

GEOPHYSICAL REPORT ON BETA GROUP

651

by J. M. Black, P.Eng.

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Department of
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ASSESSMENT REPORT
NO. 651 MAP.....

BETA GROUP

INTRODUCTION

This group is about $2\frac{1}{2}$ miles south of Kains Lake and is reached by traversing southward from an access road that runs along the south shore of the lake.

The area is gently rolling with one ridge in the east. No outcrops were seen.

Blazed lines were used for base lines and traverses were run by pace and compass, along and from these base lines.

A Sharpe D.I.M. tripod-mounted magnetometer was used one day. This is read in degrees of swing. These readings have been converted to gammas and are shown on the accompanying map, Figure 1. The remainder of the readings were taken with a Sharpe P.M.F. 3 (No. 40512), which is read directly in gammas. All readings are positive.

MAGNETOMETER SURVEY AND INTERPRETATION

The results of the magnetometer survey are shown on Figure 1. Across the central part of the group, readings are over 1,000 gammas. North and south of this central part, readings are less than 1,000 gammas. This general, broad zone is interrupted as shown, just west of the centre of the group. In the eastern part of this broad zone are five anomalies which are numbered from east to west.

No. 1 is broad and has low gradients. It has a high reading of 2,600 gammas. Its shape generally conforms with contours around the ridge previously mentioned. This dies out to the northwest. Presumably, the anomaly is caused by a mass of rock which

forms the ridge but is not exposed and is not strongly magnetic.

No. 2 anomaly extends northerly in the eastern part of the group. It is broad and generally has gentle slopes. Within it are four areas with readings over 3,000 gammas. This anomaly may be caused by a rock ridge covered by less than average thickness of overburden or by a mass with greater than average intensity of magnetism.

Anomaly No. 3 is very close to No. 2 and is probably related to the same cause. Its gradients are steep and it would appear to be caused by a mass at fairly shallow depth.

Anomaly No. 4 is a gentle one and is only a few hundred gammas higher than the surrounding area.

Anomaly No. 5, in the centre of the group, has the highest reading obtained, 4,900 gammas. Its slopes are not as steep as those of No. 3 and it is probably caused by an isolated mass at moderate depth.

EMPLOYMENT

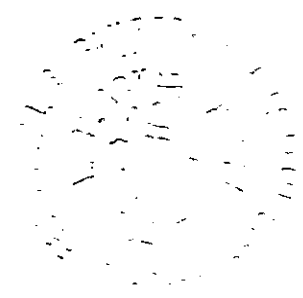
One person, J. M. Black, P.Eng., directed the survey and carried it out. The work was done in seven days on the following dates:

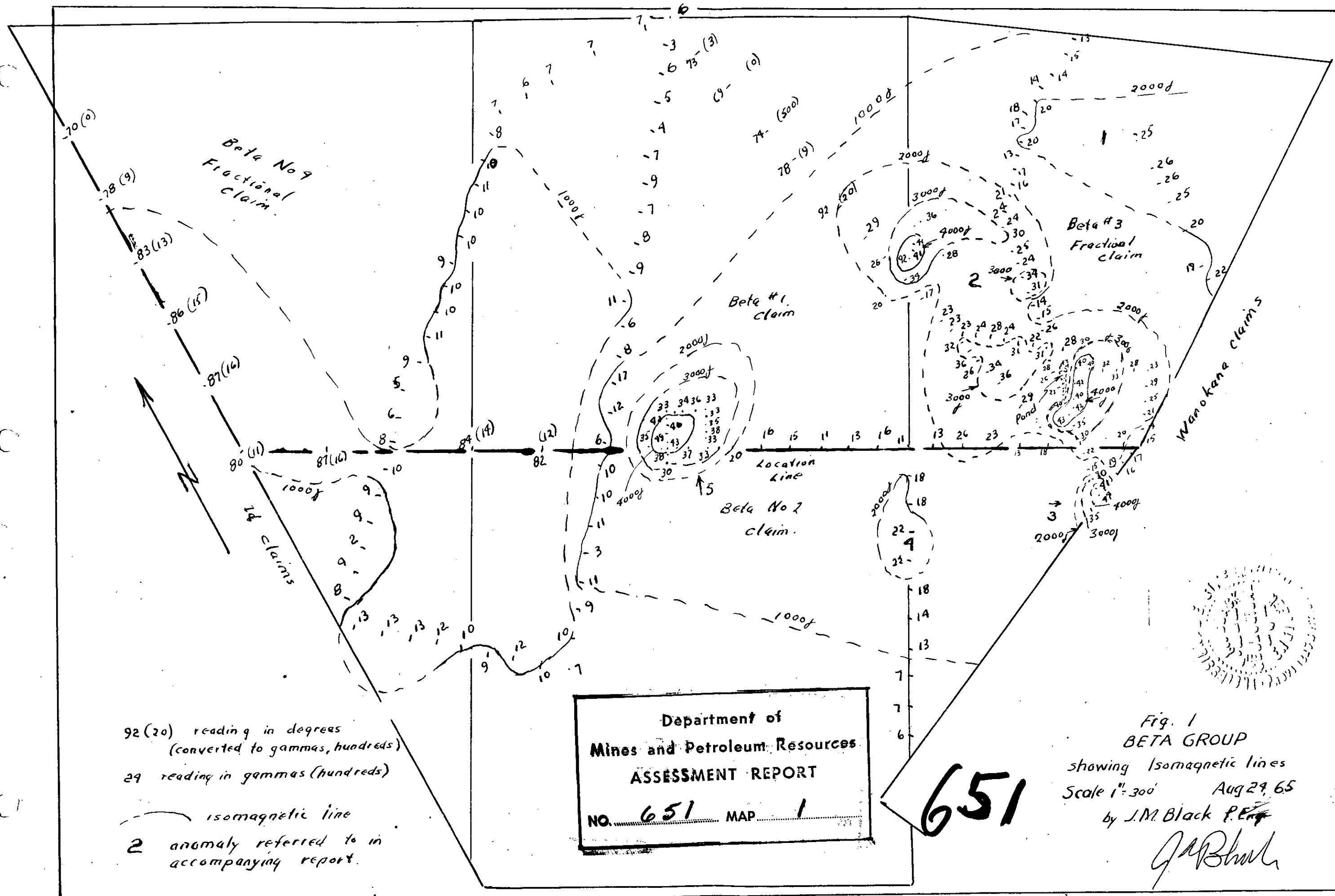
1964 - August 5.

1965 - July 5, 9 and 13. August 20, 23 and 24.

No other competent geophysical operator is available at Port Hardy.

*J. M. Black
P. Eng.*





92(20) reading in degrees
(converted to gammas, hundreds)
29 reading in gammas (hundreds)

— isomagnetic line

2 anomaly referred to in
accompanying report.

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Fig. 1
BETA GROUP
showing Isomagnetic lines
Scale 1" = 300' Aug 29, 65
by J.M. Black P. Eng
J.M. Black