

1999 Annual Report of Exploration

AN 364 – Mt. Fitch North

Sixth Annual Report

CR99 / 362

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INTRODUCTION

Authority to Explore No. N364 (357.8 hectares) was granted to Compass NL for five years on 2 July, 1993. The tenement was joint ventured with Billiton Australia Gold Pty. Ltd. (later Acacia Resources Limited) on 4 August, 1993. Acacia managed the joint venture until mid-June 1997 when Compass Resources NL resumed management.

A request for waiver of reduction of AN 364 was granted on 9 August 1995 for 12 months. A waiver of reduction of AN 364 was again granted on 12 July 1996 for 12 months enabling the retention of the total area until 1 July 1998. A small portion of the southeastern section of the tenement, which was on Aboriginal Freehold land, was relinquished in July 1998 when the tenement was renewed for a further two years. The tenement area is now 348.9 hectares.

This report details all work completed between 2 July, 1998 and 1 July, 1999 the sixth year of the Authority.

AN 364 is situated approximately 15 Kilometres north-northwest of the Batchelor township, approximately 80 kilometres south of Darwin (Figure 1). Access to the tenement is via sealed roads to Browns Shaft from Batchelor, then by unsealed roads to the abandoned North Australian Railway which leads north into the tenement. Access within the tenement to the gridded areas is provided by numerous well defined four wheel drive tracks.

An alternative access route during the dry period is from the Darwin River Dam area by travelling 10 kilometres south on the old railway line into the tenement.

AN 364 consists of undulating to flat landscape which drains towards the south and west. Vegetation is predominantly medium sized trees and a grassy understorey, though small patches of forest occur around semi-permanent springs and waterholes and in parts of the major drainages.

Average rainfall for the area is 1,456 mm per year, nearly all of which falls between the months of November and March. The tenement is largely inaccessible by road during these months.

REGIONAL GEOLOGY

The Mt. Fitch North tenement (AN 364) is situated on the western flax of the Rum Jungle Complex in the Rum Jungle Region of the Pine Creek Geosyncline. The oval shaped complex consists predominantly of granitoid rocks.

Unconformably overlying the granitoid basement is the Crater Formation (up to 600 metres thick) which forms the basal sequence of the Mt. Partridge Group and comprises two major arenaceous and rudaceous sequences. The Coomalie Dolomite conformably overlies the Crater Formation and has a reported maximum thickness of 1,000 metres. Immediately overlying the Coomalie Dolomite is the Whites Formation, a black shale sequence which frequently contains base metal sulphide mineralisation at its base.

PREVIOUS EXPLORATION

During the 1950s and 1960s, the Bureau of Mineral Resources and Territory Enterprises Pty. Ltd., undertook both base metal and uranium exploration along the Whites Formation-Coomalie Dolomite contact. This involved mapping, costeaning, geochemical and geophysical surveys culminating in significant diamond drill programmes. Only minor mineralisation was reported.

Between 1979 and 1983 Uranerz undertook some regional RAB geochemical sampling to the immediate west of the tenement.

Compass Resources drilled two drill holes to the immediate west of the tenement in 1990, intersecting encouraging lead and copper mineralisation.

During 1994/1995 Acacia Resources completed one precollared diamond drill hole (MFN 3, collared just west of the tenement) and during 1995/1996 completed 7 reverse circulation drill holes over a major copper geochemical anomaly within the tenement.

The diamond drill hole intersected copper sulphide mineralisation at the base of the Whites Formation, whilst the reverse circulation holes showed the copper geochemical anomaly to be surficial in nature over Coomalie Dolomite.

In the period 1997/1998, Compass Resources completed three diamond drill holes, 1 north of hole MFN 3 and two holes to the south. Hole MFN 4 located 50 metres to the north of MFN 3 intersected 14 metres of 1.94% copper at the base of the Whites Formation.

WORK COMPLETED THIS YEAR

1. R/C Percussion Drilling

In the southern portion of the tenement, as part of a more extensive programme in ERL 125, one R/C percussion drill hole was completed. This hole, designated MFN 41, passed through the contact of the Whites Formation into the underlying Coomalie Dolomite without intersecting any significant base metal mineralisation. Assay and lithological logs for this hole are appended.

2. Review of Magnesite Potential

Drill logs from holes within the tenement were reviewed in light of the increasing importance being placed on magnesite as a source ore for metallic magnesium production. In particular, the automotive industry is set to undertake major developments using magnesium metal and its alloys in production of engine blocks and related parts.

The results of the review of diamond drill holes from north to south are as follows:

- DDH593 711750 E 8570715 N
Dec 60° to east, 49.68 metres deep, the interval 49.08-49.68 Metres recorded as pink tremolitic limestone.
This hole is located just north of the current tenement.
- DDH 729 711635 E 8570585 N
Vertical, 121.00 metres deep, the interval 114.90-121.00 metres logged as coarse grained grey dolomite.
- DDH 590 711685 E 8570550 N
Dec. 60° to east, 59.13 metres deep, the interval 54.71-59.13 metres logged as limestone.
- DDH 589 711500 E 8570190 N
Dec. 60° to east, 56.39 metres deep, the interval 46.94-56.39 metres logged as tremolite limestone.
- DDH 588 711580 E 8570150 N
Dec. 60° to east, 27.74 metres deep, limestone with cavities logged from 22.86-27.74 metres.
- DDH 585 711454 E 8569750 N
Dec 60° to east, 77.72 metres deep, the interval 74.68-77.72 metres logged as limestone.
- DDH 584 711468 E 8569675 N
Dec 60° to east, 60.66 metres deep, the interval 56.91-60.66 logged as limestone.
- DDH 583 711485 E 8569560 N
Dec 60° to east, 67.06 metres deep, logged as tremolitic limestone 40.23-67.06 metres.
- DDH 968 711315 E 8569460 N
Vertical, 153.00 metres deep, the interval 131.06-153.00 metres logged as dolomite.
- DDH 859 711400 E 8569460 N
Vertical, 91.14 metres deep, the interval 60.35-91.14 metres logged as medium grained grey dolomite, mottled in part.
- DDH 855 711465 E 8569460 N
Dec. 60° east, 91.44 metres deep, the interval 36.89-91.44 metres logged as medium grained grey dolomite.

- DDH 853 711468 E 8569400 N
Dec. 60° to east, 60.96 metres deep, the interval 55.78-60.96 metres logged as grey tremolitic dolomite.
- DDH 856 711410 E 8569340 N
Vertical, 79.25 metres deep, the interval 60.96-79.25 metres logged as very hard pale brown chert, tremolitic in part (silicified dolomite).
- DDH 854 711450 E 8569340N
Vertical, 60.96 metres deep, the interval 52.73-60.96 metres logged as browns tremolitic clays containing chert bands (silicified dolomite).
- DDH 852 711480 E 8569340 N
Vertical, 91.44 metres deep, the interval 38.10-91.44 metres logged as brown clay and brown tremolitic chert (silicified dolomite)
- DDH 849 711510 E 8569340 N
Vertical, 45.72 metres deep, the interval 38.71-45.72 metres logged as broken grey silicified dolomite (weathered).
- DDH 866 711390 E 8569295 N
Dec. 60° to 130°T, 89.31 metres deep, the interval 70.10-89.31 metres logged as weathered grey tremolitic dolomite
- DDH 965 711330 E 8569225 N
Vertical, 151.18 metres deep, the interval 114.3-151.18 metres logged as dolomite, quartz enriched with minor chlorite.
- MFN 3 711292.62 E 8569094.73 N
Dec 60° to 90°T, 290 metres deep, the interval 82.00-290.00 metres logged as dolomite and tremolitic dolomite.
- MFN 4 711300 E 8569138 N
Dec 60° to 84°T, 87 metres deep, the interval 85.5-87.00 metres logged as massive light grey dolomite.
- MFN 5 711290 E 8569035 N
Dec 60° to 86°T, 98.3 metres deep, the interval 91.00-98.3 metres logged as pale grey dolomite with coarse tremolite crystals.
- MFN 6 711290 E 8568985 N
Dec 60° to 87°T, 84 metres deep, the interval 79.00-84.00 metres logged as medium grey-white mottled crystallised dolomite with tremolite.

From the above summary, it would not appear that any significant intersections of high grade magnesite were encountered. Likewise geological mapping has

shown the Coomalie Dolomite at this location is largely composed of tremolitic dolomite. However, without assay data, this area could not be dismissed as many holes logged as containing limestone or dolomite do in fact contain magnesite.

The following seven RC holes were drilled by Acacia Resources

- | | |
|----------|---|
| FNRC 001 | 71443.03E 8569164.95N
Dec 70° to 135°T. Weathered dolomite to 39 metres then tremolitic dolomite 39-59 metres. |
| FNRC 002 | 711423.67E 8569181.71 N
Dec 70° to 135°T
Weathered dolomite to 24 metres, then tremolitic dolomite 24-89 metres. |
| FNRC 003 | 711545.70E 8569134.51N
Dec 60° to 90°T. Weathered dolomite to 16 metres, chloritic dolomite 16-20 metres, then tremolitic dolomite 20-59 metres, with chlorite present in the interval 41-50 metres. |
| FNRC 004 | 715520.61E 8569135.76N
Dec 60° to 90°T, weathered dolomite to 22 metres, then tremolitic dolomite 22-65 metres, with chlorite present from 58-65 metres. |
| FNRC 005 | 711495.32E 8569136.17N
Dec 60° to 90°T, weathered dolomite 0-10 metres, fresh tremolitic dolomite from 10-59 metres, with chloritic tremolitic dolomite present from 21-36 metres. |
| FNRC 006 | 711470.98E 8569133.16N
Dec 60° to 90°T, weathered dolomite to 11 metres, with tremolitic dolomite to 59 metres. |
| FNRC 007 | 711445.52E 8569134.66N
Dec 60° to 90°T, weathered dolomite to 25 metres, with tremolitic dolomite to 59 metres. |

However the following high magnesium zones suggest that magnesite was intersected in the following intervals (>20% Mg which is >82% magnesite):

FNRC 001	11 to 15 metres, 42 to 43 metres, 45 to 46 metres, 47 to 59 metres
FNRC 002	25 to 38 metres, 51 to 55 metres, 59 to 61 metres, 63 to 64 metres, 65 to 66 metres, 74 to 79 metres, 86 to 88 metres
FNRC 003	16 to 17 metres, 20 to 23 metres, 24 to 26 metres, 28 to 30 metres.
FNRC 004	35 to 36 metres, 37 to 38 metres, 39 to 41 metres, 46 to 50 metres, 57 to 58 metres.
FNRC 005	14 to 15 metres.
FNRC 006	41 to 44 metres, 58 to 59 metres.
FNRC 007	43 to 44 metres, 46 to 47 metres, 48 to 49 metres, 50 to 52 metres, 54 to 55 metres, 56 to 57 metres.
FNRC 008	11 to 12 metres, 16 to 17 metres, 18 to 59 metres.

Of these intervals the highest grades are in Hole FNRC 007.

The indications are that without assay data, the lithological logging of the drill holes is not indicative of the nature of the carbonates in the Coomalie Dolomite. Magnesite has been shown to be present in most locations where assaying for magnesium has taken place.

PROPOSED PROGRAMME AND BUDGET

As part of an overall programme to locate potential base metal feed for the Browns Project, additional drilling for base metals at the Mt. Fitch North prospect is planned.

In addition, the potential for magnesite ore will be pursued, particularly by the assaying of existing drill cores.

A budget of \$10,000 has been proposed for this exploration work.

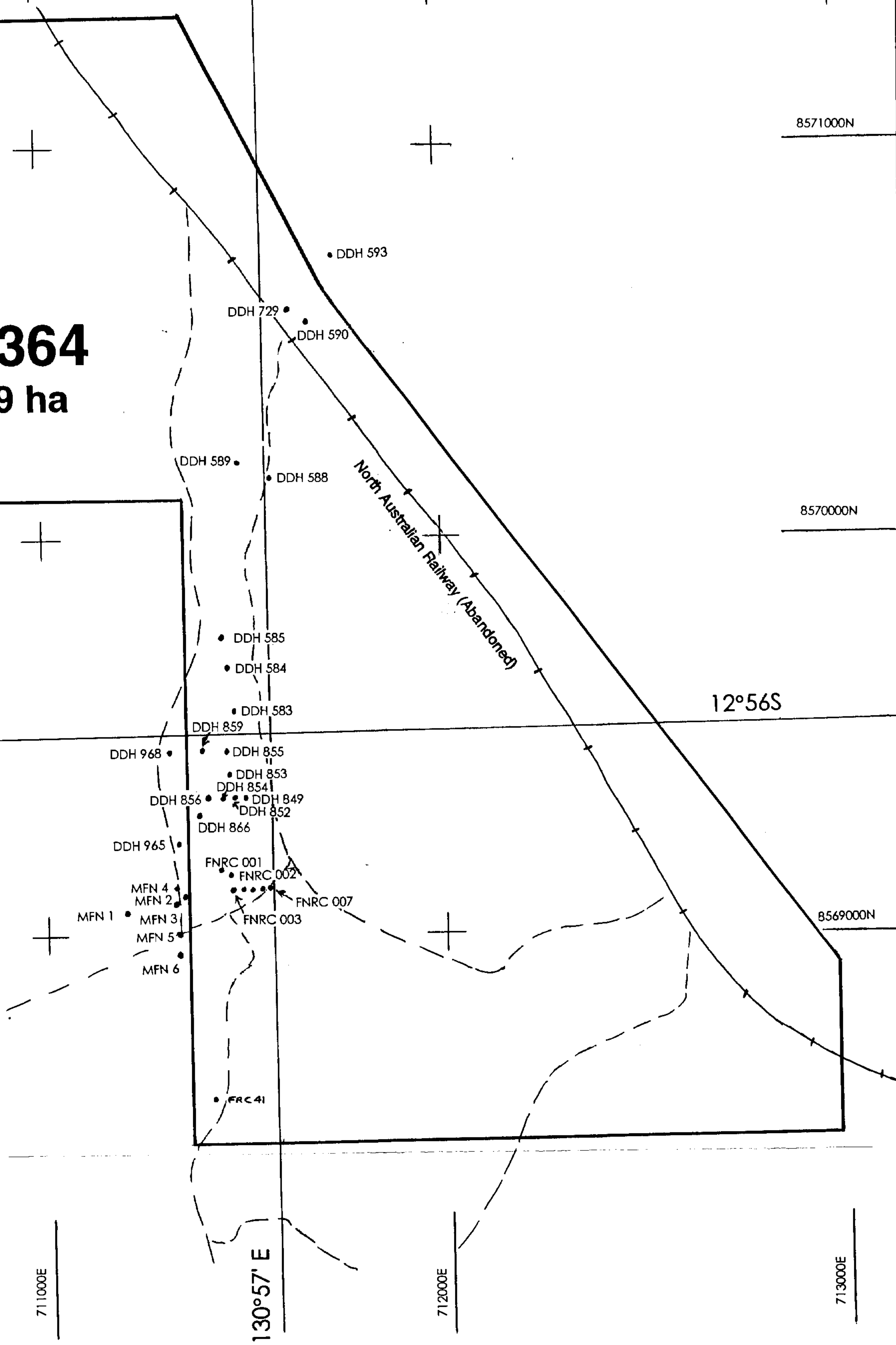
AN 364 – MT. FITCH NORTH
EXPENDITURE REPORT

2 July 1998 to 1 July 1999

Salaries, wages, on costs	3,774.86
Travel and accommodation	31.00
Field costs	1,715.37
Assay costs	1,154.00
Motor vehicle allocation	35.00
Photographs and maps	105.00
Drilling, site preparation, rehabilitation	2,150.00
Overheads	<u>1,344.78</u>
Total expenditure	\$10,310.01

APPENDIX 1

AN 364
348.9 ha



Scale 1:10,000

COMPASS RESOURCES NL

Drill Hole Location Map

AN 364 - Mt. Fitch North

AN 364

HOLE NO. FRC41

Page 1

Co-ordinates 61860 N 26120 E

AMG 8568600 N 711410 E

Declination: 60° Azimuth: 90°

Total Depth: 43m

Start date: 2.8.1998

Completion Date: 2.8.1998

Sample	Interval		Description
48595	0.0	1.0	Orange red soil
48596	1.0	2.0	Orange brown clays and quartz
48597	2.0	3.0	Light brown clays
48598	3.0	4.0	Light brown clays, weathered shale
48599	4.0	5.0	Light grey weathered black shale
48600	5.0	6.0	Weathered black shale
48601	6.0	7.0	As above
48602	7.0	8.0	As above
48603	8.0	9.0	As above
48604	9.0	10.0	As above
48605	10.0	11.0	As above
48606	11.0	12.0	As above
48607	12.0	13.0	As above
48608	13.0	14.0	As above
48609	14.0	15.0	Partly weathered black shale
48610	15.0	16.0	As above
48611	16.0	17.0	As above
48612	17.0	18.0	As above
48613	18.0	19.0	As above
48614	19.0	20.0	As above
48615	20.0	21.0	As above
48616	21.0	22.0	As above
48617	22.0	23.0	As above
48618	23.0	24.0	As above
48619	24.0	25.0	As above
48620	25.0	26.0	As above
48621	26.0	27.0	As above
48622	27.0	28.0	As above
48623	28.0	29.0	As above
48624	29.0	30.0	As above
48625	30.0	31.0	Brown-black weathered shale
48626	31.0	32.0	As above
48627	32.0	33.0	As above
48628	33.0	34.0	Slightly weathered black shale
48629	34.0	35.0	As above
48630	35.0	36.0	As above
48631	36.0	37.0	As above
48632	37.0	38.0	Light grey, tremolite schist
48633	38.0	39.0	As above
48634	39.0	40.0	As above
48635	40.0	41.0	As above
48636	41.0	42.0	As above
48637	42.0	43.0	As above
48638	43.0	44.0	As above

AN 364

HOLE NO. FRC41

Co-ordinates 61860 N 26120 E

Declination: 60° Azimuth: 90°

Start date: 2.8.1998

Page 2

AMG 8568600 N 711410 E

Total Depth: 43m

Completion Date: 2.8.1998

Sample	Interval		Description
48639	44.0	45.0	Light grey dolomite
48640	45.0	46.0	Light grey dolomite, wet sample
48641	46.0	47.0	As above
48642	47.0	48.0	Light grey dolomite and quartz
48643	48.0	49.0	As above
48644	49.0	50.0	As above
48645	50.0	51.0	As above
48646	51.0	52.0	Light grey dolomite.
48647	52.0	53.0	As above

AN 364 DRILLING SEPTEMBER 1998

Hole	From	To	Sample	Cu	Pb	Zn	Co	Ni	Mn	Ag	As	Bi	Mo	Mg	Fe
FRC41	0	1	48595	0.0250	0.0150	0.0200	0.0050	0.0100	0.1650	0.5	0.0005		0.0005	0.1000	12.400
FRC41	1	2	48596	0.0500	0.0150	0.0050	0.0080	0.0120	0.3050	0.5	0.0005		0.0005	0.1800	8.790
FRC41	2	3	48597	0.0450	0.0100	0.0100	0.0100	0.0130	0.1300	0.5	0.0005		0.0005	0.6050	6.170
FRC41	3	4	48598	0.0400	0.0100	0.0250	0.0230	0.0230	0.2200	0.5	0.0005		0.0005	1.2800	6.020
FRC41	4	5	48599	0.0250	0.0010	0.0150	0.0080	0.0110	0.0900	0.5	0.0005		0.0005	0.7350	4.720
FRC41	5	6	48600	0.0200	0.0050	0.0010	0.0030	0.0060	0.0350	0.5	0.0005		0.0005	0.5400	4.860
FRC41	6	7	48601	0.0150	0.0100	0.0100	0.0005	0.0050	0.0100	0.5	0.0005		0.0005	0.4200	4.250
FRC41	7	8	48602	0.0200	0.0050	0.0100	0.0030	0.0090	0.0200	0.5	0.0005		0.0005	0.4550	6.410
FRC41	8	9	48603	0.0150	0.0100	0.0100	0.0040	0.0120	0.0150	0.5	0.0005		0.0005	0.4800	6.350
FRC41	9	10	48604	0.0150	0.0100	0.0150	0.0040	0.0140	0.0200	0.5	0.0005		0.0005	0.4900	8.590
FRC41	10	11	48605	0.0100	0.0150	0.0800	0.0040	0.0170	0.0200	0.5	0.0005		0.0005	0.7200	6.790
FRC41	11	12	48606	0.0100	0.0100	0.0300	0.0050	0.0180	0.0350	0.5	0.0005		0.0005	0.9450	16.700
FRC41	12	13	48607	0.0200	0.0050	0.0050	0.0040	0.0150	0.0150	0.5	0.0005		0.0005	0.5850	9.680
FRC41	13	14	48608	0.0100	0.0050	0.0010	0.0005	0.0060	0.0100	0.5	0.0005		0.0030	0.3100	8.850
FRC41	14	15	48609	0.0100	0.0050	0.0010	0.0005	0.0060	0.0050	0.5	0.0005		0.0020	0.1800	6.510
FRC41	15	16	48610	0.0100	0.0010	0.0010	0.0005	0.0070	0.0050	0.5	0.0005		0.0005	0.3450	6.670
FRC41	16	17	48611	0.0100	0.0050	0.0010	0.0005	0.0120	0.0050	0.5	0.0005		0.0005	0.4700	6.820
FRC41	17	18	48612	0.0100	0.0050	0.0010	0.0005	0.0060	0.0100	0.5	0.0005		0.0005	0.3550	5.590
FRC41	18	19	48613	0.0050	0.0050	0.0010	0.0020	0.0070	0.0150	0.5	0.0005		0.0005	0.2550	4.230
FRC41	19	20	48614	0.0100	0.0100	0.0100	0.0020	0.0260	0.0100	0.5	0.0005		0.0005	0.7400	5.290
FRC41	20	21	48615	0.0100	0.0050	0.0010	0.0040	0.0140	0.0250	0.5	0.0005		0.0005	0.5650	5.170
FRC41	21	22	48616	0.0100	0.0050	0.0010	0.0030	0.0110	0.0100	0.5	0.0005		0.0005	0.4900	5.320
FRC41	22	23	48617	0.0150	0.0100	0.0150	0.0040	0.0120	0.0100	0.5	0.0005		0.0005	0.4950	13.300
FRC41	23	24	48618	0.0200	0.0100	0.0100	0.0040	0.0150	0.0150	0.5	0.0005		0.0005	0.4700	11.200
FRC41	24	25	48619	0.0150	0.0010	0.0100	0.0060	0.0350	0.0150	0.5	0.0005		0.0005	0.9250	13.100
FRC41	25	26	48620	0.0150	0.0100	0.0100	0.0060	0.0240	0.0150	0.5	0.0005		0.0005	0.6900	12.900
FRC41	26	27	48621	0.0100	0.0100	0.0010	0.0030	0.0130	0.0050	0.5	0.0005		0.0005	0.4200	12.000
FRC41	27	28	48622	0.0100	0.0100	0.0050	0.0040	0.0110	0.0250	0.5	0.0005		0.0005	0.4000	6.910
FRC41	28	29	48623	0.0100	0.0100	0.0150	0.0050	0.0110	0.0250	0.5	0.0005		0.0005	1.4700	6.080
FRC41	29	30	48624	0.0100	0.0100	0.0250	0.0050	0.0350	0.0150	0.5	0.0005		0.0005	6.2400	4.990
FRC41	30	31	48625	0.0350	0.0400	0.0350	0.0060	0.0230	0.0050	0.5	0.0005		0.0005	8.0900	4.980

AN 364 DRILLING SEPTEMBER 1998

Hole	From	To	Sample	Cu	Pb	Zn	Co	Ni	Mn	Ag	As	Bi	Mo	Mg	Fe
FRC41	31	32	48626	0.0400	0.0150	0.0550	0.0050	0.0160	0.0100	0.5	0.0005		0.0005	8.6100	3.900
FRC41	32	33	48627	0.0150	0.0200	0.0700	0.0060	0.0110	0.0100	0.5	0.0005		0.0005	9.6700	4.840
FRC41	33	34	48628	0.0100	0.0250	0.0750	0.0040	0.0080	0.0200	0.5	0.0005		0.0005	10.6000	5.760
FRC41	34	35	48629	0.0150	0.0200	0.0300	0.0040	0.0100	0.0250	0.5	0.0005		0.0005	11.1000	6.050
FRC41	35	36	48630	0.0050	0.0100	0.0100	0.0020	0.0060	0.0150	0.5	0.0005		0.0005	13.1000	4.500
FRC41	36	37	48631	0.0050	0.0010	0.0010	0.0020	0.0050	0.0200	0.5	0.0005		0.0005	11.5000	2.270
FRC41	37	38	48632	0.0010	0.0010	0.0010	0.0005	0.0020	0.0200	0.5	0.0005		0.0005	11.0000	1.530
FRC41	38	39	48633	0.0010	0.0010	0.0010	0.0005	0.0030	0.0300	0.5	0.0005		0.0005	12.5000	1.550
FRC41	39	40	48634	0.0010	0.0010	0.0010	0.0005	0.0005	0.0550	0.5	0.0005		0.0005	12.4000	1.300
FRC41	40	41	48635	0.0010	0.0010	0.0010	0.0005	0.0005	0.0450	0.5	0.0005		0.0005	11.1000	1.390
FRC41	41	42	48636	0.0010	0.0050	0.0050	0.0005	0.0030	0.0350	0.5	0.0005		0.0005	10.6000	1.850
FRC41	42	43	48637	0.0010	0.0010	0.0100	0.0005	0.0030	0.0400	0.5	0.0005		0.0005	11.9000	1.930
FRC41	43	44	48638	0.0010	0.0010	0.0010	0.0005	0.0005	0.0850	0.5	0.0005		0.0005	11.6000	1.120
FRC41	44	45	48639	0.0350	0.0100	0.0010	0.0040	0.0060	0.1100	0.5	0.0005		0.0005	10.9000	1.610
FRC41	45	46	48640	0.0010	0.0010	0.0010	0.0005	0.0030	0.1100	0.5	0.0005		0.0005	11.4000	1.200
FRC41	46	47	48641	0.0010	0.0010	0.0010	0.0005	0.0030	0.1000	0.5	0.0005		0.0005	10.5000	1.390
FRC41	47	48	48642	0.0100	0.0050	0.0050	0.0030	0.0110	0.1100	0.5	0.0005		0.0005	6.6100	4.160
FRC41	48	49	48643	0.0050	0.0050	0.0050	0.0005	0.0070	0.0850	0.5	0.0005		0.0005	6.6900	3.030
FRC41	49	50	48644	0.0010	0.0010	0.0010	0.0005	0.0020	0.0400	0.5	0.0005		0.0005	1.6100	0.895
FRC41	50	51	48645	0.0010	0.0010	0.0010	0.0005	0.0020	0.1050	0.5	0.0005		0.0005	1.1500	1.010
FRC41	51	52	48646	0.0010	0.0010	0.0010	0.0005	0.0040	0.1150	0.5	0.0005		0.0005	0.8150	1.200
FRC41	52	53	48647	0.0010	0.0050	0.0010	0.0005	0.0060	0.1600	0.5	0.0005		0.0005	1.2700	1.710