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EL 24/84

LETTER
5-1-89
REFERS

EXPLORATION LICENCE 24/84

MT. ROMULUS

TASMANIA

REPORT ON EXPLORATION ACTIVITY

TO OCTOBER 1988

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PREPARED BY:

R. J. HENHAM,
GEOLOGIST.

ISSUED BY:

D. B. WALLACE,
REGIONAL MANAGER.

NOVEMBER 1988.

C O N T E N T S

PLATES

1. SUMMARY

This report summarises exploration activity on EL 24/84 Mt. Romulus conducted by Aberfoyle Resources Limited for the 12 months to the 15th November, 1988.

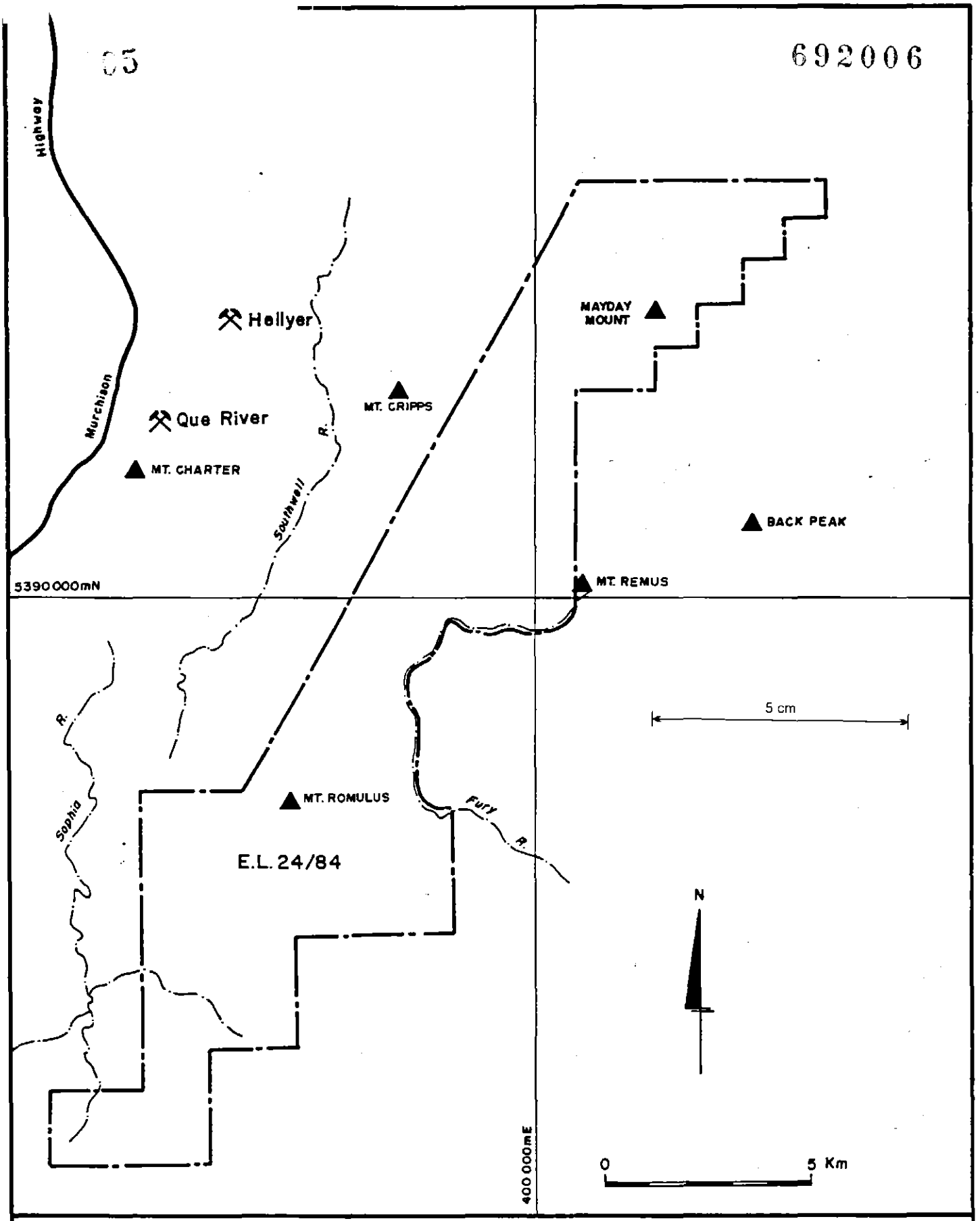
Gridding followed by soil and rock chip sampling as well as limited ground magnetics were conducted by CRA Exploration in the early months of 1988 over the Ten Mile Creek stream sediment anomaly thought to be related to haematite stockwork in Cambrian volcanics of the Tyndall Group.

Further sampling of this haematite stockwork was undertaken by Aberfoyle in October of 1988. Extremely poor weather conditions coupled with the rugged topography and vegetation limited work to the existing CRA grid.

2. INTRODUCTION

Exploration Licence 24/84 (Mt. Romulus) of 119 square kilometres is situated between the western edge of the Cradle Mountain - Lake St. Clair National Park and Lake Mackintosh (see Plate MROM 1b). The area is rugged and heavily forested and to date there is no road access to the majority of the licence.

Since 28th April 1988 the area has been explored by Aberfoyle Resources Limited under the terms of the Mount Read Volcanics Joint Venture with CRA Exploration Pty. Ltd.



Aberfoyle Resources Limited

EXPLORATION DIVISION

REVISIONS			
Init.	Date	Init.	Date

NORTH WEST TASMANIA
C.R.A.E.
MT. ROMULUS E.L. 24/84
LOCATION PLAN

Compiled :
Drawn :
Traced : JLR
Checked :

Location Code :
Scale : As shown
Date : December, 1988
Plate No. : MROM 1b

3. EXPLORATION HISTORY

3.1 Picklands Mather (mid 60's)

Stream sediment sampling over the entire area. A number of base metal anomalies were detected but not followed up. No Au determinations done.

3.2 Aberfoyle Ltd. (1970-1976)

Airborne geophysics over EL 2/70 which resulted in the relinquishment of an area approximately between the Vale and Southwell Rivers.

Following the discovery of mineralisation at Que River the area relinquished was re-applied for and granted in 1974.

Airborne EM and regional stream sediment sampling led to the relinquishment of 45 sq. km. which now forms the northernmost part of the EL 24/84 Mt. Romulus.

3.3 CRA Exploration (1974)

Reconnaissance mapping and soil sampling over Cambrian tuffs and schists in the south of the EL. No evidence for base metal mineralisation and no Au determination carried out.

3.4 Alcoa (1978-1980)

Aeromagnetic Survey and some stream sediment sampling. Target selection and follow up restricted to Sn/W exploration related to Devonian granites.

3.5 Shell (1981-1984)

Dighem and stream sediment surveys. Most follow up restricted to the base metal potential in Cambrian volcanics. Most anomalies downgraded. Almost total lack of Au assays even in areas of strongly anomalous As in the Precambrian. Mapping indicates a massive porphyry occupies much of the Cambrian belt.

The Ten Mile Creek, Sophia, Mt. Swallow and Romulus East Au anomalies were generated in addition to the Fury River Pb/Ba/As anomaly.

3.6 CRA Exploration (1984-1987)

Fury River Pb/Ba/As anomaly attributed to carbonaceous phyllites in the Precambrian. Rock chip sampling was undertaken in the Ten Mile Creek and Romulus East areas, but Sophia and Mt. Swallow Au anomalies were not tested.

3.7 CRA Exploration (1987-1988)

The Romulus East Au anomaly was downgraded. Two anomalous rock chips were taken from the Cambrian Porphyry in the Ten Mile Creek Area. Follow up gridding, soil and rock chip sampling were undertaken in November 1987. Au results from the rock chips were generally disappointing although a weak Au soil anomaly was outlined over haematite stockwork zones within the Cambrian porphry.

4. REGIONAL GEOLOGY

Precambrian sediments outcrop along the south eastern boundary of the E.L. They consist mostly of interlayered pelite and quartzite metamorphosed to Greenschist facies and form the north western margin of the Tyennan nucleus. Foliation is defined by muscovite and is medium grey in colour. In the south eastern corner of the EL a coarse-grained muscovite-biotite granite has intruded the Precambrian sequence. K-Ar dating of the granite gives an age of 355±6 Ma, (McDougall and Leggo, 1965).

Unconformably overlaying the Precambrian is a north-east south-west trending belt of Cambrian volcanics attaining a maximum thickness of approx. 2 km north-west of Mt. Romulus. North-west of Mt. Remus a thin unit of coarse-grained sandstone of Cambrian age is exposed immediately west of the Precambrian contact. This is structurally overlain by a conformable unit of coarse-grained quartz-feldspar-biotite porphyry which is rhyolitic in composition. Considerable variation in the composition and grainsize of the unit can be seen throughout.

Unconformably overlaying the porphyritic Cambrian unit are Ordovician sediments which dip broadly westwards with an upward facing. They appear as both a siliceous sandstone/conglomerate, which can be mapped as individual units and abutt the Cambrian, and

a Gordon Limestone equivalent which outcrops in the north-western area of the E.L.

Intruded into the coarse-grained porphyritic Cambrian sequence is a north-west south-east trending body of granitic intrusives of possible Devonian age related to the Granite Tor batholith.

Tertiary basalt overlays the Ordovician and Cambrian sequences to the north-west of Mt. Romulus. Quaternary fluvioglacials, glacials, talus deposits and alluvium appear throughout the E.L.

5. EXPLORATION ACTIVITY - 1988

5.1 Ten Mile Creek

Introduction

Limited exploration has been conducted in the volcanic rocks of the Tyndall Group within the Mt. Romulus E.L.

Reconnaissance stream sediment sampling by CRA Exploration in the Ten Mile Creek Area indicated a strong bulk cyanide leach anomaly thought to be draining a haematite stockwork zone previously described by Shell.

Gridding and soil sampling by CRA Exploration in early 1988 delineated a moderate Au soil geochemical anomaly and co-incident weakly Au anomalous rock chips directly over the haematite stockwork zone.

A reconnaissance mapping and sampling programme was undertaken over 6 days in October 1988. Most work was restricted to the existing CRAE grid.

Geology (refer plates MROM 10a & MROM 10b)

The geology of the Ten Mile Creek area is restricted to two major units. These being Cambro-Ordovician siliclastics ranging from quartz-feldspar rich sandstones and quartzites to

coarse grained siliceous pebble conglomerates and a massive quartz-feldspar-biotite porphyritic rhyolite which is Cambrian in age.

Two siliclastic units were identified. A quartz rich pink-brown pebble conglomerate, most probably an upper unit in the Owen Conglomerate sequence and a leached grey-brown quartzite interpreted to be the Moina Sandstone. Poor outcrop prevented the determination of dip/strike measurements for these units.

The porphyritic rhyolite known as Bond Range porphyry, occurs as a pink brown quartz-feldspar-biotite porphyritic rhyolite. It outcrops on the western slopes of Mt. Remus as a north-east south-west trending unit of most likely intrusive origin. Quartz and plagioclase phenocryst sizes range up to approx. 1cm in diameter with a quartz, plagioclase, k-feldspar matrix. In most cases the biotite and plagioclase exhibit moderate to strong alteration.

Spherulitic textures in a finer grained unit within the porphyry are interpreted to be the result of chilling near an intrusive contact.

A quartzite unit outcropping between the Owen Conglomerate and the Bond Range Porphyry contains abundant volcanic quartz and rare rhyolite clasts and is most probably locally derived.

Alteration

Argillic alteration of the plagioclase phenocrysts and groundmass occurs throughout the porphyry. Patchy alteration of biotite occurs as chlorite-illite, muscovite-sericite or limonitic pseudomorphs. Pervasive haematite alteration appears in discrete patches and haloes surrounding haematite stockwork and vein mineralisation and is also related to martitized primary magnetite disseminations.

Weak illite/sericite alteration within the matrix of Cambro-Ordovician siliclastics is present throughout the entire area mapped.

Mineralisation

Specular haematite occurs as irregular branched stockworks and wide spaced sheeted vein systems. Vein thicknesses range up to 10mm in places. No preferential orientation of the veins seems evident, although outcrop was poor.

Interstitial quartz within the haematite may contain rare chalcopyrite as inclusions and in one case an inclusion of silver rich gold was detected, (Appendix B).

No mineralisation within the Cambro-Ordovician was detected.

Geochemistry (refer plates MROM 11a & MROM 11b)

Two metre spaced rock chip samples were taken from pits dug to bedrock along line 9400N over a previously sampled Au geochemical anomaly, (CRAE 1988-89). Maximum value returned was 0.092 g/t Au which compares favourably with previous results.

-80 mesh and BCL stream sediment samples were taken from a tributary to Ten Mile Creek in a location previously sampled by CRAE. Both samples returned anomalous values for gold. 3000 ppt Au (BCL), 0.037 g/t Au (-80 mesh).

6. CONCLUSIONS

1. Gold Mineralisation in the Ten Mile Creek Area appears to be related to two sources.

   Rock chips collected by Shell in 1983-84 from the Moina Sandstone (max. 2.2 g/t Au) appear related to quartz-chlorite veining of possible Devonian Age. Anomalous rock chips taken from the Bond Range Porphyry by CRAE in 1988-89 (max. 8.08 g/t) ~~are~~ from outside the zone of haematite mineralisation may also be related to a Devonian event due to the presence of similar veining.

   The haematite stockwork zone contains rare gold as inclusions in interstitial quartz.

2. Stream sediment Au geochemical anomalies at Ten Mile Creek cannot be repeated by further sampling. A site previously sampled as 29500 ppt Au (BCL), >0.008 g/t Au (-80 mesh) by CRAE, was resampled as 3000 ppt Au (BCL), 0.037 g/t Au (-80 mesh) by Aberfoyle.

   This indicates a significant problem in the generation of stream sediment anomalies for gold in this area. Variability in sample analysis can most likely be attributed to site selection and seasonal sediment load variation as well as the generally "nuggetty" distribution of gold mineralisation.

3. The haematite stockwork zone has a width of at least 50 metres and is open at both ends along strike. The strike of mineralisation appears to be north-east south-west with the dip or plunge not yet determined.

7. RECOMMENDATIONS

1. Mapping and sampling of the haematite stockwork zone be undertaken to further understand the nature of gold mineralisation within the haematite.

2. Investigate anomalous gold zones outside the haematite stockwork and determine their potential.

3. Conduct an orientation survey to determine which stream sediment sampling technique is applicable. This should be done by the one person or group of people to reduce sample variability.

4. Extend the existing grid to the north-east and conduct detailed mapping as well as soil geochemical sampling to assess the strike extent of the haematite mineralisation.

5. Conduct ground based hand held geophysics, once a suitable method is determined, to delineate the size and orientation of haematite mineralisation.

8. REFERENCES

CLEMENTSON, I.M. (1985)
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COLLINS, P.L.F., GUILLANE, A.B. & WILLIAMS, E. (1981)
Geological Atlas 1 Mile Series Sheet 44 - Mackintosh Explan. Rep. Dept. Mines, Tasmania.

FUNNELL, F.R. & VON STROKIRCH, T. (1987)
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Progress Report on Exploration 25/11/86 - 25/11/87.
CRA Exploration Pty. Limited - Company Report.

McDOUGALL, I. & LEGGO, P.J. (1965)
Isotopic Age Determinations on Granitic Rocks from Tasmania.
J. Geol. Soc. Aust. (12) pp 295-332.

APPENDIX A

ASSAY RESULTS

ANALABS

A Division of Macdonald Hamilton & Co. Pty. Ltd.

692021

ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	23.3.08.05811	10/11/88	5041	1 OF 2

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Ag	Fe	As	Au		
1	431650	20	20	110	<0.5	9.50	1	0.011		
2	431651	<5	15	45	<0.5	6.30	1	0.008		
3	431652	10	10	40	<0.5	6.40	2	0.013		
4	431653	<5	<5	60	<0.5	5.55	2	<0.008		
5	431654	45	15	90	<0.5	6.50	1	0.013		
6	431655	25	15	35	<0.5	7.90	1	0.009		
7	431656	30	20	50	<0.5	5.55	2	0.092		
8	431657	<5	5	45	<0.5	4.33	1	0.018		
9	431658	5	5	75	<0.5	4.24	1	0.013		
10	431659	<5	10	55	<0.5	5.35	1	<0.008		
11	431660	5	10	45	<0.5	4.48	1	<0.008		
12	431661	<5	<5	40	0.5	3.19	<1	0.014		
13	431662	<5	10	35	<0.5	3.60	1	<0.008		
14	431663	<5	10	40	<0.5	4.62	2	0.038		
15	431664	15	5	60	<0.5	3.83	1	<0.008		
16	431665	15	10	45	<0.5	4.03	<1	<0.008		
17	431666	<5	<5	55	<0.5	3.88	1	<0.008		
18	431667	<5	15	60	<0.5	4.75	1	<0.008		
19	431668	<5	<5	45	<0.5	3.60	<1	<0.008		
20	431669	<5	10	35	<0.5	3.33	<1	0.064		
21	431670	<5	<5	30	<0.5	3.70	1	<0.008		
22	431671	<5	<5	35	<0.5	2.68	<1	0.018		
23	431672	<5	<5	35	<0.5	4.49	1	<0.008		
24	431673	<5	<5	30	<0.5	2.91	<1	<0.008		
25	431674	<5	<5	40	<0.5	3.96	1	0.033		

Results in ppm unless otherwise specified
T = element present; but concentration too low to measure
X = element concentration is below detection limit
— = element not determined

AUTHORISED OFFICER

00 21

ANALABS

A Division of Macdonald Hamilton & Co. Pty. Ltd.

692022

ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	23.3.08.05811	10/11/88	5041	2 OF 2

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Ag	Fe	As	Au		
1	431675	<5	15	30	<0.5	3.34	<1	<0.008		
2	431676	5	15	40	<0.5	5.30	1	<0.008		
3	431701	15	20	40	<0.5	11.90	1	0.020		
4	431702	35	55	170	<0.5	10.50	12	<0.008		
5	431703	<5	375	30	<0.5	1.17	5	<0.008		
6	431704	<5	20	50	<0.5	3.84	<1	<0.008		
7	431705	15	25	145	<0.5	3.36	<1	<0.008		
8	431706	10	10	150	<0.5	4.54	<1	<0.008		
9	431707	<5	10	85	<0.5	2.89	<1	<0.008		
10	431708	5	55	75	<0.5	13.05	2	0.008		
11	431709	<5	10	30	<0.5	10.30	2	0.012		
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23	DETECTION	5	5	5	0.5	0.05	1	0.008		
24	UNITS	PPM	PPM	PPM	PPM	%	PPM	PPM		
25	METHOD	101	101	101	101	104	114	309		

Results in ppm unless otherwise specified
T = element present: but concentration too low to measure
X = element concentration is below detection limit
— = element not determined

AUTHORISED OFFICER

06 22

ANALABS

A Division of Macdonald Hamilton & Co. Pty. Ltd.

692023

ANALYTICAL DATA

SAMPLE PREFIX	REPORT NUMBER	REPORT DATE	CLIENT ORDER No.	PAGE
	23.3.08.05818	15/11/88	5051	1 OF 1

TUBE No.	SAMPLE No.	Cu	Pb	Zn	Ag	Fe	As	Au		
1	431601	55	10	80	<0.5	1.64	1	0.037		
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23	DETECTION	5	5	5	0.5	0.05	1	0.008		
24	UNITS	PPM	PPM	PPM	PPM	%	PPM	PPM		
25	METHOD	101	101	101	101	104	114	309		

Results in ppm unless otherwise specified
T = element present; but concentration too low to measure
X = element concentration is below detection limit
— = element not determined

AUTHORISED OFFICER

692024

CONSULTING ANALYTICAL CHEMISTS

INCORPORATED IN QUEENSLAND

LABORATORY REPORT

Fax: (07) 352 5109.
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Lot 197 Victoria Road, Malaga, W.A. 6062.
Phone: (09) 249 2988. Fax: (09) 249 2942.
Townsville Laboratory
21 Bombala Street, Garbutt, Q. 4814.
Phone: (077) 79 9155. Fax: (077) 799 729.
Bendigo Laboratory
127A Victoria Street, Eaglehawk.
Phone: (054) 46 1390. Fax: (054)
Orange Laboratory
10 Leewood Drive, Orange, N.S.W.
Phone: (063) 631 722. Fax: (063)

Client: ABERFOYLE RESOURCES LIMITED

Address: P O BOX 952
BURNIE
TASMANIA 7320

Batch Number: K264

Contact: MR R DE BOMFORD

Order No. 5037

Sample Type: STREAM SEDIMENT

No. of Samples: 1
Date Received: 31/10/9
Date Completed: 04/11/9

SAMPLE NUMBER	Element / Unit / Method	Au ppt PM216	S.Wt Kg			
431602		3000	11.3			
Detection Limit:						

Comments:

Registered Laboratory No. 825

Signatory:

FORM

APPENDIX B

PETROLOGICAL REPORTS

CENTRAL MINERALOGICAL SERVICES

692026

Central Mineralogical Services

39 Beulah Road, Norwood, South Australia 5067
Telephone (08) 42 5659 Fax (08) 363 1820
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Mr. R. Henham
Geologist
Aberfoyle Resources Ltd.
Exploration Division
P.O. Box 952
BURNIE / TAS. 7320

29th November, 1988

REPORT CMS 88/10/40

YOUR REFERENCE:	Letter dated 28.10.1988
DATE RECEIVED:	31st October, 1988
SAMPLE NOS.:	5 Samples
SUBMITTED BY:	R. Henham
WORK REQUESTED:	Petrology/Mineralogy

H.W. Fander, M. Sc.

Copy to:
Mr. H. Skey
Exploration Manager
Aberfoyle Resources Ltd.
Exploration Division
123, Camberwell Road
HAWTHORN EAST / VIC. 3123

REPORT CMS 88/10/40

A suite of five rock chip samples from the Tyndall Group (Mount Read Volcanics) east of Mackintosh was received for petrological examination, with one sample delineated for mineragraphic examination.

Representative sections were prepared and examined together with respective offcuts. K-feldspar stain tests were performed where warranted. Attached descriptions summarise the microscopic data and include interpretative comments.

Apart from sample 431703 (sericitic orthoquartzite), this suite consists of altered rhyolites.

These rocks are strongly porphyritic biotitic sodi-potassic types, with fabrics consistent with a minor intrusive mode of origin.

The rhyolites are rather uniformly altered, with selective replacement of plagioclase and ferromags. by sericite, and minor development of biotite-replacive chlorite. Mild stress effects postdate the alteration which, in sample 431705, is complexed by chloritic/altered feldspathic quartz veining, with disseminations of allanite.

Sample 431709 exhibits marked hematite veining, with a quartz-phyllosilicate gangue carrying rare traces of chalcopyrite and extremely rare particles of pale gold as inclusions in quartz.

D. Cowan, B. Sc.

692028

CLASSIFICATION: **Sericitic Orthoquartzite**

COMPOSITION: Framework of angular to subround quartz grains/minor stressed vein- and metamorphic-type uartz composites, minor clasts of chert, sericitic impure chert, and metaquartzite. Cement of semi-sericitic white mica (partly degraded/illitic) and sericitic microcrystalline quartz, supplemented by a little overgrowth quartz.

FABRIC: Poorly sorted, slightly coarse sandy silty, fine to medium sandy clastick; crudely bedded and vaguely slumped. Weakly stressed.

ACCESSORIES: Disseminated fine sand-sized clastic opaques, traces of chromite, tourmaline, zircon, leucoxene. Rare clasts of silicified "rhyolit lava (quartz-porphyritic), carbonaceous pelite and carbonaceous chert. Minor microscopic clots, impregnations and spongy films of partly degraded/poorly determinate microcrystalline jarosite and ?pharmacosiderite. Rare incipiently quartz pressure-shadowed cavities.

INTERPRETATION/ COMMENTS: A poorly sorted/vaguely slumped orthoquartzite. Includes rare rhyolite clasts and partly abraded volcanic quartz grains, but lacks strictly tuffaceous features. The sericite-quartz cement is weakly corrosive and of marginal hydrothermal character. The minor secondary Fe-salts and sparse cavities suggest traces of pyrite were present in the absence of diagnostic boxworks.

SAMPLE NO.: 431704 (T.S. 60906)

CLASSIFICATION: **Altered Biotite Rhyolite**

COMPOSITION: Phenocrysts of sericite-pseudomorphed plagioclase, frequent limonitic Fe- and leucoxene-stained muscovite-sericite pseudomorp after biotite phenocrysts, subordinate variably corroded quartz phenocrysts and minor coarse, unaltered sanidine-anorthoclase phenocrysts. Groundmass of fine granular quartz and granular to weakly lathic K-feldspar with subordinate argillised plagioclase microlaths.

FABRIC: Strongly/coarsely porphyritic and very incipiently flow-structure (weakly orientated phenocrysts) with a homogeneous microcrystalli groundmass. Incipiently stressed.

ACCESSORIES: Rare miarolitic vugs of quartz, sericitised feldspar (?albite) an orthoclase. Thinly disseminated martitised magnetite, rare sericitised ferromagnesian (pyroxene, amphibole) phenocrysts, rare zircons.

INTERPRETATION/ COMMENTS: An extensively sericite-muscovite-altered, biotite-rich rhyolite. The strongly porphyritic/weakly miarolitic/granular groundmass textural features are entirely consistent with a minor or margina intrusive. White micaceous alteration is selective (after plagioclase, ferromags.), with K-feldspar essentially unaffected.

SAMPLE NO.: (...1705 (T.S. 60...)

CLASSIFICATION: **Altered, Veined Biotite Rhyolite**

COMPOSITION: Sericite-pseudomorphed plagioclase phenocrysts, subordinate varia corroded quartz phenocrysts, chlorite-illite pseudomorphs after phenocrystal biotite flakes, and weakly sericite-stained phenocrysts of sanidine-anorthoclase. Altered groundmass of fine granular K-feldspar, sericitised plagioclase and subordinate quar Sporadic veinlets of quartz, chlorite and variably sericitised orthoclase. Marginal vein of quartz with disseminated laths of argillically altered and partly degraded allanite, disseminated clots of chlorite, marginal clots of sericitised feldspar.

FABRIC: Similar to 431704, less strongly porphyritic; relatively stressed (post-veining). Vein allanite is microfractured in stressed quartz host aggregates.

ACCESSORIES: Leucoxenic stainings in altered biotite. Disseminated magnetite (partly martitised), thinly disseminated zircons.

INTERPRETATION/ COMMENTS: Close affinities with 431704, similarly interpreted. Alteration is analogous to that in the previous rock, but complexed by quartz-chlorite-allanite veining, stress effects and late argillic alteration of vein feldspar (and allanite). K-feldspar phenocryst are late magmatic, marginally poikilitic, with quartz inclusions.

SAMPLE NO.: 431707 (T.S. 60908)

CLASSIFICATION: **Altered Biotite Rhyolite**

COMPOSITION: Frequent sericite-pseudomorphed feldspar phenocrysts, subordinate corroded quartz phenocrysts and chlorite-muscovite-pseudomorphed biotite phenocrysts. Altered groundmass of microcrystalline K-feldspar and sericitised plagioclase, with relatively minor quartz. Minor late quartz veinlets.

FABRIC: Strongly porphyritic, incipiently flow-structured, with a semi-felsitic micro-textured, variably spherulitic (devitrified) groundmass. Incipiently stressed.

ACCESSORIES: Disseminated partly martitised magnetite, semi-conspicuous leucoxenised opaques, rare apatite, rare zircons.

INTERPRETATION/ COMMENTS: Affinities with 431704 and 431705 and similarly interpreted as intrusive. In comparison, this rock exhibits a devitrified, semi-spherulitic groundmass and a relatively complex primary accessory assemblage. Alteration is similar to that in 431704, and particularly 431705, with chlorite supplementing plagioclase and biotite-replacive semi-sericitic white mica.

REPORT CMS 88/10/40

Mineragraphic Notes

431709 (P.S. 60909)

As requested, three polished sections were prepared, representing the stockwork-style hematite veins.

Opaque mineralogy comprises almost entirely vein-hosted and relatively quite minor impregnations of hematite with a characteristic flaky/semi-micaceous ("specular") habit. Minor host rock disseminations of finer-grained hematite aggregates represent altered (martitised) primary magnetite disseminations, and these are supplemented by very thinly disseminated zircons.

Veins, as sectioned, range to 5 mm in width in irregularly branching networks. Associated silicates were not specifically determined, but include quartz and irregularly distributed spongy patches of fine-grained phyllo-silicate (?sericite).

Close examination of the three sections revealed a single particle of pale **gold** (?argentian) as an inclusion in a hematite-interstitial quartz grain. This particle is sized 15x20 um, with a crudely rectangular sectional shape.

Similarly distributed quartz very rarely exhibits microscopic (< 20 um) inclusions of chalcopyrite, representing the only sulphide phase detected.

D. Cowan, B. Sc.

APPENDIX C

TABLE OF GEOLOGICAL ABBREVIATIONS

Abundant	abn
Adularia	Adl
Agglomerate	agg
Albite	Ab
Alkali feldspar	Afd
Altered	alt
Amphibole	Amb
Amygdaloidal	amg
Andesite	A
Angular	ang
Aplite	Ap
Approximate	apx
Arcuate	ar
Arenaceous	arn
Argillaceous	arg
Argillite	Arg
Arkose	Ak
Arkosic	ak
Arsenopyrite	Ap
Ash volcaniclastic	av
Autobrecciated	aub
Average	ave
Banded	bnd
Barite	Ba
Basalt	B
Bedded	bd
Black	bk
Black shale	Bsh
Blue	bl
Boulder	bld
Breccia	b
Breccia volcaniclastic	bv
Bright	brt
Brown	br
Calcareous	cc
Calcite	Cc
Carbonaceous	g
Carbonate	Co
Cavernous	cav
Chalcopyrite	Cp
Chert	Ch
Chlorite	Cl
Chromite	Cr
Chromitiferous	cr
Clay	cy
Coarse	c
Coarse grained	cg
Colour	col
Common	com
Matrix	mtx
Matrix dominated	md
Medium	med
Medium grained	mg
Micaceous	mic
Minor	mnr
Mixed	mxd
Mottled	mtl
Nodule	nd
Off white	ow
Orange	or
Ordovician	O
Oxidised	ox
Patchy	pat
Peperitic	pep
Perlitic	prl
Pervasive	per
Phenocrysts	phn
Phyllite	phyl
Picrite	Pic
Pillow lava	pl
Pink	pk
Polymict	Y
Porphyritic	por
Pumice/pumiceous	pu
Purple	pp
Pyrite	Py
Pyritic	py
Pyroxene	Px
Quartz	Q
Quartzite	Qtz
Quellite	Qll
Questionable	?
Recrystallised	rx
Red	rd
Rehealed	rhd
Reworked	rw
Rhyodacite	RD
Rhyolite	R
Ripple marks	rmk
Round	rnd
Rubble	rbb
Sandstone	Ss
Schist	Sch
Schistose	sch
Sediment	sed
Selected fragments	sfr
Sericite	Se
Serpentine	Srp
Shale	Sh
Sheared	shd
Siderite	Sid
Silica	Si
Siltstone	Slt
Slickenside	slk
Sphalerite	Sp
Spotted	spt
Spotty	spt
Stockwork	stw
Strong	str
Conglomerate	Cg
Conglomeratic	cg
Crystal	x
Crystal volcaniclastic	xv
Dacite	D
Dark	dk
Dense	dns
Devitrification	dv
Diorite	Di
Disseminated	dis
Dolerite	Do
Dolomite	Dm
Dyke	dy
Elongated	el
Emphasised	emp
Epiclastic (adj.)	e
Epiclastic (noun)	E
Epidote	Ep
Euhedral	euh
Eutaxitic	eux
Fabric	fab
Fault	F
Fault zone	FZ
Feldspar	Fd
Feldspar phyric	fp
Ferruginous	fer
Fibrous	fb
Fine	f
Fine grained	fg
Fissile	fis
Flowbanded	fbn
Fragments	fr
Fuchsite	Fu
Galena	Gn
Glass	Gl
Glassy	gl
Granular	glr
Graphite	Gt
Graphitic	gt
Green	gn
Grey	gy
Greywacke	Gw
Haematite	Hmt
Ignimbrite	Ig
Illite	Ill
Interbedded	ibd
Intercalated	icl
Intrusive	int
Jurassic	Ju
K-Feldspar	Kfd
Khaki	kh
Laminated	lm
Lapilli volcaniclastic	lv
Lava	l
Leached	lch
Limonitic	Lim
Light	lgt
Lithic	lh
Magnetite	Mt
Massive	mas
Structure controlled	stc
Talc	Tc
Tertiary	T
Trace	tr
Trachyte	Tr
Tuff	Tf
Variolitic	vr
Vein	vn
Vein concordant to bedd	cV
Vein discordant to bedd	dV
Very	v
Vesicular	ves
Vitric	vtr
Volcanic	vlc
Volcaniclastic	vlcl
Weak	wk
Weathered	wth
White	wh
Yellow	yw

692033 **Aberfoyle Resources Limited** 8246

EXPLORATION DIVISION

REVISIONS			
Init.	Date	Init.	Date

NORTH WEST TASMANIA

ROMULUS E.L. 24/84 - CRA JV

10 MILE CREEK AREA

OUTCROP GEOLOGY & SAMPLE LOCATIONS

Compiled : RJH

Drawn :

Traced : JLR

Checked :

Location Code :

Scale : 1:5000

Date : Dec, 1988

Plate No : MROM 10a

8247
rd-br R ı̄c̄ Hmt stw/Hmt4 431701
or-br Rint c̄ Hmt stw 431702
431601/431602 (BCL)
ow-gy f-mg Qtz.Ss
gy mg Ss c̄ Fdx
gy mg Ss c̄ Fdx & dv Q.
gy-br mg Qtz/Se2 431703P
pk-br Cg (Q. rich)
pk-br Rint/Ox2 431704P
rd-br Rint Ox3
FOR BEDROCK GEOCHEMISTRY SAMPLING REFER TO ENLARGEMENT
pk-br Rint c̄ stc Hmt/Ox2 431708
pk-br Rint c̄ Hmt stw 431709P
rd-br Rint c̄ vQ. & Cl/Cl.2/Ox3 431705P, 431706
rd-br Rint c̄ spt Cl (RP1518) 431707P
TEN MILE CREEK
9600N
9400N
9200N
8800N
10000N
20100E
5 391 000mN
5 390 000mN
5 389 000mN
398 000mE
399 000mE
400 000mE
401 000mE
402 000mE
VALE RIVER
LAKE MACKINTOSH
FURY RIVER
ANIO CREEK
CONSERVATION AREA BOUNDARY
Mount Remus
SOUTHWEST CONSERVATION AREA
674
300
400
500
600
700
800
900
1000
431676
431675
431674
431673
431672
431671
431670
431669
431668
431667
431666
431665
431664
431663
431662
431661
431660
431659
431658
431657
431656
431655
431654
431653
431652
431651
431650
20600E
20625E
20650E
9400N
R.int c̄ Hmt stw & stc Hmt veins (approx. outcrop position)
ENLARGEMENT SCALE 1:400
BEDROCK GEOCHEMISTRY SAMPLE LOCATIONS
For key to geological abbreviations see Appendix C
5 cm
N
HELLYER
QUE RIVER
HWY
MURCHISON
TULLAH
A
B
Index to Sheets
MT. ROMULUS
E.L. 24/84
0 5 10 Km
0 500metres
692034 Aberfoyle Resources Limited
EXPLORATION DIVISION
8247
REVISIONS
Init. Date Init. Date
NORTH WEST TASMANIA
ROMULUS E.L. 24/84 - CRA JV
10 MILE CREEK AREA
OUTCROP GEOLOGY & SAMPLE LOCATIONS
Compiled : RJH
Drawn :
Traced : JLR
Checked :
Location Code :
Scale : 1:5000
Date : Dec ,1988
Plate No : MROM 10b

8248

398 000mN | 399 000mN | 400 000mN | 401 000mN | 402 000mN

5 395 000mN | 5 394 000mN | 5 393 000mN | 5 392 000mN

MACKINTOSH CREEK

VALE RIVER

CHRISTMAS CREEK

VALE RIVER

TEN MILE CREEK

5 cm

Aberfoyle Resources Limited EXPLORATION DIVISION				8248
REVISIONS Init. | Date | Init. | Date	NORTH WEST TASMANIA ROMULUS E.L. 24/84 - CRA JV 10 MILE CREEK AREA ASSAY RESULTS			Compiled : RJH Drawn : Traced : JLR Checked :
Location Code :	Scale : 1:5000	Date : Dec , 1988		Plate No : MROM 11a

692035

8249

35,55,170,X,10-50,12,X,X

55,10,80,X,1-64,1-0·057/3000 (BCL)

X,375,30,X,1-17·5,X

X,20,50,X,3-84,X,X

FOR BEDROCK GEOCHEMISTRY SAMPLING REFER TO ENLARGEMENT

5, 55,75,X,13·05,2,0·008
X,10,30,X,10·30,2,0·012
(5,25,145,X,1·36,X,X
1,10,10,150,X,4·54,X,X
X,10·85,X,2·89,X,X

ENLARGEMENT SCALE 1:400
BEDROCK GEOCHEMISTRY SAMPLE ASSAY RESULTS

x Cu, Pb, Zn, Ag, Fe, As, Au
All results in ppm except Fe% B(BCL) ppt
X Below detection limits
x Rock chip sample location
• Stream sediment sample location

Mount Remus

5 391 000mN
5 390 000mN
5 389 000mN

LAKE MACKINTOSH
FURY RIVER
VALE OF RIVER
ANIO CREEK
TEN MILE CREEK
CONSERVATION AREA BOUNDARY

SOUTHWEST CONSERVATION AREA

398 000mE
399 000mE
400 000mE
401 000mE
402 000mE

5 cm

HELLYER
QUE RIVER
Index to Sheets
A
B
MT. ROMULUS E.L. 24/84
MURCHISON HWY.
TULLAH
0 5 10 Km

0 500 metres

692036 Aberfoyle Resources Limited
EXPLORATION DIVISION

REVISIONS			
Init.	Date	Init.	Date

Location Code :

NORTH WEST TASMANIA
ROMULUS E.L. 24/84 - CRA JV
10 MILE CREEK AREA
ASSAY RESULTS

Scale : 1:5000 Date : Dec ,1988

Compiled : RJH
Drawn :
Traced : JLR
Checked :
Photo No : MROM IIb