ASSESSMENT REPORT

on

VLF-EM GEOPHYSICS

ZEUS 9 CLAIM

Palmer Bar Creek Area

FORT STEELE MINING DIVISION

TRIM Map 82G.041

UTM 575800E 5482200N

By

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1.00 INTRODUCTION

This report describes a VLF-EM survey completed on the Zeus 9 claim in the Palmer Bar Creek drainage west of Cranbrook, B.C. during 2001.

1.10 Location and Access

The Zeus 9 claim is located approximately 11 kilometers west of Cranbrook, B.C. in the Fort Steele Mining Division (Fig. 1). The claim block is located in the drainage of Palmer Bar Creek, a southeast flowing tributary of the Moyie River. The claims are centered near UTM coordinates 575800E, 5482200, on TRIM reference map 82G.041 (Fig. 2).

Good road access to the claim exists from south of Cranbrook off Highway 3/95 via the Lumberton logging road which passes just south of the property at about km 18.

1.20 Property

The Zeus 9 claim is a single 2-post claim, tenure number 377859, owned by the author (Fig. 2).

1.30 Physiography

The Zeus 9 claim is situated west of the Rocky Mountain Trench, within the Moyie Range of the Purcell Mountains. It covers moderately undulating east-facing slopes on the western side of Palmer Bar Creek, a southeast flowing tributary of the Moyie River. Elevations on the property range from about 1450 to 1570 meters.

Forest cover consists of a mixture of immature pine, fir and larch; most of the claim area was clear-cut logged in the early or mid 1970's.

1.40 History of Previous Exploration

Southeast flowing tributaries of the Moyie River have historically been worked for placer gold and Palmer Bar Creek, which drains the Zeus 9, is known to carry placer gold. The search for lode gold sources to the placers has occurred intermittently over many years. Within the past 15 years junior companies such as Chapleau Resources Ltd. and Abitibi Mining Ltd. have conducted small exploration projects on or near what is now the Zeus 9 claim.

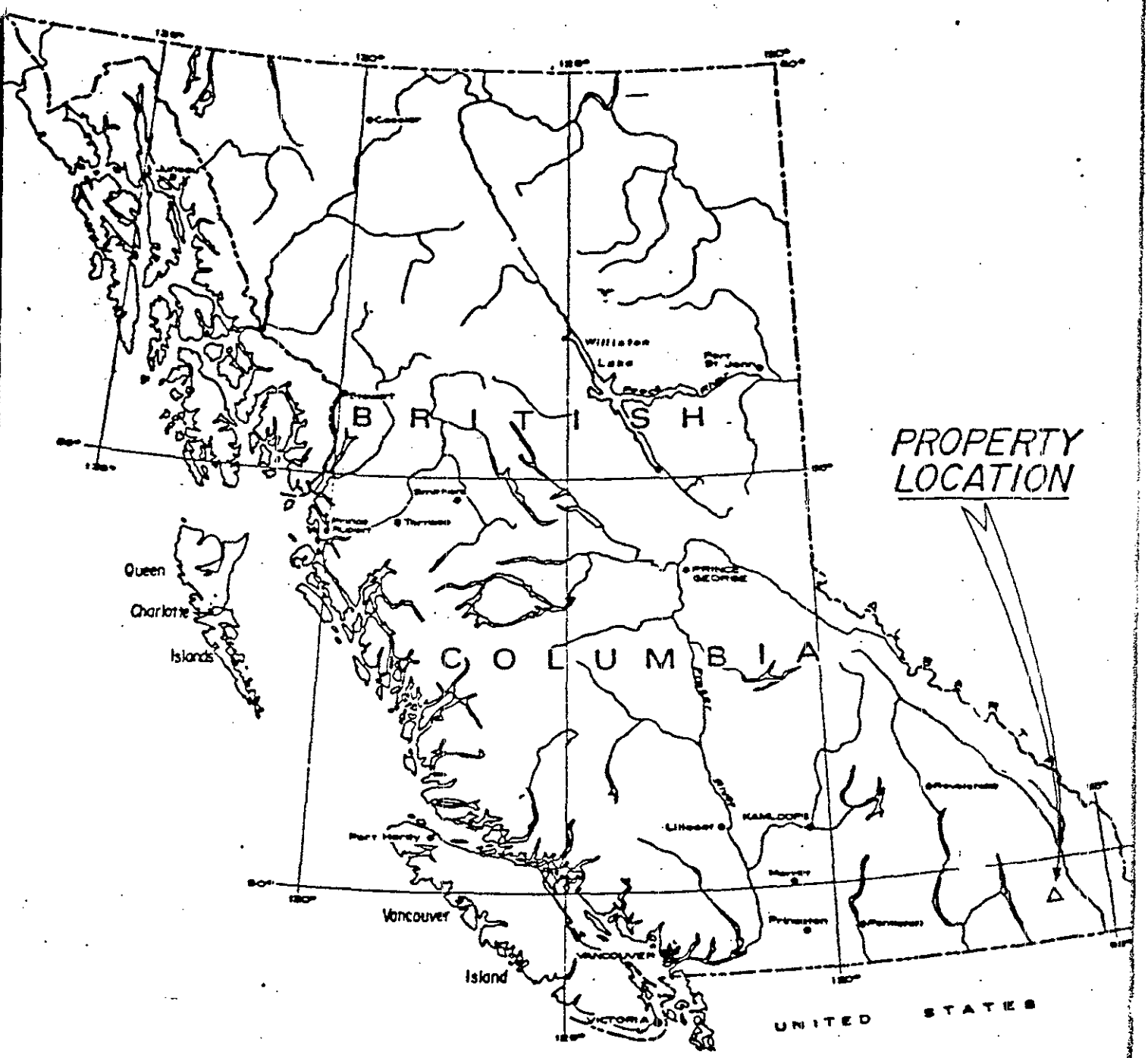

Figure 1
ZEUS 9 CLAIM
PROPERTY LOCATION MAP

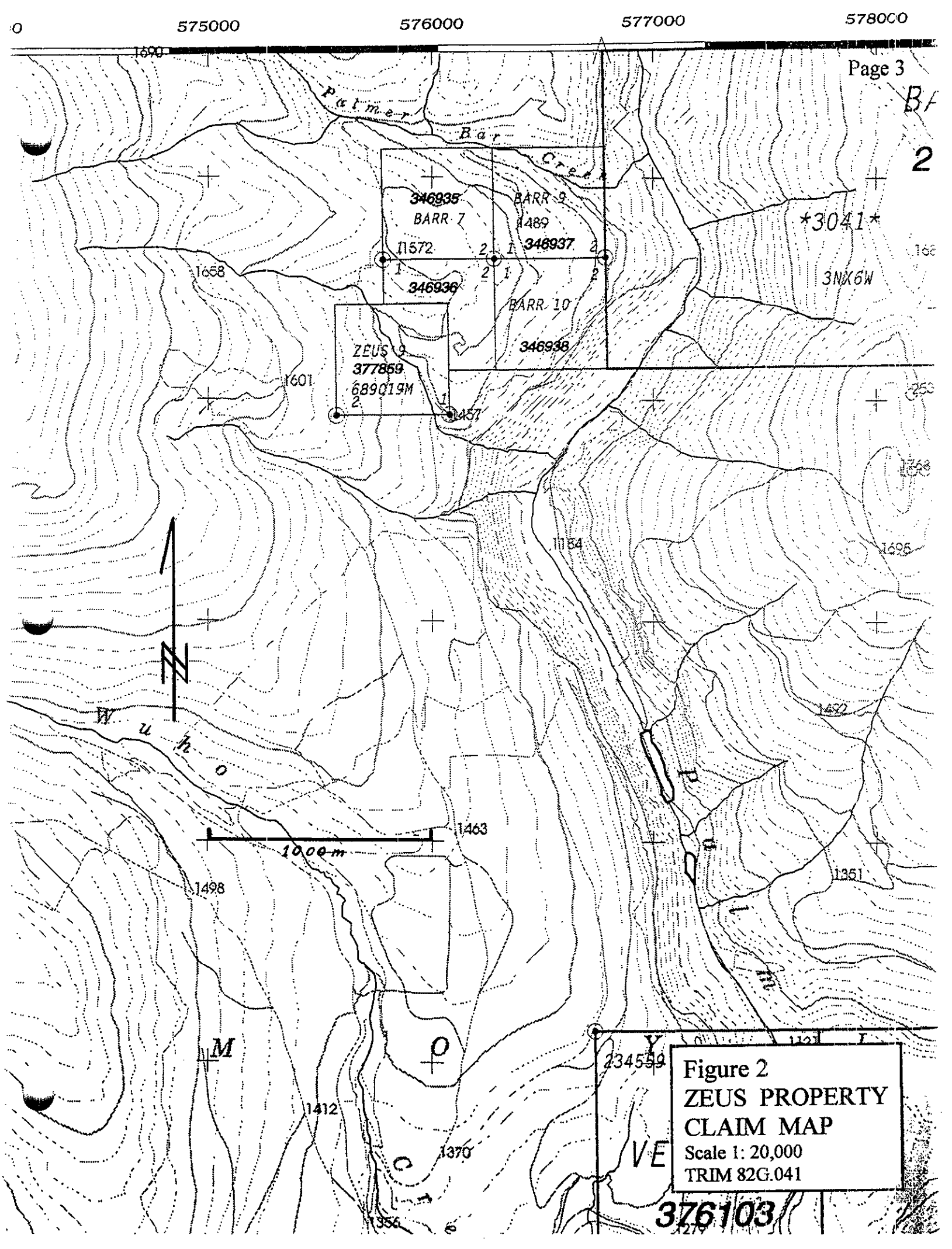

Figure 2
ZEUS PROPERTY
CLAIM MAP
Scale 1: 20,000
TRIM 82G.041

1.50 Purpose of Survey

During 2001 a program of VLF-EM geophysical surveying was carried out on the property to try and identify the location of the Palmer Bar Fault which is believed to intersect the east trending Cranbrook Fault on the Zeus 9 claim.

2.00 GEOLOGY

2.10 Regional Geology

The general area of the property has been recently mapped by Hoy and Diakow (1982): the property is underlain by the Mesoproterozoic Purcell Supergroup, a thick succession of fine grained clastic and carbonate sedimentary rocks exposed in the core of the Purcell Anticlinorium in southeast British Columbia. These rocks are believed by most workers (eg. Harrison, 1972) to have been deposited in an epicratonic re-entrant of a sea that extended along the western margin of the Precambrian North American Craton.

The oldest known member of the Purcell Supergroup is the Aldridge Formation, a thick sequence of fine-grained siliciclastic rocks deposited largely by turbidity currents. Reesor (1958) has divided the Aldridge Formation in the Purcell Mountains into three informal units: rusty weathering siltstone, quartzitic wacke and argillite of the lower Aldridge Formation; grey weathering quartz wacke and siltstone of the middle Aldridge Formation; and laminated argillite of the upper Aldridge Formation.

The Aldridge Formation is gradationally overlain by shallower-water deltaic clastics of the Creston Formation. The Creston Formation is in turn overlain by predominantly dolomitic siltstones of the Kitchener Formation. The Aldridge Formation has been intruded by a series of gabbroic sills and dikes which are interpreted to be penecontemporaneous with deposition of their host sediments (Hoy, 1989).

The Purcell Anticlinorium is transected by a number of steep transverse and longitudinal faults. The transverse faults appear to have been syndepositional (Lis and Price, 1976) and Hoy (1982) suggests a possible genetic link between mineralization and syndepositional faulting. Longitudinal faults which more closely parallel the direction of basin growth faults may have played a similar role. Gold mineralization, most of which is believed Cretaceous in age, appears to be related to felsic intrusive activity and controlled by fault or shear structures. The Kiakho stock, dated by Hoy and van der Hayden(1988) as Cretaceous, is located about 2 kilometers east of the Zeus 9 claim, within the east-trending Cranbrook Fault. Gold mineralization is known to occur with felsic dikes within the Cranbrook fault zone.

2.20 Property Geology

The Zeus 9 claim covers a structurally-controlled, hydrothermally-emplaced deposit of quartz, sulfides and syenite dikes within an envelope of argillic, chloritic, silicic and carbonate altered wallrock. This deposit, termed the 'Bar Deposit', is developed at the intersection of the east-trending Cranbrook Fault and northeast-trending Palmer Bar Fault. Both faults are regionally-extensive structures and are probably deep-seated. The sulfide-rich quartz flooded zone on the property was tested by diamond drilling between 1988 and 1996 (for example, see Klewchuk, 1990; A.R. 20274)

Although the regional geology indicates the Palmer Bar Fault intersects the Cranbrook Fault within the claim boundary, the actual location of the Palmer Bar Fault on the property has not been defined due to poor bedrock exposure and the extensive alteration. The western extension of the Cranbrook Fault west of the Zeus 9 claim has also not been clearly defined.

3.00 VLF-EM GEOPHYSICS

3.10 Introduction

The No. 1 Post of the Zeus 9 claim was the initial control point for the survey. Four east-west survey lines were established using compass, hip chain and flagging. The north and south claim boundaries were surveyed, along with one additional line adjacent to each claim boundary, to provide some indication of the trend of the identified VLF-EM responses. A total of 1525 meters of line were surveyed, with VLF-EM readings taken at 25 meter spacings. Figure 3 shows the location of the survey lines as well as dip angle and Fraser Filter data.

3.20 Instrumentation and Survey Procedure

A Crone Radem VLF-EM receiver, manufactured by Crone Geophysics Ltd. of Mississauga, Ontario was used for the VLF-EM survey. Annapolis, Maryland, transmitting at 21.4 Khz and at an approximate azimuth of 113° from the survey area, was used as the transmitting station.

In all electromagnetic prospecting, a transmitter produces an alternating magnetic (primary) field by a strong alternating current usually through a coil of wire. If a conductive mass such as a sulfide body is within this magnetic field, a secondary alternating current is induced within it, which in turn induces a secondary magnetic field that distorts the primary magnetic field. The VLF-EM receiver measures the resultant field of the primary and secondary fields, and measures this as the tilt or 'dip angle'. The Crone Radem VLF-EM receiver measures both the total field strength and the dip angle.

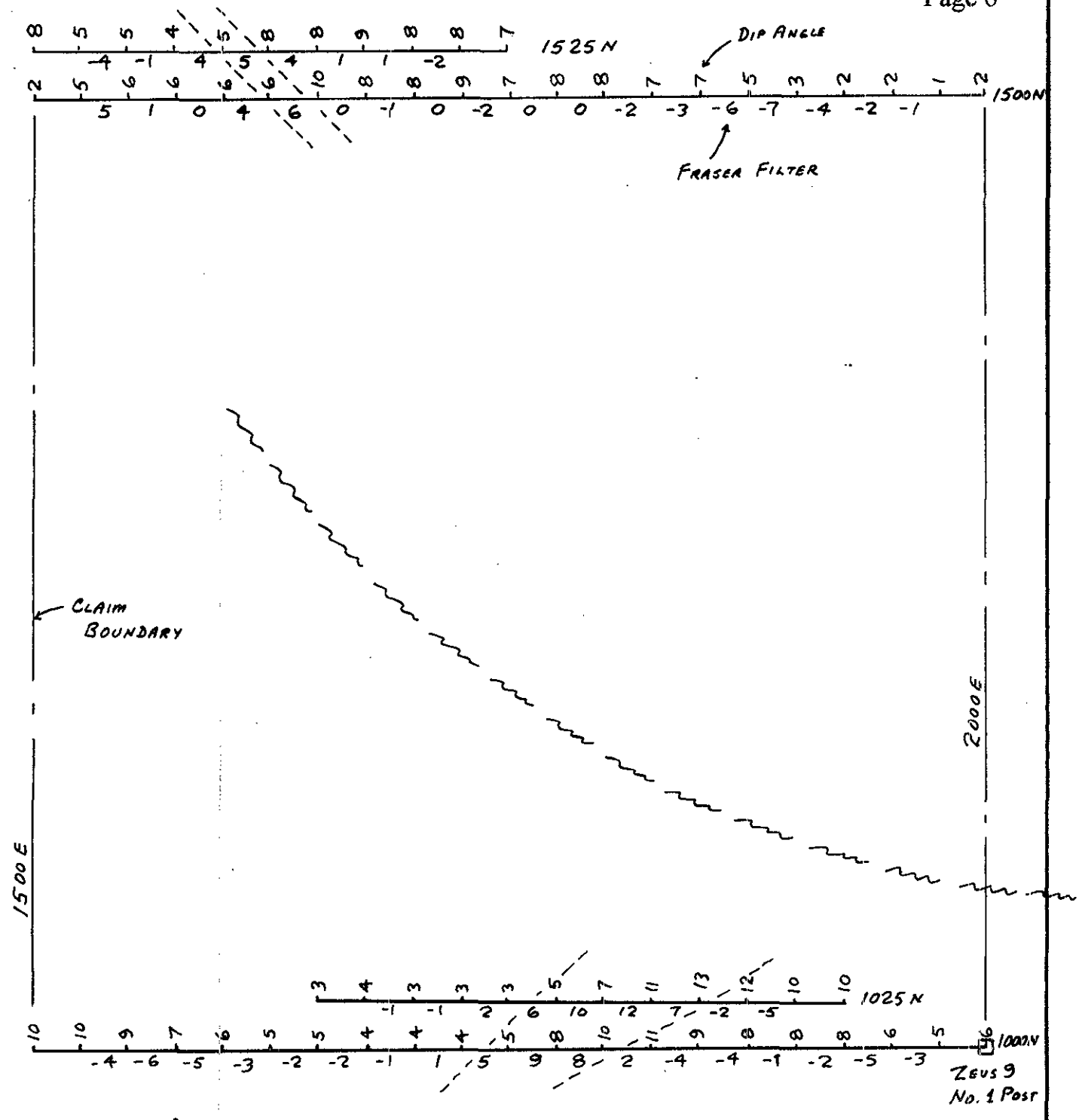

Figure 3
ZEUS 9 CLAIM
VLF-EM DATA
Showing Dip Angle
and Fraser Filter Values
Scale 1:3000

The VLF-EM uses a frequency range from about 15 to 28 Khz, whereas most EM instruments use frequencies ranging from a few hundred to a few thousand Hz. Because of its relatively high frequency, the VLF-EM can detect zones of relatively lower conductivity. This results in it being a useful tool for geologic mapping in areas of overburden but it also often results in detection of weak anomalies that are difficult to explain. However the VLF-EM can also detect sulfide bodies that have too low a conductivity for other EM methods to pick up.

For the survey on the Zeus 9 claim, readings were taken every 25 meters along east-west oriented survey lines spaced as shown in Figure 3.

Results were reduced by applying the Fraser Filter; dip angle readings and the Fraser Filter values are shown in plan in Figure 3. Fraser Filter values are plotted between the dip angle readings which are at survey points. The higher Fraser Filter values (5+) are also contoured.

The Fraser Filter is essentially a 4-point difference operator which transforms zero crossings into peaks, and a low pass operator which induces the inherent high frequency noise in the data. Thus the noisy, often non-contourable data are transformed into less noisy, contourable data. Another advantage of this filter is that a conductor which does not show up as a zero crossover in the unfiltered data quite often shows up in the filtered data.

3.30 Discussion of Results

A weak, northwest-trending response was detected near the western edge of the northern lines and a stronger northeast response was detected in the central part of the southern lines (Fig. 3). These responses may reflect the Palmer Bar Fault zone which is deflected in toward its juncture with the Cranbrook Fault. Further delineation of both VLF-EM responses would aid in this interpretation.

4.00 CONCLUSIONS & RECOMMENDATIONS

A reconnaissance VLF-EM geophysical survey completed on the Zeus 9 mineral claim in 2001 successfully detected two anomalous responses along the northern and southern claim boundaries. The anomalies may reflect the Palmer Bar Fault.

Further VLF-EM surveying should be carried out on and adjacent to the claim to further delineate the anomalies. Geologic mapping should be conducted to relate the VLF-EM results to bedrock geology, if possible.

5.00 REFERENCES

Harrison, J.E., 1972 Precambrian Belt Basin of northwestern United States: Its geometry, sedimentation and copper occurrences: Geol. Soc. of America Bull., V.83, p.1215-1240.

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6.00 STATEMENT OF EXPENDITURES

2 man-days, field work, drafting and report @ $300/day	$600.00
4X4 truck 1 days @ $75/day	75.00
VLF-EM rental 1 days @ $30/day	30.00
TOTAL EXPENDITURE	$705.00

7.00 AUTHOR'S QUALIFICATIONS

As author of this report I, Peter Klewchuk, certify that:

1. I am an independent consulting geologist with offices at 246 Moyie Street, Kimberley, B.C.
2. I am a graduate geologist with a B.Sc. degree (1969) from the University of British Columbia and an M.Sc. degree (1972) from the University of Calgary.
3. I am a Fellow of the Geological Association of Canada and a member of the Association of Professional Engineers and Geoscientists of British Columbia.
4. I have been actively involved in mining and exploration geology, primarily in the province of British Columbia, for the past 26 years.
5. I have been employed by major mining companies and provincial government geological departments.

Dated at Kimberley, British Columbia, this 5th day of September, 2001.

Peter Klewchuk
P. Geo.

PROFESSIONAL ENGINEERS AND GEOSCIENTISTS PROVINCE OF BRITISH COLUMBIA P. KLEWCHUK