be drilled on a reconnaissance basis. Then areas for infill drilling will be selected. The criteria to be applied for selection of areas for infill will be:

- Good quality, low silica limestone
- Little or no development of caverns
- Thin or no overburden
- Absence of problem trace elements such as As, Pb, Hg

It is expected that RC drilling techniques will be necessary for the drilling programme. The cost of the planned programme is likely to be in the vicinity of \$30,000.

APPENDIX SAMPLING DATA AND RESULTS

Daly River Basin Sampling April 2002

EL#	Sample #	Easting	Northing
EL10421	32651	754 560	8491 675
EL10421	32652	755 550	8491 515
EL10421	32653	755 460	8491 850
EL10421	32654	755 460	8491 870
EL10421	32655	759 225	8488 850
EL10421	32656	752 980	8493 930
EL10422	32657	763 520	8481 240
EL10422	32658	759 570	8482 300
EL10422	32659	758 700	8481 800
EL10422	32660	758 700	8481 760
EL10422	32661	758 070	8481 575
EL10422	32662	758 000	8481 500
EL10422	32663	756 090	8479 970
EL10422	32664	756 350	8480 050
EL10421/10422	32665	761 570	8485 480
EL10421/10422	32666	761 440	8485 500
EL10420	32667	728 035	8509 070
EL10420	32668	728 015	8509 075
EL10420	32669	728 020	8509 155
EL10420	32670	728 020	8509 175
EL10420	32671	728 020	8509 050
FL10420	32672	728 015	8509 055

Analabs Pty. Ltd. ACN 004 591 664

50 Murray Road, Welshpool Western Australia 6106 Telephone: +61 8 9458-7999 Facsimile: +61 8 9458-2922

Our reference Your reference	: WM063431 : 11 5358
Project code Date received Date reported Cost code	: 15/05/02 : 24/05/02 : MINERALS
S. Robinson	

_	
S.	Robinson

Mt Grace Resources Level 4 170 Burswood Road Burswood WA 6979 Australia

: 3 : 22 : 32651 : 32672 Number of pages of results Number of Samples First Sample Last Sample

Invoice to: S. Robinson	
Mt Grace Resources Level 4 170 Burswood Road Burswood WA 6979 Australia	

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Results to:		

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Authorised by . On behalf of:

Mr Richard Bowen Laboratory Manager,

Our reference Your reference roject code eport date Report Number Report status

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WM063431 **115358**

24/05/02 00063433 Final

Final 1 of

Analabs Pty. Ltd. ACN 004 591 664 50 Murray Road, Welshpool Western Australia 6106 Telephone: (61 8) 9458 7999 Facsimile: (61 8) 9458 2922

ANALYTICAL DATA

G1	Al2O3	CaO	Fe2O3	K20	1 /2-0	SiO2
Sample	A12O3		rezUs	K2U	MgO	S1U2
32651	0.46	50.86	0.98	0.25	1.66	2.82
32652 32653	1.23 0.44	48.85 42.60	1.05 0.98	0.68 0.27	1.58 7.63	5.86 5.04
32654 32654	0.44	43.77	0.70	0.27	5.19	8.57
32655	29.26	0.22	18.81	0.51 0.12	0.05	36.94
32656 -32657	10.29 	0.27 0.29	0.89 2.14	1.19 0.04	0.29 0.04	82.96 95.89
32658—	0.01	42.98	1.57	$-\frac{0.07}{0.02}$	5.18	8.92
32659	0.11	49.62	0.83	0.04 -	3.80	 1.07
32660	0.07	48.26	0.57	0.03	5.13	1.08
32661	0.10	46.84	0.56	0.04	5.81	1.78
32662	0.06		0.94	0.02	7:73	 1.86
32 663	2.77		1.38	1.47	1.54	12.77-
-32664	3.21	42.03	1.28	1.65	1.15	15.48
32665	2.42	39.14.	1.15	1.37	6.10	11.95
32666	0.41	48.88	0.37	0.27	3.97	2.40
*StdNIMG SARM1	0.36	49.67	2.64	0.02	1.93	3.03
= 3 <u>2667</u>	<0.05	34.66	0.44	0.03	17.62	0.52
3 2668 3 2669	0.13 0.12	45.49 43.97	0.50 0.52	0.08 0.07	8.00 9.42	0.39
3 2670	0.07	45.78	0.43 0.63	0.03	8.03	0.22
, 32671 - 32672 -		41.86 47.55	0.63	0.26 0.08	10.40- 5.91	1.34 0.75
*SS -32659	0.10	47.33		0.04	3.86	1.06
*Std NIMP_SARM5	4.16	49.90 2.72	12.76	0.09	25.59	51.23
*Rep 32652	1.21	48.78	1.03	0.68	1.62	5.86
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Method	X408	X408	X408	X408	X408	X408
Units Detection Limit	% 0.05	····//////////////////////////////////	%	%	% 0.01	0.05
Detection Limit	h	0.01	0.01	0.01	tU.U.L	U.U3
Detection Limit	ola is disalistic				***************************************	

Notes: - = not analysed. - = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

Our reference Your reference roject code eport date Report Number Report status WM063431 **115358**

24/05/02 00063433 Final 2 of

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		<u> </u>		<u> </u>		Art in
Sämple	Na2O	P205	TiO2	МπО	LOT	
32651 32652 32653 32654 32655	0.05 <0.05 0.06 0.05 <0.05	0.06 0.16 0.17 0.32 0.14	0.02 0.08 0.02 0.05 3.62	0.08 0.10 0.15 0.09 0.01	42.35 40.17 42.23 39.89 10.81	
32656 32657 32658 32659 32660	0.10 <0.05 <0.05 <0.05 0.07	0.03 <0.01 0.02 0.02 0.08	0.56 0.05 <0.01 <0.01 <0.01	<0.01 0.07 0.42 0.30 0.24	3.53 0.85 40.44 43.83 43.91	
-32661 -32662 -32663 -32664 -32665	<0.05 <0.05 0.06 0.06 0.07	0.02 0.02 0.34 0.40 0.04	<0.01 <0.01 0.16 0.18 0.16	0.28 0.31 0.06 0.08 0.05	43.83 44.04 35.98 34.31 37.56	
32666. *StdNIMG_SARM1 - 32667 - 32668 - 32669	<0.05 0.08 0.11 0.06 0.07	0.03 1.97 0.03 0.07 0.04	0.02 0.04 <0.01 <0.01 <0.01	0.11 0.19 0.15 0.14 0.13	43.12 <0.01 46.65 44.76 45.13	•
32670 -32671 32672 *SS -32659 *Std NIMP_SARM5	0.06 0.08 0.06 0.05 0.47	0.02 0.04 0.02 0.02 0.01	<0.01 0.02 <0.01 <0.01 0.19	0.11 0.18 0.20 0.28 0.23	44.82 44.33 44.40 43.56 <0.01	
*Rep 32652	0.05	0.15	0.07	0.10	39.97	
X						
Method Units Detection Limit	X408 % 0.05	X408 % 0.01	X408 % 0.01	X408 % 0.01	X408 % 0.01	

Notes: - = not analysed. -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

Our reference Your reference Project code Report date Report Number Report status

WM063431 **115358**

24/05/02 00063433 Final 3 of

Analabs Pty. Ltd. ACN 004 591 664 50 Murray Road, Welshpool Western Australia 6106 Telephone: (61 8) 9458 7999 Facsimile: (61 8) 9458 2922

ANALYTICAL DATA

		. 4 _{. 1} . [V]		ing a special control of the special control		. ·
Sample	CO3(R)					
32651 *BIK BLANK 32652 32653 *BIK BLANK	54.82 54.84 56.30					
32654 32655 32656 *Std BLANK /10 32657	49.49 0.38 0.72 					
32658 32659 32660 32661 32662	56.09 60.08 61.00 56.33 58.69					• .
32663 32664 32665 32666 32667	45.33 42.40 47.21 58.22 64.59				•	
32668 *Blk BLANK -32669 32670 32671	57.93 					
*SId BLANK /30 *Rep 32666 *Rep 32672	59.45 58.26 59.43					
Method Units Detection Limit	V828 % 0.025					

Notes: - = not analysed, - = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

ANALYSIS DESCRIPTION

For solid samples, reported units are expressed as mass / mass. ie: % denotes %mass/%mass, ppm denotes mg/kg, ppb denotes μ g/kg. For liquid samples, reported units are expressed as mass / volume. ie: % denotes %mass/%volume, ppm denotes mg/L, ppb denotes μ g/L.

Job number

: WM063431

Order number

: 115358

Scheme code

: S033 - Drillcore/Rock; Dry, Jaw crush, Fine pulv, Ring

Sample preparation. Drillcore, Rock samples; Dry, Jaw crush, Fine pulverise, Ringmill, <3.5kg, nominal 75 microns.

Scheme code

: X408 - Glass fusion, XRF, Whole rock analysis

Glass fusion, XRF, Whole rock analysis ie Silicates, feldspar, gypsum, iron ore

, limestone

Al2O3 CaO Fe2O3 K2O MgO SiO2

Alumina Calcium Oxide Iron Oxide Potassium Oxide Magnesium Oxide Silica

Sodium Oxide Phosphorus Pentoxide TiO2 Titanium Dioxide Manganese Oxide MnOLoss on Ignition 1000 C - Moisture

Weight one Weight two Weight three

Scheme code

: V828 - Carbonate Carbon

Hydrochloric acid leach, Leco tube furnace, Carbonate carbon.

CO3(R)

: Carbonate carbon repeat

