

**ARCHER, CATHRO
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CONSULTING GEOLOGICAL ENGINEERS**

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REPORT ON
LINE CUTTING, SOIL GEOCHEMISTRY AND GEOLOGY
VIC#46-49, 55-62

This report has been audited by the
Geological Branch of the Geological
Survey of Canada and is recom-
mended to the Canadian public to be consid-
ered as representation work for the amount of

\$4,095.71

J. B. Craig

President, Canadian
Geological Association

for

LEWES RIVER MINES LTD.

considered as representation work under
Section 53 (4) Yukon Quartz Mining Act.

[Signature]

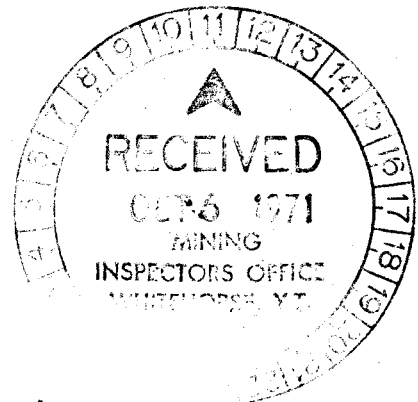
Commissioner of Yukon Territory

by

Alan R. Archer

Consulting Engineer

Whitehorse, Y.T.



INTRODUCTION

During the period May 21 to May 31 lines were cut at 400 foot intervals on the Vic 46-49 and 55-62 claims in preparation for an Induced Polarization survey. At the same time, soil samples were taken where ground conditions allowed, the claims prospected and outcrops identified. The crew initially mobilized by walking to and from the claims daily from the end of the nearest road. This procedure was found to be too time consuming and a field camp was established on the property by helicopter from May 24-31. The names of the individual crew members and days worked are shown on the attached statement of expenditures.

LINE CUTTING

The purpose of cutting the lines was to prepare for an Induced Polarization survey over a linear magnetic anomaly located by a low level aeromagnetic survey conducted by Seigel Associates Ltd. in 1968. The 7200 foot long baseline was established by compass and picketing using a 1" = 1000 foot airphoto for ground control. Crosslines were cut at 400 foot intervals for a length of 1600 feet on either side of the baseline. Picket stations, appropriately numbered, were established by horizontal chaining at 200 foot intervals.

SOIL SAMPLING AND MAPPING

Soil samples were taken at 200 foot intervals by digging to a "B" horizon with a mattock grubhoe. These were analyzed

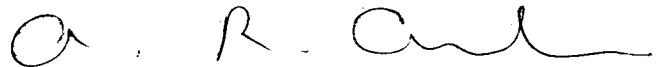
for copper by atomic absorption spectrometry of a nitric-perchloric extraction at Chemex Labs Ltd., North Vancouver, B.C. Overburden on the claims is either glacial-fluvial material or river silts from old channels cut by the Yukon River. Vegetation is generally thick spruce grading to buckbrush, willow and alder in the swampy areas. No significant anomalies were found.

Prospecting located only one outcrop that is near the southeast end of Line 32W. This was a fine to medium grained diorite in contact with shales and limestone of the Lewes River group. The attitude of the contact suggests that the claims are underlain by Lewes River sediments.

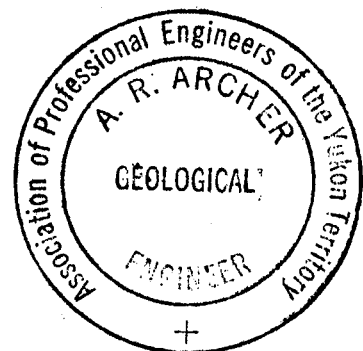
CONCLUSION

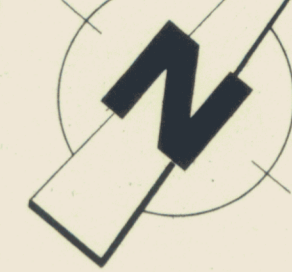
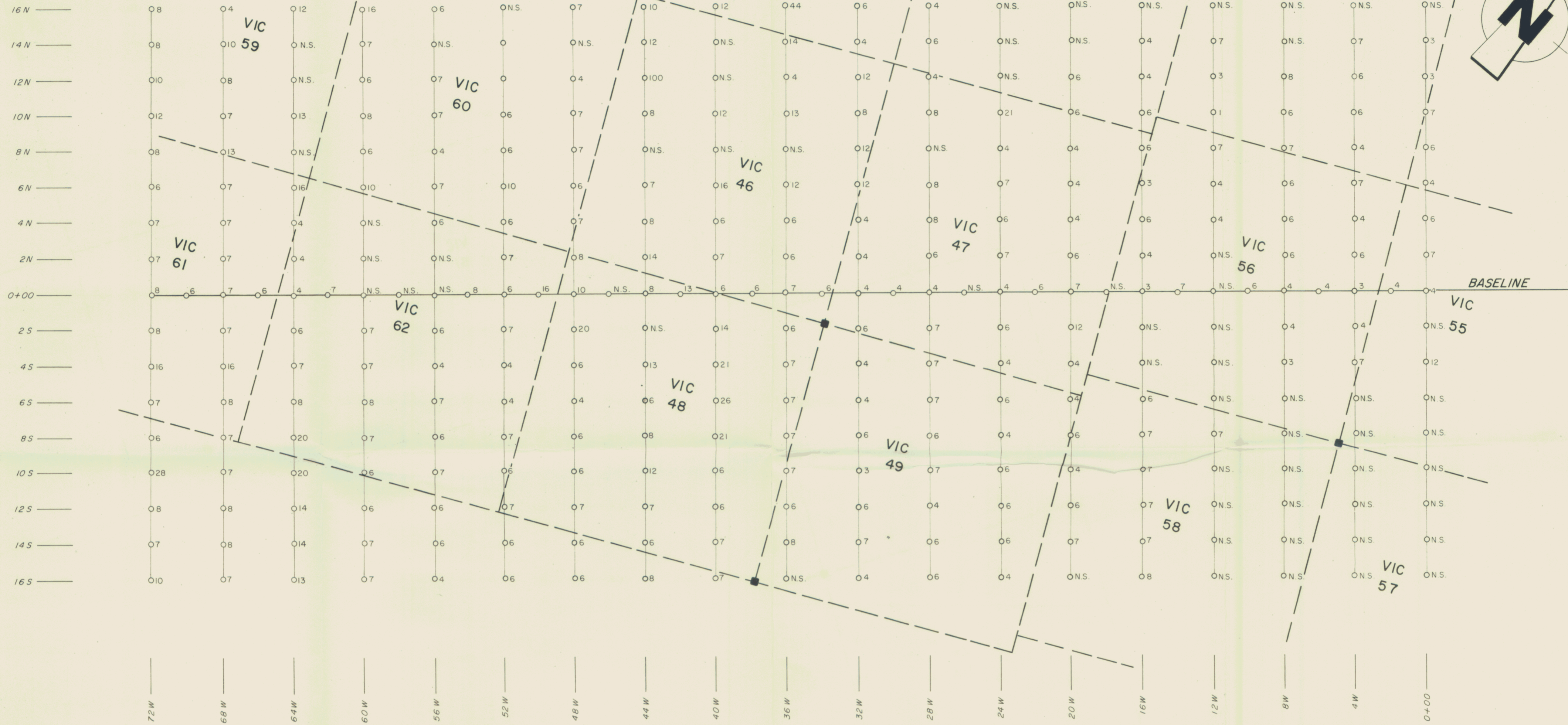
No explanation could be found for the aeromagnetic anomaly on the basis of geochemistry or geology because of thick till. Further exploration data will have to await results of the planned ground geophysical survey.

Respectfully submitted,
ARCHER, CATHRO & ASSOCIATES LTD.



A.R. Archer, B.A.Sc., P.Eng.





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LINE CUTTING AND COPPER GEOCHEMISTRY
 LEWES RIVER MINES LTD.
 WHITEHORSE COPPER BELT PROPERTY

LEGEND
 N.S. = TOO SWAMPY TO OBTAIN A SAMPLE

