73/058

(23)

Reference B S: HG

12 Prince St
Wombarral
N S W 2251
March 16 1973

Mr G Rose
Director
Geological Survey of N S W

Dear Sir

We have received copies of the geological log of our second diamond drill hole near the Ironclad mine Cargo for which we thank you. A copy of the Geochemical analysis was sent to the mines Dept some time ago so now we a sending copies of Gold & Copper assays results direct to you. missing?

Unfortunately for us are not encouraging on the anomaly situated to the west of the Ironclad Reef, would the result of these two drill holes be sufficent to conclude that this part of the lease is too low in values to mine?

We would like to conclude by thanking yourself & Mr Brian Stephens for your assistance.

We are

Yours Faithfully
R & M J R Finlayson
per J R Finlayson

R00024380

JN 21/3

AD(M1) NL 21/3/73

Please now assemble & regard & take above.

B Stevens —

D002950730

73/058
(24)

# ROBERTSON RESEARCH (AUSTRALIA) PTY. LIMITED

SYDNEY OFFICE: ADC HOUSE, 77 PACIFIC HIGHWAY, NORTH SYDNEY, N.S.W. 2060 • TELEPHONES: 929 5433, 929 5709
TELEX: AA 22823

LABORATORY
MOSS VALE ROAD
BOWRAL, N.S.W. 2576
TELEPHONE: (048) 61 2388, 61 2191
TELEX: AA 22769

PERTH OFFICE
OLIVIER HOUSE
1318 HAY STREET
WEST PERTH, W.A. 6005
TELEPHONE: 22 2809

## Certificate of Analysis

(Comprising 1 sheets)

Certificate Number: Nº 2363

Project Number: 723/7683

Your Reference:

Date: 10th January, 1973.

**CLIENT:** Messrs. I.R. & W.J.R. Finlayson,
12 Prince Street,
WOMBERAL. N.S.W. 2251.

For the attention of:

Samples from:

Area:

Samples of:

GEOCHEM. ANALYSIS

| Sample Identification | | Au dwt/long ton |
|---|---|---|
| Drill Hole Number | Interval (feet) | |
| 1 | 84'10" - 89'10" | <0.2 |
| 1 | 89'10" - 94'10" | <0.2 |
| 1 | 163'0" - 168'0" | 0.2 |
| 1 | 168'0" - 173'4" | <0.2 |
| 1 | 173'4" - 176'3" | 0.6 |
| 1 | 176'3" - 181'3" | 0.4 |
| 1 | 181'3" - 184'0" | <0.2 |
| 1 | 211'9" - 216'9" | <0.2 |
| 1 | 216'9" - 221'9" | <0.2 |
| 1 | 261'4" - 267'4" | <0.2 |
| 1 | 308'7" - 314'1" | 0.12 ? |
| 2 | 104'9" - 110'0" | 0.2 |
| 2 | 110'0" - 115'0" | <0.2 |
| 2 | 115'0" - 120'4" | <0.2 |
| 2 | 120'4" - 125'0" | <0.2 |
| 2 | 125'0" - 130'0" | <0.2 |
| 2 | 130'0" - 135'0" | <0.2 |
| 2 | 135'0" - 137'6" | <0.2 |

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D002950740

for and on behalf of
ROBERTSON RESEARCH (AUSTRALIA) PTY. LIMITED

Mr. Trevor Francis
Chief Chemist

73/058

(35)

# ROBERTSON RESEARCH (AUSTRALIA) PTY. LIMITED

SYDNEY OFFICE: ADC HOUSE, 77 PACIFIC HIGHWAY, NORTH SYDNEY, N.S.W. 2060 • TELEPHONES: 929 5433, 929 5709
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LABORATORY
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TELEPHONE: (048) 61 2388, 61 2191
TELEX: AA 22769

PERTH OFFICE
OLIVIER HOUSE
1318 HAY STREET
WEST PERTH, W.A. 6005
TELEPHONE: 22 2809

## Certificate of Analysis

(Comprising 1 sheets)

Certificate Number: Nº 2404

Project Number: 723/7733 (7683)

Your Reference:

Date: 5th February, 1973.

CLIENT: I.R. & W.J.R. Finlayson,
12 Prince Street,
WOMBERAL. N.S.W. 2251.

For the attention of:

Samples from:

Area:

Samples of:

GEOCHEMICAL ANALYSIS

| Sample | Cu ppm |
|---|---|
| I 1/1 | 510 |
| 2 | 890 |
| 3 | 4400 |
| 4 | 110 |
| 5 | 510 |
| 6 | 560 |
| 7 | 750 |
| 8 | 40 |
| 9 | 15 |
| 10 | 350 |
| 11 | 2300 |
| I 2/1 | 3100 |
| 3 | 640 |
| 5 | 680 |
| 7 | 500 |

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for and on behalf of
ROBERTSON RESEARCH (AUSTRALIA) PTY. LIMITED

Mr. Trevor Francis
Chief Chemist

73/058
(26)


# ROBERTSON RESEARCH (AUSTRALIA) PTY. LIMITED

*GEOLOGICAL AND MINING CONSULTANTS*

HEAD OFFICE: A.D.C. HOUSE, 77 PACIFIC HIGHWAY, NORTH SYDNEY, N.S.W. 2060
LABORATORY: MOSS VALE ROAD, BOWRAL, N.S.W. 2576. TELEX No. AA22769
TELEPHONES: BOWRAL S.T.D. 048 61-2388; 048 61-2191

TELEPHONES:
929 5433
929 5709

TELEGRAPHIC ADDRESS:
"RESEARCH", SYDNEY
TELEX No.: AA22823


6th March, 1973.

Messrs. I.R. & W.J.R. Finlayson,
12 Prince Street,
WOMBERAL. N.S.W. 2251.

Dear Mr. Finlayson,

In reply to your telephone conversation of last month, I enclose the following data for Project 723/7733 and Certificate 2404.

| Our Sample Number | Drill Hole Number | Footage |
|---|---|---|
| I 1/1 | 1 | 84'10" - 89'10" |
| 2 | 1 | 89'10" - 94'10" |
| 3 | 1 | 163'0" - 168'0" |
| 4 | 1 | 168'0" - 173'4" |
| 5 | 1 | 173'4" - 176'3" |
| 6 | 1 | 176'3" - 181'3" |
| 7 | 1 | 181'3" - 184'0" |
| 8 | 1 | 211'9" - 216'9" |
| 9 | 1 | 216'9" - 221'9" |
| 10 | 1 | 261'4" - 267'4" |
| 11 | 1 | 308'7" - 314'1" |
| I 2/1 | 2 | 104'9" - 110'0" |
| 3 | 2 | 115'0" - 120'4" |
| 5 | 2 | 125'0" - 130'0" |
| 7 | 2 | 135'0" - 137'6" |

If you have any further queries regarding this matter do not hesitate to inform me.

Yours sincerely,
ROBERTSON RESEARCH (AUSTRALIA) PTY. LIMITED

T. FRANCIS
CHIEF CHEMIST


D002950750

GS1973/058
(2)

SEIGEL ASSOCIATES AUSTRALASIA PTY. LTD.
6 Tramore Place, Killarney Heights, N.S.W. 2087.

MISCELLANE
9 OCT 1972
72-6911.
DEPT. OF MINES N.S.W.

5th October, 1972

The Under Secretary for Mines,
State Office Block,
Phillip Street,
SYDNEY N.S.W. 2000.

Attention: Mr. N.G. Green

Dear Sir,

I have been requested by Messrs. I.R. and W.J.R. Finlayson of 686 The Entrance Road, Wamberal, New South Wales, to forward an application for aid from the prospecting vote.

In support of this application please find enclosed:

1. Application form.
2. Photocopy of Mining Lease ✓
3. Geological Report by Amax Mining (Australia) Ltd. ✓
4. Photocopy of Mine Section of the Ironclad Gold Mine. ✓
5. Geophysical report by Seigel Associates Australasia Pty. Ltd. ✓
6. Proposed drilling plan. ✓

Could you please direct any correspondence concerning this matter directly to Messrs. I.R. and W.J.R. Finlayson at the adress given above.

Yours faithfully,

A.W. HOWLAND-ROSE, M.Sc.,DIC,AMAusIMM,FGS.

AWHR:LK

c.c. I.R. & W.J.R. Finlayson

| State what work it is now desired to carry out. | Diamond drilling required to investigate anomalous chargeabilities located by Seigel Associates in a recent survey (report attached). The theory being that increased gold mineralisation will be associated with increased pyrite. |
|---|---|

GS1973/058

SD/55-8, 8631 II

(3)

MISCELLANEOUS
9 OCT 1972
6911
DEPT. OF MINES N.S.W.

mber

DEPARTMENT OF MINES N.S.W.

# APPLICATION FOR AID FROM THE PROSPECTING VOTE

The information asked for hereunder to be filled in, and the form then forwarded to the Under Secretary for Mines, Sydney

| | |
|---|---|
| Give names *in full* of each applicant (Block Letters)<br>*(If made in the interests of a Syndicate or Company, the name of the representative or agent to be indicated in addition)* | Irvên Robert Finlayson and<br>William Robert Finlayson<br>(Irvin Robert Finlayson)<br>Signature of Applicant I.R.F. Finlayson W.J.R. Finlayson<br>Postal Address 686 The Entrance Road Date: 5./10./1972<br>Wamberal 2251 |
| State metal or mineral for which it is proposed to prospect. | Gold and Copper |
| Set out fully the exact *locality* of the site, the name of the reef, mine or lead if known, and the best route for the inspecting officer to take. | The lease on which the Ironclad Mine is situated, is partly in the town of Cargo which is 24 miles from Orange on the road from Orange to Canowindra. |
| Furnish particulars of title, as indicated:—<br>*(It is essential for the prospector to show a valid mining title to or legal right to prospect the site before aid will be granted)* | IF CROWN LAND<br>State under what title the land is held Gold Lease<br>Give the registration number or lease number 5828<br>Place of application (Mining Registrar's Division) Orange<br>Portion No 137 & 163 Parish Cargo County Ashburnham.<br><br>IF PRIVATE LAND<br>Give the owner's name<br>Portion number Parish County<br>State by what title under the Mining Act land is held<br>Number of authority to enter, or lease application, or lease, etc.<br>Place of application (Mining Registrar's Division)<br>If held under agreement, give particulars |
| Describe the work already done on the site, giving depth of respective shafts; length of drives, and at what levels; length of tunnels, etc. and state clearly the work you have carried out. | See attached mine section |
| State what work it is now desired to carry out. | Diamond drilling required to investigate anomalous chargeabilities located by Seigel Associates in a recent survey (report attached). The theory being that increased gold mineralisation will be associated with increased pyrite. |

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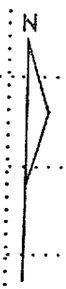
| | |
|---|---|
| 7. Give an estimate of the full cost of the work per foot. | $5.50 per foot detailed ; none yet received. |
| 8. State whether deposit it is proposed to test is now being worked, or whether it has been worked at any time ? If so, state at what distance from your site, and give full details of the work done thereon. | The Ironclad Mine on lease turn of the century. The p drilling programme is to te blind lodes on the lease. ...vual |
| 9. State, if known, whether aid has previously been granted or refused to anyone at or in the near vicinity of your site ? If so, give the name of the applicant. | Not to applicants knowledge |
| 10. General remarks .. .. *(Add further information on separate sheet if insufficient space).* | |
| 11. Sketch showing any existing workings in the near vicinity, notes on rock types and mineralization, other information you consider relevant and proposed work. (Show approximate scale). | See attached geological and geophysical Reports.   |

ES1973/058
(5)

DEPARTMENT OF MINES
SYDNEY

# Minute Paper

M 18399 V.C.N. Blight, Government Printer

PERS: 72/6911
WS:CS

SUBJECT:

Application for Diamond Drilling Aid by
I.R. & W.J.R. Finlayson, G.M.L. 5828, Ironclad Mine - Cargo

I.R. & W.J.R. Finlayson have applied for aid to develop two diamond drill holes, each 250 feet in length, on Gold Mining Lease 5828, Ironclad Mine, Cargo 20 miles southwest of Orange. The Cargo field is an old gold mining centre which recently has been the subject of considerable exploration directed towards locating a large tonnage, low grade copper deposit.

General Geology

The Cargo field occurs within the Cargo Andesite, a sequence of volcanic rocks, predominantly andesitic, of Ordovician age which forms part of the Molong Geanticline. More acidic rocks are encountered in the Cargo field itself where mapping and drilling has outlined a complex suite of volcanic rocks comprising andesites, dacites, andesitic-dacitic tuffs, breccias and intrusive monzonite porphyry and dacite prophyry. Disseminated mineralization has been encountered in all rock types.

Mineralization at Cargo has previously been described by Dr. N. Markham, Assistant Director, in notes to accompany the Economic Geology Excursion Bathurst-Orange Area, 44th ANZAAS Congress. These notes contain the following description:

"Primary mineralisation at Cargo appears to be of two main types.

1. Tabular, pyritic, gold lode deposits of hydrothermal type that are localised along favourable structures in the host volcanic rocks. The lodes are not well-defined quartz reefs but are described as zones of above-average sulphide concentration. In the oxidised zone a marked enrichment in gold values has been recorded. Examples of this type of mineralisation include the Ironclad, by far the most productive deposit on the field, Essex, Cargo Consols and Dalcouth workings. The Ironclad lode is described as being up to 600' long with widths of from 3-6'. Recorded production is some 10,000-12,000 ounces with the deepest development being at 470' below surface.

2. Disseminated pyrite-chalcopyrite mineralisation within altered andesitic and dacitic volcanic rocks. The disseminated mineralisation is of wide aerial extent and almost all rocks contain at least some content of sulphide. The best copper mineralisation appears to be associated with a type of volcanic breccia."

Two diamond drill holes were developed by Command Minerals N.L. in G.M.L. 5828. These holes were designed to test beneath the old Ironclad mine workings. The first hole intersected old workings. The second hole made an intersection of 6 inches of 1.7% Copper and 9 dwts of gold which was interpreted as the down dip continuation of the Ironclad Reef. Disseminated pyrite was recorded as occurring practically throughout both holes. Aid was refused on these holes on the basis of insufficient information (Papers M71/3124).

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DEPARTMENT OF MINES, SYDNEY

M72/6911

Application for Diamond Drilling Aid by I.R. & W.J.R. Finlayson, G.M.L. 5828, Ironclad Mine - Cargo

Geophysical Survey

Geophysical Surveys were carried out over G.M.L. No. 5828 by Seigel Associates Australasia Pty Ltd on behalf of the applicants. Time-domain induced polarization data has outlined two specific targets which have been recommended by Seigel for further investigation. It was also noted that background chargeability values over all lines were high, probably indicating the presence of disseminated sulphides over the whole survey area. The two targets are anomalies outlined by chargeability "highs" indicating possible increased sulphide mineralization. This increase could mean increased gold associated with pyrite and/or increased chalcopyrite.

Mr I.R Finlayson informed me by phone that the holes were not drilled in this order. Hole 1 was collared at 00-410N, hole 2 was collared at 6W-280N. (The results of drilling tend to be easier to interpret, with this being the case)
B. Stevens
Geologist
15.3.76

The proposed holes are:

| | Position | Declination | Length |
|---|---|---|---|
| 1 | Line 6W - 280N | -60°N | 250 feet |
| 2 | Line 00 - 410N | -60°N | 250 feet |

The first hole will test an anomaly, centred at 350N on line 6W, which is outlined by a chargeability high and associated broad resistivity low.

The second hole will test an induced polarization anomaly centred at 450N on line 00. A shallow depth and southerly dip is indicated by the geophysical data.

Both holes will adequately test these anomalies and will give information on the nature of disseminated mineralization north and west of the Ironclad Mine. This drilling will be a useful addition to percussion and diamond drilling already undertaken south and west of G.M.L. 5828 which has outlined a large area of volcanic rocks carrying low-grade copper values.

It is recommended that aid be granted on the proposed drilling at the usual rate.

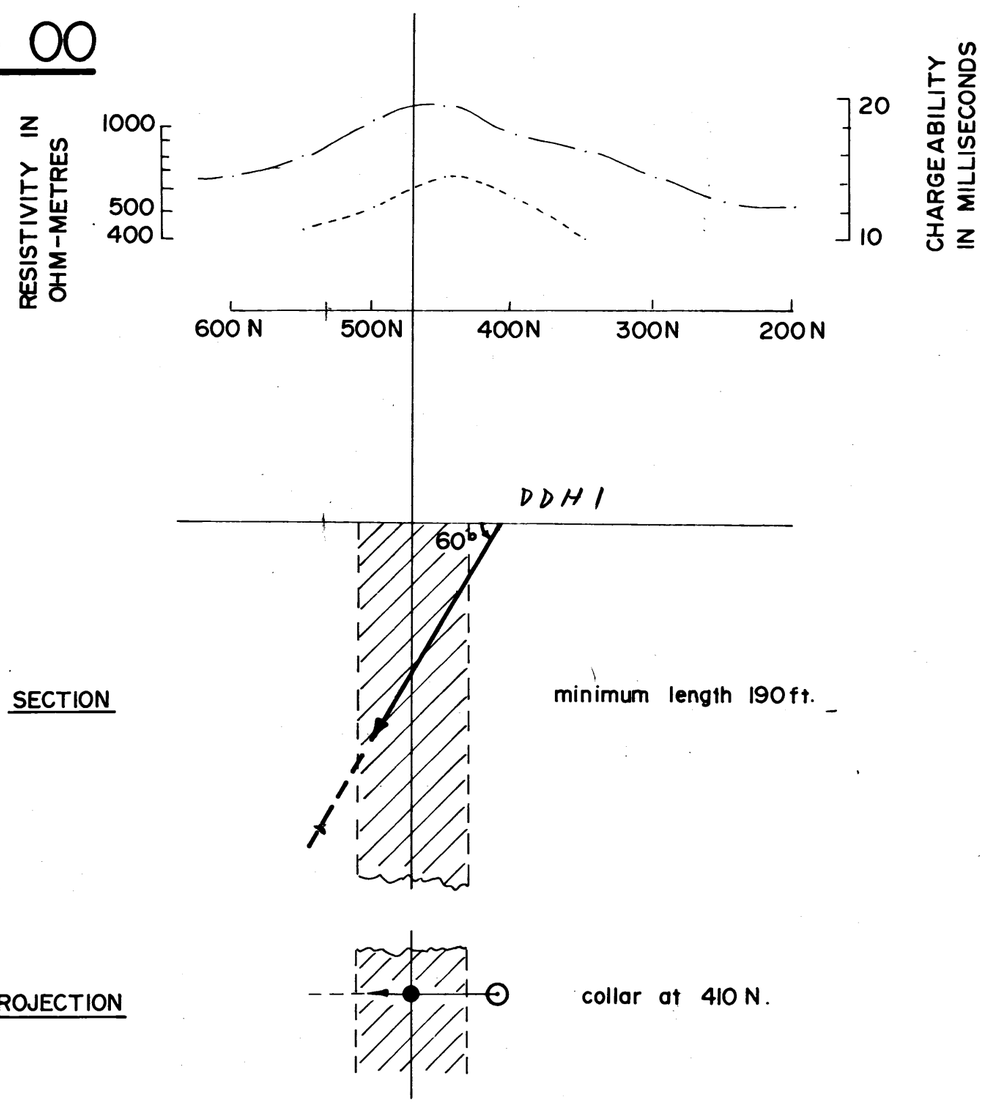
D. W. Suppel
(D. W. SUPPEL),
PRINCIPAL GEOLOGIST.
7th November, 1972.

ASST. DIRECTOR (M)

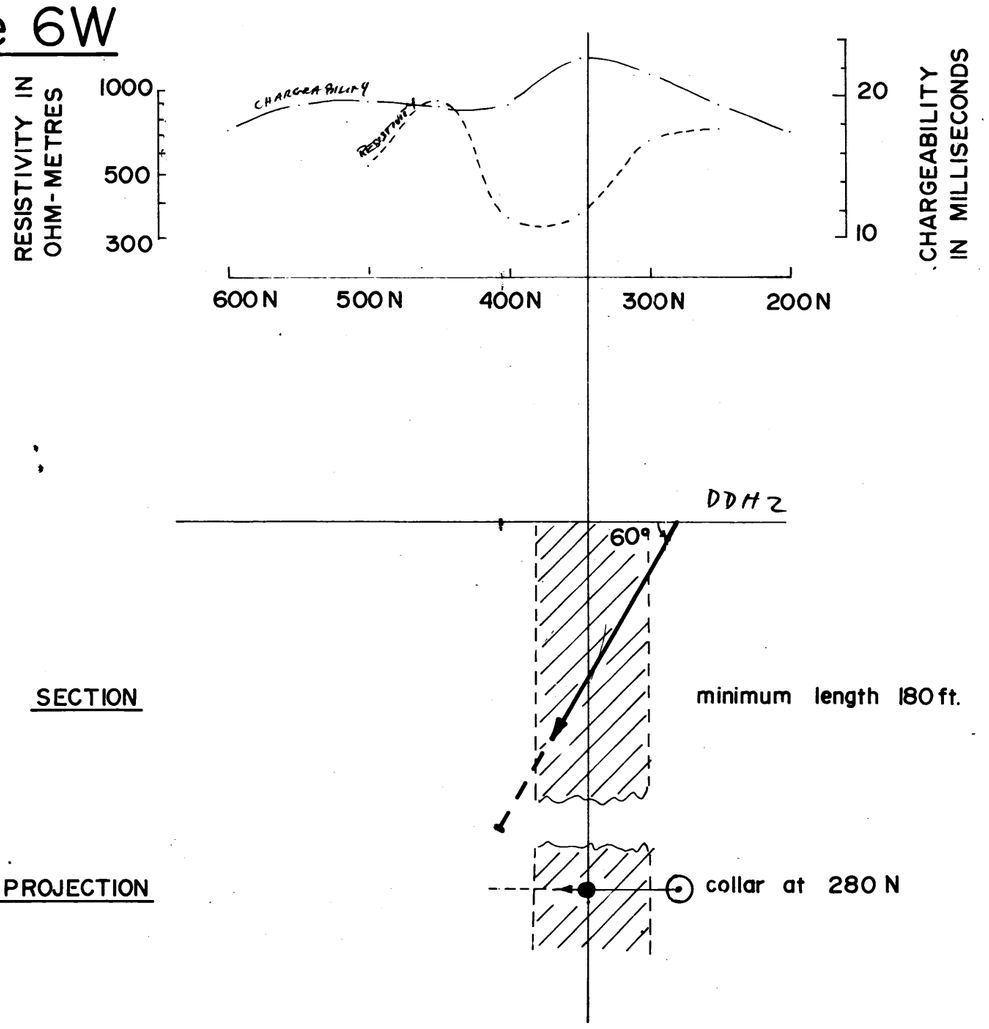
I concur
W. Markham
10/11/72

SECRETARY, PROSPECTING BOARD

## Line 00




## Line 6W




# I.R. & W.J.R. FINLAYSON

# IRONCLAD PROSPECT G.M.L. 5828
## CARGO AREA

## Drill – Hole Recommendations

( FOR USE IN SUBMISSION TO THE N.S.W. MINES DEPT.)

SURVEYED AND COMPILED BY

SEIGEL ASSOCIATES AUSTRALASIA PTY. LTD.

SEPTEMBER 1972

00 0 100 200

SCALE IN FEET

( LINE POSITIONS RELATIVE TO GEOPHYSICAL GRID)

JOB N°. N.S.W-017 SHEET 1 of 1

0 1 2 3 4 5 cm

A1BW

D002950756

(56)

GS1973/058