

85-109-13448
03/86

GEOPHYSICAL REPORT

ON THE

KERO - LAREDO GROUP

NTS 82E/5

OSOYDOOS MINING DIVISION

LATITUDE 49 20'N

LONGITUDE 119 50'N

for

Grand National Resources Inc.

915 - 470 Granville Street

Vancouver, B.C.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

13,448

March 15, 1985

Box 63

Westbridge, B.C.

VOH 2B0

Roy Kregosky

BSc. Geology

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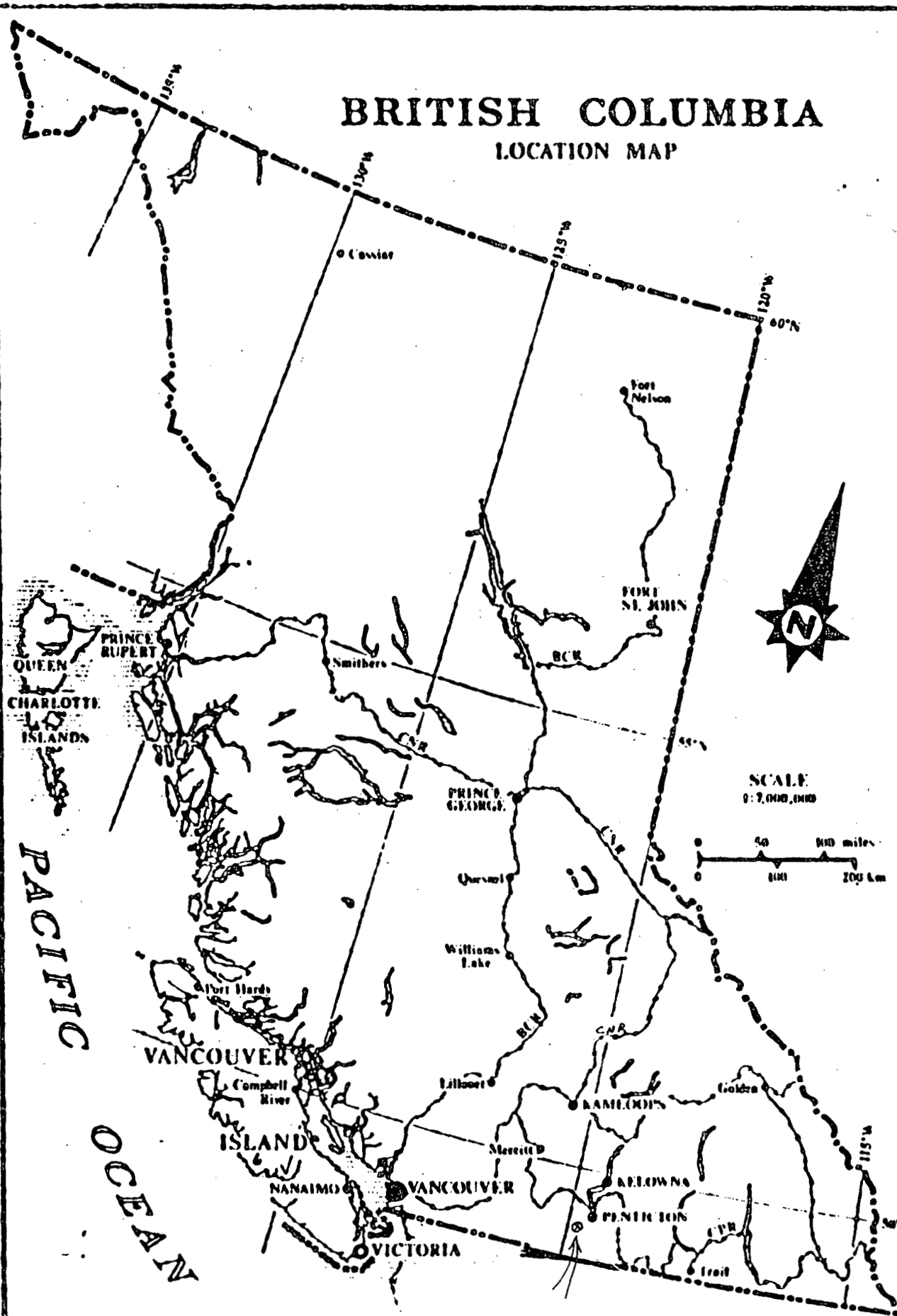
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BRITISH COLUMBIA

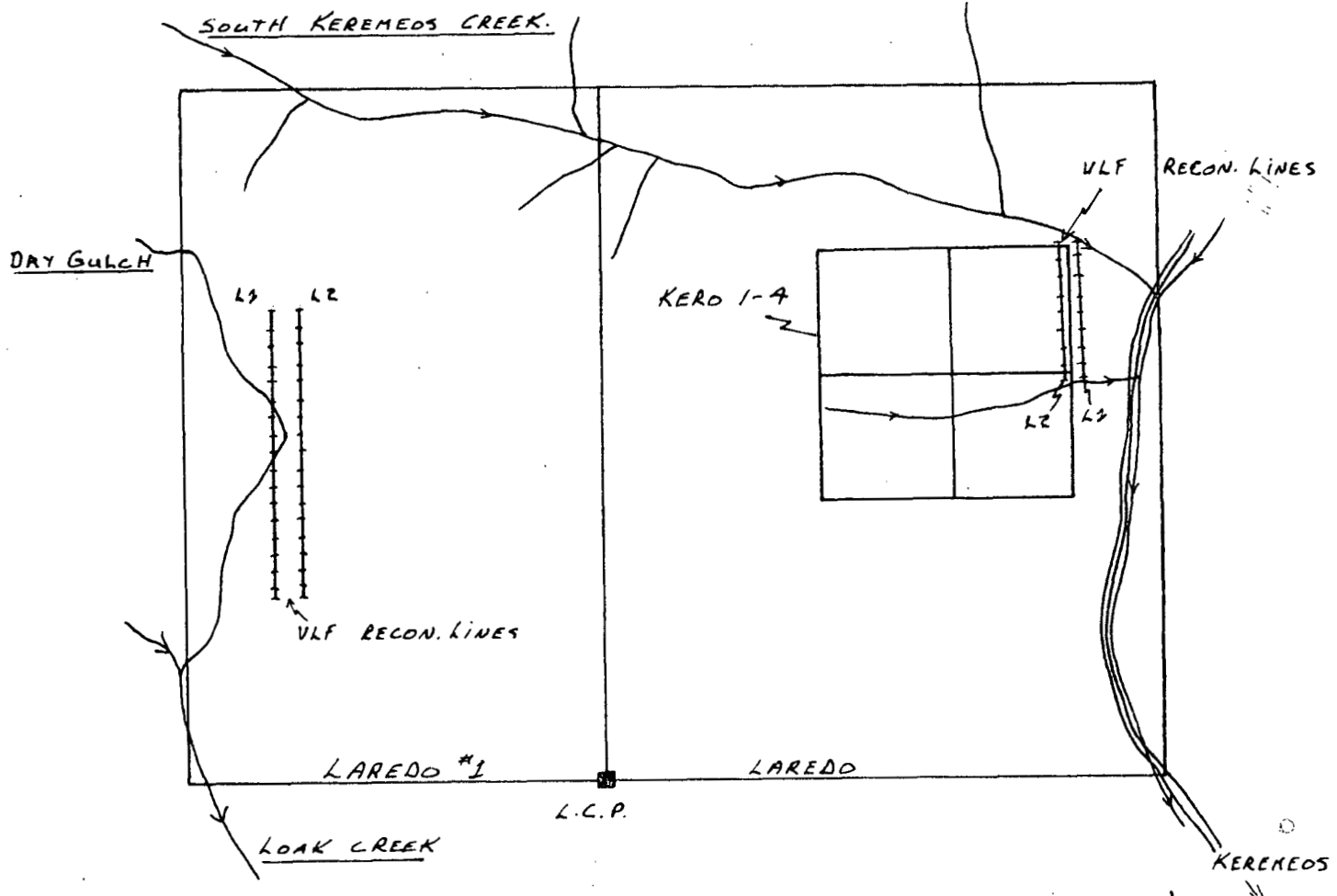
LOCATION MAP



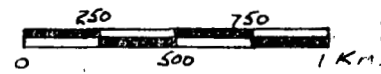
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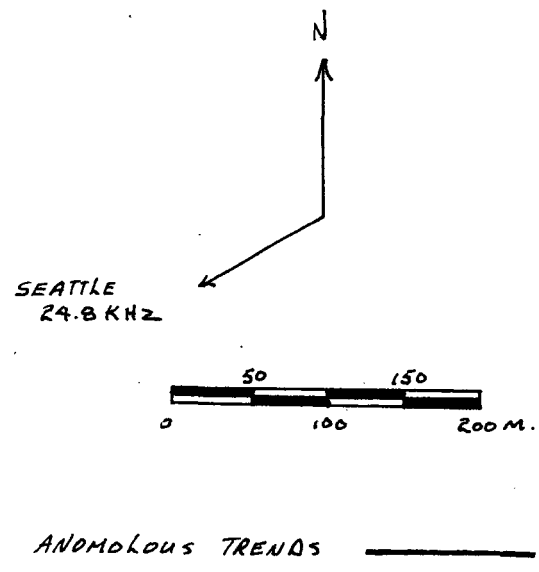
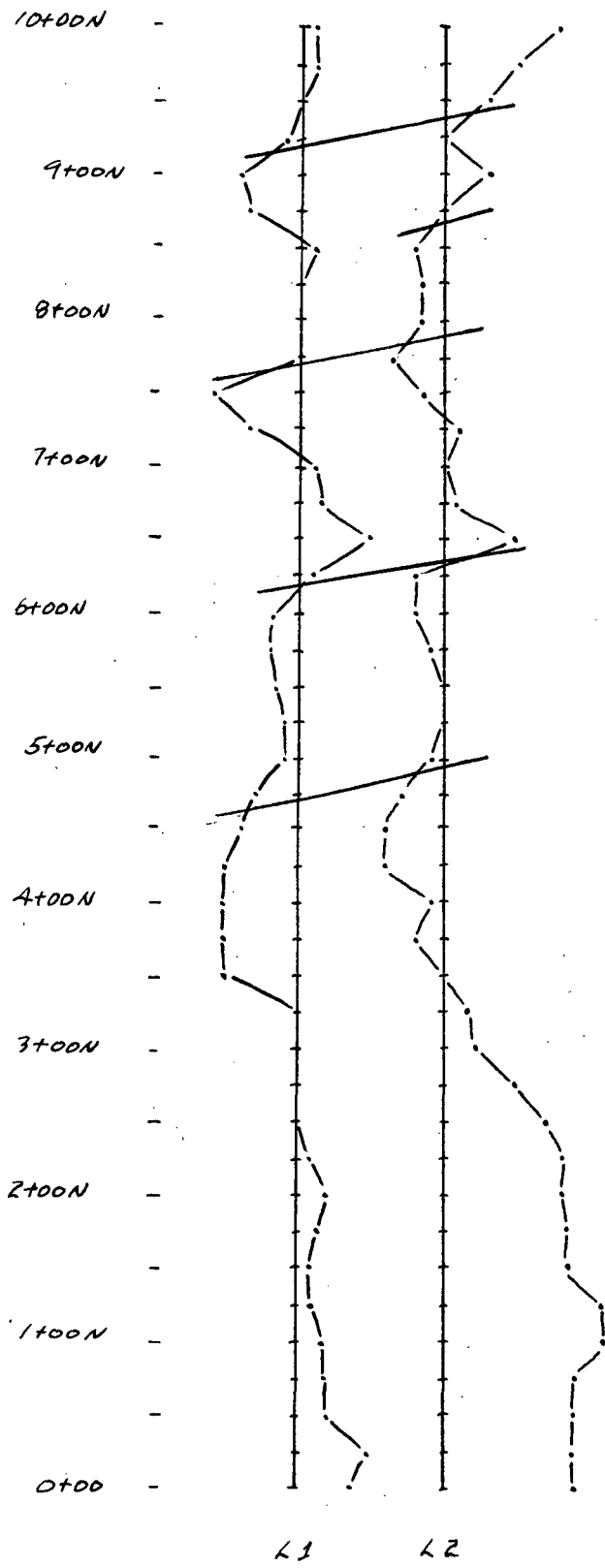
GRAND NATIONAL RESOURCES INC.
LAREDO CLAIMS

DATE
MARCH 15/85
FIG. No.
7



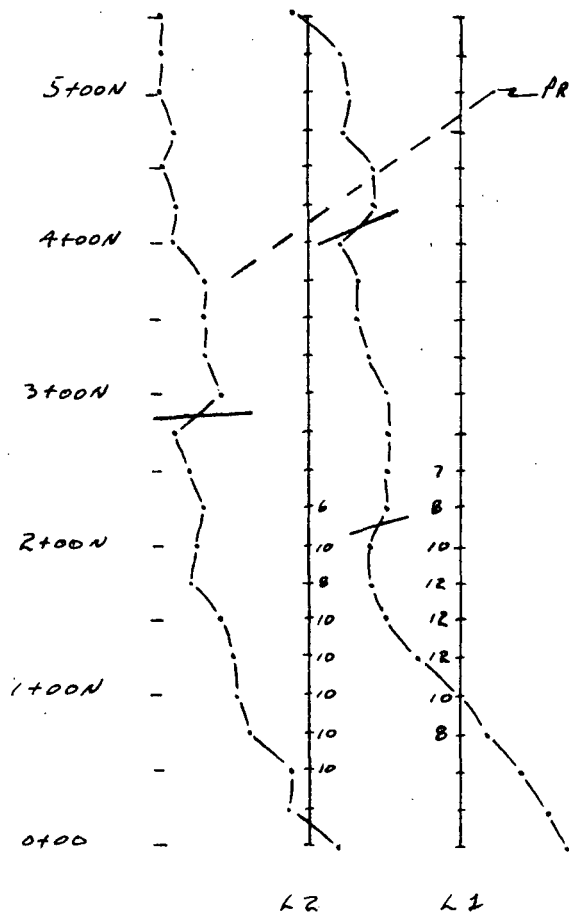
RECONNAISSANCE VLF-EM SURVEY
KERO-LAREDO GROUP



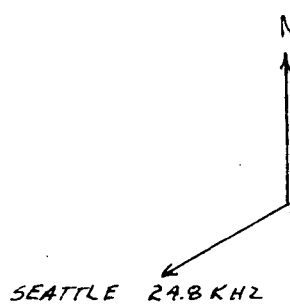


VLF-EM SURVEY
LAREDO' CLAIM
DIP ANGLE

FIG. 4



+20 +10 0 -10 -20
DEGREES



ANOMALOUS TRENDS _____

QUADRATURE - - - - - 12

VLF-EM SURVEY

KERO-LAREDO CLAIMS

DIP ANGLE

INTRODUCTION

The Kero-Laredo claims are located in the Osoyoos Mining Division and are situated approximately 20 kilometers north of Keremeos, B.C. (fig. 1). Access is from B.C. Highway 3A to the Apex Mountain Road just north of Ollala, B.C. The road provides moderate two-wheel drive access to the claims.

The property (fig. 2) is located on the eastern flank of Apex Mountain. The terrain is steep, with slopes frequently in excess of 50 , with elevations ranging from approximately 915 meters on Apex Mtn. Road to more than 1700 meters in the western portions. The exposure is generally easterly with local variations due to the mountainous terrain. The claims are forested with moderately open growths of Douglas Fir, Spruce and Pine. There is sufficient timber and water resources available for exploration and development purposes.

PROPERTY HISTORY

The Kero-Laredo Group consists of the following mineral claims:

<u>Claim</u>	<u>Record #</u>	<u>Expiry Date</u>	<u>Units</u>
Laredo	1708	March 31/86	20
Laredo 1	1709	March 31/85	15
Kero 1&2	1606/07	Oct. 6/85	2
Kero 3&4	1634/35	Dec. 14/85	2
Puma Fr.	1938	Oct. 27/87	1
Puma	1937	Oct. 27/86	16
Lynx 1	2005	Apr. 15/88	1
Lynx 2	2006	Apr. 15/88	1
		Total	58

The claims are currently registered to Grand National Resources Inc. of #915 - 470 Granville Street, Vancouver, B.C. The claims are considered to have good mineral potential due to its close proximity to the Hedley and Fairview Gold camps. A brief examination of assessment reports failed to locate areas of previous exploration in the immediate claim group. Grand National Resources has undertaken a considerable amount of physical development on these claims by way of trenching on the strike extension of the Kero vein.

PROPERTY GEOLOGY

According to H.W. Little's Geological Map 15-1961, the Kero-Laredo Group is underlain by Triassic Cherts, greenstones and minor tuffs from two contemporaneous formations including the Shoemaker and Old Tom formations. These formations have been intruded by Cretaceous dioritic plutons of the Nelson Batholith. Bedding in the area trends northeasterly with moderate to steep dips to the southeast. The main structural feature in the area is the fault zone as represented by Keremeos Creek.

GEOPHYSICAL SURVEY

This years reconnaissance VLF-EM survey (fig. 3-5) on the Kero-Laredo Group was conducted during the two days March 10 and 11, 1985. The author plus one field assistant carried out the geophysical survey which utilized a Sabre VLF-EM (Model 27) receiver. It was tuned to the Seattle, Washington Transmitter which operates at a frequency of 24.8 Khz. Just over 3 line kilometers were surveyed at two separate locations during the two days.

The first survey location (fig. 3&4) is situated in the western portion of the Laredo #1 claim. This site was chosen for a

reconnaissance survey due to the proximity of a lensoid, massive sulphide pod which is exposed to the east of the lines. The mineralization was previously sampled by a prospector working for Grand National and indicated the presence of copper, lead and zinc with a trace of gold and silver (personal communication). The VLF-EM lines (fig. 4) were run due north/south for a distance of 1000 meters. Stations were located every 25 meters along these lines.

A second reconnaissance survey (fig. 3&5) was carried out on the Kero and Laredo claims in an attempt to locate the lateral extension of what is known as the Kero vein. Grand National Resources Inc. has done a considerable amount of physical (trenching) development on this epithermal vein occurrence (personal Communication). Subsequent sampling has indicated interesting precious metal content. Two short (550 meter) reconnaissance lines were run due north/south across the projected vein trace. Stations were located at 25 meter intervals along these survey lines.

TECHNICAL DATA AND INTERPRETATION

The geophysical lines on the Kero-Laredo Group were conducted in an attempt to locate lateral extensions to mineralization that is observed on the claims.

The first reconnaissance lines (fig. 4) on the Laredo #1 claim indicated a number of east/west trending zones which were coincident on lines 1 and 2. The two strongest zones are associated with the 'cross-over' features at 6+25N and 9+25N. A strong inflection response was also obtained on L1 at 7+75N. All of the above anomalous zones dip in a southerly direction. A strong topographical feature called Dry Gulch in this vicinity

probably accounts for the strong and varied response on these lines and suggests a series of associated sub-parallel fault splices. As such, the immediate area appears to be structurally conducive for the transport and deposition of sulphide mineralization.

The second group of reconnaissance lines (fig. 5) on the Kero and Laredo claims failed to positively indicate the mineralization and/or structure that could be associated with the Kero Vein. The exception to this is a weak inflection point located on L1 4+00N which has a possible extension to L2 3+00N. This weak zone lies sub-parallel and has a southerly offset to the projected trace of the Kero vein. The dip angle indicates a topographical response near the beginning of the lines and this is indeed the case as observed in the field. An interesting development on both lines was the recording of quadrature readings centered around the 1+00N and 2+00N stations. The offset quadrature readings and the trend of the anomalous zone both suggest the easterly trend of the Kero vein.

CONCLUSION

The reconnaissance VLF-EM lines on the Laredo #1 claim yielded good responses and indicated a number of east/west trending zones that dip to the south. These zones are viewed as being positive considering the location of mineralization in the immediate area. As such, additional geophysical prospecting should be undertaken.

The reconnaissance VLF-EM lines on the Kero and Laredo claims yielded poor inflection responses and failed to indicate an extension of the Kero vein. The anomalous zone as indicated by the quadrature readings should be tested by geochemical means. In terms of geophysical prospecting, it is believed that a

magnetometer survey would give more valuable information on the Kero vein.

ITEMIZED COST STATEMENT

1. R. Kregosky, Geologist; 2 days @ \$200.00/day.....	\$ 400.00
2. Field Assistant; 2 days @ \$100.00/day.....	\$ 200.00
3. Snowmobile rental; 2 days @ \$25.00/day.....	\$ 50.00
4. VLF-EM Rental; 2 days @ \$50.00/day.....	\$ 100.00
5. Accommodation.....	\$ 100.00
6. Transportation, rental & mileage.....	\$ 150.00
7. Report preparation 1 day @ \$200.00/day.....	\$ <u>200.00</u>
TOTAL	\$1,200.00

AUTHOR'S QUALIFICATIONS

I declare, that I, Roy D. Kregosky am a practicing Geologist having graduated from the University of Calgary in 1971 with a Bachelor of Science degree in Geology.

March 15, 1985

Roy Kregosky