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VANCOUVER, B.C.

GEOPHYSICAL REPORT  
on the  
JIB "B" CLAIM GROUP  
QUEEN CHARLOTTE ISLANDS, B. C.

GOVERNMENT AGENT  
RECEIVED  
MAR 3 - 1965

PRINCE RUPERT, B. C.

Vancouver, B. C.  
March 3rd, 1965

W. R. Bacon, P. Eng.

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I L L U S T R A T I O N S

(in envelope at back)

- FIGURE 1 Magnetometer and sounding survey. Compiled map.
- FIGURE 2 Profile along Line A-A Figure 1.
- FIGURE 3 Magnetometer survey (individual readings)

<p><b>Department of Mines and Petroleum Resources ASSESSMENT REPORT</b></p> <p>NO. <u>617</u> MAP</p>
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GEOPHYSICAL REPORT  
on the  
JIB "B" CLAIM GROUP  
QUEEN CHARLOTTE ISLANDS, B. C.

INTRODUCTION:

The Jib "B" group of seven claims (Jib Nos: 35, 41, 42, 47, 48, 52 and 53) is just off the southeastern corner of Burnaby Island, a small island in the southern part of the Queen Charlotte group.

The Jib "B" group is largely a submerged claim group.

The claims were located to cover the possible seaward extension of buried, high-grade magnetite deposits found beneath the southeastern part of Burnaby Island.

The geophysical work consisted of a water borne magnetometer survey. The project was planned and carried out under the supervision of the writer.

The geophysical work was undertaken during the period June 2nd - 7th. This time interval includes delays imposed by bad weather and equipment breakdowns. It includes no time for mobilization and demobilization, by far the most significant costs in an operation of this type.

PROCEDURE:

A network of triangulation points was established on Burnaby and adjacent islands in order that the position of the water borne geophysical equipment could be determined quickly and efficiently. This was accomplished in the period May 20th - June 1st.

The technical personnel for the geophysical survey were based on the 29-ton seiner, "Ocean Cape" which was chartered specifically for the job. The magnetometer selected was a proton type, a Varian M-49 A with sensitivity to 5 gammas. It was housed in a torpedo and towed at an average depth of 3 feet below the water surface, at a distance of 150 feet abaft the stern of the boat. The recording device was carried inboard.

North-south traverses were run by the "Ocean Cape" at intervals of from 150 to 600 feet. In addition, east-west tie-in traverses were run. The course of the boat was predetermined by reference to the on-shore triangulation points; every 2 minutes, the position of the boat was determined and plotted by two men with sextants who took fixes on the triangulation stations.

Simultaneously with the above, a sounding survey of the ocean bottom was undertaken with an echo-sounder (Kelvin-Hughes MS 26 B Model, 12.25 KC, 1 KW) fitted with a continuous recording device.

PRESENTATION OF RESULTS:

The results of both magnetometer and sounding surveys are shown on Fig. 1. (As the sounding tape is no longer available, no claim, under Costs below, is included for the sounding survey and it is not discussed further.)

The magnetic contours shown on Figure 1 are derived from the magnetic readings shown on Figure 3, which is in essence a work sheet or field sheet.

Figure 2 is a profile plotted from Figure 1, along line A-A.

INTERPRETATION:

Magnetically anomalous areas are present on the Jib "B" group. Highs occur in the northwest corners of Jib 41 and Jib 48.

An interpretation of the anomalies is aided by the following:-

1. An airborne magnetic survey of Burnaby Island and vicinity showed anomalies over the known magnetite deposit, and over the anomalous areas on the Jib "B" claim group.
2. Geological work on the islands in and near the claim group.
3. Extensive diamond drilling, one mile to the west of the claim group which established the stratigraphy, the nature of the deposit causing one magnetic anomaly, and the positions in the stratigraphic sequence where similar deposits might be expected to occur.

On the basis of the above, it is considered highly probable that parts of the anomalous areas on the Jib "B" group are underlain by magnetite deposits at the base of the massive limestone member of the Upper Triassic Kunga formation. Other possibilities, such as a magnetic sulphide deposit or an ultrabasic body, appear less likely in the light of present geological knowledge - which is considerable.

COSTS:

The costs set forth below pertain strictly to the work performed on the Jib "B" group.

The total cost of surveying the area outlined in Figures 1 and 3 was \$16,545.91. Needless to say, the results of the water borne survey beyond the boundaries of the Jib "B" group helped in understanding the results obtained within the claim group, in precisely the same way as an airborne survey beyond the boundaries of a property is recognized in Chapter 244, Mineral Act as serving to clarify the results within. The reason for pointing out this analogy is to support a request that some consideration be given to the work done on an equivalent area adjacent to the Jib "B" group, the whole to be applied to the Jib "B" group.

The professional services of Messrs. Yamaguchi, Kurihara, and Tatsugami of Tokyo, Japan were utilized for several very good reasons, chief of which is the fact that they have conducted similar surveys in Japanese waters.

COSTS (Cont'd)

Technical -

W. R. Bacon, P. Eng.	-	June 2 - 7	-	6 days @ \$35.00	=	\$ 210.00
Rokuhi Yamaguchi	-	"	-	"	=	210.00
Ichiro Kurihara	-	"	-	"	=	210.00
Masao Tatsugami	-	"	-	"	=	210.00
Kinsabura Oya (interpreter)	"	-	-	@ \$25.00	=	150.00
J. C. Stephen, Surveyor-	May 20 -	May 31	-	12 days @ \$25.00	=	300.00
F. Jackson, Surveyor	-	May 20 -	June 7	- 19 days @ \$20.00	=	380.00
R. Greyell, Surveyor	-	"	"	"	=	380.00

Labour -

V. Neidolin	-	May 20 - 31	-	12 days @ \$15.00	=	180.00
U. Anins	-	"	-	"	=	<u>180.00</u>
						2,410.00

Rental "Ocean Cape" @ \$100.00 per day	=	800.00*
Rental, 2 Varian magnetometers	=	<u>500.00</u>

Total applicable costs	=	<u><u>\$ 3,710.00</u></u>
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\*Includes voyage out and return to home port, Prince Rupert.

Declared before me at the  
city of Vancouver in the  
Province of British Columbia,  
this 3rd day of March, 1965 A.D.

*[Signature]*  
Sub-mining Recorder  
March 3rd, 1965  
Vancouver, B. C.

*[Signature]*  
W. R. Bacon, P. Eng.

REVISED STATEMENT OF COSTS (Applicable to and beneficial to 1964 work performed on JIB "B" Group)

Costs shown in affidavit of March 3rd*		\$ 3,710.00
Supplementary Costs**		
W. R. Bacon, P. Eng.	- June 8 - 20 - 13 days @ \$35.00	= \$ 455.00
Rokuhei Yamaguchi	- " " - " " "	= 455.00
Ichiro Kurihara	- " " - " " "	= 455.00
Masao Tatsugami	- " " - " " "	= 455.00
Kinsabura Oya (interpreter)	" " - " " \$25.00	= 325.00
F. Jackson, Surveyor	- June 8 - 17 - 10 days @ \$20.00	= 200.00
R. Greyell, "	- " " - " " "	= 200.00
		<u>\$ 2,545.00</u>
Rental "Ocean Cape" @ \$100.00 per day		= <u>1,000.00</u>
		\$ 3,545.00
Total applicable costs		= <u>\$ 7,255.00</u>

\* Contained in Geophysical Report by W. R. Bacon, P. Eng., on the Jib "B" Claim Group, Queen Charlotte Ids., Skeena M. D., dated March 3rd, 1965.

\*\* On an area adjacent to Jib "B" Group.

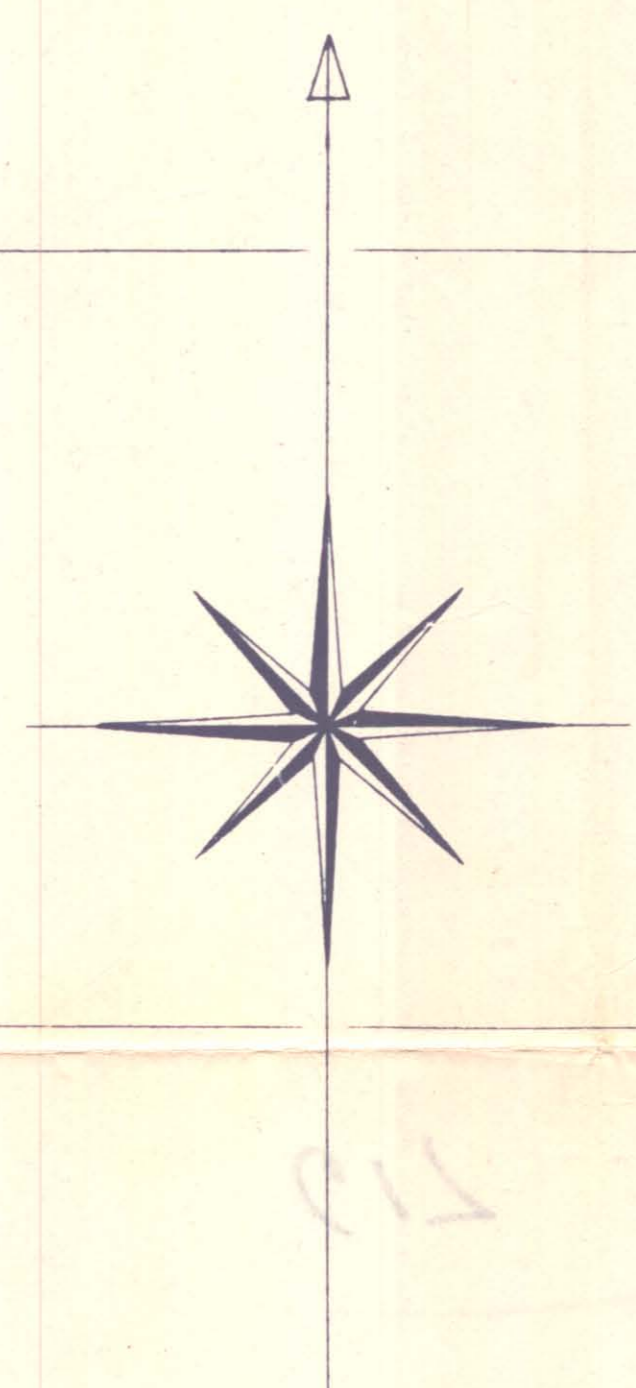
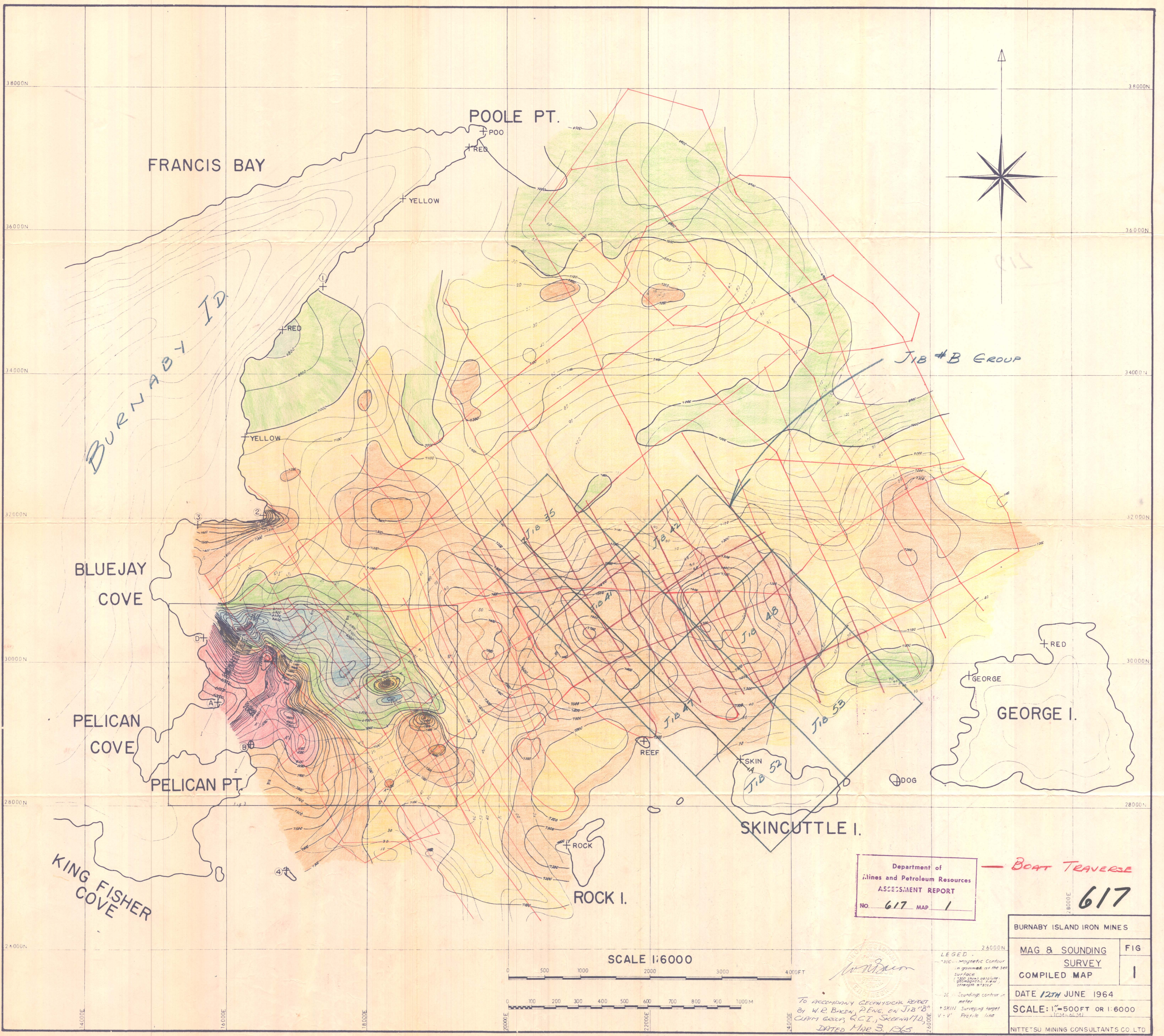
*Declared before me at the  
City of Vancouver in the  
Province of British Columbia  
this 9th day of April 1965.*

*W. R. Bacon, P. Eng.*

March 23rd, 1965  
Vancouver, B. C. *Gold Commissioner*

W. R. Bacon, P. Eng.





Department of  
Mines and Petroleum Resources  
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BURNABY ISLAND IRON MINES	
MAG & SOUNDING SURVEY	FIG 1
COMPILED MAP	
DATE 12TH JUNE 1964	
SCALE: 1"=500FT OR 1:6000	
NITTE'SU MINING CONSULTANTS CO. LTD	

LEGEND  
-300- Magnetic Contour in gamma at the sea surface  
+300 SKIN absolute geopotential field strength meter  
-20- Soundings contour in meter  
+SKIN surveying target  
V-V' Profile line

SCALE 1:6000  
0 500 1000 2000 3000 4000 FT

0 100 200 300 400 500 600 700 800 900 1000 M

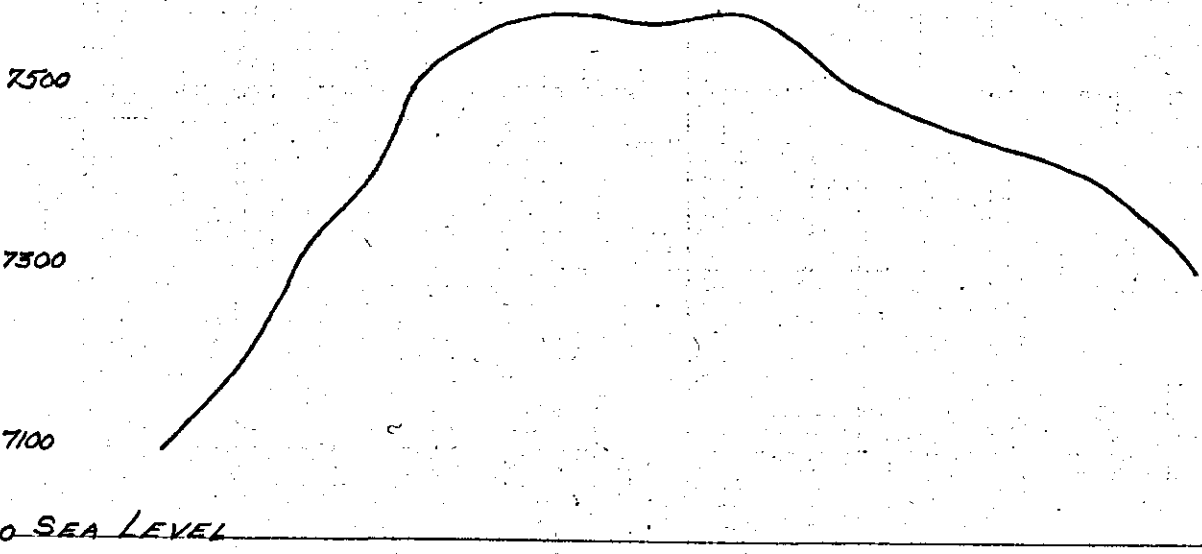
To ACCOMPANY GEOPHYSICAL REPORT  
By W.R. BAXEN, P. ENG. ON JIB'S B  
CLAIM GROUP (C.C.I.), SKINCUTTLE I.D.  
DATED MAR 3, 1965

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BOAT TRAVERSE

MAGNETIC PROFILE IN GAMMAS  
FEET BELOW SEA LEVEL

7500  
7300  
7100  
0 SEA LEVEL  
250  
500



SKINCUTTLE ISLAND

*W.R. Bacon*

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT

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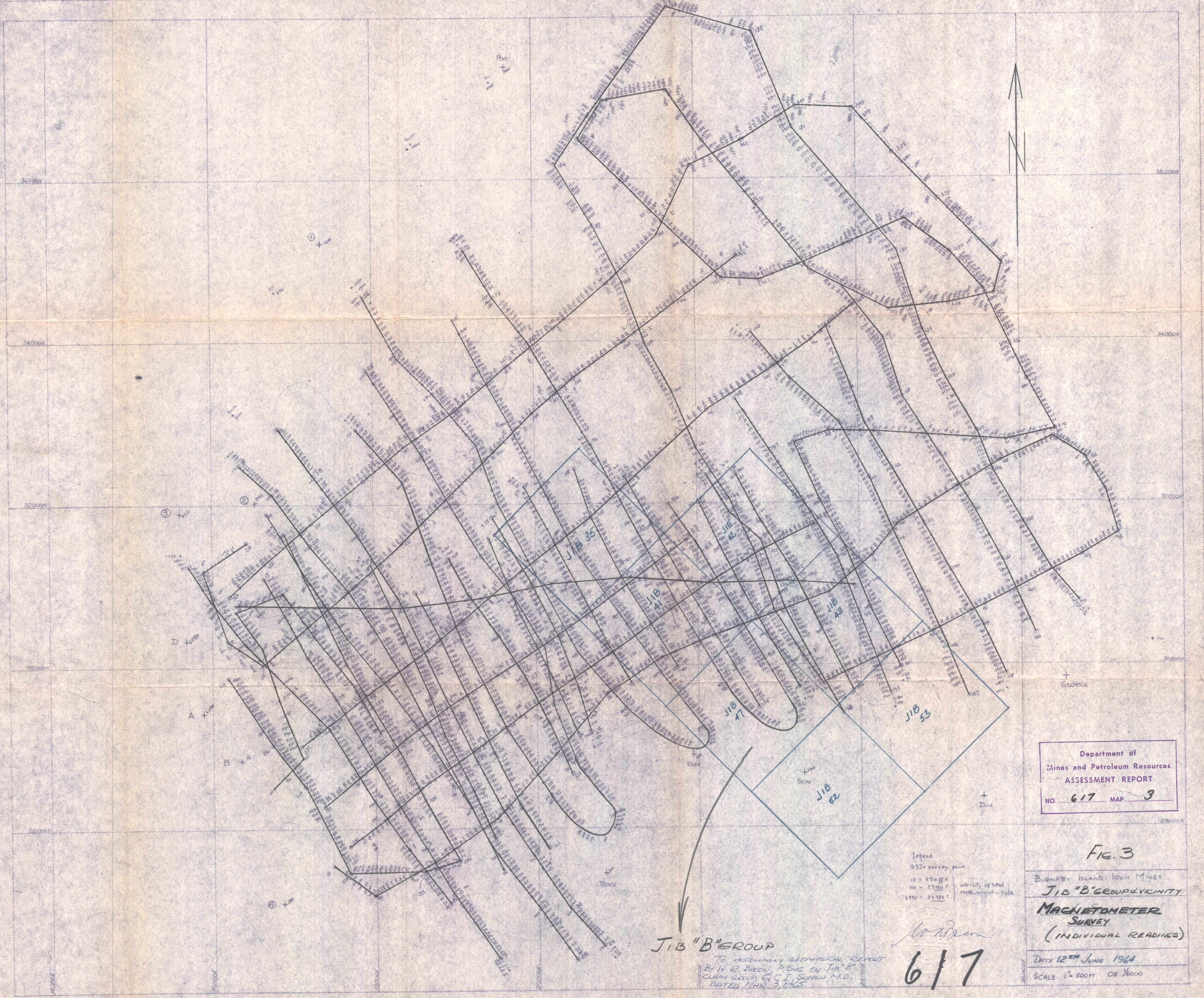
BURNABY IRON MINES LTD

FIG 2

PROFILE ALONG LINE A-A FIG 1  
HORIZONTAL & VERTICAL SCALE 1"=500'  
MAGNETIC PROFILE 1"=200'  
DATE JUNE 12 1964

TO ACCOMPANY GEOPHYSICAL  
REPORT BY W.R. BACON, P. ENG.  
ON TIB "B" CLAIM GROUP, Q.C.I.,  
SKEENA M.D., DATED MAR. 3, 1965.

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FIG. 3

BURNABY ISLAND IRON MINES  
JIB "B" GROUP VICINITY  
MAGNETOMETER  
SURVEY  
(INDIVIDUAL READINGS)

DATE 12<sup>TH</sup> JUNE 1964  
SCALE 1" = 500 FT OR 1/6000

Legend  
992 = survey point  
15 = 57015 f  
160 = 57160 f  
5950 = 56920 f

intensity of total  
earth magnetic field

JIB "B" GROUP

TO ACCOMPANY GEOPHYSICAL REPORT  
BY W. R. BROWN, P. ENG. ON JIB "B"  
CLAIM GROUP, C. I. SHERWIN M.D.,  
DATED MAR. 3, 1965

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