

HESS REGION REPORT

No. 69-1

Detailed Work in the Vicinity
of
Aeromagnetic Anomaly North of
Spearhead Mountain

N.T.S. 105-J-13

Work done in the period

May 28 - 30, 1969

by

G.R. Sanford

REPORT ON SPEARHEAD MTN. AEROMAG ANOMALY

105-J-13

May 28 - 30, 1969

On the 29th and 30th of May, 1969, the bullseye aeromagnetic anomaly six miles north of Spearhead Mountain, Peak 6923 (see aeromagnetic map #4391 G) was examined. On the day previous, an attempt was made to determine the exact position of the anomaly by using a Jalander magnetometer while traversing in a helicopter. This proved unsuccessful as there appeared to be too much local interference from the helicopter. A lake suitable for float-equipped aircraft lies less than one mile south of the area.

During the period of examination, all major drainages in the vicinity of the anomaly were sampled. This proved difficult as most of the creeks were still snow-covered and frozen, especially in the valley to the north of the anomaly. Soil samples were taken along lines at the base of the slope below the anomaly and through the centre of the suspected anomaly. In most cases the ground was still frozen. The soil profile consisted of 2 inches of moss, 2 inches of dark organic material, 2 inches of volcanic ash and then brown soil filled with 1 cm. diameter argillaceous fragments. An attempt was made to run a magnetometer survey over the suspected anomaly but the magnetometer was not functioning correctly.

Outcrop was not found in the suspected anomalous area. Creek float consisted almost entirely of a blue-grey chert with scattered cobbles of chert pebble conglomerate. Outcrop on the ridge tops above the anomaly is almost entirely a massive grey weathering blue-grey chert.

No anomalous values were detected in the samples collected. Several high zinc values could be attributed to the blue-grey cherts. Several high manganese values were recorded. A magnetic anomaly could exist at this position, but the soil samples indicate that it is probably not a copper anomaly.

Illustrations: Geochemistry

Respectfully submitted,

G. R. Sanford

GEOCHEMISTRY
AEROMAG ANOMALY
NTS' 105-J-13
Cu,Pb,Zn,Mn in ppm.

22, 28, 117

20, 24, 34

82, 28, 126

57, 16, 179

54, 24, 210

64, 32, 228

60, 17, 260, 800

54, 15, 97, 440

45, 15, 185, 630

45, 15, 158, 404

4, 10, 127, 186

50, 15, 220, 630

21, 10, 170, 137

30, 10, 20, 340

25, 10, 204, 208
26, 10, 188, 170
27, 10, 164, 70
28, 10, 124, 42
29, 10, 106, 12
30, 10, 170, 170
31, 10, 150, 730
32, 10, 180
33, 10, 90, 40

12, 10, 82, 260

30, 15, 102, 1370

18, 25, 106, 744

30, 40, 104, 1190

28, 15, 102, 630

59, 5, 113, 170

67, 15, 150, 960

41, 18, 136, 1030

28, 17, 120, 1170

40, 25, 136

36, 20, 119

32, 20, 102

66, 4, 150

56, 16, 210

108, 14, 180, 500

33, 45, 102, 650

42, 15, 113, 1000

28, 15, 154, 650

42, 15, 190, 1150

