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**NOBLE METAL GROUP
INCORPORATED**

**GEOPHYSICAL REPORT ON A
MAGNETOMETER AND VLF-EM
SURVEY**

ON THE

**STU CLAIM GROUP
CARIBOO MINING DIVISION
NTS 93A/14W**

LATITUDE 52 48'N LONGITUDE 121²⁶ 31'W

AUTHOR: *Markus B. Seywerd B.Sc.*

DATE OF WORK: *April 13 - 17, 1991*

DATE OF REPORT: *September 10, 1991*

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

21,895

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ILLUSTRATIONS

FIGURE 1 - Location Map

FIGURE 2 - Claim Map

FIGURE 3 - Grid Location Map

FIGURE 4 - Magnetic Profile Map

FIGURE 5 - VLF-EM Profile Map: Seattle

FIGURE 6 - VLF-EM Profile Map: Cutler

Introduction:

From the thirteenth to eighteenth of April **White Geophysical Inc.** established approximately 3.5 kilometres of line and completed approximately 3.5 kilometres of total field magnetics and VLF-EM survey on **Noble Metal Group Incorporated's CAC and Stu Claims**. The purpose of the survey was to delineate structures and rock types in an attempt to locate precious metal bearing sulphides.

Property:

The **CAC 6,7** and **Stu 1** claims are described in the table below and illustrated in Figure 2.

Claim Name	Units	Record No.	Record Date
CAC 6	20	7543	April 19, 1991
CAC 7	20	7544	April 19, 1991
STU 1	12	1141	August 16, 1990

Location and Access:

The area in which the work was completed is located between Weaver and Four Creeks to the Northwest of Keithly Creek in the Cariboo Mining District. The area is most easily reached by traveling north from likely over gravel and logging roads for a distance of approximately 32 kilometers.

The Claims are located at 52 48'N 121 31'W on NTS Sheet 93A/14W. Much of the area is logged. Outcrops are scarce due to a pervasive cover of glacial till.

Survey Grid:

The survey grid was established in 1991 in conjunction with the magnetometer and VLF-Em Surveys. Its location is marked in Figure 3.

History and Previous Work:

The claims lie in an area that was in the several decades after 1860 an important placer producing region. The CAC Claims themselves were Staked in 1985 and 1986 by Cascadia Mines and Resources Ltd. A program of soil sampling and prospecting in 1989 (Lorimer) led to the drilling of several diamond drill holes.

Property Geology

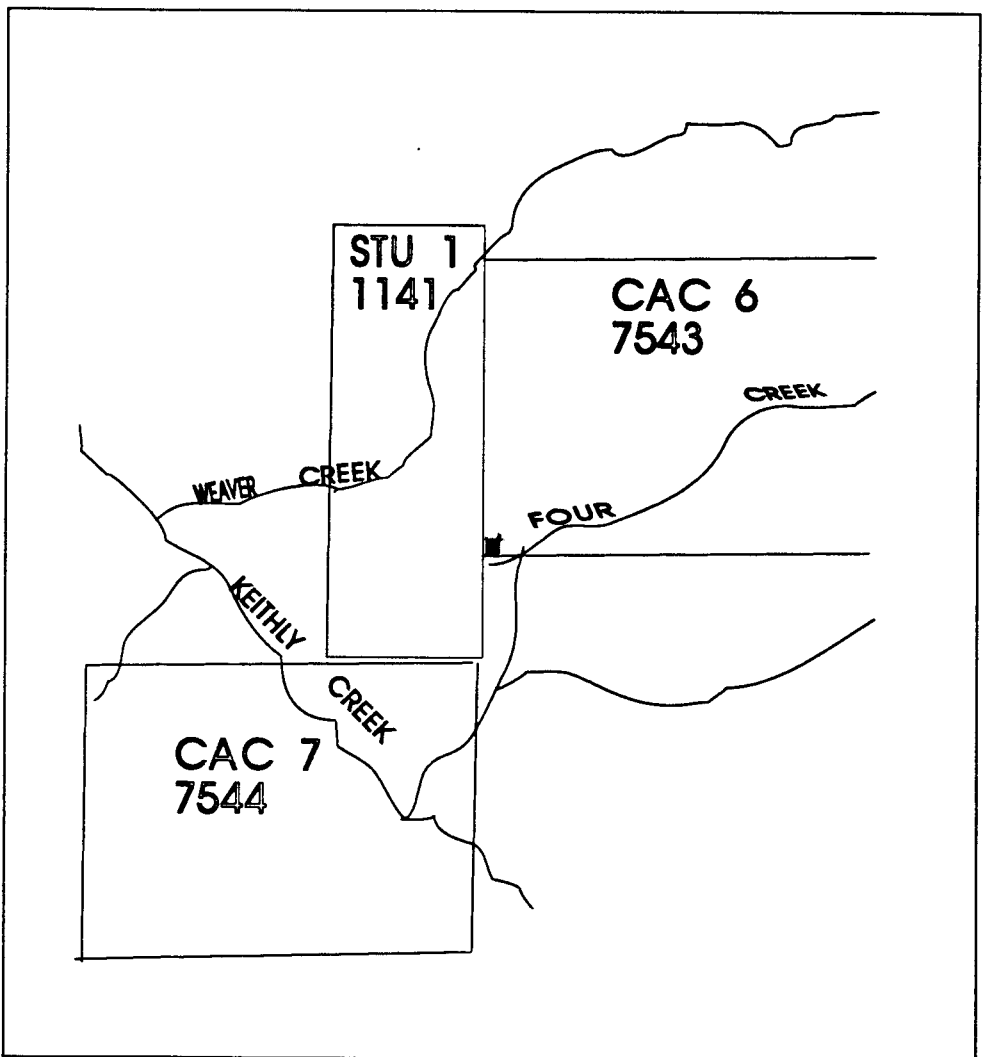
The Geological survey of Canada has mapped the property as underlain by Phyllite, Shist, Quartzite, silicate rocks and minor limestone.

The shist often occurs with limestone in deformed folds. Magnetite is a minor constituent of these assemblies, and calcite veinlets occur.

At least one diorite intrusion has been observed and a thrust fault has been mapped along Rabbit Creek.

Magnetometer and VLF-EM Survey:

The VLF-EM and Magnetic surveys were conducted simultaneously utilizing the Omni-Plus VLF/MAGNETOMETER system built by EDA Instruments Inc. This instrument contains several microprocessors and associated circuitry for monitoring, processing and storing data. The VLF-EM portion of this instrument utilizes the VLF-electromagnetic fields generated by submarine navigation and communication stations which operated in the 15-30 kHz frequency band. The field generated by these stations is primarily horizontal. The instrument indicates the presence of a secondary field due to a conductor as a distortion in this horizontal field. The distortion of this field produces an anomaly in the tilt angle, quadrature and total field intensity readings. VLF-EM data is corrected for facing direction during data processing and is edited for spurious noise spikes. For maximum coupling, a transmitter station located in the same direction as the geological strike of interest should be selected, since the direction of the horizontal electromagnetic field is perpendicular to the direction from the transmitting station.



STU CLAIM GROUP

NOBEL METALS GROUP INCORPORATED

CLAIMS MAP

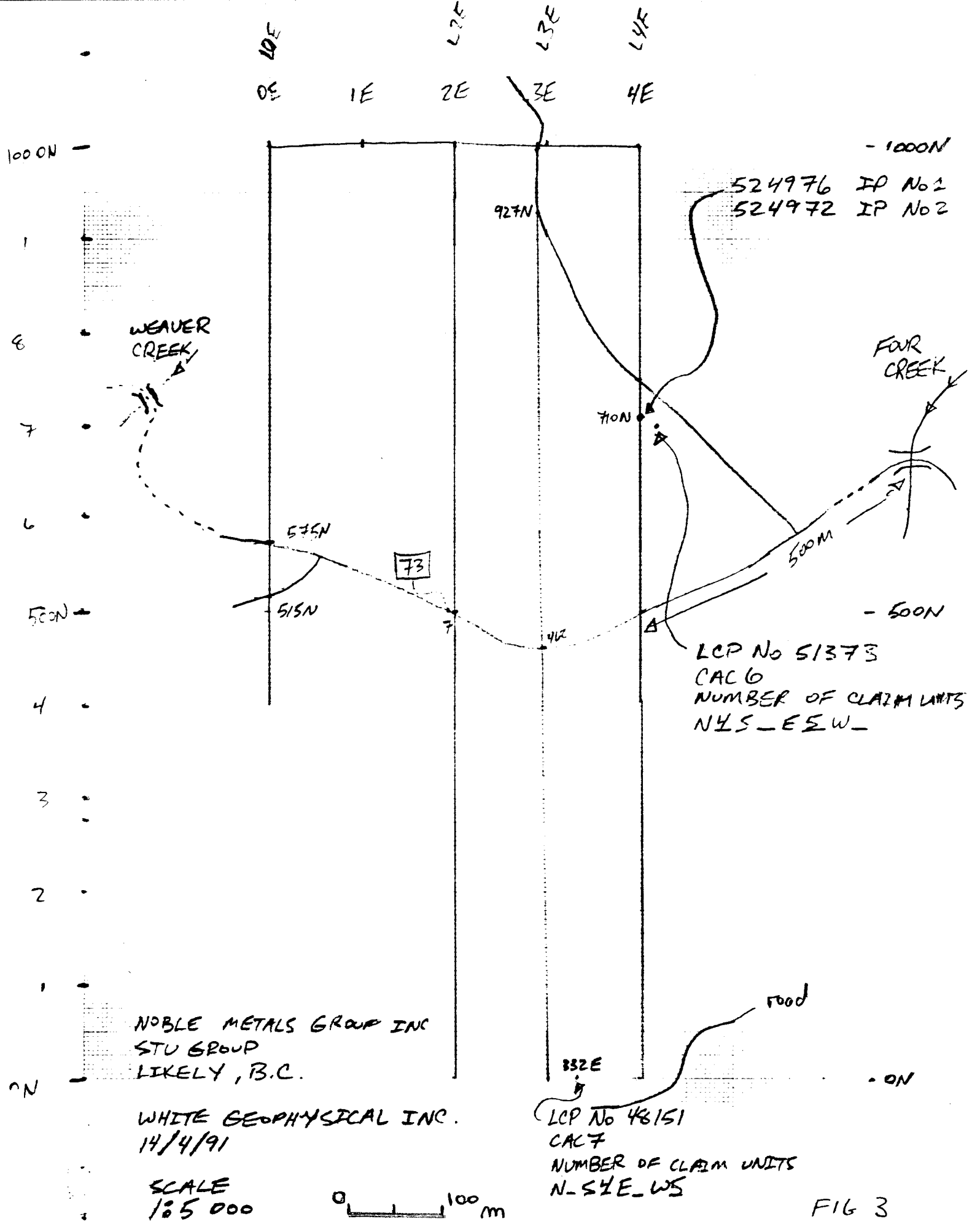


FIG 3

The advantage of the Omni-Plus is that several stations can be recorded simultaneously since the instrument automatically compensates for individual station direction. The magnetics portion of the survey was conducted using the magnetometer system built into the Omni-Plus in conjunction with an EDA base magnetometer. The quartz clocks in the two instruments are synchronized in the morning. At the end of each survey day the field unit is connected to the base unit via an RS232C interface. At this time the base units readings are match to the field units and then dumped to a microprocessor via the RS232C interface. The microprocessor writes the data to a storage medium, most commonly magnetic disks or tape, for later processing. The solid state memory of this instrument and the microprocessors give rapid data gathering at a rate of some 5-10 kilometres per day at 12.5 metre intervals.

Discussion of Results:

The magnetometer and VLF-EM data is presented in stacked profile form in figures 4, 5 & 6; total field magnetics, Cutler and Seattle respectively.

The magnetic data outlined a narrow magnetic anomaly situated at 550N on lines 200E, 300E, 400E respectively. This anomaly may be sourced in an intrusive dyke. A second much stronger anomaly is situated at 675N on line 0+00N. No analysis of this anomaly is possible since it is a single line intercept of a relatively strong anomalie which may continue to the West.

The VLF-EM data indicates the presence of several conductors all of which are marked on Figures 5 & 6. These conductors may be sourced in shear zones, conductive clays, graphite and/or sulphides.

Recommendations and Conclusions:

Two magnetically anomalous areas and several conductors were delineated in the relatively small area surveyed. These may be indicative of precious metal bearing sulphide zones. The survey area should be geochemically sampled and if positive results are indicated an induced polarization survey conducted in order to accurately determine drill targets.

Respectfully Submitted,



Markus B. Seywerd, B.Sc.
Geophysicist

COST BREAKDOWN:

Personnel	Dates	per Diam	Total
D. Hrynyk	April 13-17	\$ 400.00	\$2000.00
Mobilization and demob and Report.....			\$ 500.00
TOTAL.....			\$ 2500.00

STATEMENT OF QUALIFICATIONS

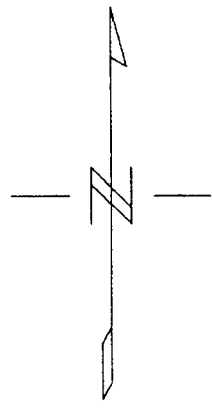
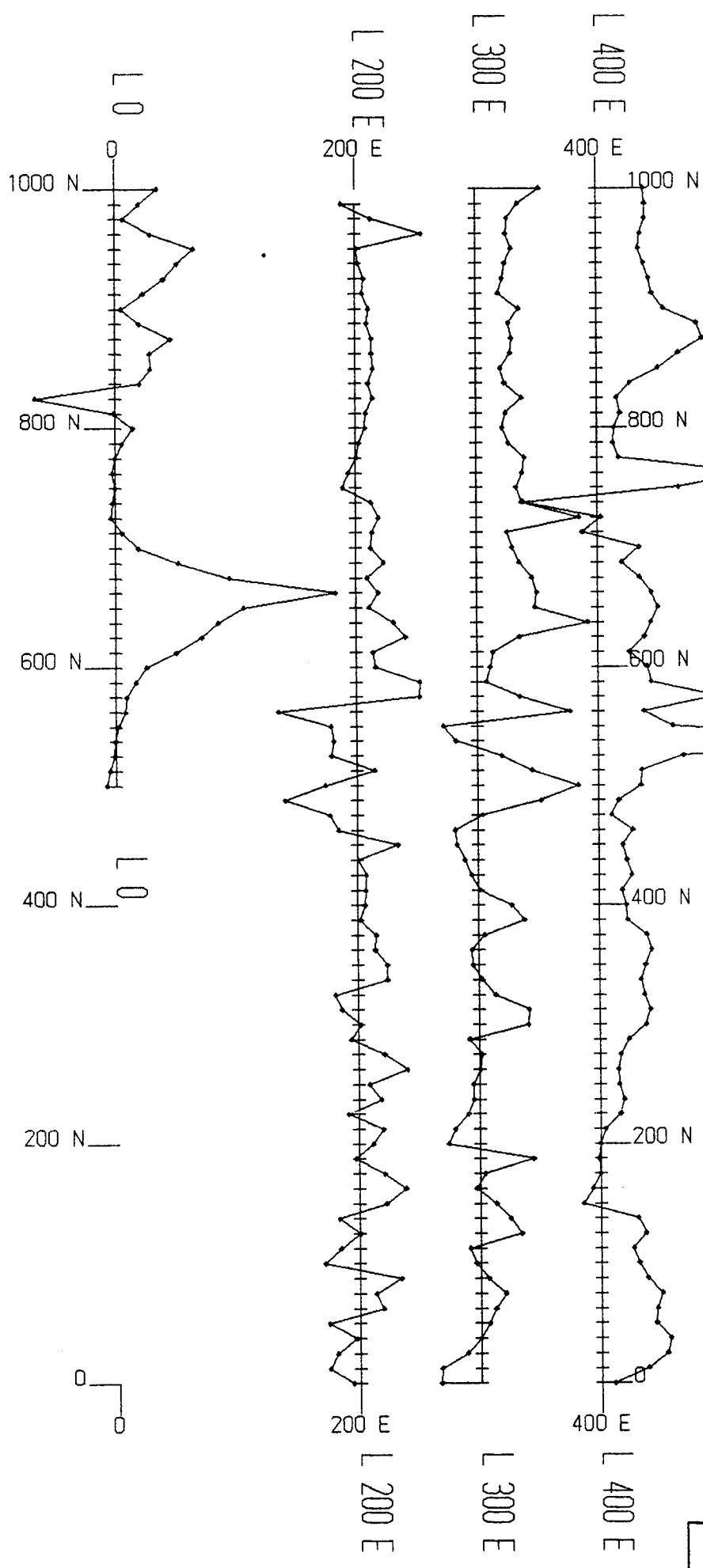
NAME: SEYWERD, MARKUS B., B.Sc.

PROFESSION: Geophysicist

EDUCATION: University of British Columbia -
B.Sc., Mathematics

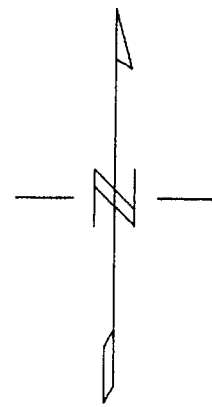
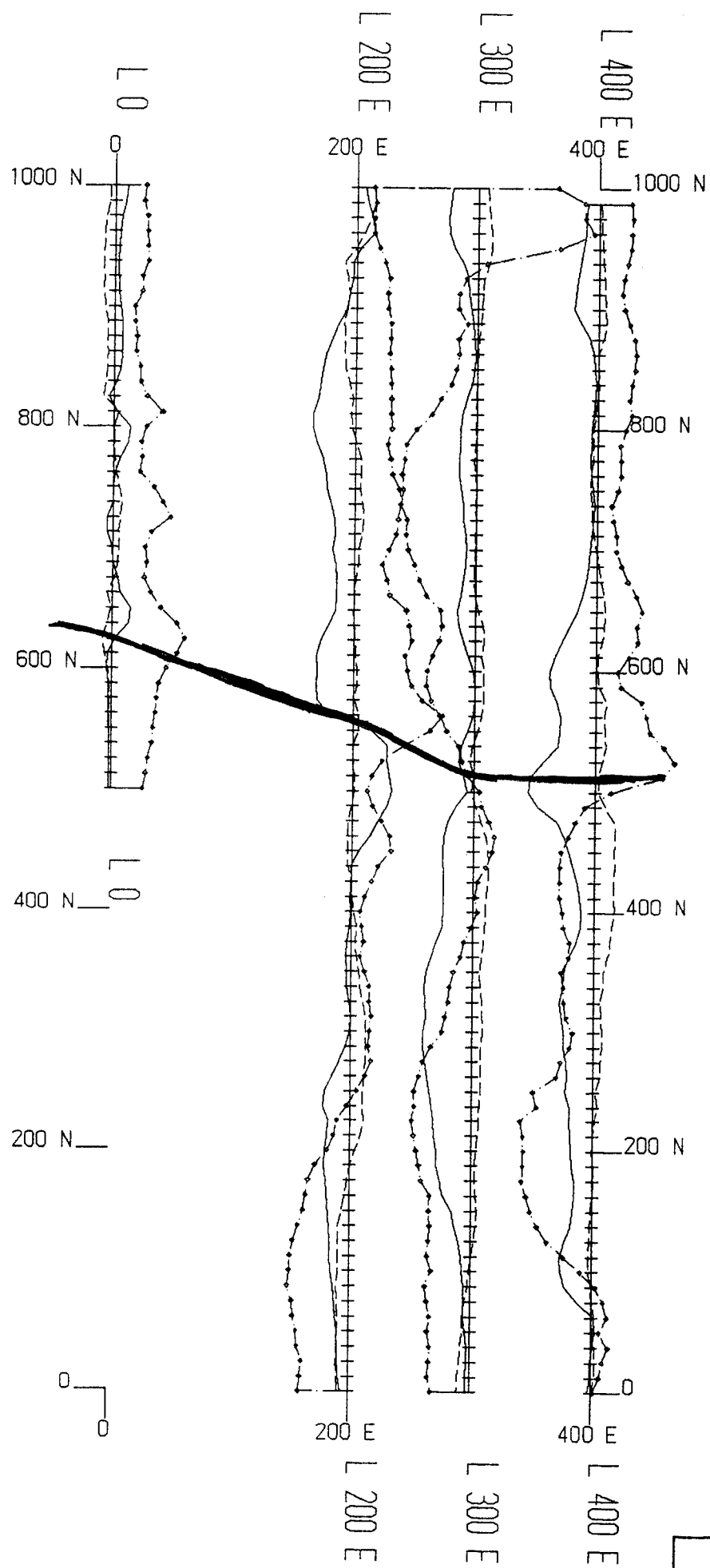
EXPERIENCE: Three years of summer field work with Noranda
Exploration Company Ltd. in British Columbia,
Northwest Territories, and Yukon Territories.

Four year Geophysicist with White Geophysical
Inc. with work in British Columbia,
Saskatchewan, and Yukon Territories.



Scale 1:5000
 50 0 50 100 150 200 250
 (metres)

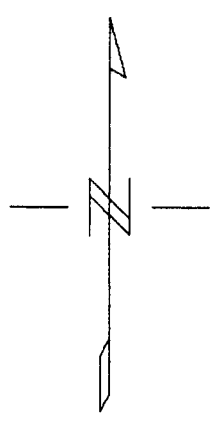
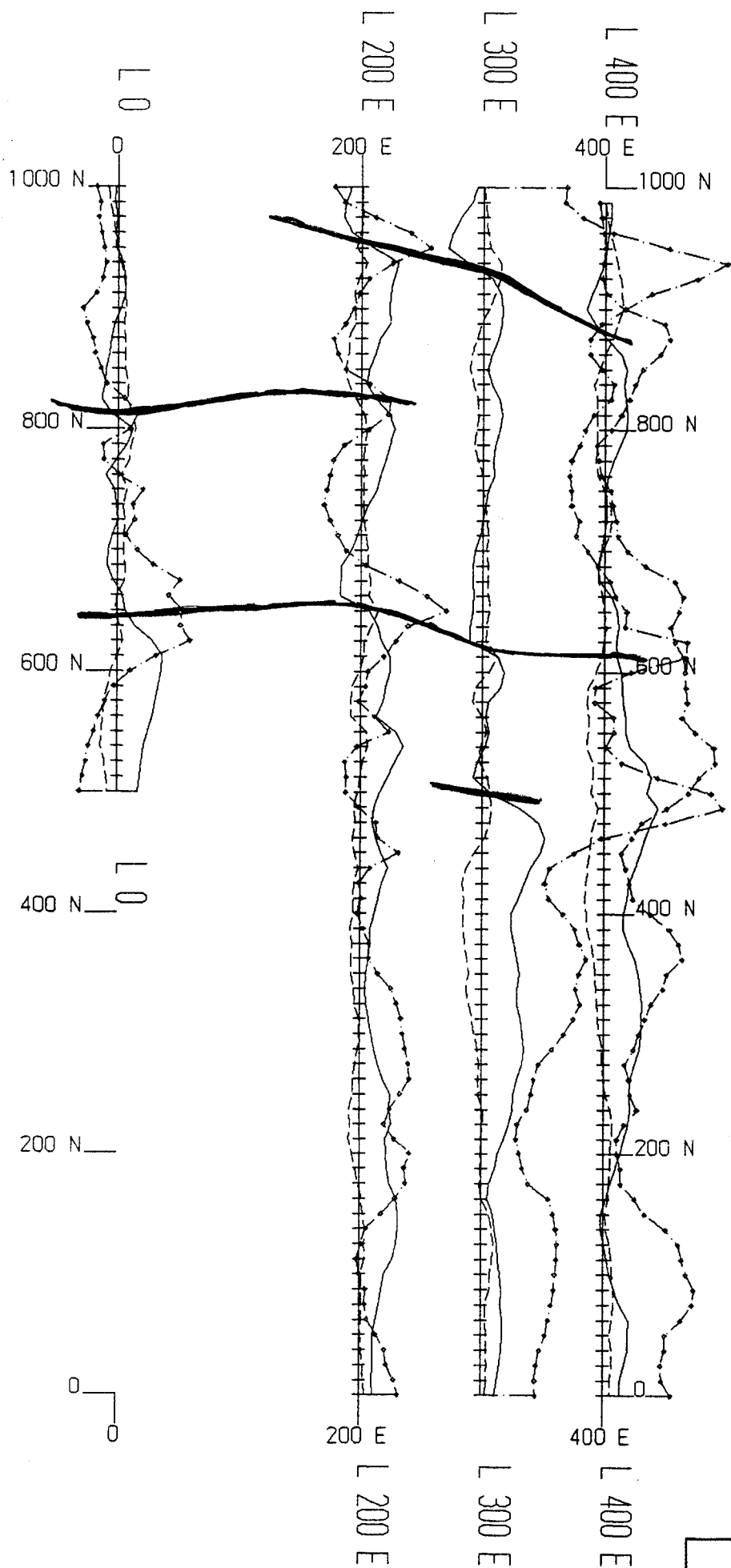
Noble Metals Group Inc.	
Stu Claims	
Total Magnetic Field Profiles EDA OMNI-PLUS vertical scale = 50nT/cm 1cm	
White Geophysical Inc.	FIG 4



Scale 1:5000
 50 0 50 100 150 200 250
 (metres)

Inphase 10%/cm
 Quadrature 10%/cm
 Total Field 100 Units/cm

Noble Metals Group Inc.	
Stu Claims	
VLF-EM Survey: Seattle EDA OMNI-PLUS Profiled In-Phase, Quadrature and Total Field	
White Geophysical Inc.	FIG 5



Scale 1:5000
 50 0 50 100 150 200 250
 (metres)

Inphase 10%/cm
 Quadrature 10%/cm
 Total Field 100 Units/cm

Noble Metals Group Inc.
Stu Claims
VLF-EM Survey, Cutler EDA OMNI-PLUS Profiled In-Phase, Quadrature and Total Field
White Geophysical Inc. FIG 6