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**VANCOUVER, B.C.**

**ASSESSMENT REPORT**

**FILMED**

**ON THE**

**ERIC PROPERTY**

**FINLAY RIVER AREA**

**OMINECA MINING DIVISION**

**NTS : 94 - E / 2**

**West Longitude 126° 42'      North Latitude 57° 10'**

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT  
CONSOLIDATED PETROQUIN RESOURCES LTD.  
200-1130 West Pender Street  
Vancouver, B.C.**

**18,920**

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DENIS A. COLLINS, Ph.D, P.Geol., F.G.A.C.**



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**JUNE 20, 1989**



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## 1.0 SUMMARY

Pursuant to a request by the Directors of Consolidated Petroquin Resources Ltd., VLF-EM and Magnetometer surveys were conducted over selected areas of the Eric Property during April of 1989. The writers performed the work and researched the literature pertaining to the area.

Previous exploration on the Eric Claim Group consisted of reconnaissance exploration work done by Cominco Ltd. in 1977 and 1981 (geological mapping, rock and soil geochemical sampling). This work confirmed the presence of significant gold and silver values in association with copper and iron within a porphyry system on the Eric Claim. An airborne Magnetic and VLF-EM survey was conducted over the entire property during the spring of 1988 and several very interesting geophysical features were delineated. The present exploration program was designed to follow-up an airborne geophysical target found on the Peak Claim.

The general area has been explored intermittently for base metals since the 1930's. Exploration work in the Toadoggone Region since the 1960's has led to the discovery of three main mineral deposits: the Baker Gold Mine (pre-production reserves of 100,000 tons at 0.92 oz Au/t), the SEREM's Layers deposit (pre-1985 reserves estimated of 1.035 million tons at 0.21 oz Au/t and 7.58 oz Ag/t) and the Energex's Al property (reserves estimated at 264,000 tons "open-pittable at 0.248 oz Au/t).

Mineralization in the Toadoggone Gold Belt is represented by four main mineral deposit types:

- a) Porphyry - mainly associated with Omineca intrusions.
- b) Skarn - contact of limestone and intrusive rock.
- c) Stratabound - occurring in or adjacent to limestone with interbedded chert.
- d) Epithermal - occurring mostly in Toodoggone and Takla volcanics.

Of the four, the epithermal type is the most common. It usually occurs as massive quartz veins (Baker Gold Mine) or as silicified zones and amethystine breccia zones (Lawyers Deposit). The epithermal deposit model is generally associated with siliceous volcanic centers, exhalative vents and zones of alteration within the Toodoggone volcanics and are usually within close proximity of major northwest striking faults. Quartz, barite and carbonate are the chief gangue minerals. The vein minerals are acanthite, pyrite, electrum, chalcopyrite, native gold, sphalerite and galena. Grades range from 0.1 to 1.0 oz Au/t and 1.0 to 20.0 oz Ag/t.

The limited ground Magnetic and VLF-EM survey conducted in April 1989 on the Peak claim shows a weak magnetic low striking south from line 350N/250W to line 50N/300W which may reflect a fault zone. A weak VLF-EM anomaly (lines 400N and 450N at 250W) is believed to be related to a contact on topography.

In order to fully evaluate the mineral and economic potential of the Eric Claim Group further exploration work is warranted. The two-phase exploration program should consist of grid establishment, Magnetic and VLF-EM surveying, soil and rock geochemical sampling and detailed geological mapping over the entire property.



Dependant upon positive results from Phase I, an exploratory diamond drilling program should be designed to define the geometry and grade characteristics of any identified mineralization.

## 2.0 INTRODUCTION

### 2.1 Objectives

Pursuant to a request by the Directors of Consolidated Petroquin Resources Ltd., a program of ground geophysical exploration, consisting of detailed VLF-EM and Magnetometer surveys, was conducted over a selected portion of the ERIC Property during the early Spring of 1989.

The purpose of the surveys was to test airborne VLF-EM conductors and Magnetic anomalies delineated during the 1988 airborne survey.

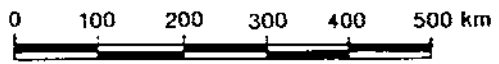
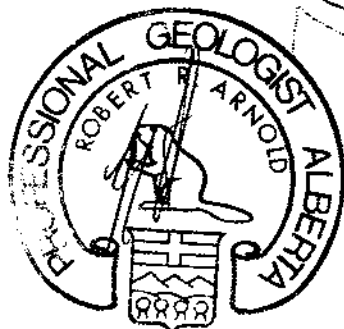
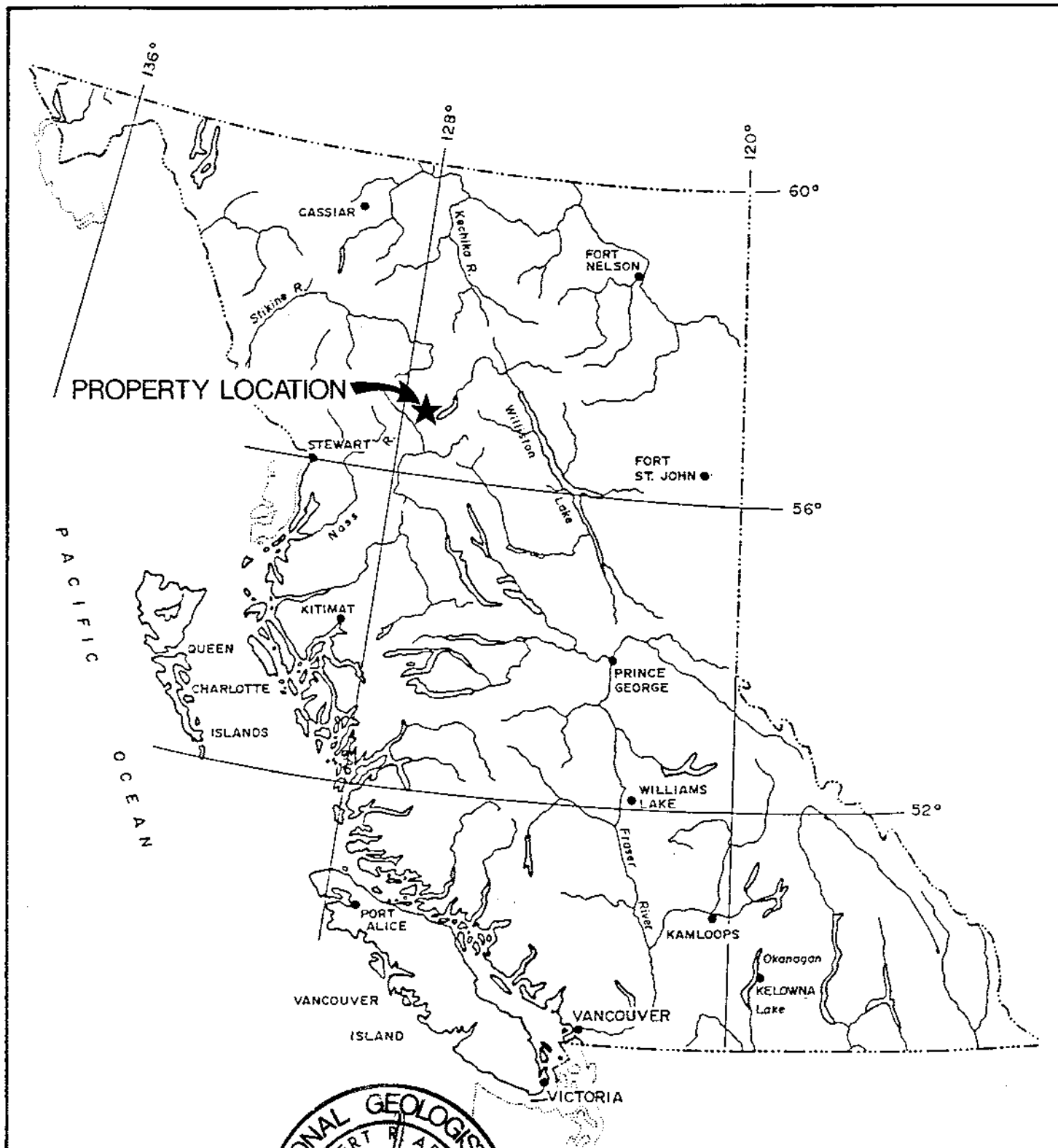
The present report is based on the results of the 1989 geophysical surveys, on the 1988 airborne survey, and on the available literature pertaining to the area.


### 2.2 Location and Access

Province:	British Columbia
Area:	Finlay River
Mining Division:	Omineca
Mineral Disposition:	Eric Claim Group
NTS:	94-E/2
Longitude:	126° 42' West
Latitude:	57° 10' North
Size of Area:	2200 hectares
Disposition Holders:	Consolidated Petroquin Resources Ltd.

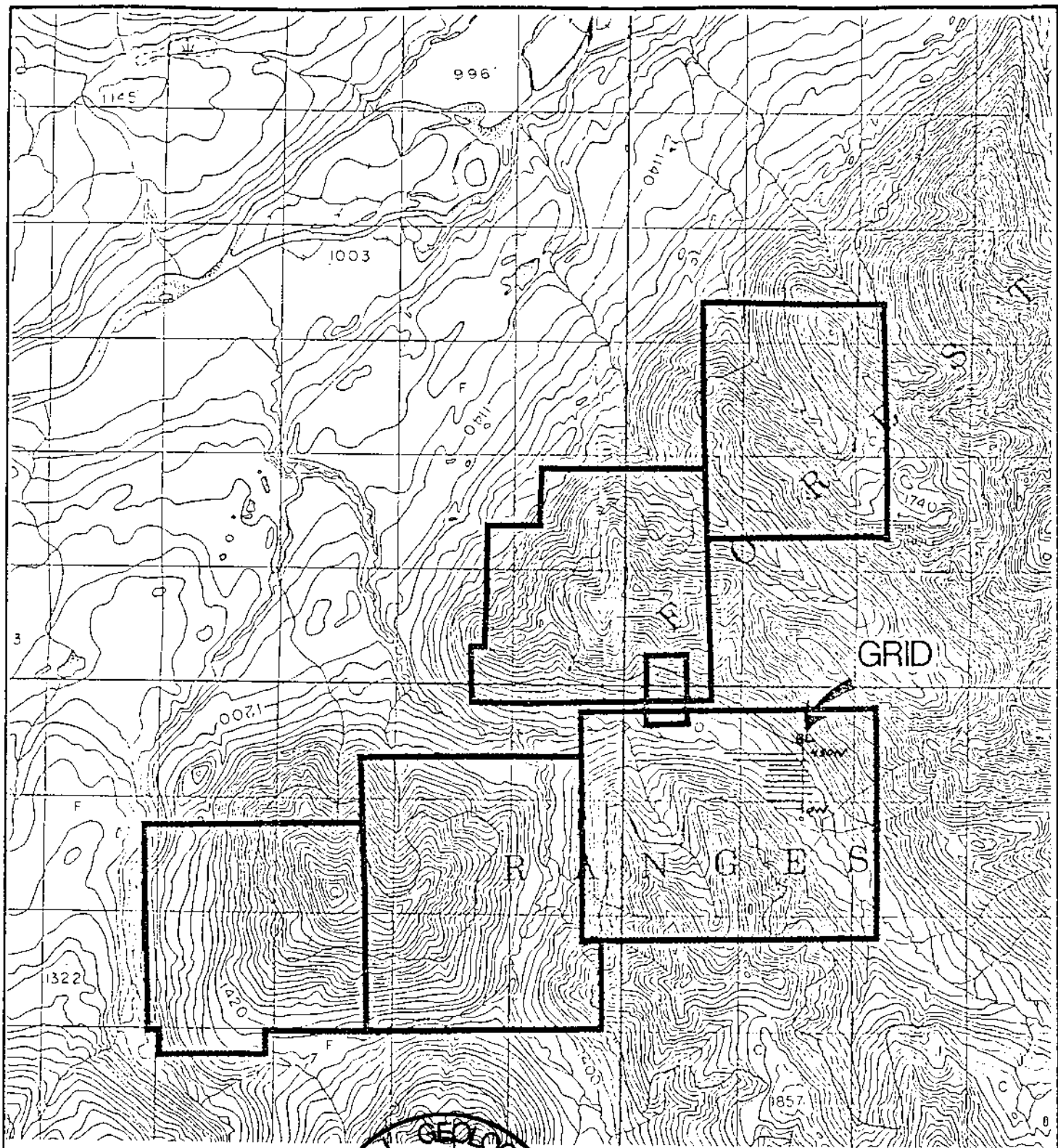
The Eric property is located in the Toadoggone River area, approximately 280 kilometers north of Smithers, British Columbia (Figures 1 and 2). The Eric Claim Group can be accessed by fixed-wing aircraft from Smithers to the Sturdee airstrip (290 kilometers north





CONSOLIDATED PETROQUIN RESOURCES LTD			
ERIC CLAIM GROUP OMNECA M.D., B.C.			
GENERAL LOCATION MAP			
 M-TEC RESOURCE MANAGEMENT LTD	SCALE: As shown	N.T.S.: 94E/2	FIGURE No. <b>1</b>
	OWN. BY: H.V.	DATE: May/1989	
	CHKD. BY: R. Arnold	PROJECT No.: 896C 009	FILE No.:





CONSOLIDATED PETROQUIN RESOURCES LTD

ERIC CLAIM GROUP

# TOPOGRAPHIC MAP



HI-TEC  
RESOURCE MANAGEMENT LTD

SCALE: As shown	N.T.S.: 94E/2	FIGURE No: 2
DWN. BY: HV	DATE: May/1989	
CHKD. BY: R. Arnold	PROJECT No: 89BC 009	FILE No:

of Smithers), and from there by helicopter 20 kilometers to the east.

### 2.3 Physiography

The Eric Claim Group is located within the divide of the Omineca Mountains and the Cassiar Mountains. The area exhibits the characteristics of typical glaciated physiography. These include wide U-shaped, drift-filled valleys flanked by steep rugged mountains and deeply incised V-shaped upland valleys.

Local topography relief varies from moderate to very steep. Elevations within the property range from 1,180 meters (3,870 feet) in the Finlay River Valley to 1,890 meters (6,200 feet) in the Swan 2 claim. Vegetation consists mainly of mixed grassland and scrub brush with occasional pine trees in the valleys whereas at higher elevations vegetation grades into alpine growth. The highest parts of the property support only moss and lichen.

### 2.4 Operations and Communications

Field work was carried out during the month of April 1989. A Bell Ranger helicopter of Canadian Helicopters based in Terrace, British Columbia, was used to transport the crew and field equipment from Smithers to the Skylark Camp on the north side of the Finlay River. The field crew commuted daily from the Skylark Camp to the property by helicopter. Regular telephone communications were maintained with the office in Vancouver, British Columbia.



## 2.5 Property Status

The ERIC Property is recorded in the Smithers Mining Recorder's Office as follows:

<u>CLAIM</u>	<u>RECORD NUMBER</u>	<u>UNITS</u>	<u>RECORD DATE</u>
Eric	7467	12	Feb. 12, 1986
Peak	8306	20	Apr. 16, 1987
Swan 1	8309	20	Apr. 16, 1987
Swan 2	8310	20	Apr. 16, 1987
Dawn	8311	16	Apr. 16, 1987
Rita	10300	1	Apr. 12, 1989

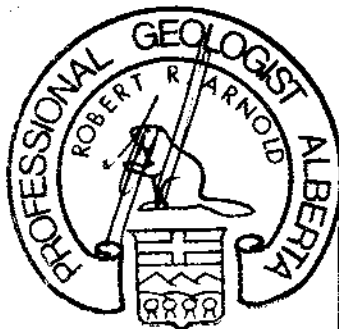
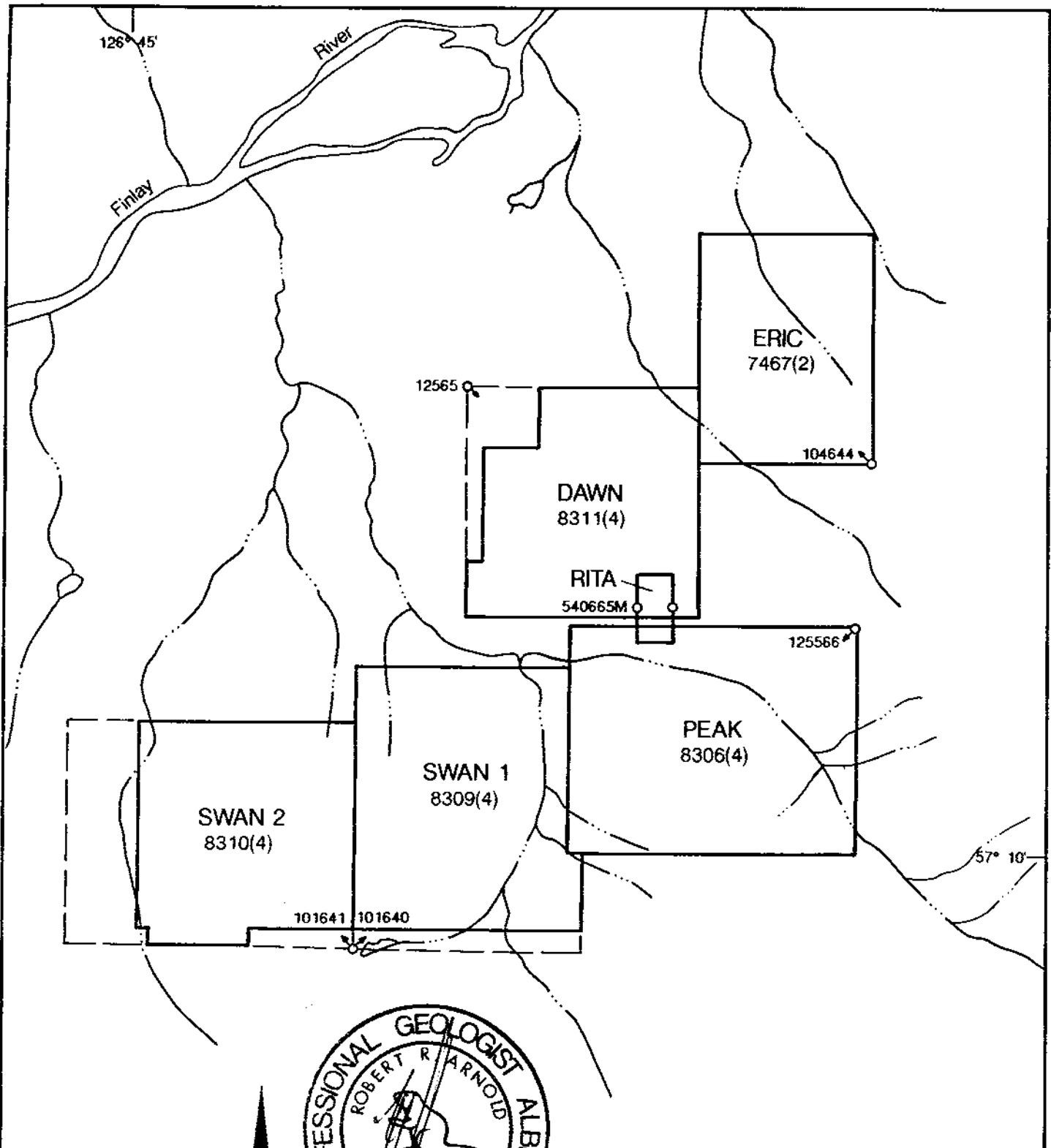
The property consists of 6 contiguous located mineral claims located in the Omineca Mining Division and all of the claims are 100% owned by Consolidated Petroquin Resources Ltd. The claims are shown on the Mineral Claims Map 94-E/2E and on Figure 3 of the present report.

## 3.0 HISTORY AND PREVIOUS WORK

A clear and concise history of the exploration in the Toodoggone region, and in the area of the subject properties, is taken from Yeager and Ikona (Assessment Report on the Oxide Peak Property, 1986).

"The first known mining exploration activity in the area was placer mining in the Toodoggone River and McClair Creek in the 1930's. Several lode prospecting ventures from that era succeeded in discovering high grade material at several localities in the Toodoggone district but unfavorable economic conditions precluded the development of the showings at that time. The importance of the discoveries was not recognized and their existence was soon forgotten.

In the late 1960's, modern exploration programs were carried out in the region searching for base metal porphyry deposits associated with alkalic intrusive



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ERIC CLAIM GROUP  
OMNECA MD., B.C.

### CLAIM MAP



H-TEC  
RESOURCE MANAGEMENT LTD

SCALE: 1 : 50,000	N.T.S.: 94E/2	FIGURE No: <b>3</b>
OWN. BY: H.V.	DATE: May/1989	
CHKD. BY: R. Arnold	PROJECT No: 89BC 009	FILE No:

systems. Following up on silt samples with anomalous base metal values led to the discovery on gold and silver mineralization by Kennco on the Chappelle property (later Baker Mine) and by Sumito (later Sumac Mines) on Albert's Hump. The early work done by these two companies drew attention to the area and led to the development by other companies of what are presently the three main properties in the region: Multinational's Baker Mine (Chappelle), SEREM's Lawyers deposit and Energex's Al deposits."

During the past four years numerous companies explored over 3,000 mineral claims units in the Toodoggone area.

To date, little of the whole belt has been explored in detail. However, reserves of gold-silver mineralization have been indicated on seven different properties. Grades and tonnages of the best three are: Baker Mine - 52,000 tonnes at 1.07 oz/t Au and 23.20 oz/t Ag; Lawyers - 561,000 tonnes at 0.21 oz/t Au and 7.10 oz/t Ag; Al - 160,000 tonnes at 0.37 oz/t Au.

Previous work on the subject property was described by J.P. Sorbara and H.C. Grond (Report on the Eric Property, dated Feb. 25, 1988) as follows:

"Previous work on the Eric claim (then called the Mex claim) was done by Cominco Ltd. in 1977. The work consisted of reconnaissance geological mapping, and soil and rock chip sampling for copper and molybdenum mineralization. The geological work indicated an environment permissive for porphyry copper and molybdenum deposits. Caelles (1978) obtained significant gold values from rock chips taken from an altered zone of quartz-monzonite and monzonite 600 m in diameter. Values ranged from <10 to 780 ppb gold in rocks.

Follow-up work in 1981 by Cominco outlined an area 600 m in diameter which contains gold anomalies in rock and soil. Gold values range from <10 ppb to 3260 ppb in soils and up to 168 ppb in rocks (Sharp, 1981). A diamond drilling program was recommended to test the gold/copper zone.

A summary report by Cooke (1986) on the Eric claim gave results for 6 rock geochemical samples. The values for gold range from 5 to 145 ppb. Cooke suggests that the altered zone of intrusive rock and enclosed altered breccia may represent a breccia pipe occurring within a sub-volcanic intrusive complex. If so the breccia pipe may have served as a conduit for mineralizing fluids. He recommended a program of detailed rock chip sampling and geophysics to test the potential of the property.

The four remaining claim blocks (Dawn, Peak, Swan 1 and Swan 2) have no reported work history."


In early April 1988, an airborne magnetic and VLF-EM survey was conducted over the Eric Claim Group by Western Geophysical Aero Data Ltd. Several interesting magnetic and VLF-EM features were recognized on the property and additional ground follow-up work was recommended by geophysicists D.V. Woods, Ph.D., and R.G. Hermary, B.Sc.

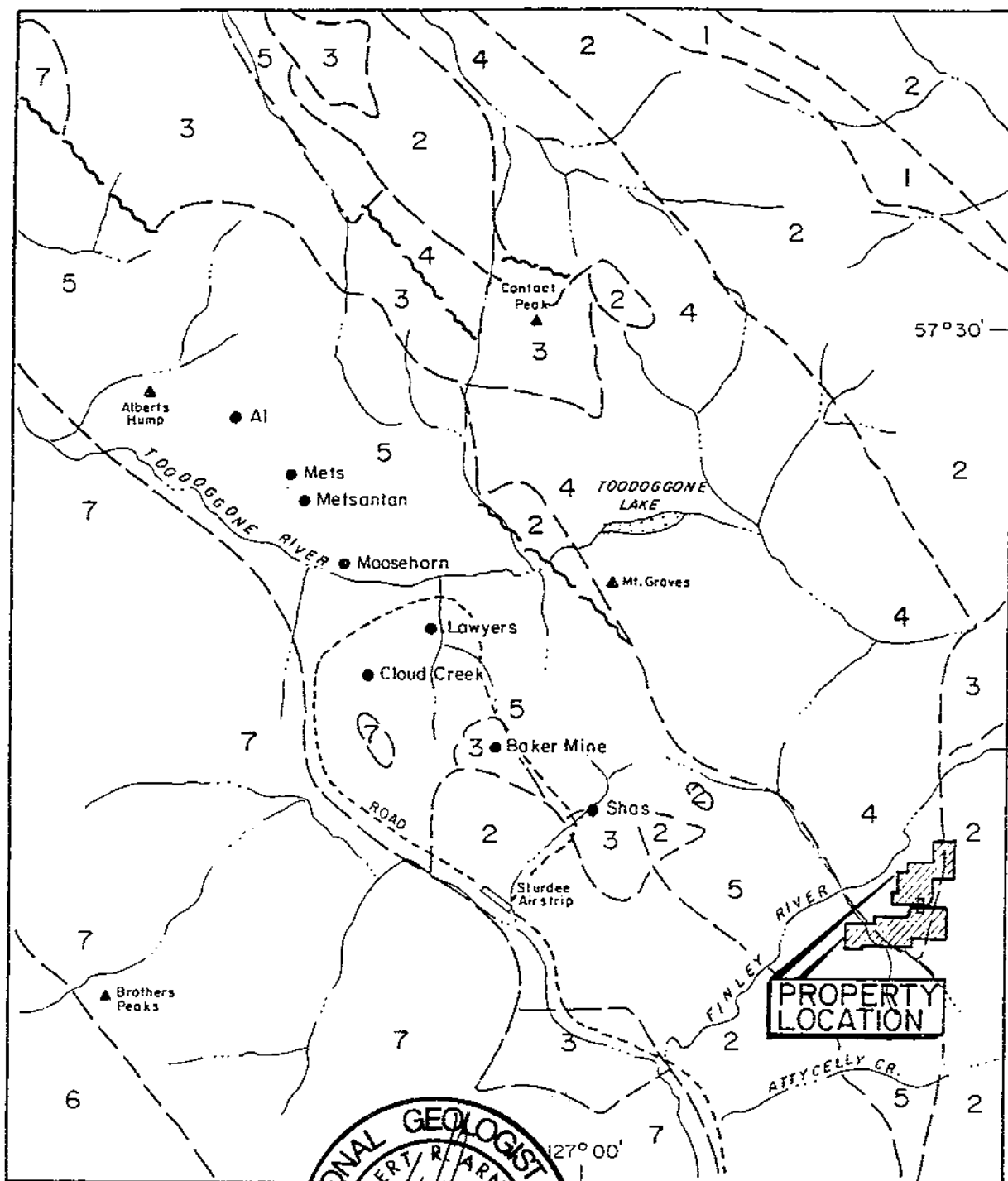
#### 4.0 GEOLOGY

##### 4.1 Regional Geology and Mineralization

The regional geology of the Toodoggone River has been described in detail by T.G. Shroeter (1981) as follows:

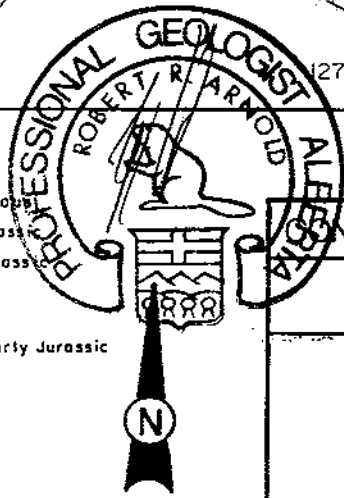
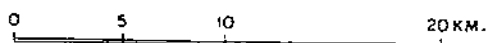
" The Toodoggone River area lies within the eastern margin of the Intermontane Belt. The oldest rock exposed are wedges of crystalline limestone more than 150 meters thick that have been correlated with the Asitka Group of Permian Age. The next oldest rocks consist of andesitic flows and pyroclastic rocks including augite-tremolite andesite porphyries and crystal and lapilli tuffs that belong to the Takla Group of Late Triassic age. The Omineca intrusions of Jurassic and Cretaceous age (potassium-argon age of 186 to 200 Ma obtained by the Geological Survey of Canada) range in composition from granodiorite to quartz monzonite. Some syenomonzonite bodies and quartz feldspar porphyry dykes may be feeders to the Toodoggone rocks which unconformably overlie the Takla Group. The 'Toodoggone' volcanic rocks (named informally by Carter, 1971) are complexly intercalated





LEGEND

- 7 SUSTUT GROUP: Tertiary - Cretaceous
- 6 BOWSER GROUP: Middle - Late Jurassic
- 5 TOODOGGONE VOLCANICS: Early Jurassic
- 4 HAZELTON GROUP: Early Jurassic
- 3 TAKLA GROUP: Late Triassic
- 2 OMINECA INTRUSIONS: Late Triassic - Early Jurassic
- 1 ASITKA GROUP: Permian
- APPROX. GEOLOGICAL CONTACT
- ~ FAULT
- MAJOR DRAINAGE
- MINERAL DEPOSIT



CONSOLIDATED PETROQUIN RESOURCES LTD  
ERIC CLAIM GROUP

REGIONAL GEOLOGY and  
MINERAL DEPOSITS

<p>H-TEC RESOURCE MANAGEMENT LTD.</p>	SCALE: As shown	N.T.S.: 94E/2	FIGURE No: <b>4</b>
	OWN. BY: HV	DATE: May/1989	
	CHKD. BY: R. Arnold	PROJECT No.: 89BC 009	FILE No:

volcanic and volcanic-sedimentary rocks of Early and Middle Jurassic age, 500 meters or more in thickness, along the west flank of a northwesterly trending belt of 'basement' rocks at least 90 kilometers in length by 15 kilometers in width (Geological Survey of Canada, Open File 306, replaced by Open Files 483 and 606). A potassium-argon age of  $186 \pm 6$  Ma was obtained by Carter (1971) for a hornblende separate from a sample collected from a volcanic sequence 14 kilometers southeast of Drybrough Peak. Four principal subdivisions of 'Toodoggone' rocks have been recognized:

1) Lower volcanic division - dominantly pyroclastic assemblage including purple agglomerate and grey to grey to purple dacitic tuffs.

2) Middle volcanic division - an acidic assemblage including rhyolites, dacites, 'orange' crystal to lithic tuffs, and quartz feldspar porphyries; includes welded tuff. The 'orange' color of the tuffs resulted from oxidation of the fine-grained matrix while the rock was still hot. A coeval period of explosive volcanism included the formation of 'laharic' units and intrusion of syenomonzonite bodies and dykes. This event was accompanied by explosive brecciation along the zones of weakness, predominantly large-scale faults and attendant splays, followed by silicification and deposition of precious and base metals to varying degrees in the breccias. Rounded fragments of Omineca intrusive rocks are rare components in Toodoggone tuffs.

3) Upper volcanic-intrusive division - grey to green to maroon crystal tuffs and quartz-eye feldspar porphyries.

4) Upper volcanic-sedimentary division - lacustrine sedimentary rocks (sometimes varved), stream bed deposits, and possible local fanglomerate deposits and interbedded tuff beds.

Many Toodoggone rocks have a matrix clouded with fine hematite dust implying a subaerial origin, however, some varieties may have accumulated in shallow water. The host rock for mineralization (division 2) is an orange to chocolate brown-colored crystal tuff with varying minor amounts of lithic and vitric ash. Broken crystals of plagioclase and quartz are set in a fine-grained 'hematized' matrix of quartz and feldspar. The exact chemical composition(s) and rock name(s) await chemical analyses. Carter (1971) determined the composition of a suite of rocks collected from the Toodoggone area to range from latites to dacites (less



than 30 weight per cent quartz); fused beads gave refractive indices between 1.505 and 1.535. Apatite may be a common accessory mineral.

To the west, Upper Cretaceous to Tertiary pebble conglomerates and sandstones of the Lower Tango Creek Formation of the Sustut Group (Eisbacher, 1971) unconformably overlie both Takla Group volcanic rocks and Toodoggone volcanic rocks.

The structural setting was probably the most significant factor in allowing mineralizing solutions and vapor to migrate through the thick volcanic pile in the Toodoggone area. The entire area has been subjected to repeated and extensive normal block faulting from Jurassic to Tertiary time. It is postulated that a northwesterly trending line of volcanic centers along a gold-silver-rich 'province' marks major structural breaks, some extending for 60 kilometers or more (for example, McClair Creek system, Lawyers system). Prominent gossans are often associated with structural zones but many contain only pyrite; sulfides occur as disseminations and fracture fillings in Toodoggone and Takla Group rocks. Thrusting of Asitka Group limestones over Takla Group rocks probably occurred during Middle Jurassic time.

Today Toodoggone rocks display broad open folds with dips less than 25 degrees. The Sustut Group sedimentary rocks have relatively flat dips and do not appear to have any major structural disruptions.

The Toodoggone area is host to many polymetallic mineral prospects and four main types are recognized:

1) 'Porphyry' copper+/-molybdenum+/-silver+/-gold - mainly associated with Omineca Intrusions. Chalcopyrite and pyrite, with or without molybdenite, occur in fractures, as disseminations, or in quartz veins within both intrusive and the host volcanic rocks (mainly Takla Group andesitic rocks). Secondary chalcocite and covellite may form layers up to 30 meters thick. In these 'porphyries', silver may exceed 3.1 grams per tonne (0.1 ounce per ton) and gold 0.47 gram per ton (0.015 ounce per ton) and therefore be economically significant [for example, Riga (MI 94E-3,4,5), Fin (MI 94E-16), Pillar (MI 94E-8), Rat (MI 94E-25), Mex (MI 94E-57), Kerness (94E-21)].

2) Skarn - contact of limestone and host rock resulting in formation of small bodies of magnetite, galena, and sphalerite [for example, Castle Mountain (MI 94E-27) and several other minor showings west of Duncan Lake].

3) Precious and base metal epithermal - gold+/-silver+/-copper+/-lead+/-zinc

- a) Fissure-vein type - the most important economic type. It is associated with predominantly silicified zones (quartz veins and/or older volcanic 'centers') related to repeated, extensive block faulting and possible tensional fractures formed during late doming. Large and small-scale faulting were integral processes in the sequential development of calderas formed by progressive emplacement and subsequent collapse of different phases of composite magmas (batholiths). So far, no distinct superimposed complex zones have been identified as isolated calderas in the Toodoggone area. Many calderas have a moat structure around their periphery, which is infilled by lacustrine sedimentary and pyroclastic rocks, mainly volcanic ash, deposited penecontemporaneously in the moat. Local fanglomerate deposits form adjacent to the steeper walls away from tributary streams. In the Toodoggone area, recurrent faulting during crater building would guide intrusions and the soft lacustrine sedimentary rocks may have an impermeable barrier to mineralizing solutions.

Principal ore minerals include fine-grained argentite, electrum, native gold, and native silver with minor amounts of chalcopyrite, galena, and sphalerite. Rare constituents include bornite, polybasite, stromeyerite, and secondary chalcocite and covellite. Gangue minerals include, in order of decreasing abundance: amethystine to white quartz, chalcedony, calcite, hematite, manganese oxide, and rare barite and fluorite. Deposits occur in the form of vein fillings, stockworks, irregular branching fissures, and large, recurrently brecciated fault zones. Common textures include comb structures, symmetrical banding, crustifications, and drusy cavities - all typical features of epithermal deposits formed at shallow depths and at low temperatures. Alteration is commonly restricted to - vein systems [Chappelle (MI 94E--26), Lawyers (MI 94E-17), Metsantan Lake (MI 94E-35), McClair, Cliff Creek, Shas (MI 94E-50), Saunders (MI 94E-37)].

- b) Hydrothermally altered and mineralized type - associated with major fault zones and possibly after subsidence of volcanic centers followed by a doming of caldera cores. Pyrite is the most common sulfide present with minor amounts of galena and sphalerite and rare molybdenum and scheelite. This type is probably somewhat older or contemporaneous with

fissure-type mineralization. Cauldron zones are strongly leached and sulfotatically altered to varying degrees to clay minerals and silica; some areas contain alunite (for example, Alberts Hump). Epidote is a common alteration mineral in both hydrothermal and fracture zones [for example, Kodah, Alberts Hump, Saunders (MI 94E-17), Chappelle (MI94E-26), Oxide].

- c) Alteration generally associated with the precious and base metal epithermal is as follows:
- i) Epidotization and silicification in the vicinity of quartz veins
  - ii) Laumontite in fractures
  - iii) Extensive pyritisation
  - iv) Anhydrite as veinlets and fractures up to 70 meters or more long
  - v) Hematization near surface, and
  - vi) Carbonitization at depth.

4) Stratabound (?) - galena+/-sphalerite+/-chalcopryrite occur in or adjacent to limestone with interbedded chert in Takla Group (?) volcanic agglomerates and tuffs. This type of deposit, which may have been deposited on the flank of a volcano adjacent to a limestone reef, usually has associated low-grade silver values [for example, Firesteel (MI94E-2), Attycelley (MI 94E-22)]."

#### 4.2 Property Geology

Due to heavy snow cover at the time of the survey, no additional geological information was gathered by the writers. The Eric Claim Group geology was described in detail by J.P. Sorbara and H.C. Grond (1988) as follows:

"The Eric Group of mineral claims is underlain by Lower to Middle Jurassic Toodoggone volcanics which have been intruded by Middle Jurassic batholith along the eastern margin of the claim block (Diakow, et al., 1985). The batholith consists of coarse-grained granodiorite and quartz diorite.

According to Cooke (1986), a leached and altered breccia zone approximately 100 meters wide forms the core of the intrusive complex on the Eric claim. Pervasive sericite alteration is associated with the



breccia and successive zones of silicification and pyrite mineralization are followed by magnetite and propylitic alteration.

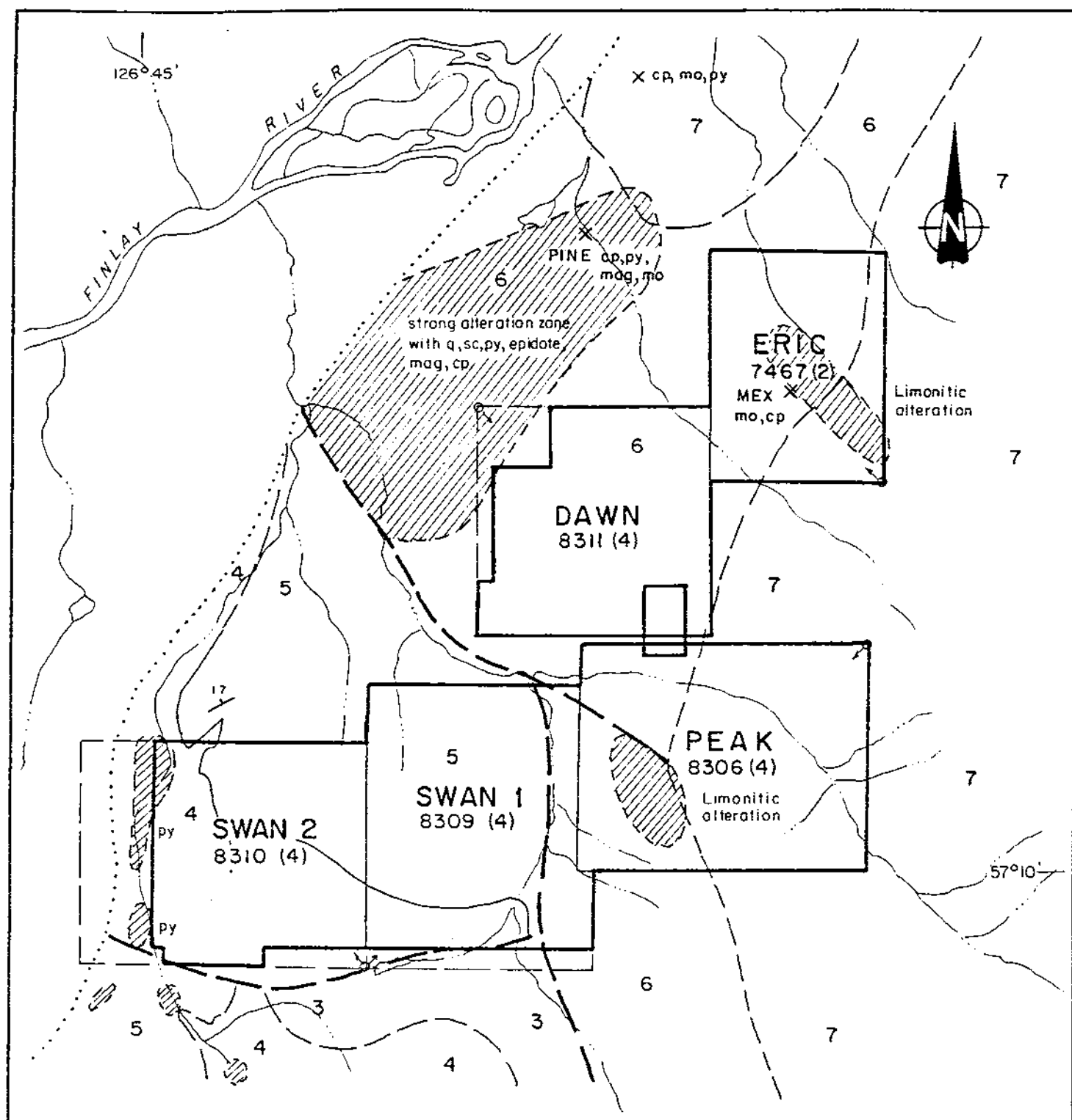
The regional geology map by Diakow, et al. (1985) shows several gossanous zones associated with the volcanic/intrusive contact which transects the eastern edge of the property. One of the zones occurs within the Eric claim and is described by Cooke (1986) as a broad zone of pyrite mineralization resulting in a gossan zone which has a surface dimension of 1500 x 500 meters (Figure 4) [herein Figure 5]. Pyrite occurs as fracture-fillings and disseminations in amounts ranging from 1% to 7%. Minor amounts of chalcopyrite and secondary chalcocite are associated with the pyrite over an area of 400 x 250 meters.

Reconnaissance rock chip sampling from this zone returned gold values ranging from <10 to 710 ppb (Cooke, 1981) in association with the sulfides. Soil sampling in the same area has produced gold values of <10 to 3260 ppb gold. Silver values range from 0.2 to 11.2 ppm within the zone. Anomalous gold values are associated with copper and pyrite mineralization as well as with silicified and propylitized monzonite and quartz monzonite.

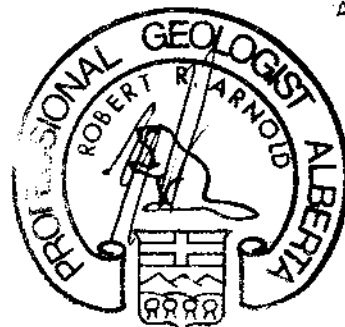
A second limonite gossan zone occurs within the western half of the Peak claim (Figure 4) [herein Figure 5]. It adjoins the intrusive contact to the east and is bounded by a northwest trending fault to the north. The gossan zone measures approximately 1000 x 500 meters and trends northwesterly. It is not known whether precious or base metals are associated with this zone.

The Swan 2 claim also has several smaller limonitic zones along its western boundary (Figure 4) [herein Figure 5]. The regional geology indicates that pyrite is associated with these zones, occurring over an area of roughly 1500 x 150 meters.






After Diakow, Panteleyev, Schroeter, 1985



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CONSOLIDATED PETROQUIN RESOURCES LTD			
ERIC CLAIM GROUP			
<b>PROPERTY GEOLOGY</b>			
 MTEC RESOURCE MANAGEMENT LTD.	SCALE: As shown	N.T.S.: 94E/2	FIGURE No.: 5
	DWN. BY: HV	DATE: May/1989	
	CHRD. BY: R. Arnold	PROJECT No.: 89EC 009	FILE No.:

## 5.0 GEOPHYSICS

Detailed VLF-Electromagnetic, Total Field and Vertical Gradient Magnetometer surveys were carried out on the Consolidated Petroquin Resources Ltd. property using an EDA Omni-Plus instrument. The survey grid was established on the Peak claim (Figure 6). East-West survey lines were surveyed at 50 meter line separations with 25 meter station intervals. A total of 3.975 kilometers was surveyed.

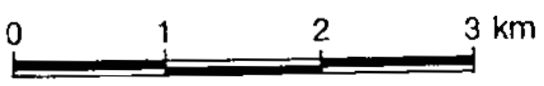
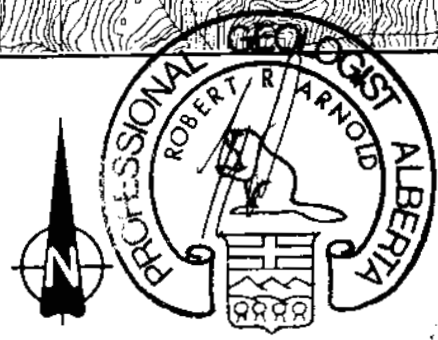
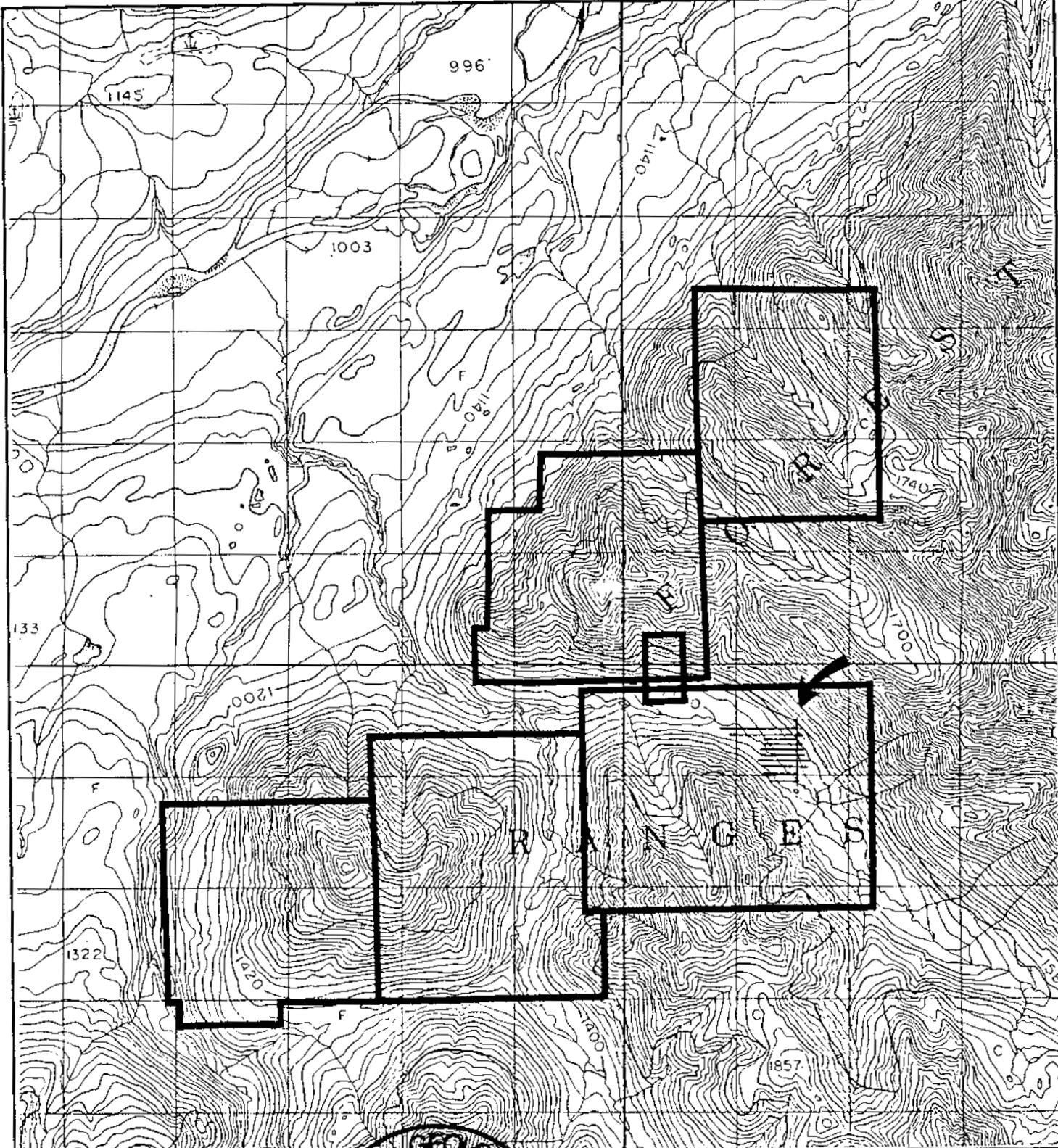
The survey data was dumped to computer and examined each night. Final computer assisted plotting and interpretation of the data was done in Vancouver by S.J.V. Consultants Ltd.

### 5.1 Magnetometer Survey

The magnetic survey was conducted with an EDA OMNI PLUS Tie-Line Magnetometer. Total Magnetic Field Strength and Magnetic Vertical Gradient data were collected at 25 meter intervals along east-west survey lines. A total of 3.975 line kilometers were surveyed. Diurnal magnetic variations were removed by reference to an automatic base station (EDA Omni-IV) established at the Skylark Camp. This method is well known and fully described in the literature. The instrument specifications can be found in Appendix II.

Magnetic Total Field Strength and Vertical Gradient readings are presented in profile map form (Figure G1A) and Magnetic Total Field data are presented in contour map form (Figure G1B).





CONSOLIDATED PETROQUIN RESOURCES LTD

ERIC CLAIM GROUP  
OMNECA M.D., B.C.

GRID LOCATION



M-TEC  
RESOURCE MANAGEMENT LTD

SCALE: 1 : 50,000	N.T.S.: 94E/2	FIGURE No.: 6
OWN. BY: H.V.	DATE: May/1989	
CHRD BY: R. Arnold	PROJECT No.: 89DC 008	FILE No.:



## 5.2 VLF-EM Survey

The VLF-EM survey was conducted with an EDA-OMNI PLUS receiver. Two transmitter stations were used: NAA Cutler, Maine, at a frequency of 24.0 kHz and a radiated power of 1,000 kilowatts; NPG Jim Creek (Seattle), Washington, at a frequency of 24.8 kHz and a radiated power of 500 kilowatts. These two transmitter stations were chosen because they most closely aligned with the surveyed lines orientation. The VLF-EM field strength, in-phase and quadrature components were measured and recorded concurrently for the two stations.

Results were plotted in profile plot plan form (Figures G2A, G2B, G3A and G3B). Furthermore, the measurements were filtered using the Fraser Filter Method to permit presentation of data in contour map form (Figure G2C). This method is well known and fully described in the literature.

## 6.3 Discussion of Geophysical Results

S.J. Visser, consultant geophysicist, reports that a weak magnetic low striking approximately south from 250W on line 350N and 300W on line 50N may reflect a depletion of magnetic minerals along a fault zone. The VLF-EM indicates a weak anomaly at approximately 250W between lines 400N and 450N which is probably due to a contact on topography. Figure G4 shows the compilation of the Magnetics and VLF-EM surveys.





## 6.0 CONCLUSIONS AND RECOMMENDATIONS

The general area has been explored intermittently for base metals since the 1930's. Exploration work in the Toodoggone Region since the 1960's has led to the discovery of three main mineral deposits: the Baker Gold Mine (pre-production reserves of 100,000 tons at 0.92 oz Au/t), the SEREM's Layers deposit (pre-1985 reserves estimated of 1.035 million tons at 0.21 oz Au/t and 7.58 oz Ag/t) and the Energex's Al property (reserves estimated at 264,000 tons "open-pittable at 0.248 oz Au/t).

Mineralization in the Toodoggone Gold Belt is represented by four main mineral deposit types:

- a) Porphyry - mainly associated with Omineca intrusions.
- b) Skarn - contact of limestone and intrusive rock.
- c) Stratabound - occurring in or adjacent to limestone with interbedded chert.
- d) Epithermal - occurring mostly in Toodoggone and Takla volcanics.

Of the four, the epithermal type is the most common. It usually occurs as massive quartz veins (Baker Gold Mine) or as silicified zones and amethystine breccia zones (Lawyers Deposit). The epithermal deposit model is generally associated with siliceous volcanic centers, exhalative vents and zones of alteration within the Toodoggone volcanics and are usually at close proximity of major northwest striking faults. Quartz, barite and carbonate are the chief gangue minerals. The vein minerals are acanthite, pyrite, electrum, chalcopyrite, native gold, sphalerite and



galena. Grades range from 0.1 to 1.0 oz Au/t and 1.0 to 20.0 oz Ag/t.

Previous exploration on the Eric Claim Group consisted of reconnaissance exploration work done by Cominco Ltd. in 1977 and 1981 (geological mapping, rock and soil geochemical sampling). This work confirmed the presence of significant gold and silver values in association with copper and iron within a porphyry system on the Eric Claim. An airborne Magnetic and VLF-EM survey was conducted over the entire property during the spring of 1988 and several very interesting geophysical features were delineated. Additional follow-up ground exploration work was then recommended.

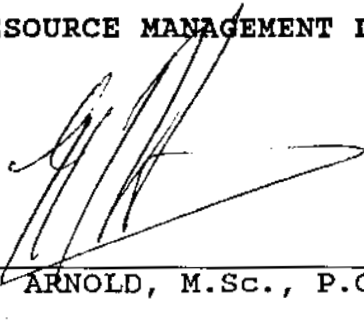
The limited ground Magnetic and VLF-EM survey conducted in June 1989 on the Peak claim shows a weak southerly striking magnetic low which may be the signature of a fault zone within the surveyed area. The VLF-EM exhibits a weak anomaly which is believed to be due to topographic effect.

In order to fully evaluate the mineral and economic potential of the Eric Claim Group further exploration work is warranted. The two-phase exploration program should consist of grid establishment, Magnetic and VLF-EM surveying, soil and rock geochemical sampling and detailed geological mapping over the entire property.

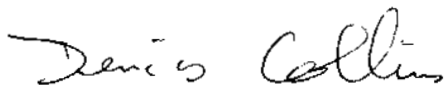


Dependant upon positive results from Phase I, an exploratory diamond drilling program should be designed to define the geometry and grade characteristics of any identified mineralization.

Respectfully submitted  
HI-TEC RESOURCE MANAGEMENT LTD.



ROBERT R. ARNOLD, M.Sc., P.Geol., F.G.A.C.



DENIS A. COLLINS, Ph.D., P.Geol., F.G.A.C.



JUNE 20, 1989



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**APPENDIX I**

**STATEMENTS OF QUALIFICATIONS**





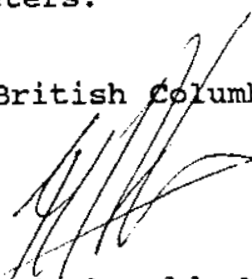
## STATEMENT OF QUALIFICATIONS

I, ROBERT R. ARNOLD, of 1227 Caledonia Avenue, in the District of North Vancouver, in the Province of British Columbia, hereby certify:

1. THAT I am a geologist employed by Hi-Tec Resource Management Ltd. My office is at Suite 1500 - 609 Granville Street, Vancouver, B.C., V7Y 1G5, Canada.
2. THAT I obtained a Bachelor of Science degree in Geology from the University of Geneva, in the City of Geneva, Switzerland, in 1976 and a Master of Science degree in Geological Engineering, from the same university in 1978.
3. THAT I am a Registered Professional Geologist, in good standing, of the Association of Professional Engineers, Geologists and Geophysicists of Alberta since 1981.
4. THAT I am a Fellow Member of the Geological Association of Canada, in good standing since 1985. That I am an associate member of the Mineralogical Association of Canada and of the Society of Economic Geologists.
5. THAT I have been practising my profession as a geologist in Western Europe, West Africa, Southeast Asia and North America, both permanently since 1978 and seasonally since 1971.
6. THAT this report is based on work personally conducted during June 1989 and on an examination of publicly and privately held literature.
7. THAT I have not received, nor do I expect to receive any interests, direct or indirect, or contingent in the securities or properties of Consolidated Petroquin Resources Ltd. and that I am not an insider of any company having interest in the Eric Property which is the subject of this report, or any other claims within a radius of 10 kilometers.

Dated in Vancouver, British Columbia, this 20th day of June, 1989.



  
Robert R. Arnold, M.Sc., P.Geol., FGAC.



## STATEMENT OF QUALIFICATIONS

I, DENIS A. COLLINS, of the City of Vancouver, Province of British Columbia, hereby certify:

1. THAT I am a geologist employed by Hi-Tec Resource Management Ltd. at 1500-609 Granville Street, Vancouver, British Columbia, Canada, V7Y 1G5.
2. THAT I obtained a Bachelor of Science degree in Geology from University College Cork, Ireland in 1980 and a Ph.D. in Structural Geology from the same university in 1985.
3. THAT I have been practising my profession as a geologist in Ireland, South Africa and Canada since 1980.
4. THAT I am a Fellow, in good standing, with the Geological Association of Canada.
5. THAT I am a registered Professional Geologist, in good standing, with a license to practice with the Association of Professional Engineers, Geologists and Geophysicists of the Northwest Territories.
6. THAT this report is based on work personally conducted during June 1989 and on an examination of publicly and privately held literature.

Dated in Vancouver, British Columbia, this 20th day of June, 1989.

*Denis Collins*

Denis A. Collins, Ph.D., P. Geol., F.G.A.C.



**APPENDIX II**

**INSTRUMENT SPECIFICATIONS**



## SECTION 2

### PHYSICAL DESCRIPTION

#### 2.1 SYSTEM COMPLIMENT

As with the OMNI IV, the OMNI-PLUS can be configured in three ways depending on the magnetometer requirements. As previously mentioned, these are:

- Total field, tie-line or looping application (3)
- Base station application (4)
- Vertical gradient application (5)

For each of these applications, VLF measurements will be automatically performed if a VLF sensor is connected.

Table 2-1 lists the standard and optional components of the OMNI-PLUS in each of it's three configurations.

Item	Total Field	Base Station	Gradiometer
OMNI-PLUS VLF/Magnetometer Console			
128K RAM Memory	Standard	Standard	Standard
Display Heater	Standard	Standard	Standard
Magnetometer Components			
Remote Sensor	Standard	Standard	
0.5m Gradient Sensor			Standard
1.0m Gradient Sensor			Optional
Pole Assembly (4-600mm sections)	Standard	Standard	Standard
30m Cable Extension		Optional	
Rope Joiner		Standard	Standard
VLF Components			
VLF Sensor Module	Standard	Standard	Standard
VLF Interconnect Cable	Standard	Standard	Standard

Table 2-1 OMNI-PLUS System Compliments

Item	Total Field	Base Station	Gradiometer
Power Sources			
Battery Belt (rechargeable)	Standard	Standard	Standard
Battery Cartridge (rechargeable)	Optional	Optional	Optional
Battery Belt (alkaline)	Optional	Optional	Not Recommended
Battery Charger 110/220 Vac	Standard	Standard	Standard
Operation Manual	Standard	Standard	Standard
VLF Resistivity	Optional	Optional	Optional
Magnetometer Memory Upgrade	Optional	Optional	Optional
RS232C Serial Interface Cable	Optional	Optional	Optional
Transit Case	Optional	Optional	Optional

Table 2-1 OMNI-PLUS System Compliments (con't)

## 2.2 COMPONENT DESCRIPTION

**INSTRUMENT CONSOLE** The primary electronics, data acquisition circuit, microprocessor and memories are built into a rectangular, aluminum, weather-proof case with the instrument panel facing upwards. This console is supported in a dual shoulder-type harness and is carried on the chest.

**Display** Operator modes, data and information is displayed on a custom-designed, ruggedized liquid crystal display (LCD) which operates in temperatures ranging from -40 C to +55 C. The display includes a six-numeric digit readout, decimal point, mode function readout, battery status monitor, signal decay rate, signal amplitude monitor, VLF signal strength and operator quality monitors and parameter indicators. The internal heater is activated automatically at -25 C during the survey. The mode selector should be set to OFF overnight and when the unit is not being used to avoid power consumption from the heater at low temperatures.

**Operator Keys** The operator keys are grouped into two sections located on each side and below the LCD. The 12 keys on the left hand side are for programming the instrument. The 10 keys on the right hand side are for taking measurements and recording them, accessing the VLF magnetic and electric parameters and accessing the electronics notebook. The one key below the LCD is the mode selector, where the modes are viewed on the LCD. The key functions are described in Section 4.

**Cable Connectors** There are two cable connectors located on the rear of the instrument. When the console is being used (ie, chest mounted):

- The one on the operator's left side connects the magnetometer sensor. The type of connector is the same as those used for the PPM and OMNI IV series of magnetometers. Therefore, magnetometer sensors are interchangeable between systems.
- The one on the operator's right side is for interconnecting the console with the VLF sensor and for dumping the stored data. (Note: If the interconnect cable becomes unusable, the data transfer cable may be used where the base station connector is attached to the console and the field connector is attached to the VLF sensor).

**SENSORS** The OMNI-PLUS system consists of two types of sensors; the magnetometer proton precession sensor and the VLF three-component sensor.

**Magnetometer Sensor** The sensor consists of two helical coils of copper wire connected in series in a noise-cancelling mode with a least 50 dB attenuation of external noise. The coils are immersed in a hydrocarbon-rich liquid inside a lightweight, leakproof cylinder. The sensor cylinder is mounted inside a thin-wall fiberglass tube. The coils are positioned with their axes parallel to each other. The interconnections are carried through a cable, 3m long and terminated in a connector which interfaces with a connector on the rear of the OMNI-PLUS. This configuration is for a remote sensor to be used when the system is being operated as a field, tie-line, looping or base station unit.

**Dual Gradient Magnetometer Sensor** For the gradiometer application, two identical sensors are mounted vertically at the ends of a rigid fiberglass tube. In the standard configuration, the centers of the coils are spaced 0.5m apart. An optional configuration separates the coils by 1.0m. It should be noted that through a patented measuring process, the two coils are read simultaneously, thereby alleviating the need to correct the gradient readings for diurnal variations. The interconnections are the same as those for the remote magnetometer sensor. It should be noted that a gradient sensor may be used when the magnetometer portion of the OMNI-PLUS is configured as a field, tie-line, looping or base station unit.

**Sensor Poles** The pole consists of four 600mm sections which engage end to end so that the remote magnetometer sensor is approximately 2.5m above the ground. For base station applications, a rope joiner is supplied and is attached between the top section of pole and the magnetometer sensor. Rope is attached to the four holes and is secured in the same fashion as a tent guy rope.

**VLF Sensor Module** The VLF sensor module consists of three sections: the VLF sensor; the circuitry; the back-pack frame.

The VLF sensor consists of three orthogonal coils mounted in a cylindrical housing with a pre-amp signal circuitry. The coils consist of copper wire wound on a non-ferrous frame. These coils are mounted with two coils horizontal and one mounted vertically. The sensor housing is made of a ruggedized plastic material.

The VLF circuitry is housed in a ruggedized, rectangular, metal or plastic housing and consists of three circuit boards.

The circuit boards contain a microprocessor, CPU circuitry, a tilt correction meter and signal filtering circuitry. For the standard OMNI-PLUS configuration, the circuitry housing has one KPT type connector which allows for interfacing with the OMNI-PLUS console. For the optional VLF resistivity, additional KPT type connectors are installed for connecting the resistivity probes.

Both the VLF sensor and circuitry housings are attached to a rigid polyethylene frame. To the back of the frame is permanently attached a neoprene foam padding that allows for comfortable field usage. The foam is closed-celled and will not absorb water or perspiration.

**Power Supplies** Three types of power supplies are available for use with the OMNI-PLUS with a) the standard:

- a) A non-magnetic rechargeable battery belt with eight sealed lead acid cells.
- b) A non-magnetic rechargeable battery cartridge with eight lead acid cells.
- c) An alkaline battery belt with 12 "D" size alkaline disposable power cells (not recommended for use with the gradiometer).

A) **Rechargeable Battery Belt** This is a webbed belt with a zip enclosure pouch designed specifically for rugged field use. The 8 lead acid cells are placed in protective packing inside the pouch. Powering of the console and recharging of the belt are performed through the coiled cable with a pin socket connector at the end. For powering the console, the connector is attached to the corresponding male connector on the back of the console. The two straight pins are designed so that the connector can be only attached one way. The two thumb screws allow for securing the connector to the console. At each end of the coiled cable, strain reliefs have been attached to provide extra protection against cable breakage. For recharging the belt, the female connector of the battery belt is attached to the male connector of the battery charger and is left on until the red indicator light on the charger shuts off.

**NOTE:** At this time, the rechargeable battery belt is NOT to be used when VLF feature is being used. However, the belt may be used when the system is being as a magnetometer ONLY.



- B) **Rechargeable Battery Cartridge** The cartridge consists of eight lead acid cells securely fashioned in a aluminum housing. The cartridge is attached to the back of the console using the four plastic clips. The cartridge can only be attached one way which is determined by the cut-out on the console backplate and the corresponding key on the cartridge. Also, the battery connector on the back of the console has two straight pins of different diameters that allow the cartridge to be attached only one way.
- C) **Alkaline Battery Belt** Disposable alkaline batteries may be used to power the OMNI-PLUS system. However, the disadvantage of this method is that the batteries are depleted quite rapidly and therefore, they are not recommended for use with the gradiometer.

#### NOTE

The characteristics of alkaline batteries require a program variation. For this reason, the second digit of the operator code is entered as a '9' (eg, OP39NN) for alkaline batteries and any other digit for rechargeable batteries.

**Base Station Power Supply** Although the battery cartridge or belt supplied may be used to power the system, a 12V car battery may be used if so desired. This feature is useful especially in winter conditions, where a battery cartridge or belt may not last the full day. To use a car battery, disconnect the battery cartridge or belt and attach the data reduction cable using the connector where a red and black cable extends from it. Attach the red cable to the positive pole of the 12V battery and the black cable to the negative pole of the 12V car battery. It would be advisable to protect the rear of the console from adverse weather conditions.

**HARNESS** A multi-functional harness is supplied with every OMNI-PLUS system. This harness may be used with or without the VLF module or magnetometer sensor. It has been designed to be durable, yet comfortable. The harness assembly comes with wide shoulder pads and tri-glides that allow the operator to customly adjust the straps to suit his or hers requirements. Setup for the harness is graphically shown on page 5-4 of this manual.

**BATTERY CHARGER** The battery charger supplied with the OMNI-PLUS system is designed to operate on either 120/240 volts. Generally, the user should charge the battery overnight or until the red light on the side of the unit goes out. The system has been designed with an overvoltage protection so as not to damage the batteries from overcharging. Appendix A-2 gives a detailed description on battery care and life expectancy.

APPENDIX III

VLF-EM DATA





2+25 W	-3.8	3.4	17.60	-2.1	10:10:09	59	13.0	-4.2	-3.7
2+50 W	-5.6	4.1	17.35	-3.2	10:11:31	58	5.9	-6.0	-5.1
2+75 W	-7.9	5.1	17.47	-4.5	10:12:37	47	-1.4	-5.5	-5.8
3+00 W	-10.5	5.9	17.55	-6.0	10:13:44	56	4.1	-5.2	-5.4
3+25 W	-13.9	1.9	17.77	-7.9	10:16:10	35	25.8	-6.2	-5.7

Line	3+00 N	Date	11 APR 89	24.8	#46					
POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA	5-FRA
3+00 W	-2.2	6.0	16.91	-1.3	10:32:36	49		-0.2		
2+75 W	-1.4	5.4	16.69	-0.8	10:34:38	59		6.7		
2+50 W	0.0	3.0	16.62	0.0	10:35:43	49		10.1		
2+25 W	2.2	3.1	16.55	1.2	10:37:16	59		6.2	-3.3	
2+00 W	2.7	0.8	16.56	1.5	10:38:50	59		12.3	-3.5	-3.4
1+75 W	5.4	0.3	16.45	3.1	10:39:50	58		2.9	-3.4	-3.5
1+50 W	8.2	-0.5	16.61	4.6	10:41:31	55	57	0.3	-5.0	-4.2
1+25 W	8.1	-1.3	16.88	4.6	10:42:47	37		-6.1	-4.6	-4.8
1+00 W	9.2	-2.6	17.19	5.2	10:44:52	57		6.8	-2.1	-3.4
0+75 W	10.5	-3.5	17.41	6.0	10:47:02	56		0.9	-2.0	-2.1
0+50 W	10.7	-5.4	17.49	6.1	10:48:22	46		-6.9	-2.3	-2.2
0+25 W	11.6	-5.4	17.72	6.6	10:49:35	66	56	6.4	-1.5	-1.9
0+00 E	11.7	-5.9	17.78	6.7	10:50:50	56		7.9	-1.2	-1.4
0+25 E	12.4	-5.8	18.04	7.0	10:53:04	56		3.1	-1.0	-1.1

Line	4+00 N	Date	11 APR 89	24.8	#60					
POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA	5-FRA
0+25 E	20.7	-3.3	18.83	11.7	11:00:49	59		-3.2		
0+00 E	22.2	-4.1	18.57	12.5	11:02:03	59		-2.7		
0+25 W	22.8	-2.1	17.75	12.8	11:03:01	59		-4.6		
0+50 W	19.2	-1.5	17.08	10.9	11:03:58	56	69	-7.4	-0.5	
0+75 W	15.1	-1.5	16.83	8.6	11:04:50	55	59	0.7	-5.8	-3.2
1+00 W	12.5	-1.0	16.92	7.1	11:05:48	49		12.0	-8.0	-6.9
1+25 W	11.4	-2.5	17.04	6.5	11:07:31	49		-3.7	-5.9	-7.0
1+50 W	10.5	-3.2	17.00	6.0	11:08:22	49		-0.4	-3.2	-4.6
1+75 W	8.2	0.0	16.97	4.7	11:09:13	59		5.7	-2.9	-3.1
2+00 W	6.0	0.7	17.09	3.4	11:10:06	65	49	1.3	-4.4	-3.7
2+25 W	7.5	-0.8	17.22	4.3	11:11:19	56	29	7.4	-3.0	-3.7
2+50 W	6.4	2.0	16.96	3.6	11:12:29	55	49	4.5	-0.2	-1.6
2+75 W	4.6	-0.2	16.78	2.6	11:13:22	39		7.0	-1.5	-0.9
3+00 W	2.1	1.7	16.67	1.2	11:14:13	59		-1.4	-4.1	-2.8
3+25 W	-2.2	0.8	16.69	-1.2	11:15:12	58		4.5	-6.2	-5.2
3+50 W	-4.7	2.4	17.07	-2.7	11:16:14	59		2.6	-7.7	-7.0
3+75 W	-5.7	3.4	17.67	-3.2	11:21:46	68		0.6	-5.9	-6.8
4+00 W	-6.1	2.0	17.62	-3.5	11:22:54	48		-6.5	-2.8	-4.4
4+25 W	-7.5	4.7	17.70	-4.3	11:24:27	38		-2.8	-1.9	-2.4
4+50 W	-7.9	3.6	17.70	-4.5	11:25:59	37		11.7	-2.1	-2.0
4+75 W	-9.0	3.6	17.49	-5.1	11:26:58	67		8.5	-1.8	-2.0
5+00 W	-10.1	5.1	17.61	-5.8	11:27:47	36		-1.3	-2.1	-2.0
5+25 W	-10.3	1.6	17.87	-5.8	11:30:13	8		8.0	-2.0	-2.1
5+50 W	-10.2	1.6	17.74	-5.8	11:31:08	56	57	10.0	-0.7	-1.4
5+75 W	-11.6	2.5	17.56	-6.6	11:32:01	46		0.2	-0.8	-0.8
6+00 W	-13.6	1.3	17.64	-7.7	11:33:10	56		10.7	-2.7	-1.8
6+25 W	-14.5	0.8	17.76	-8.2	11:34:36	56		8.9	-3.5	-3.1

EDF

OMNI-PLUS Tie-line MAG/VLF V12L Ser #18035

VLF TOTAL FIELD DATA (uncorrected)

Date 11 APR 89

Operator: 5001

Records: 86

Bat: 17.1 Volt Lithium: 3.48 Volt

Last time update: 4/11 7:00:00

Start of print: 4/12 7:48:30

Line	0+00	N	Date	11	APR	89	24.0	#1						
POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA	5-FRA				
#1	-70.4	-0.2	3200.	-12.0	8:22:14	66	99	0.0	!					

Line	0+00	N	Date	11	APR	89	24.0	#2						
POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA	5-FRA				
0+00	E	7.9	-7.0	5.44	4.5	8:27:35	67	66.7						
0+25	W	9.7	-5.3	5.33	5.5	8:43:39	55	65	88.3					
0+50	W	9.0	-5.3	4.96	5.1	8:51:17	66	54	77.9					
0+75	W	9.8	-4.2	4.96	5.6	8:53:15	64	-79.6	0.7					
1+00	W	9.6	-3.9	4.87	5.4	8:56:03	54	-85.8	0.4	0.5				
1+25	W	8.2	-3.5	4.78	4.6	8:57:02	65	89.1	-0.7	-0.2				
1+50	W	6.8	-3.6	4.73	3.8	8:58:08	64	-79.2	-2.6	-1.7				
1+75	W	7.2	-3.9	4.64	4.1	8:59:23	44	-62.7	-2.1	-2.4				
2+00	W	7.6	-2.5	4.43	4.3	9:02:15	55	64	-72.1	0.0	-1.1			

Line	1+00	N	Date	11	APR	89	24.0	#11						
POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA	5-FRA				
3+00	W	8.9	-0.1	5.31	5.1	9:15:03	66	65	86.7					
2+75	W	8.6	-0.5	5.28	4.9	9:19:33	65	88.5						
2+50	W	6.4	-0.4	5.24	3.6	9:20:25	65	87.8						
2+25	W	6.4	0.4	5.22	3.7	9:21:17	65	83.2	2.7					
2+00	W	5.8	-0.8	5.15	3.3	9:22:10	56	65	84.2	1.5	2.1			
1+75	W	5.5	-0.8	5.09	3.1	9:23:24	55	55	75.3	0.9	1.2			
1+50	W	5.7	-0.7	5.10	3.3	9:28:43	56	65	85.9	0.6	0.7			
1+25	W	3.6	-1.2	5.02	2.1	9:30:09	66	55	74.6	1.0	0.8			
1+00	W	3.6	-2.0	5.02	2.0	9:31:09	55	63.1	2.3	1.6				
0+75	W	3.9	-2.3	5.05	2.2	9:32:08	65	65	67.2	1.2	1.7			
0+50	W	4.1	-2.4	5.11	2.3	9:33:50	55	55	80.9	-0.4	0.4			
0+25	W	4.2	-2.4	5.06	2.4	9:35:25	55	65	75.6	-0.5	-0.5			
0+00	E	4.6	-1.2	5.04	2.6	9:37:36	56	65	78.2	-0.5	-0.5			
0+25	E	5.7	-1.5	5.04	3.3	9:39:02	66	55	81.7	-1.2	-0.9			
0+50	E	6.6	-0.6	5.10	3.8	9:40:26	65	55	71.3	-2.1	-1.7			
0+75	E	4.9	-0.1	5.17	2.8	9:42:43	65	65	70.8	-0.7	-1.4			
1+00	E	2.5	0.0	5.25	1.4	9:44:15	55	55	63.3	2.9	1.1			

Line	2+00	N	Date	11	APR	89	24.0	#28						
POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA	5-FRA				
1+00	E	-1.4	-3.8	5.14	-0.8	9:50:08	55	67.2						
0+75	E	-1.2	-4.9	5.13	-0.7	9:52:12	55	88.2						
0+50	E	-1.3	-4.7	5.15	-0.7	9:53:17	56	65	80.5					
0+25	E	-1.3	-4.8	5.23	-0.7	9:56:00	55	56	67.5	0.1				
0+00	E	-0.5	-4.3	5.24	-0.2	9:57:16	65	79.5	0.5	0.3				
0+25	W	0.3	-3.2	5.26	0.1	9:59:10	56	65	77.5	1.3	0.9			
0+50	W	2.3	-2.1	5.38	1.3	10:00:09	55	55	76.4	2.3	1.8			
0+75	W	3.1	-2.3	5.26	1.7	10:01:07	65	83.1	3.1	2.7				
1+00	W	2.1	-2.4	5.31	1.2	10:02:04	66	56	72.2	1.5	2.3			
1+25	W	1.0	-2.1	5.26	1.1	10:03:10	55	55	73.2	2.7	2.3			
1+50	W	0.0	-2.1	5.26	1.1	10:04:10	55	55	73.2	2.7	2.3			

2+25 W	5.7	-1.2	5.61	2.1	10:10:09	65	83.3	1.3	1.2
2+50 W	6.3	0.5	5.74	3.6	10:11:31	65	75.4	2.6	1.9
2+75 W	8.7	0.6	5.77	5.0	10:12:37	35	66.6	4.9	3.7
3+00 W	10.5	1.6	5.75	6.0	10:13:44	35	73.7	5.3	5.1
3+25 W	9.6	2.5	5.74	5.4	10:16:10	55	-77.7	2.8	4.0

Line	3+00 N	Date	11 APR 89	24.0	#46					
POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA	5-FRA
3+00 W	8.3	1.0	5.72	4.7	10:32:36	65	70.8			
2+75 W	7.0	0.7	5.69	4.0	10:34:38	65	78.6			
2+50 W	5.9	0.6	5.64	3.3	10:35:43	45	83.3			
2+25 W	5.2	0.5	5.62	3.0	10:37:16	65	77.8	2.4		
2+00 W	4.0	0.7	5.69	2.3	10:38:50	45	82.5	2.0	2.2	
1+75 W	2.7	0.3	5.70	1.5	10:39:50	66	72.0	2.5	2.2	
1+50 W	1.6	0.3	5.73	0.9	10:41:31	55	65	71.2	2.9	2.7
1+25 W	0.0	0.0	5.66	0.0	10:42:47	55	63.9	2.9	2.9	
1+00 W	-1.2	-0.8	5.60	-0.7	10:44:52	65	77.4	3.1	3.0	
0+75 W	-2.5	-0.6	5.51	-1.4	10:47:02	65	72.0	3.0	3.0	
0+50 W	-3.6	-1.4	5.39	-2.0	10:48:22	56	62.2	2.7	2.8	
0+25 W	-3.6	-1.1	5.35	-2.0	10:49:35	66	55	78.8	1.9	2.3
0+00 E	-4.5	-2.0	5.28	-2.5	10:50:50	55	78.9	1.1	1.5	
0+25 E	-5.7	-1.4	5.14	-3.2	10:53:04	65	76.2	1.7	1.4	

Line	4+00 N	Date	11 APR 89	24.0	#60					
POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA	5-FRA
0+25 E	1.9	-1.4	5.61	1.1	11:00:49	66	66.9			
0+00 E	3.0	-1.2	5.54	1.7	11:02:03	46	66.6			
0+25 W	5.0	-0.6	5.40	2.8	11:03:01	67	66.8			
0+50 W	3.6	-1.0	5.25	2.1	11:03:58	56	67	67.0	2.1	
0+75 W	3.1	-0.5	5.21	1.8	11:04:50	55	65	78.1	-0.6	0.7
1+00 W	2.3	-1.1	5.21	1.3	11:05:48	65	-86.4	-1.8	-1.2	
1+25 W	0.3	-1.6	5.25	0.2	11:07:31	46	72.1	-2.4	-2.1	
1+50 W	-0.3	-1.6	5.21	-0.1	11:08:22	55	76.7	-3.0	-2.7	
1+75 W	-0.5	-1.8	5.20	-0.3	11:09:13	65	82.7	-1.9	-2.5	
2+00 W	-0.5	-1.6	5.21	-0.3	11:10:06	65	46	78.8	-0.7	-1.3
2+25 W	-0.6	-2.2	5.17	-0.3	11:11:19	56	55	77.4	-0.2	-0.5
2+50 W	0.0	-2.9	5.13	0.0	11:12:29	55	46	78.2	0.3	0.0
2+75 W	0.7	-2.8	5.13	0.4	11:13:22	65	78.0	1.0	0.6	
3+00 W	0.9	-3.5	5.16	0.5	11:14:13	65	72.7	1.2	1.1	
3+25 W	0.7	-2.9	5.09	0.4	11:15:12	75	77.5	0.5	0.8	
3+50 W	2.2	-3.1	5.18	1.3	11:16:14	55	74.1	0.8	0.6	
3+75 W	5.5	-1.7	5.29	3.1	11:21:46	56	74.0	3.5	2.1	
4+00 W	6.7	-2.0	5.25	3.8	11:22:54	54	67.7	5.2	4.3	
4+25 W	8.4	-2.5	5.13	4.8	11:24:27	46	71.6	4.2	4.7	
4+50 W	9.2	-2.2	5.17	5.3	11:25:59	55	87.9	3.2	3.7	
4+75 W	9.2	-2.6	5.15	5.2	11:26:58	64	-88.7	1.9	2.5	
5+00 W	9.6	-2.4	5.14	5.5	11:27:47	54	80.1	0.6	1.2	
5+25 W	9.5	-1.7	5.15	5.4	11:30:13	44	87.4	0.4	0.5	
5+50 W	9.5	-1.7	5.13	5.4	11:31:08	56	65	-85.7	0.1	0.2
5+75 W	8.7	-2.4	5.08	4.9	11:32:01	65	84.0	-0.6	-0.3	
6+00 W	6.3	-0.8	5.10	4.7	11:33:10	55	-80.0	-1.2	-0.9	
6+25 W	7.4	-0.8	5.11	4.2	11:34:36	66	-86.6	-1.4	-1.3	

EOF

APPENDIX IV

MAGNETOMETER DATA





OMNI-PLUS Tie-line MAG/VLF V12L Ser #18120  
VLF TOTAL FIELD DATA (uncorrected)

Date 11 APR 88

Operator: 5000

Records: 89

Bat: 17.7 Volt Lithium: 3.48 Volt

Last time update: 4/11 7:00:00

Start of print: 4/12 7:41:07

Line 0+00 N Date 11 APR 88 24.8 #1  
POSITION I/P QUAD T.FLD TILT TIME CULT S DIR 4-FRA 5-FRA  
#1 -69.7 -0.1 3888. -7.0 8:30:56 99 0.0 !

Line 0+00 N Date 11 APR 88 24.8 #2  
POSITION I/P QUAD T.FLD TILT TIME CULT S DIR 4-FRA 5-FRA  
0+00 E 10.4 -0.1 26.63 5.9 8:33:46 59 -9.0

Line 0+50 N Date 11 APR 88 24.8 #3  
POSITION I/P QUAD T.FLD TILT TIME CULT S DIR 4-FRA 5-FRA  
0+25 W 10.6 -2.4 24.21 6.0 8:43:15 69 -4.9  
0+00 E 10.6 -1.7 23.13 6.0 8:46:33 66 69 3.1  
0+25 W 9.3 -1.2 22.79 5.3 8:47:38 55 59 24.8  
0+50 W 7.8 -2.2 22.16 4.4 8:53:48 55 69 2.7 -2.3  
0+75 W 6.9 -0.8 21.83 3.9 8:55:09 69 8.8 -3.0 -2.7  
1+00 W 3.9 1.4 21.12 2.2 8:56:11 66 59 8.8 -3.6 -3.3  
1+25 W 0.4 1.1 20.91 0.2 8:57:30 69 1.0 -5.9 -4.8  
1+50 W -2.2 3.2 20.86 -1.3 8:59:27 69 -1.6 -7.2 -6.6  
1+75 W -4.0 4.5 20.66 -2.3 9:01:20 59 2.4 -6.0 -6.6  
2+00 W -6.3 5.7 20.18 -3.6 9:02:16 55 59 1.1 -4.8 -5.4  
2+25 W -9.0 4.7 19.41 -5.1 9:07:42 28 -4.7 -5.1 -5.0  
2+50 W -14.9 3.1 19.76 -8.5 9:09:55 56 1.9 -7.7 -6.4  
2+75 W -17.4 3.3 20.31 -9.9 9:10:53 66 45 5.0 -9.7 -8.7  
3+00 W -19.1 4.6 20.29 -10.8 9:11:44 65 0.5 -7.1 -8.4

Line 1+50 N Date 11 APR 88 24.8 #17  
POSITION I/P QUAD T.FLD TILT TIME CULT S DIR 4-FRA 5-FRA  
3+00 W -13.7 4.9 18.89 -7.8 9:18:00 55 59 8.5  
2+75 W -13.8 1.7 18.21 -7.8 9:19:26 66 59 20.6  
2+50 W -11.0 1.9 17.19 -6.3 9:20:27 59 5.6  
2+25 W -8.2 2.3 16.88 -4.7 9:21:26 55 49 10.0 -4.6  
2+00 W -6.0 1.8 16.50 -3.4 9:22:30 39 5.9 -6.0 -5.3  
1+75 W -3.6 -0.7 16.52 -2.0 9:23:42 49 9.4 -5.6 -5.8  
1+50 W -1.3 0.1 17.48 -0.7 9:28:39 39 10.5 -5.4 -5.5  
1+25 W 0.5 -0.8 17.32 0.2 9:29:27 69 12.1 -4.9 -5.2  
1+00 W 3.5 -0.9 17.41 2.0 9:31:04 29 13.4 -4.9 -4.9  
0+75 W 6.8 -1.6 17.72 3.9 9:32:35 66 49 10.4 -6.4 -5.7  
0+50 W 7.5 -3.2 18.49 4.3 9:33:57 38 15.4 -6.0 -6.2  
0+25 W 8.4 -5.3 18.62 4.8 9:34:56 18 10.5 -3.2 -4.6  
0+00 E 9.8 -5.9 18.78 5.6 9:37:41 55 67 8.5 -2.2 -2.7  
0+25 E 12.1 -5.4 18.90 6.9 9:39:06 66 56 9.7 -3.4 -2.8  
0+50 E 14.4 -4.3 19.06 8.2 9:40:25 55 55 12.8 -4.7 -4.1  
0+75 E 14.6 -2.5 19.71 8.3 9:41:41 65 17.0 -4.0 -4.4  
1+00 E 12.6 -1.9 20.15 7.1 9:44:04 67 15.8 -0.3 -2.2

Line 2+50 N Date 11 APR 88 24.8 #34  
POSITION I/P QUAD T.FLD TILT TIME CULT S DIR 4-FRA 5-FRA  
0+50 E 14.3 -1.9 19.14 8.1 9:54:31 69 11.0  
0+25 E 14.4 -3.5 19.19 8.2 9:55:51 69 7.5  
0+00 E 15.4 -3.7 19.02 8.7 9:56:48 59 5.5

0+25 W	16.0	-3.8	18.66	9.1	9:58:37	66	59	7.5	1.5		
0+50 W	13.3	-4.2	18.45	7.6	10:00:21		69	3.3	-0.2	0.6	
0+75 W	10.7	-2.5	18.39	6.1	10:01:25		59	6.3	-4.1	-2.2	
1+00 W	8.0	-1.4	18.43	4.6	10:02:07		59	13.1	-6.0	-5.1	
1+25 W	7.2	-0.4	18.21	4.1	10:03:54	55	17	0.9	-5.0	-5.5	
1+50 W	6.4	-0.9	18.20	3.6	10:05:05	66	69	5.3	-3.0	-4.0	
1+75 W	3.5	3.1	17.88	2.0	10:06:13	55	49	11.0	-3.1	-3.1	
2+00 W	1.6	0.7	18.11	0.9	10:07:21		59	11.8	-4.8	-4.0	
2+25 W	0.8	2.8	18.21	0.5	10:09:55	66	49	7.3	-4.2	-4.5	
2+50 W	-0.8	4.6	17.87	-0.4	10:11:18	55	39	1.5	-2.8	-3.5	
2+75 W	-2.7	5.4	17.62	-1.5	10:12:37		49	4.2	-3.3	-3.1	
3+00 W	-4.8	7.1	17.52	-2.7	10:13:44		68	-0.9	-4.3	-3.8	
3+25 W	-6.0	6.5	17.61	-3.4	10:16:16		57	5.3	-4.2	-4.3	

Line 3+50 N Date 11 APR 88 24.8 #50

POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT S	DIR	4-FRA	5-FRA
3+00 W	2.6	4.5	17.25	1.5	10:33:13	48	0.5		
2+75 W	2.0	3.6	17.44	1.1	10:34:38	66 69	2.1		
2+50 W	3.4	1.8	17.04	1.9	10:35:46	55 68	-0.4		
2+25 W	3.3	0.0	16.98	1.9	10:36:48		58	-2.8	-1.2
2+00 W	5.2	-0.8	16.72	3.0	10:38:18		67	1.4	-1.9 -1.6
1+75 W	8.3	-1.3	16.79	4.7	10:40:07		56	-4.8	-3.9 -2.9
1+50 W	10.5	-0.3	16.82	6.0	10:42:06	66 56	0.7	-5.8	-4.9
1+25 W	11.5	-0.8	17.32	6.5	10:43:07		46	2.6	-4.8 -5.3
1+00 W	12.1	-2.8	17.80	6.9	10:44:05	55 56	2.0	-2.7	-3.8
0+75 W	13.4	-4.5	18.14	7.6	10:47:10	66 26	-0.4	-2.0	-2.4
0+50 W	14.4	-5.6	18.50	8.2	10:48:25		66	2.9	-2.4 -2.2
0+25 W	13.9	-5.6	18.64	7.9	10:51:38	55 55	-0.7	-1.6	-2.0
0+00 E	12.1	-6.3	19.10	6.9	10:52:24		46	5.3	1.0 -0.3

Line 4+50 N Date 11 APR 88 24.8 #63

POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT S	DIR	4-FRA	5-FRA
0+25 W	24.5	-0.3	18.07	13.7	11:02:14		49	5.0	
0+50 W	22.7	-2.9	17.26	12.8	11:04:03		49	-0.3	
0+75 W	17.1	-2.9	16.88	9.7	11:04:51	66 39	-0.7		
1+00 W	13.7	-2.9	17.37	7.8	11:05:52	55 59	-6.5	-9.0	
1+25 W	11.9	-3.1	17.16	6.7	11:07:24		39	-4.3	-8.0 -8.5
1+50 W	9.9	-1.5	17.19	5.6	11:08:20		49	-0.3	-5.2 -6.6
1+75 W	8.2	0.6	17.50	4.7	11:09:22		59	2.1	-4.2 -4.7
2+00 W	6.0	-0.2	17.47	3.4	11:10:17		79	-3.6	-4.2 -4.2
2+25 W	6.1	0.7	17.84	3.5	11:11:13		49	-2.6	-3.4 -3.8
2+50 W	9.8	0.8	17.96	5.6	11:12:18	66 59	6.8	1.0	-1.2
2+75 W	9.2	3.1	17.38	5.2	11:13:02		59	1.1	3.3 2.4
3+00 W	7.4	3.7	17.18	4.2	11:13:50		39	1.6	0.3 2.1
3+25 W	4.1	2.5	16.92	2.3	11:15:21	55 69	4.6	-4.3	-2.0
3+50 W	2.5	2.1	17.11	1.4	11:16:19		59	3.1	-5.7 -5.0
3+75 W	-0.9	3.2	17.24	-0.5	11:17:32		69	5.6	-5.6 -5.7
4+00 W	-3.6	3.7	17.52	-2.1	11:21:16		59	-1.0	-6.3 -6.0
4+25 W	-4.3	3.9	17.86	-2.4	11:22:56		58	-0.4	-5.4 -5.9
4+50 W	-5.4	3.0	17.89	-3.1	11:23:44		58	-2.7	-2.9 -4.2
4+75 W	-5.4	5.1	17.99	-3.1	11:24:37		38	0.3	-1.7 -2.3
5+00 W	-7.1	6.4	17.93	-4.0	11:26:27		57	13.2	-1.6 -1.7
5+25 W	-8.1	7.2	17.65	-4.6	11:29:35		57	-3.1	-2.4 -2.0
5+50 W	-10.2	7.2	17.61	-5.8	11:30:33	66 56	-2.5	-3.3	-2.9
5+75 W	-13.8	6.3	17.73	-7.8	11:31:19	55 55	-0.5	-5.0	-4.2
6+00 W	-13.6	4.5	18.29	-7.7	11:32:07		45	-5.5	-5.1 -5.1
6+25 W	-14.8	4.7	18.40	-8.4	11:33:32		35	-4.0	-2.5 -3.8
6+50 W	-14.0	6.0	18.40	-7.9	11:34:40		45	-5.2	-0.8 -1.7
6+75 W	-14.4	5.6	18.18	-8.1	11:35:50		66	-2.7	0.1 -0.4

EOF

OMNI-PLUS Tie-line MAG/VLF V12L Ser #18120

VLF TOTAL FIELD DATA (uncorrected)

Date 11 APR 88

Operator: 5000

Records: 89

Bat: 17.7 Volt Lithium: 3.48 Volt

Last time update: 4/11 7:00:00

Start of print: 4/12 7:42:30

Line	0+00	N	Date	11 APR 88	24.0	#1								
POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA	5-FRA				
#1	-70.1	-0.2	3784.	-12.0	8:30:56	99		0.0	!					

Line	0+00	N	Date	11 APR 88	24.0	#2								
POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA	5-FRA				
0+00	E	8.1	-4.4	5.49	4.6	8:33:46	69	58.1						

Line	0+50	N	Date	11 APR 88	24.0	#3								
POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA	5-FRA				
0+25	W	7.3	-4.6	5.43	4.1	8:43:15	68	65.8						
0+00	E	7.4	-4.6	5.34	4.2	8:46:33	66	67	73.2					
0+25	W	5.6	-5.1	5.28	3.2	8:47:38	55	65	-85.9					
0+50	W	5.9	-5.5	4.93	3.3	8:53:48	55	75	72.7	-1.8				
0+75	W	6.4	-4.6	4.86	3.7	8:55:09		65	76.6	-0.4	-1.1			
1+00	W	8.3	-4.1	4.78	4.7	8:56:11	66	65	78.7	1.9	0.7			
1+25	W	7.8	-3.3	4.67	4.4	8:57:30		56	73.0	2.1	2.0			
1+50	W	9.0	-2.3	4.58	5.1	8:59:27		65	69.8	1.1	1.6			
1+75	W	8.9	-2.2	4.50	5.1	9:01:20		66	73.3	1.1	1.1			
2+00	W	10.0	-2.4	4.43	5.7	9:02:16	55	65	71.5	1.3	1.2			
2+25	W	8.7	-2.2	4.66	4.9	9:07:42		47	67.8	0.4	0.8			
2+50	W	8.0	-2.8	4.86	4.5	9:09:55		56	73.4	-1.4	-0.5			
2+75	W	8.4	-2.5	4.97	4.8	9:10:53	66	47	74.4	-1.3	-1.4			
3+00	W	8.4	-2.3	5.10	4.8	9:11:44		28	69.5	0.2	-0.6			

Line	1+50	N	Date	11 APR 88	24.0	#17								
POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA	5-FRA				
3+00	W	9.6	1.4	5.46	5.5	9:18:00	55	65	76.7					
2+75	W	8.0	0.7	5.38	4.5	9:19:26	66	55	85.2					
2+50	W	7.3	0.5	5.33	4.2	9:20:27		56	72.8					
2+25	W	6.0	0.3	5.29	3.4	9:21:26	55	55	77.5	2.4				
2+00	W	4.8	-0.3	5.24	2.7	9:22:30		56	74.8	2.6	2.5			
1+75	W	3.2	-1.0	5.27	1.8	9:23:42		46	75.0	3.1	2.8			
1+50	W	2.6	-1.6	5.23	1.5	9:28:39		66	75.2	2.8	2.9			
1+25	W	2.2	-1.5	5.25	1.2	9:29:27		56	77.5	1.8	2.3			
1+00	W	1.4	-1.9	5.23	0.8	9:31:04		66	81.5	1.3	1.5			
0+75	W	3.9	-1.0	5.22	2.2	9:32:35	66	56	76.2	-0.3	0.5			
0+50	W	4.5	-1.0	5.31	2.5	9:33:57		56	77.4	-2.7	-1.5			
0+25	W	2.8	-2.1	5.28	1.6	9:34:56		46	75.2	-1.1	-1.9			
0+00	E	0.1	-2.8	5.29	0.0	9:37:41	55	66	77.3	3.1	1.0			
0+25	E	0.0	-3.4	5.18	0.0	9:39:06	66	55	78.0	4.1	3.6			
0+50	E	0.6	-3.2	5.11	0.3	9:40:25	55	55	78.2	1.3	2.7			
0+75	E	0.5	-2.9	5.18	0.3	9:41:41		65	84.2	-0.6	0.3			
1+00	E	0.6	-3.2	5.23	0.3	9:44:04		56	78.6	-0.3	-0.5			

Line	2+50	N	Date	11 APR 88	24.0	#34								
POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA	5-FRA				
0+50	E	-0.5	-2.4	5.24	-0.3	9:54:31		66	79.1					
0+25	E	-0.8	-3.6	5.27	-0.5	9:55:51		65	80.2					
0+00	E	-0.2	-3.7	5.30	-0.1	9:56:48		45	77.9					

0+25 W	-1.2	-3.3	5.32	-0.7	9:58:37	66	66	73.8	0.0	
0+50 W	-1.2	-2.0	5.32	-0.7	10:00:21		66	74.2	-0.8	-0.4
0+75 W	-0.7	-2.3	5.38	-0.4	10:01:25		26	74.2	-0.3	-0.6
1+00 W	-0.3	-2.0	5.38	-0.2	10:02:07		66	80.0	0.8	0.2
1+25 W	-0.5	-1.8	5.47	-0.2	10:03:54	55	66	68.6	0.7	0.7
1+50 W	0.9	-1.0	5.52	0.5	10:05:05	66	66	72.4	0.9	0.8
1+75 W	2.0	-1.5	5.59	1.1	10:06:13	55	57	79.8	2.0	1.4
2+00 W	3.4	-0.2	5.61	1.9	10:07:21		56	78.8	2.7	2.3
2+25 W	5.3	-0.7	5.73	3.0	10:09:55	66	46	76.6	3.3	3.0
2+50 W	4.9	-0.4	5.76	2.8	10:11:18	55	47	71.0	2.8	3.0
2+75 W	6.0	-0.7	5.79	3.4	10:12:37		66	73.6	1.3	2.0
3+00 W	7.3	-0.7	5.78	4.2	10:13:44		68	69.3	1.8	1.5
3+25 W	8.0	-0.7	5.88	4.5	10:16:16		47	73.3	2.5	2.1

Line	3+50 N	Date	11 APR 88	24.0	#50					
POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA	5-FRA
3+00 W	4.1	0.1	5.66	2.3	10:33:13		56	72.5		
2+75 W	2.4	0.6	5.73	1.3	10:34:38	66	66	73.0		
2+50 W	2.3	-0.1	5.67	1.3	10:35:46	55	66	72.6		
2+25 W	0.6	0.3	5.68	0.3	10:36:48		46	69.3	2.0	
2+00 W	1.5	0.0	5.60	0.8	10:38:18		66	73.1	1.5	1.7
1+75 W	1.5	-0.2	5.65	0.9	10:40:07		58	65.5	-0.1	0.7
1+50 W	1.2	0.3	5.64	0.7	10:42:06	66	56	74.3	-0.5	-0.3
1+25 W	0.9	0.6	5.73	0.5	10:43:07		56	78.1	0.5	0.0
1+00 W	0.5	-0.3	5.79	0.3	10:44:05	55	56	74.0	0.8	0.6
0+75 W	-0.9	-0.1	5.76	-0.5	10:47:10	66	56	72.2	1.4	1.1
0+50 W	-3.6	-1.0	5.76	-2.1	10:48:25		58	69.5	3.4	2.4
0+25 W	-3.9	-1.1	5.64	-2.2	10:51:38	55	58	69.3	4.1	3.7
0+00 E	-6.4	-1.4	5.64	-3.7	10:52:24		66	74.1	3.3	3.7

Line	4+50 N	Date	11 APR 88	24.0	#63					
POSITION	I/P	QUAD	T.FLD	TILT	TIME	CULT	S	DIR	4-FRA	5-FRA
0+25 W	0.4	-2.7	5.23	0.2	11:02:14		75	80.3		
0+50 W	0.5	-3.0	5.17	0.3	11:04:03		55	75.1		
0+75 W	1.2	-1.7	5.16	0.6	11:04:51	66	65	75.8		
1+00 W	0.2	-1.7	5.10	0.1	11:05:52	55	66	65.9	0.2	
1+25 W	2.4	-0.1	5.10	1.4	11:07:24		65	69.6	0.6	0.4
1+50 W	2.9	0.4	5.08	1.7	11:08:20		45	73.1	2.4	1.5
1+75 W	2.1	0.7	5.15	1.2	11:09:22		65	75.6	1.4	1.9
2+00 W	2.0	0.3	5.08	1.1	11:10:17		66	71.1	-0.8	0.3
2+25 W	1.5	-0.7	5.13	0.8	11:11:13		66	68.6	-1.0	-0.9
2+50 W	3.7	-1.6	5.12	2.1	11:12:18	66	55	76.4	0.6	-0.2
2+75 W	4.5	-1.4	5.06	2.6	11:13:02		66	73.0	2.8	1.7
3+00 W	5.8	-1.3	5.06	3.3	11:13:50		66	70.0	3.0	2.9
3+25 W	5.0	-1.0	5.03	2.9	11:15:21	55	65	78.6	1.5	2.2
3+50 W	5.2	-1.8	5.03	2.9	11:16:19		65	75.5	-0.1	0.7
3+75 W	6.1	-1.9	4.99	3.5	11:17:32		55	79.3	0.2	0.0
4+00 W	6.8	-1.9	5.13	3.8	11:21:16		56	71.4	1.5	0.8
4+25 W	6.6	-3.1	5.11	3.7	11:22:56		56	75.4	1.1	1.3
4+50 W	8.1	-2.4	5.14	4.6	11:23:44		55	74.9	1.0	1.0
4+75 W	10.9	-1.5	5.20	6.2	11:24:37		66	74.2	3.3	2.1
5+00 W	11.9	-1.5	5.14	6.7	11:26:27		34	-87.6	4.6	3.9
5+25 W	12.8	-0.2	5.12	7.3	11:29:35		65	75.5	3.2	3.9
5+50 W	14.0	-0.3	5.11	7.9	11:30:33	66	45	78.6	2.3	2.7
5+75 W	13.5	0.6	5.11	7.7	11:31:19	55	54	80.1	1.6	1.9
6+00 W	11.4	-0.5	5.13	6.5	11:32:07		55	77.0	-1.0	0.3
6+25 W	12.0	0.2	5.28	6.8	11:33:32		56	74.7	-2.3	-1.7
6+50 W	13.0	1.6	5.33	7.4	11:34:40		56	73.5	0.0	-1.2
6+75 W	11.8	2.8	5.29	6.7	11:35:50		56	80.5	0.8	0.4

EOF

**APPENDIX V**

**STATEMENT OF COSTS**



STATEMENT OF COSTS

CONSOLIDATED PETROQUIN RESOURCES LTD.  
ERIC PROPERTY  
PROJECT 89BC009  
Period of Work April 09 - April 13, 1989

Project Preparation	\$ 462.72
Mobilization/Demobilization	1,228.90
Helicopter Support(6 hours)	3,960.00
Domicile	449.50
Grid Establishment 4 kilometers	600.00
Geophysical Surveying 4 kilometers Magnetometer and VLF-EM Surveying	1,600.00
Supplies	69.37
Accounting/Communication/Freight	515.48
Report Compilation, Drafting and Geophysical Consultation	1,815.00
	-----
	10,700.97
15% Project Management Fee	1,530.48
	-----
Total Cost to date	\$ 12,231.45
	=====



Line:	0+00 N	Date:	0 JAN 89	#1
POSITION	FIELD	ERR	DRIFT	TIME DS
0+50 W	59019.4	.02	0.0	8:51:17 88
	-0.9			
0+75 W	59072.1	.02	0.0	8:53:15 88
	20.3			
1+00 W	59103.1	.02	0.0	8:56:03 88
	12.3			
1+25 W	49025.3	1.1	0.0	8:57:02 32
	344.7			
1+50 W	54132.9	1.2	0.0	8:58:08 32
	9835.1			
1+75 W	58951.6	.02	0.0	8:59:23 88
	18.2			
2+00 W	58958.6	.02	0.0	9:02:15 88
	13.1			

Line:	1+00 N	Date:	0 JAN 89	#8
POSITION	FIELD	ERR	DRIFT	TIME DS
3+00 W	53459.6	.63	0.0	9:15:03 32
	1180.9			
2+75 W	55864.7	1.3	0.0	9:19:33 32
	6453.9			
2+50 W	50389.0	1.0	0.0	9:20:25 32
	7357.4			
2+25 W	54746.8	.86	0.0	9:21:17 32
	8380.7			
2+00 W	42681.1	1.6	0.0	9:22:10 22
	2425.6			
1+75 W	52783.3	.85	0.0	9:23:24 32
	2375.4			
1+50 W	40742.2	1.1	0.0	9:28:43 32
	6609.5			
1+25 W	59063.6	.08	0.0	9:30:09 68
	10.9			
1+00 W	45406.4	1.2	0.0	9:31:09 32
	7381.5			
0+75 W	64728.6	.69	0.0	9:32:08 32
	-1439.1			
0+50 W	52125.0	1.6	0.0	9:33:50 32
	3884.5			
0+25 W	50194.3	.71	0.0	9:35:25 32
	7531.8			
0+00 E	42534.1	1.6	0.0	9:37:36 22
	3019.5			
0+25 E	53554.1	1.0	0.0	9:39:02 32
	958.9			
0+50 E	63344.8	1.5	0.0	9:40:26 32
	-8701.9			
0+75 E	63808.1	.80	0.0	9:42:43 32
	-9509.1			
1+00 E	58822.5	.02	0.0	9:44:15 88
	31.7			

Line:	2+00 N	Date:	0 JAN 89	#25
POSITION	FIELD	ERR	DRIFT	TIME DS
1+00 E	50779.5	.61	0.0	9:50:08 32
	5827.2			
0+75 E	58683.8	.03	0.0	9:52:12 88
	3.0			
0+50 E	41139.3	1.2	0.0	9:53:17 22
	5241.5			

0+25 E	55488.4	.65	0.0	9:56:00	32
	6691.4				
0+00 E	58930.0	.02	0.0	9:57:16	88
	19.3				
0+25 W	37872.6	2.5	0.0	9:59:10	22
	1739.8				
0+50 W	58983.0	.02	0.0	10:00:09	88
	38.1				
0+75 W	55831.5	.93	0.0	10:01:07	38
	6554.3				
1+00 W	59127.4	.10	0.0	10:02:04	58
	44.6				
1+25 W	59089.7	.08	0.0	10:03:49	58
	20.6				
1+50 W	59093.2	.02	0.0	10:05:01	88
	11.7				
1+75 W	59029.7	.02	0.0	10:06:01	88
	13.5				
2+00 W	55684.1	.62	0.0	10:08:33	32
	6293.5				
2+25 W	58814.5	.02	0.0	10:10:09	88
	14.8				
2+50 W	58735.0	.02	0.0	10:11:31	88
	19.0				
2+75 W	58821.2	.02	0.0	10:12:37	88
	23.3				
3+00 W	58779.5	.02	0.0	10:13:44	88
	-9.6				
3+25 W	58896.1	.02	0.0	10:16:10	88
	11.8				

Line: 3+00 N Date: 0 JAN 89 #43

POSITION	FIELD	ERR	DRIFT	TIME	DS
3+00 W	58997.4	.02	0.0	10:32:36	88
	27.2				
2+75 W	58876.7	.02	0.0	10:34:38	88
	18.5				
2+50 W	58910.7	.02	0.0	10:35:43	88
	6.8				
2+25 W	59017.5	.02	0.0	10:37:16	88
	15.9				
2+00 W	59060.5	.02	0.0	10:38:50	88
	13.6				
1+75 W	58904.7	.02	0.0	10:39:50	88
	2.7				
1+50 W	58839.6	.02	0.0	10:41:31	88
	-12.5				
1+25 W	58845.2	.02	0.0	10:42:47	88
	6.0				
1+00 W	58840.3	.02	0.0	10:44:52	88
	-18.9				
0+75 W	58876.7	.03	0.0	10:47:02	88
	-21.3				
0+50 W	58923.2	.03	0.0	10:48:22	88
	2.3				
0+25 W	59048.0	.03	0.0	10:49:35	88
	28.2				
0+00 E	59121.3	.02	0.0	10:50:50	88
	24.2				
0+25 E	59195.6	.03	0.0	10:53:04	88
	36.8				

Line: 4+00 N Date: 0 JAN 89 #57

POSITION	FIELD	ERR	DRIFT	TIME	DS
0+25 E	58938.4	.02	0.0	11:00:49	88
	22.7				



0+00 E	58958.9	.02	0.0	11:02:03	88
	29.0				
0+25 W	58937.8	.02	0.0	11:03:01	88
	11.8				
0+50 W	38702.3	1.1	0.0	11:03:58	32
	330.0				
0+75 W	58963.6	.03	0.0	11:04:50	88
	17.4				
1+00 W	53003.4	1.0	0.0	11:05:48	32
	1734.9				
1+25 W	58815.7	.07	0.0	11:07:31	58
	30.5				
1+50 W	58826.7	.02	0.0	11:08:22	88
	14.9				
1+75 W	59023.2	.04	0.0	11:09:13	88
	61.6				
2+00 W	63174.3	.94	0.0	11:10:06	32
	-8391.1				
2+25 W	38764.4	.92	0.0	11:11:19	32
	9930.5				
2+50 W	57668.1	.34	0.0	11:12:29	38
	2443.5				
2+75 W	49535.0	.85	0.0	11:13:22	32
	8761.3				
3+00 W	54671.1	1.0	0.0	11:14:13	32
	8358.0				
3+25 W	58910.4	.02	0.0	11:15:12	88
	18.9				
3+50 W	58841.8	.02	0.0	11:16:14	88
	0.2				
3+75 W	51886.2	3.0	0.0	11:21:46	22
	3799.6				
4+00 W	58706.5	.02	0.0	11:22:54	88
	-27.7				
4+25 W	58880.8	.03	0.0	11:24:27	88
	24.8				
4+50 W	58824.1	.02	0.0	11:25:59	88
	1.9				
4+75 W	58850.1	.03	0.0	11:26:58	88
	18.2				
5+00 W	58846.5	.02	0.0	11:27:47	88
	12.8				
5+25 W	58782.2	.02	0.0	11:30:13	88
	9.9				
5+50 W	39964.9	.92	0.0	11:31:08	32
	7355.2				
5+75 W	41747.6	.63	0.0	11:32:01	32
	3773.0				
6+00 W	40350.3	1.1	0.0	11:33:10	32
	6636.3				
6+25 W	43227.8	1.0	0.0	11:34:36	32
	771.2				

Checksum Error! Record #84

Line:	0+00 N	Date:	0 JAN 89	#84
POSITION	FIELD	ERR	DRIFT	TIME DS
0+00 E	0.0	.00	0.0	0:00:00 0
	0.0			

EOF

EDA OMNI-IV Tie-line MAG Ser #18120  
TOTAL FIELD DATA (Base stn. corrected)  
& GRADIENT

Date: 11 APR 89  
Operator: 5000  
Reference field: 58564.0  
Datum subtracted: 0.0  
Records: 89  
Bat: 17.7 Volt Lithium: 3.48 Volt  
Last time update: 4/11 7:00:00  
Start of print: 4/12 7:22:45

Base stn. Pos: 10+00 E Line: 10+25 N  
Last time update: 4/11 7:00:00  
Start of print: 4/12 7:22:49

#1 56345.3 .00 24.4 8:30:56 88

Line: 0+00 N Date: 11 APR 89 #2  
POSITION FIELD ERR DRIFT TIME DS  
0+00 E 58862.8 .07 25.6 8:33:46 88  
-151.8

Line: 0+50 N Date: 11 APR 89 #3  
POSITION FIELD ERR DRIFT TIME DS  
0+25 W 58957.9 .07 23.4 8:43:15 88  
-55.6  
0+00 E 58975.6 .12 22.1 8:46:33 88  
-147.8  
0+25 W 59065.8 .03 22.1 8:47:38 88  
5.9  
0+50 W 59047.8 .09 13.4 8:53:48 88  
-157.8  
0+75 W 59031.7 .03 11.1 8:55:09 88  
0.6  
1+00 W 59055.1 .06 8.9 8:56:11 88  
-68.6  
1+25 W 59204.7 .08 5.6 8:57:30 88  
-66.0  
1+50 W 59009.1 .04 4.1 8:59:27 88  
20.8  
1+75 W 58865.1 .07 3.2 9:01:20 88  
-106.5  
2+00 W 58844.5 .03 2.5 9:02:16 88  
-0.7  
2+25 W 58971.0 .07 -1.6 9:07:42 88  
-47.8  
2+50 W 59044.5 .06 -1.4 9:09:55 88  
-54.4  
2+75 W 59061.0 .03 -1.7 9:10:53 88  
-16.8  
3+00 W 59044.9 .11 -2.4 9:11:44 88  
-137.7

Line: 1+50 N Date: 11 APR 89 #17  
POSITION FIELD ERR DRIFT TIME DS  
3+00 W 59162.3 .06 -3.5 9:18:00 88  
-56.3  
2+75 W 59052.7 .05 -4.1 9:19:26 88  
42.6

2+50 W	58985.6	.07	-7.2	9:20:27	88
	-102.9				
2+25 W	58865.9	.09	-7.9	9:21:26	88
	-103.1				
2+00 W	58796.4	.03	-7.4	9:22:30	88
	-19.1				
1+75 W	58884.2	.06	-4.4	9:23:42	88
	-33.7				
1+50 W	58937.5	.08	-2.2	9:28:39	88
	-95.6				
1+25 W	59018.0	.12	-3.3	9:29:27	88
	-77.2				
1+00 W	59092.5	.07	-2.6	9:31:04	88
	-57.0				
0+75 W	59225.4	.04	-0.8	9:32:35	88
	24.9				
0+50 W	59024.0	.03	0.9	9:33:57	88
	-1.0				
0+25 W	58902.1	.14	0.4	9:34:56	88
	-129.5				
0+00 E	59008.0	.03	0.5	9:37:41	88
	5.7				
0+25 E	58999.7	.03	1.0	9:39:06	88
	-18.4				
0+50 E	58877.7	.48	0.6	9:40:25	78
	-170.5				
0+75 E	58915.7	.06	1.3	9:41:41	88
	-51.0				
1+00 E	58756.0	.07	1.1	9:44:04	88
	-82.3				

Line: 2+50 N Date: 11 APR 89 #34

POSITION	FIELD	ERR	DRIFT	TIME	DS
0+50 E	58801.3	.10	6.6	9:54:31	88
	-148.9				
0+25 E	58864.5	.08	5.7	9:55:51	88
	-76.2				
0+00 E	59091.8	.03	6.0	9:56:48	88
	-6.1				
0+25 W	59167.4	.03	6.5	9:58:37	88
	-11.4				
0+50 W	59102.8	.07	5.9	10:00:21	88
	-9.6				
0+75 W	59079.8	.05	6.6	10:01:25	88
	42.2				
1+00 W	58995.0	.06	6.6	10:02:07	88
	-49.8				
1+25 W	59009.3	.06	7.0	10:03:54	88
	39.5				
1+50 W	59005.4	.13	7.5	10:05:05	88
	-169.4				
1+75 W	58996.1	1.2	6.8	10:06:13	88
	-46.6				
2+00 W	59110.0	.36	6.2	10:07:21	88
	-185.1				
2+25 W	58957.0	.08	8.1	10:09:55	88
	-128.9				
2+50 W	58926.4	.08	6.6	10:11:18	88
	50.5				
2+75 W	58734.7	.06	7.4	10:12:37	88
	-44.3				
3+00 W	58779.6	.11	7.3	10:13:44	88
	-108.9				
3+25 W	58762.5	.03	7.7	10:16:16	88
	-12.6				

Line:	3+50 N	Date:	11 APR 89	#50
POSITION	FIELD	ERR	DRIFT	TIME DS
	3+00 W 59083.7	.04	14.3	10:33:13 88
	33.1			
	2+75 W 58800.3	.05	14.5	10:34:38 88
	-27.4			
	2+50 W 58772.1	.08	16.1	10:35:46 88
	-67.8			
	2+25 W 58890.8	.09	17.3	10:36:48 88
	-144.0			
	2+00 W 58985.8	.11	18.3	10:38:18 88
	-113.3			
	1+75 W 59049.6	.03	19.9	10:40:07 88
	7.7			
	1+50 W 59148.5	.03	20.4	10:42:06 88
	20.7			
	1+25 W 59031.4	.08	19.1	10:43:07 88
	-158.4			
	1+00 W 59114.5	.42	17.4	10:44:05 88
	-166.5			
	0+75 W 59075.2	.08	17.5	10:47:10 88
	51.5			
	0+50 W 58891.8	.04	18.5	10:48:25 88
	36.4			
	0+25 W 58955.4	.04	21.7	10:51:38 88
	20.4			
	0+00 E 58664.4	.06	20.5	10:52:24 88
	-38.1			

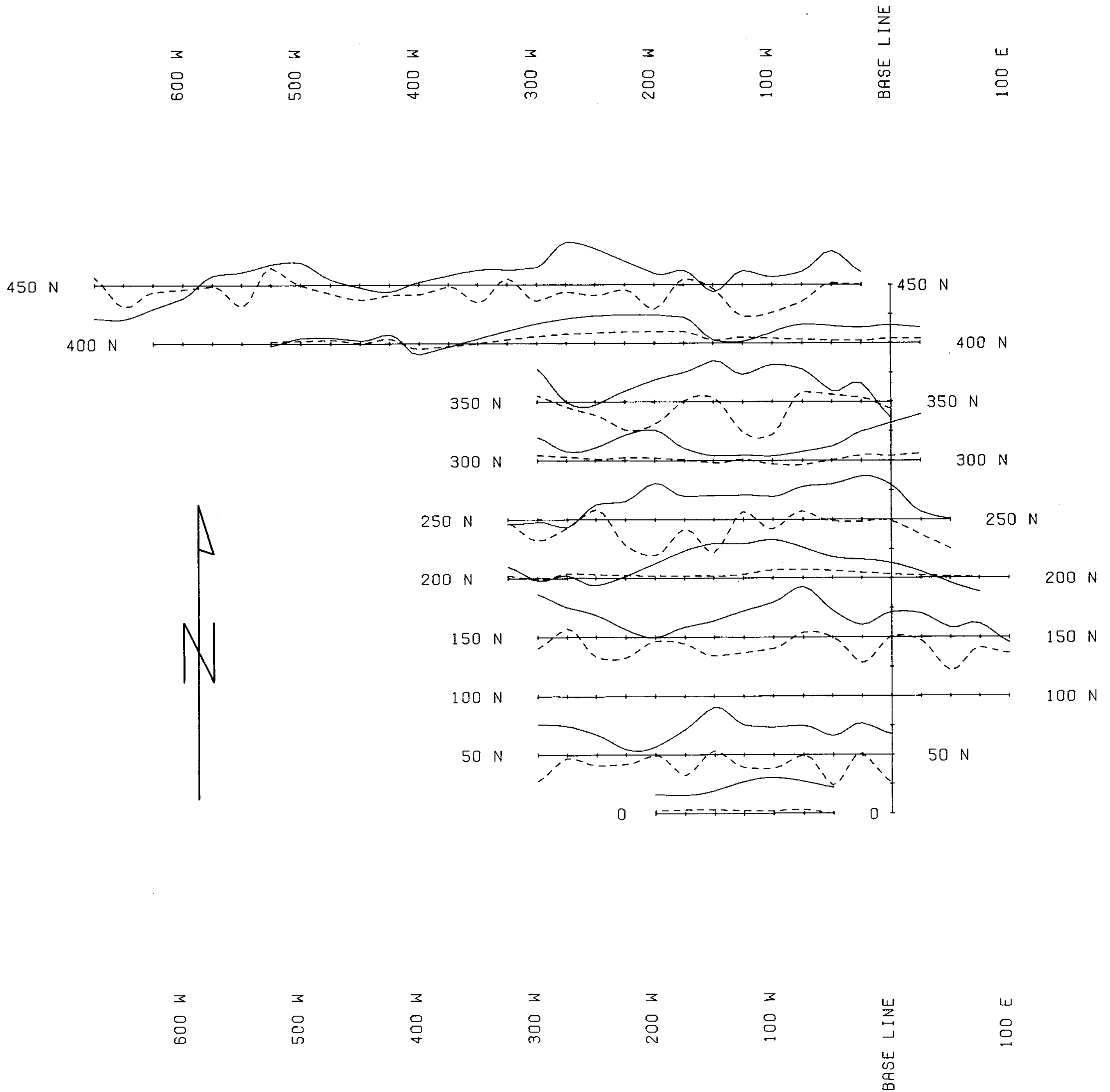
Line:	4+50 N	Date:	11 APR 89	#63
POSITION	FIELD	ERR	DRIFT	TIME DS
	0+25 W 58907.1	.03	14.3	11:02:14 88
	0.4			
	0+50 W 59088.6	.03	14.5	11:04:03 88
	8.9			
	0+75 W 58913.2	.08	14.9	11:04:51 88
	-87.0			
	1+00 W 58867.3	.11	14.4	11:05:52 88
	-143.6			
	1+25 W 58922.8	.21	15.0	11:07:24 88
	-160.2			
	1+50 W 58739.6	.04	16.0	11:08:20 88
	-17.6			
	1+75 W 58925.3	.04	17.5	11:09:22 88
	29.6			
	2+00 W 58896.9	.12	18.7	11:10:17 88
	-125.9			
	2+25 W 59002.4	.04	19.5	11:11:13 88
	-23.4			
	2+50 W 59108.9	.06	20.3	11:12:18 88
	-54.6			
	2+75 W 59165.2	.06	19.9	11:13:02 88
	-36.2			
	3+00 W 58951.6	.08	19.8	11:13:50 88
	-82.9			
	3+25 W 58929.0	.04	19.8	11:15:21 88
	32.4			
	3+50 W 58928.8	.09	18.4	11:16:19 88
	-92.6			
	3+75 W 58881.4	.03	18.5	11:17:32 88
	-7.7			
	4+00 W 58825.8	.08	17.4	11:21:16 88
	-46.7			
	4+25 W 58743.3	.07	17.6	11:22:56 88
	-51.3			
	4+50 W 58778.3	.10	17.1	11:23:44 88

		-74.8				
4+75	W	58845.0	.07	16.4	11:24:37	88
		-44.6				
5+00	W	58990.7	.03	16.9	11:26:27	88
		-1.8				
5+25	W	58978.0	.09	17.1	11:29:35	88
		89.0				
5+50	W	58913.5	.09	17.2	11:30:33	88
		-111.2				
5+75	W	58882.3	.02	17.0	11:31:19	88
		-3.7				
6+00	W	58691.8	.04	17.2	11:32:07	88
		-20.9				
6+25	W	58600.6	.06	17.3	11:33:32	88
		-33.3				
6+50	W	58511.6	.13	17.4	11:34:40	88
		-111.5				
6+75	W	58519.6	.06	17.2	11:35:50	88
		43.8				

Checksum Error! Record #90

Line:	0+00	N	Date:	11	APR	89	#90
POSITION	FIELD	ERR	DRIFT	TIME	DS		
0+00	E	0.0	.00	0.0	0:00:00	0	
		0.0					

EOF



**LEGEND**

PROFILES POSITIVE UP  
 SOLID LINES : TOTAL FIELD 250 GAMMAS / CM  
                   BASE VALUE 58800 GAMMAS  
 DASHED LINES : GRADIENT 150 GAMMAS/M / CM

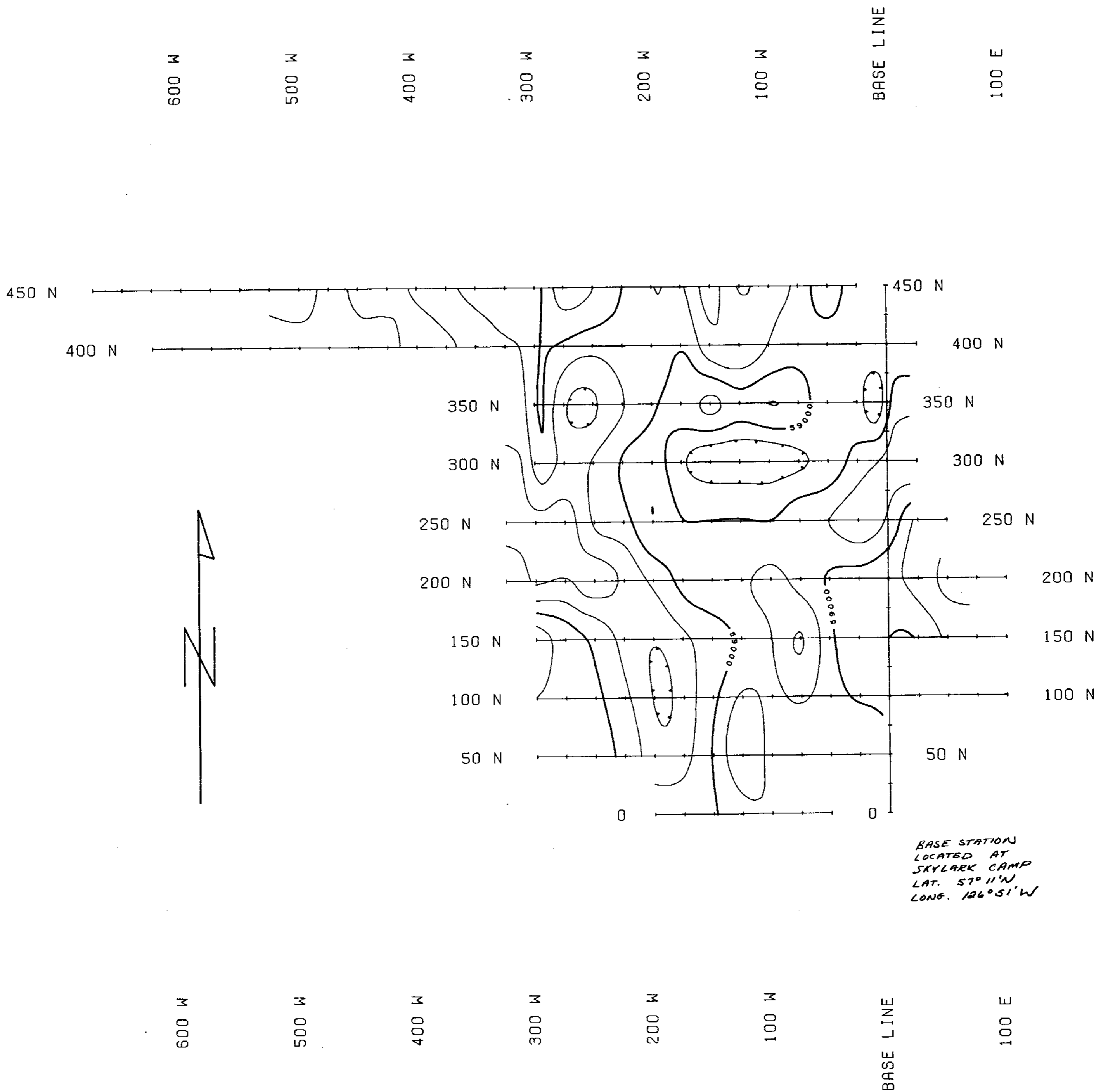
INSTRUMENTATION - MOBILES : EDA OMNI PLUS  
                           PROTON PRECESSION MAGNETOMETERS  
 - BASE : EDA OMNI IV

RANGE -  
 HIGH : 59225.4 GAMMAS  
 MEDIAN : 58868.5 GAMMAS  
 LOW : 58505.0 GAMMAS

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CONSOLIDATED PETROQUIN RESOURCES LTD		
ERIC PROPERTY OMINECA MINING DISTRICT, BRITISH COLUMBIA		
GEOLOGICAL BRANCH ASSESSMENT REPORT		
MAGNETIC PROFILE MAP TOTAL FIELD AND GRADIENT		
18,920		
SCALE: 1 : 2500	N.T.S.: 94 E/2	FIGURE NO: G1A
OWN.BY: J.R.A.	DATE: MAY, 1989	FILE NO:
CHKD.BY:	PROJECT NO: 89BC009	

**HI-TEC**  
RESOURCE MANAGEMENT LTD.



**LEGEND**

CONTOUR INTERVAL : 100 GAMMAS  
 POSTED : 500 GAMMAS  
 TREND ROTATION ANGLE : 0 DEGREES

INSTRUMENTATION - MOBILES : EDA OMNI PLUS  
 PROTON PRECESSION MAGNETOMETERS  
 - FIELD : EDA OMNI IV

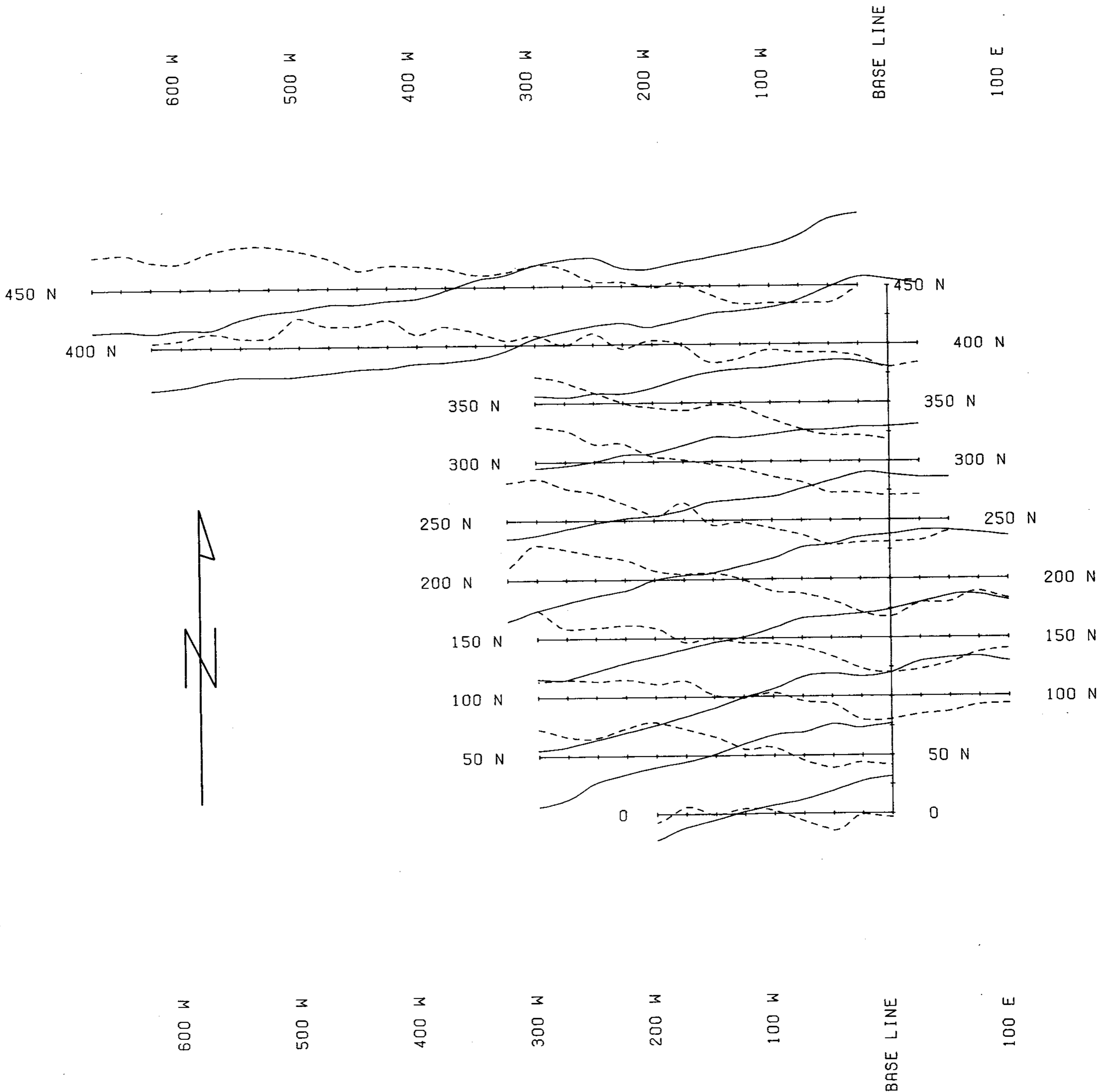
RANGE -  
 HIGH : 59225.4 GAMMAS  
 MEDIAN : 58868.5 GAMMAS  
 LOW : 58505.0 GAMMAS



CONSOLIDATED PETROQUIN RESOURCES LTD		
ERIC PROPERTY OMINECA MINING DISTRICT, BRITISH COLUMBIA		
GEOLOGICAL BRANCH ASSESSMENT REPORT		
MAGNETICS CONTOUR MAP		
<b>18,920</b> TOTAL FIELD		
SCALE: 1 : 2500	N.T.S.: 94 E/2	FIGURE NO: <b>G1B</b>
DWN.BY: J.R.A.	DATE: MAY, 1989	
CHKD.BY:	PROJECT NO: 89BC009	FILE NO:



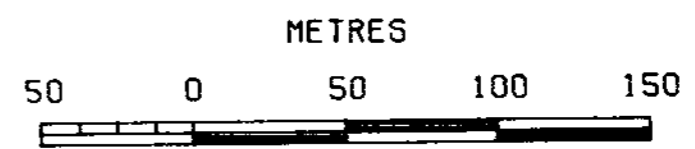
**M-TEC**  
RESOURCE MANAGEMENT LTD.



**LEGEND**

PROFILES POSITIVE UP  
 SOLID LINES : DIP ANGLE            10 % / CM  
     BASE VALUE            0 %  
 DASHED LINES : QUADRATURE        5 % / CM  
     BASE VALUE            0 %

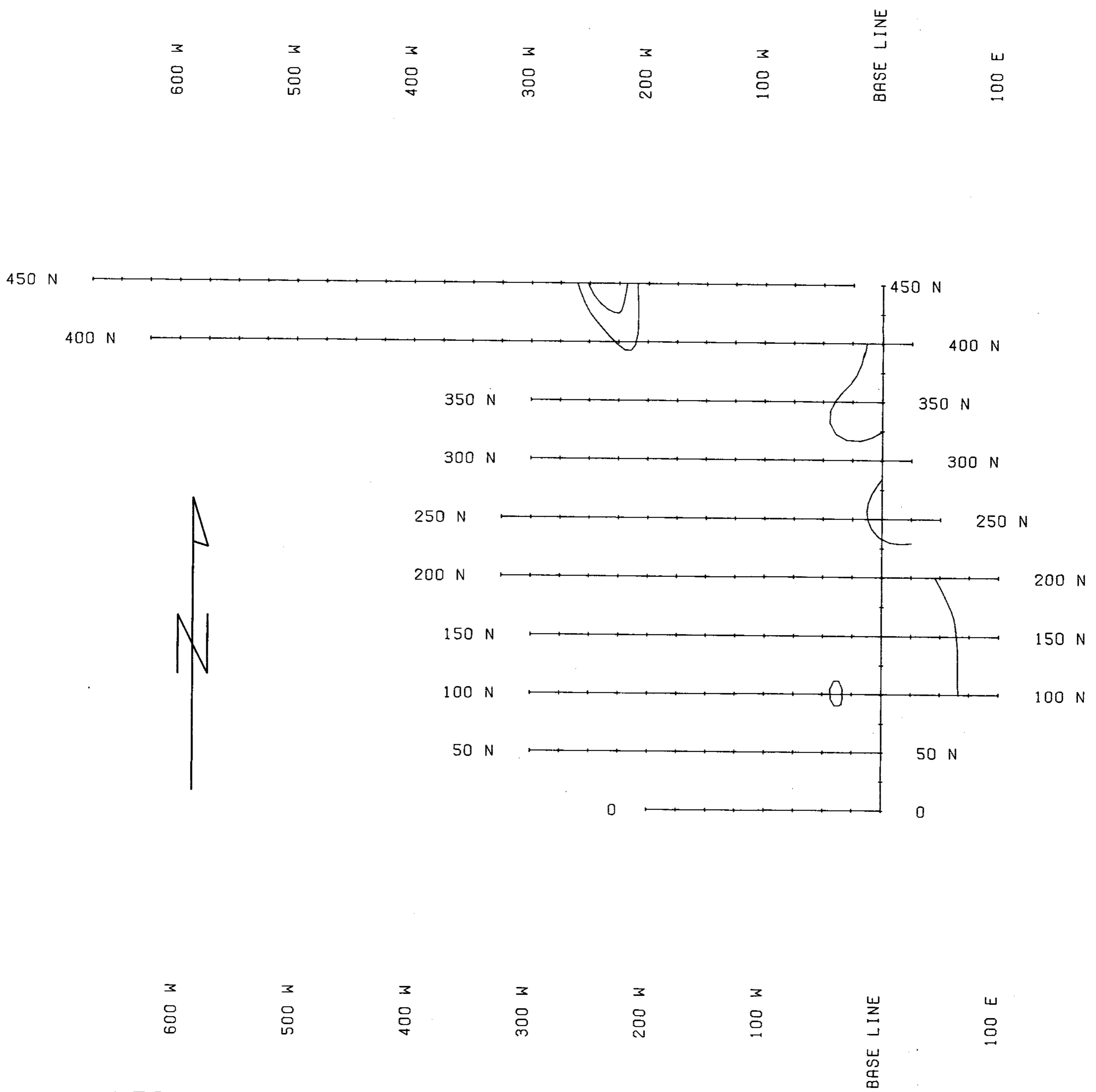
ALL READINGS EQUIVALENT TO FACING APPROXIMATELY EAST  
 INSTRUMENTATION :  
 EDA OMNI PLUS COMBINED PROTON PRECESSION MAGNETOMETER & VLF RECEIVER  
 TRANSMITTER : NLK                    24.8 KHZ  
     JIM CREEK, WASHINGTON  
     (SEATTLE)



<b>CONSOLIDATED PETROQUIN RESOURCES LTD</b>			
<b>ERIC PROPERTY</b> OMINECA MINING DISTRICT, BRITISH COLUMBIA			
<b>VLF-EM PROFILES - SEATTLE</b>			
<b>GEOLOGICAL BRANCH</b> ASSESSMENT OF DIP ANGLE AND QUADRATURE			
<b>18920</b> 	SCALE: 1 : 2500	N.T.S.: 94 E/2	FIGURE NO: <b>G2A</b>
	DWN. BY: J.R.A.	DATE: MAY, 1989	
	CHKD. BY:	PROJECT NO: 89BC009	FILE NO:







**LEGEND**

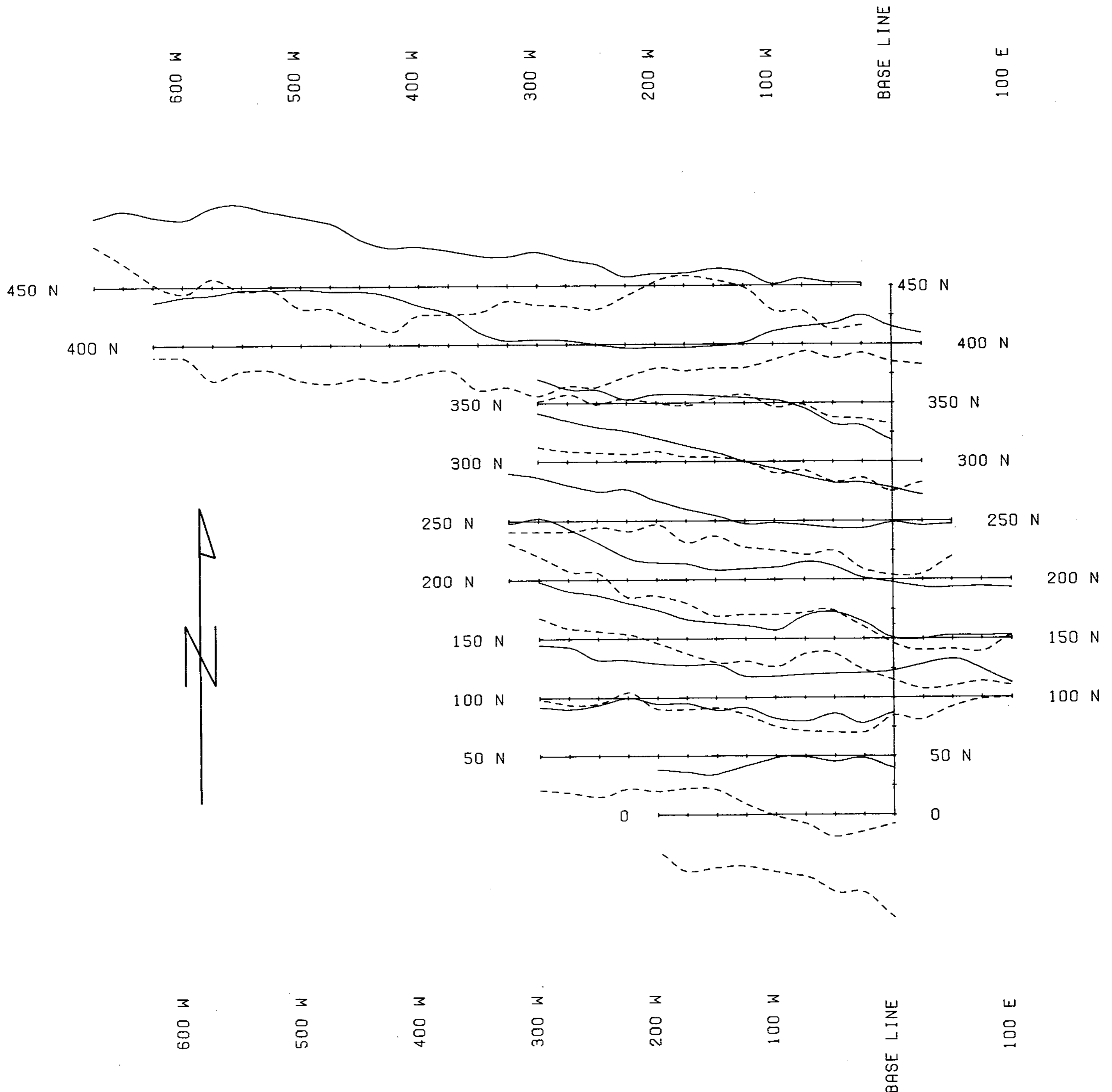
CONTOUR INTERVAL : 2 %  
 POSTED : 2 %  
 TREND ROTATION ANGLE : 0 DEGREES

ALL READINGS EQUIVALENT TO FACING  
 APPROXIMATELY EAST  
 DIP ANGLE FILTERED FROM WEST TO EAST  
 INSTRUMENTATION :  
 EDA OMNI PLUS COMBINED PROTON  
 PRECESSION MAGNETOMETER & VLF RECEIVER  
 TRANSMITTER : NLK 24.8 KHZ  
 JIM CREEK, WASHINGTON  
 (SEATTLE)



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CONSOLIDATED PETROQUIN RESOURCES LTD			
ERIC PROPERTY			
OMINECA MINING DISTRICT, BRITISH COLUMBIA			
<b>GEOLOGICAL BRANCH</b>			
<b>ASSESSMENT REPORT</b>			
VLF-EM CONTOURS - SEATTLE			
18,920 FRASER FILTER OF DIP ANGLE			
	SCALE: 1 : 2500	N.T.S.: 94 E/2	FIGURE NO: <b>G2C</b>
	DWN.BY: J.R.A.	DATE: MAY, 1989	
	CHKD.BY:	PROJECT NO: 89BC009	FILE NO:



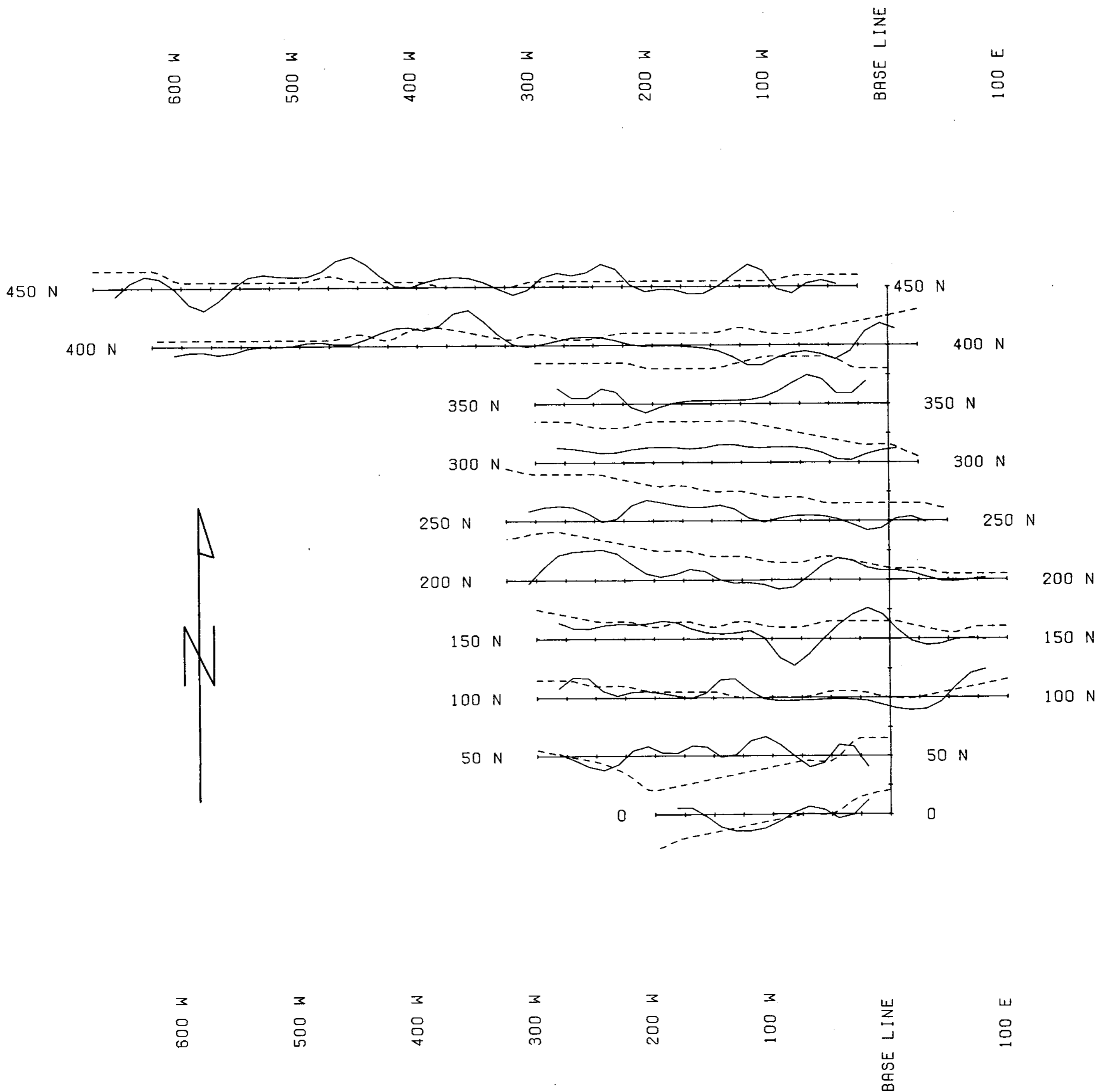
**LEGEND**

PROFILES POSITIVE UP  
 SOLID LINES : DIP ANGLE            5 % / CM  
                   BASE VALUE            0 %  
 DASHED LINES : QUADRATURE        2 % / CM  
                   BASE VALUE            0 %

ALL READINGS EQUIVALENT TO FACING APPROXIMATELY EAST  
 INSTRUMENTATION :  
 EDA OMNI PLUS COMBINED PROTON PRECESSION MAGNETOMETER & VLF RECEIVER  
 TRANSMITTER : NAA                    24.0 KHZ  
   CUTLER, MAINE



<b>CONSOLIDATED PETROQUIN RESOURCES LTD</b>			
<b>ERIC PROPERTY</b> OMINECA MINING DISTRICT, BRITISH COLUMBIA			
<b>GEOLOGICAL BRANCH</b> <b>ASSESSMENT REPORT</b> <b>DIP ANGLE AND QUADRATURE</b>			
<b>18 920</b>	SCALE: 1 : 2500	N.T.S.: 94 E/2	FIGURE NO: <b>G3A</b>
	OWN.BY: J.R.A.	DATE: MAY, 1989	
	CHKD.BY:	PROJECT NO: 89BC009	FILE NO:

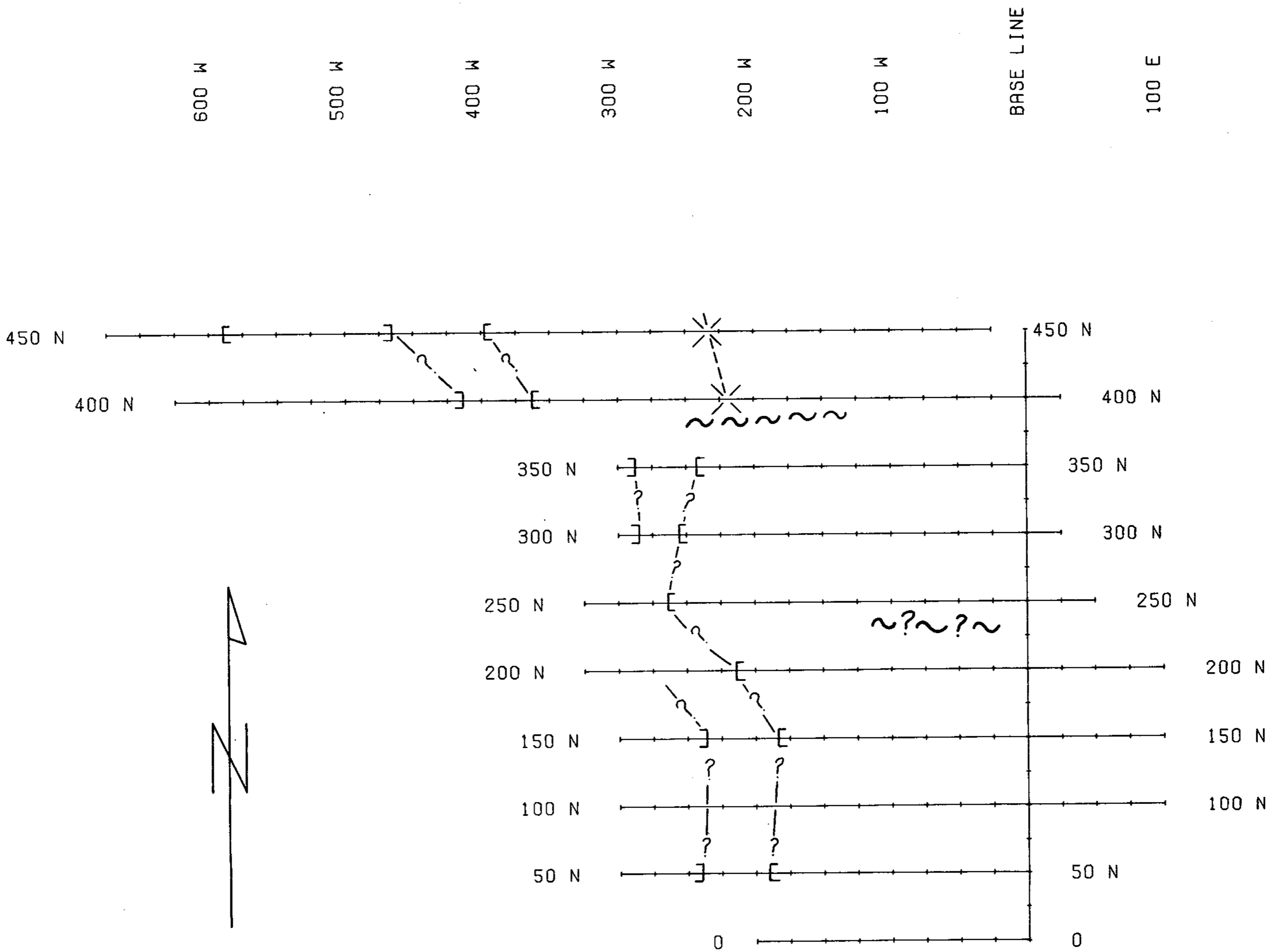


**LEGEND**

PROFILES POSITIVE UP  
 SOLID LINES : FRASER FILTERED DIP ANGLE : 5 % / CM  
 BASE VALUE : 0 %  
 DASHED LINES : RELATIVE FIELD STRENGTH : 0.5 % / CM  
 BASE VALUE : 5 %  
 ALL READINGS EQUIVALENT TO FACING  
 APPROXIMATELY EAST  
 DIP ANGLE FILTERED FROM WEST TO EAST  
 INSTRUMENTATION :  
 EDA OMNI PLUS COMBINED PROTON  
 PRECESSION MAGNETOMETER & VLF RECEIVER  
 TRANSMITTER : NAA 24.0 KHZ  
 CUTLER, MAINE



<b>CONSOLIDATED PETROQUIN RESOURCES LTD</b>			
<b>ERIC PROPERTY</b> OMINECA MINING DISTRICT, BRITISH COLUMBIA			
<b>VLF-EM PROFILES - CUTLER</b> <b>GEOLOGICAL BRANCH</b> <b>ASSESSMENT REPORT</b> <b>FILTERED DIP ANGLE &amp; TOTAL FIELD</b>			
<b>18920</b> 	SCALE: 1 : 2500	N.T.S.: 94 E/2	FIGURE NO: <b>G3B</b>
	DWN.BY: J.R.A.	DATE: MAY, 1989	FILE NO:
	CHKD.BY:	PROJECT NO: 89BC009	



**LEGEND**

- MAGNETICS ANOMALY - STRONG : [ ]  
 (SHOWING WIDTH)  
 - WEAK : [ ]
- VLF-EM ANOMALY - STRONG : — X —  
 - WEAK : - - X - -
- CROSS STRUCTURE - ~~~~~



INSTRUMENTATION :  
 EDA OMNI PLUS COMBINED PROTON  
 PRECESSION MAGNETOMETER & VLF RECEIVER  
 BASE STATION : EDA OMNI IV  
 TRANSMITTERS :                   MAGNETIC TOTAL FIELD RANGE -  
 NLK                   24.8 KHZ                   HIGH : 59225.4 GAMMAS  
 JIM CREEK, WASHINGTON           MEDIAN : 58868.5 GAMMAS  
 NAA                   24.0 KHZ                   LOW : 58505.0 GAMMAS  
 CUTLER, MAINE

S.J.V. CONSULTANTS LTD.

CONSOLIDATED PETROQUIN RESOURCES LTD			
ERIC PROPERTY OMINECA MINING DISTRICT, BRITISH COLUMBIA			
MAGNETICS & 2 FREQ VLF-EM SURVEYS GEOLOGICAL BRANCH ASSESSMENT REPORT COMPILATION MAP			
18920	SCALE:	N.T.S.:	FIGURE NO:
	1 : 2500	94 E/2	G 4
	DWN.BY:	DATE:	
	J.R.A.	MAY, 1989	
CHKD.BY:	PROJECT NO:	FILE NO:	
	898C009		