COMBINED EM + MAGNETOMETER SURVEY

REVERTED CROWN GRANT MINERAL CLAIMS

645 (6) and 646 (6)

82F - 15W SLOCAN M.D.

Lat. 49° 53' N
Long. 116° 57' W

OWNER

OTTO JANOUT
310 - 1509 Martin Street
Whiterock, B.C. V4B 3W8

OPERATOR

ESSO MINERALS CANADA
314 - 1281 West Georgia Street
Vancouver, B.C. V6E 3J7

by

Lloyd Wilson
ESSO MINERALS CANADA
Toronto

November
~~AUGUST~~ 1979

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LIST OF MAPS

GENERAL INTRODUCTION

The attached geophysical survey, carried out by personnel of ESSO MINERALS CANADA, is submitted with its supporting costs for assessment credits on two reverted crown-granted mineral claims in the Kaslo area. These claims (reissue number 645 (6) and 646 (6) are owned by Otto Janout of 310-1509 Martin Street, Whiterock, B.C., V4B 3W8.

Their location is shown on the attached INDEX MAP along with the location of the grid on which the work was done. The survey was carried out from June 29 to July 21, 1979.

Access

The property is reached via 2 miles of dirt road from the end of the Kaslo air strip, thence by foot trail for 1 mile to the showings at an elevation of 5,000 feet.

History

The True Blue (L4859) and Copper Queen (L4861) crown grants were issued in 1902 to TrueBlue Copper Mines Ltd. who are reported to have done several hundred feet of drifting and crosscutting and shipped 60 tons of ore averaging 7.4% Cu, 1.7 ounces Ag and 0.017 ounces Au per ton. Zinc, obviously present in the massive mineralization, was apparently ignored. All of this activity is believed to have taken place on the TrueBlue claim.

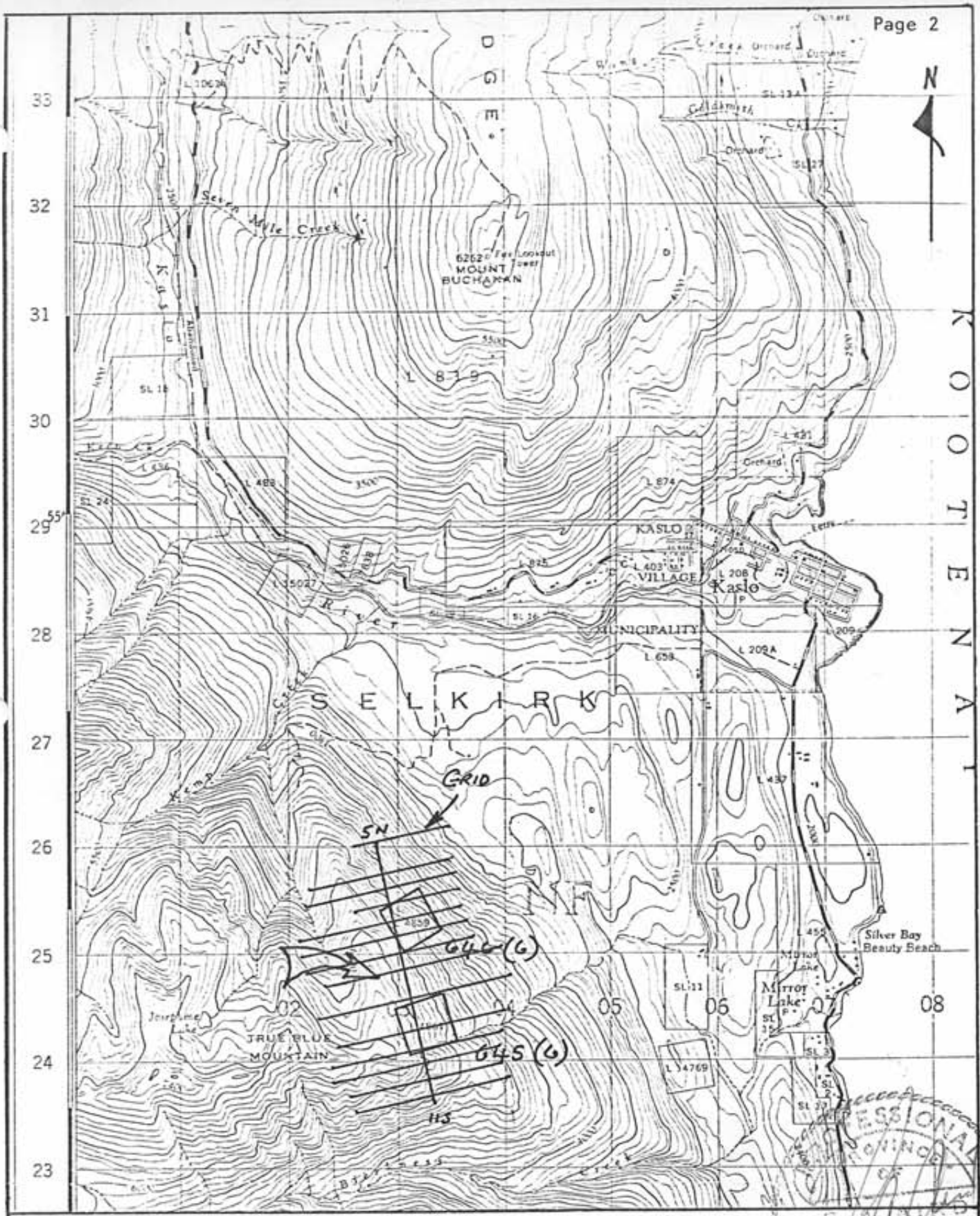
Thirty claims were staked over the area in 1969-1970 by an unnamed small company and held for one year.

The two reverted crown grant claims were acquired on June 5, 1978 by Otto Janout who located an additional two claims, the True (15 units) and the Blue (20 units) recorded July 28, 1978.

Geology

The claims are underlain by argillaceous and tuffaceous units of the upper Milford Group intercalated with greenstone units of the overlying Kaslo Group.

Mineralization on the True Blue consists of disseminated to massive pyrite, chalcopyrite and sphalerite in folded sericite schist. A chip sample of the best mineralization, taken from several small lenses, assayed 6.75% Cu, 2.76% Zn, 0.12% Pb, 1.10 ounces Ag and 0.026 ounces Au per ton.



INDEX MAP SHOWING REVERTED CROWN GRANT CLAIMS

Scale: 1:50,000

Slocan M.D.
82F-15W

1000 0 1000 2000 3000 4000 meters

COMBINED EM/MAG SURVEY
TRUE BLUE PROSPECT, KASLO, B.C.

CONCLUSIONS AND RECOMMENDATIONS

A previously explored sulphide occurence on the True Blue prospect showed no coincident electromagnetic or magnetic response. Except for an exceptionally weak Out-of-Phase EM response down slope from this occurrence, no other bedrock conductors were located. No further work is recommended on this property.

INTRODUCTION

In July of 1979 a total of 8.0 line kilometres of horizontal loop EM and 13.6 line kilometres of proton precession magnetics was carried out over the True Blue prospect, Kaslo, British Columbia by Esso Minerals Canada.

PURPOSE OF SURVEY

The purpose of the survey was to test the extent of a known sulphide occurrence into which an addit had been previously drilled.

EQUIPMENT AND DATA REDUCTION

ELECTROMAGNETIC SURVEY

The survey was carried out with an Apex Parametrics Max Min II electromagnetic system using the horizontal loop configuration. This "configuration" consists of two loops, in a horizontal plane, connected by a cable which delivers a reference signal from the transmitter loop to the receiver loop and also provides a fixed separation.

In the presence of a conductor, the field from the transmitter will be altered due to secondary magnetic fields generated in the conductor. The resulting electromagnetic field detected by the receiver is then compared with the reference signal from the transmitter loop. The primary or reference field is removed and the remaining secondary field is separated into "in-phase" and "out-of-phase" components which are expressed as a percent of the primary field strength.

In the present survey, the results for the True Blue prospect were obtained using a cable separation of 100 metres and a transmitter frequency of 1777 Hz. Readings were taken at 25 meter intervals along lines spaced 100 metres apart.

The data is plotted on Map 1 at a horizontal scale of 1:5000 and a vertical scale of 1 cm = 20% of primary field strength.

MAGNETOMETER SURVEY

A geometrics G-816 portable proton precession magnetometer was used. This instrument gives the total magnetic field strength by measuring the frequency at which protons (hydrogen nuclei) precess about the prevalent earth's magnetic field. The precession frequency is directly proportional to the total magnetic field at the point of measurement. Sensitivities of $\pm$ 1.0 gamma can be achieved with this magnetometer.

Time variations of the magnetic field (diurnal) were obtained by "tieing in" to established base stations along the grid base line. Changes in the base station values were then removed from the field data.

Readings were taken at 25 metre intervals along lines spaced 100 metres apart. The data for the True Blue prospect is presented in plan form - Map 2 - with a contour interval of 100 gammas.

INTERPRETATION

The horizontal loop EM was not completed over the central portion of the survey grid because of extremely steep terrain (up to +45°). Except for an extremely weak Out-of-Phase EM response observed from Line 1S, 1+00E to Line 5N, 1+25E, no other bedrock conductors were located. The numerous broad, negative In-Phase responses of up to -3% are probably due to misorientation of the transmitter and receiver coils in areas of steep terrain.

The proton precession magnetics does not suggest any significant structural changes in the survey area. The localized anomalous magnetic responses observed on Line 7S, 2+25W, Line 9S, 2+00W, Line 10S, 1+50E and Line 11S, 00+75E are possibly due to magnetite bearing dykes.

In summary, there was no electromagnetic or magnetic response associated with the previously explored sulphide occurrence on the True Blue prospect. The only anomaly is an exceptionally weak Out-of-Phase EM response down slope from this occurrence, extending from Line 1S, 1+00E to Line 5N, 1+25E.

Lloyd M Wilson
Geophysicist

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
C. N. ARD

PERSONNEL

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3. George Reed
   University Undergraduate, Assistant

ABOUT THE AUTHOR

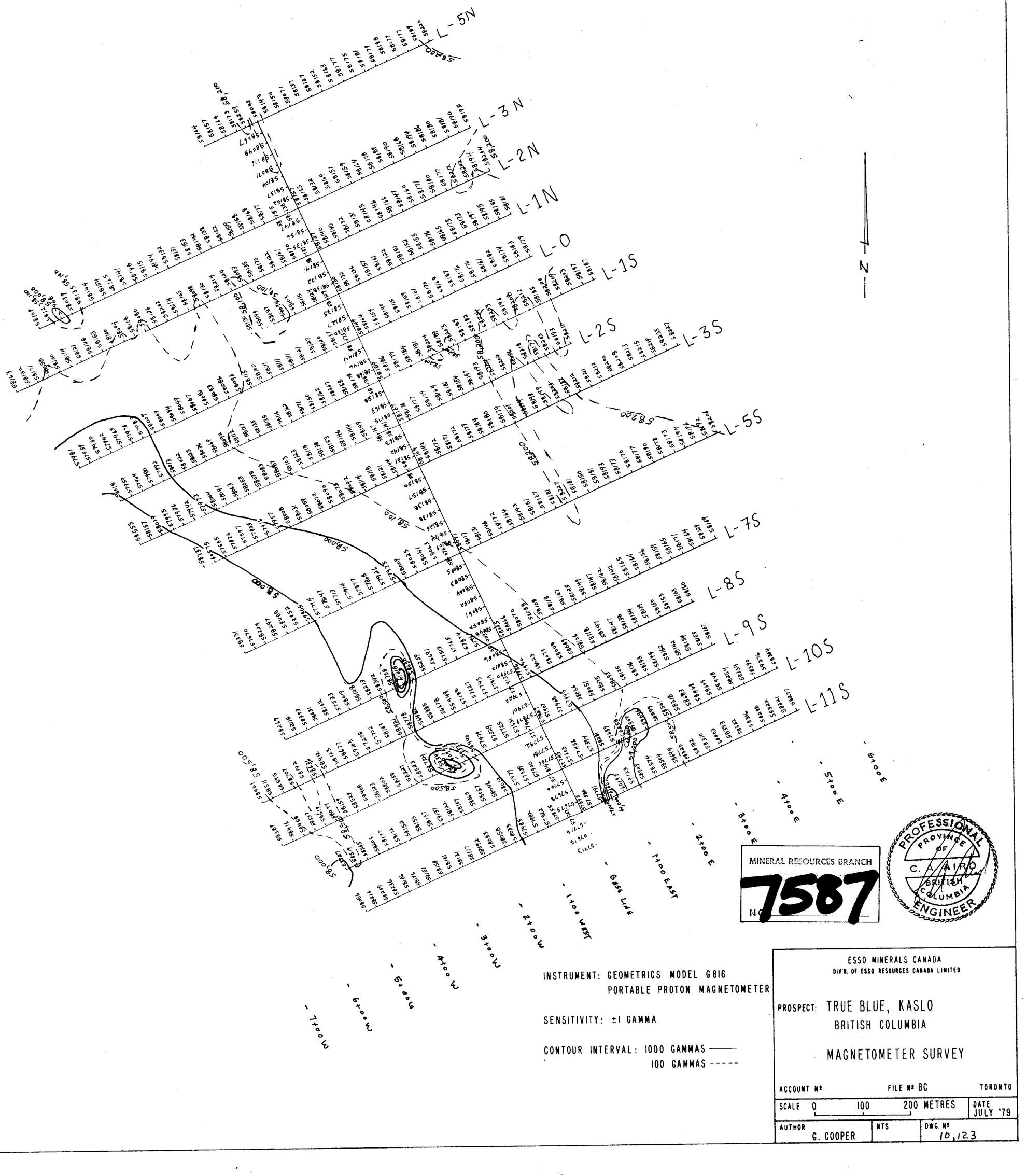
Lloyd M. Wilson attended Memorial University of Newfoundland between 1966 and 1971, graduating with a B.A. (Honors) degree in Mathematics. From May, 1971 to October, 1973, Mr. Wilson worked full-time in oil and gas exploration for Amoco Canada Petroleum Co. Ltd. in Calgary, Alberta, specializing in gravity, magnetics and seismic methods. Since then he has had over four and a half years of experience as a mineral exploration geophysicist. For the past one and a half years he has been in charge of geophysical field activities and training of summer personnel for Esso Minerals Canada. He is a member of the Society of Exploration Geophysicists and the Prospectors and Developers Association.

WILLIAM GORDON COOPER, PARTY CHIEF

Mr. Gordon Cooper is currently a student at the University of Waterloo in Ontario where he is completing the requirements for his B.Sc. in Earth Sciences, and will be graduating in December of 1979. Mr. Cooper has worked for Esso Minerals Canada for the past four years during the summer field season. In the past two years he has been acting as geophysical party chief conducting gravity, I.P. and E.M. surveys throughout all of Canada.

SURVEY COSTS

1.	L. Wilson (July 17-20)	-	Salary -	$375.00
2.	G. Cooper (June 29 - July 21)	-	Salary -	800.00
3.	G. Reed (June 29 - July 21)	-	Salary -	1037.00
4.	Expenses	-	Meals, Lodgings	1000.00
5.	Vehicle			735.00
6.	Report			300.00
			TOTAL	$ 4247.00



MINERAL RESOURCES BRANCH
NO. 7587

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
C. A. AIRD

INSTRUMENT: GEOMETRICS MODEL G816
PORTABLE PROTON MAGNETOMETER

SENSITIVITY: ±1 GAMMA

CONTOUR INTERVAL: 1000 GAMMAS ——
100 GAMMAS -----

ESSO MINERALS CANADA
DIV'N. OF ESSO RESOURCES CANADA LIMITED

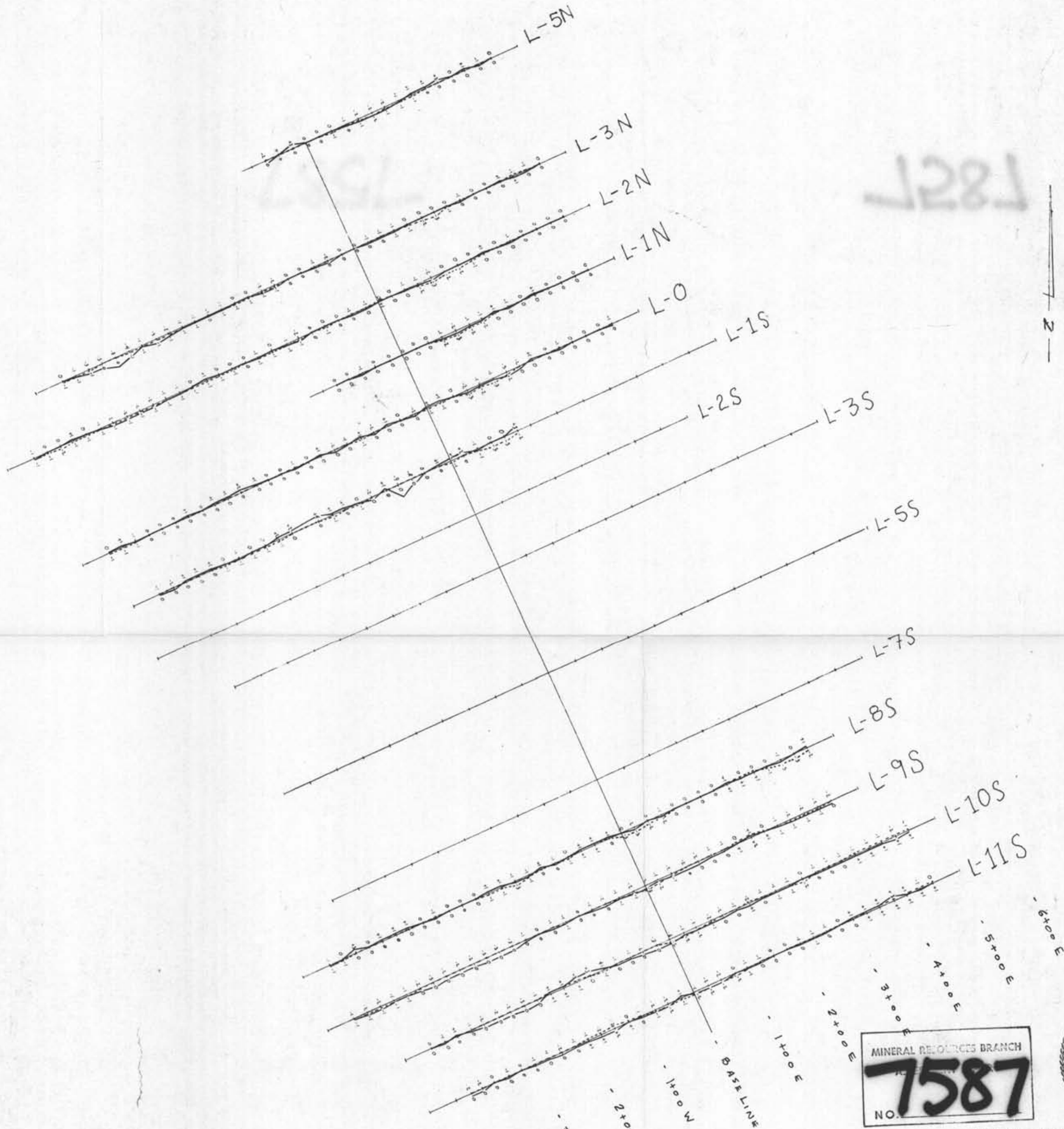
PROSPECT: TRUE BLUE, KASLO
BRITISH COLUMBIA

MAGNETOMETER SURVEY

ACCOUNT № | FILE № BC | TORONTO

SCALE 0 100 200 METRES | DATE JULY '79

AUTHOR G. COOPER | NTS | DWG. № 10,123



MINERAL RESOURCES BRANCH
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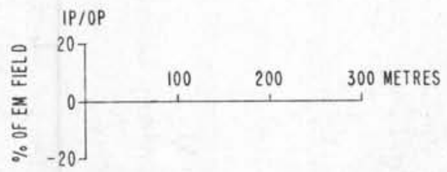
DEFINITE ANOMALY
POSSIBLE ANOMALY

INSTRUMENT: APEX PARAMETRICS MAXMIN II
FREQUENCY: 1777 HZ
TX-RX SEPARATION: 100 METRES
——IN PHASE COMPONENT
- - - -OUT OF PHASE COMPONENT



ESSO MINERALS CANADA
DIV'N. OF ESSO RESOURCES CANADA LIMITED

PROSPECT: TRUE BLUE, KASLO, BRITISH COLUMBIA

HORIZONTAL LOOP ELECTROMAGNETIC SURVEY

ACCOUNT Nº | FILE Nº BC | TORONTO

SCALE 0 100 200 METRES | DATE JULY '79

AUTHOR G.COOPER | NTS | DWG. Nº 10,122