1996 Exploration Program

on the

Friendly Lake Project

(FRI Project)

Claims:	FRI 1, FRI 2, FRI 3, FRI 4, FL 1, FL 2, FL 3, FL 4, FL 9, FL 10, FL 11, FL 12, FL 13, FL 14, RO # 15, RO # 16, RO # 17, RO # 18
Mining Division:	Kamloops
NTS Map Sheet:	92 P 09 W
Latitude:	51°35′ N
Longitude:	120°27′ W
Owner of Claims:	Electrum Resource Corporation 912-510 West Hastings Street Vancouver, B.C., Canada V6B 1L8
Project Operator:	Electrum Resource Corporation
Consultant:	New Caledonian Geological Consulting 912-510 West Hastings Street Vancouver, B.C., V6B 1L8
Report by:	Peter A. Ronning, P.Eng.
Date of Report:	February 1997

Contents

Appendices

List of Figures

Tables

Plates

I. Summary and Conclusions

The Friendly Lake or Fri property is located approximately 28 kilometers northwest of Little Fort, B.C. It consists of 18 claims, comprised of 64 units and covers an area of about 1,600 hectares. Access is by paved highway and good logging road, a driving distance of about 60 kilometers from Little Fort.

The area was first staked and explored in the 1960's as a porphyry copper-molybdenum target. It has been explored sporadically since then by various operators. The acquisition of the present claim group by Electrum Resource Corporation commenced in 1994.

The property is underlain by Triassic Nicola Group volcanics, which have been intruded by Triassic or Jurassic syenite stocks. In the central part of the claims the volcanics are strongly altered, with assemblages that include quartz veins, silicification, sericitization and zones of strong carbonatization. This alteration is particularly strong near the margins of the syenite stocks.

Strong block faulting is evidenced by a mosaic pattern formed by linears visible on aerial photographs. Near the center of the Fri property, on the south margin of a syenite stock, a strong northeast trending structure is disrupted by a strong northwest trending one. Thus the center of the property is a locus of structural weakness which may be a favourable site for the location of mineralization.

Also near the central part of the property, several quartz veins have been sampled which contain gold in the range 593 ppb Au to 2,930 ppb Au. Copper and to a lesser extent lead are at elevated levels in the veins and in sulphidized country rock. These showings could be an indication of a structurally controlled body of gold mineralization localized in northeast or northwest trending structures.

The 1996 work on the Fri property consisted of geological reconnaissance, lithogeochemical sampling, and VLF EM surveys in the vicinity of the northeast trending structure.

II. Introduction

A. Location and Access

The FRI and other claims are located approximately 28 km northwest of Little Fort, B.C., on NTS map sheets 92 P 9, at latitude 51°35′ N and longitude 120°27′ W (Rebagliati, 1988). Access for the present work was gained by driving west on Highway 24 from Little Fort for 38 kilometers, then turning right (north) onto Forest Service Road 20-74. The Grid 1 area of this report is about 19 kilometers from Highway 24.

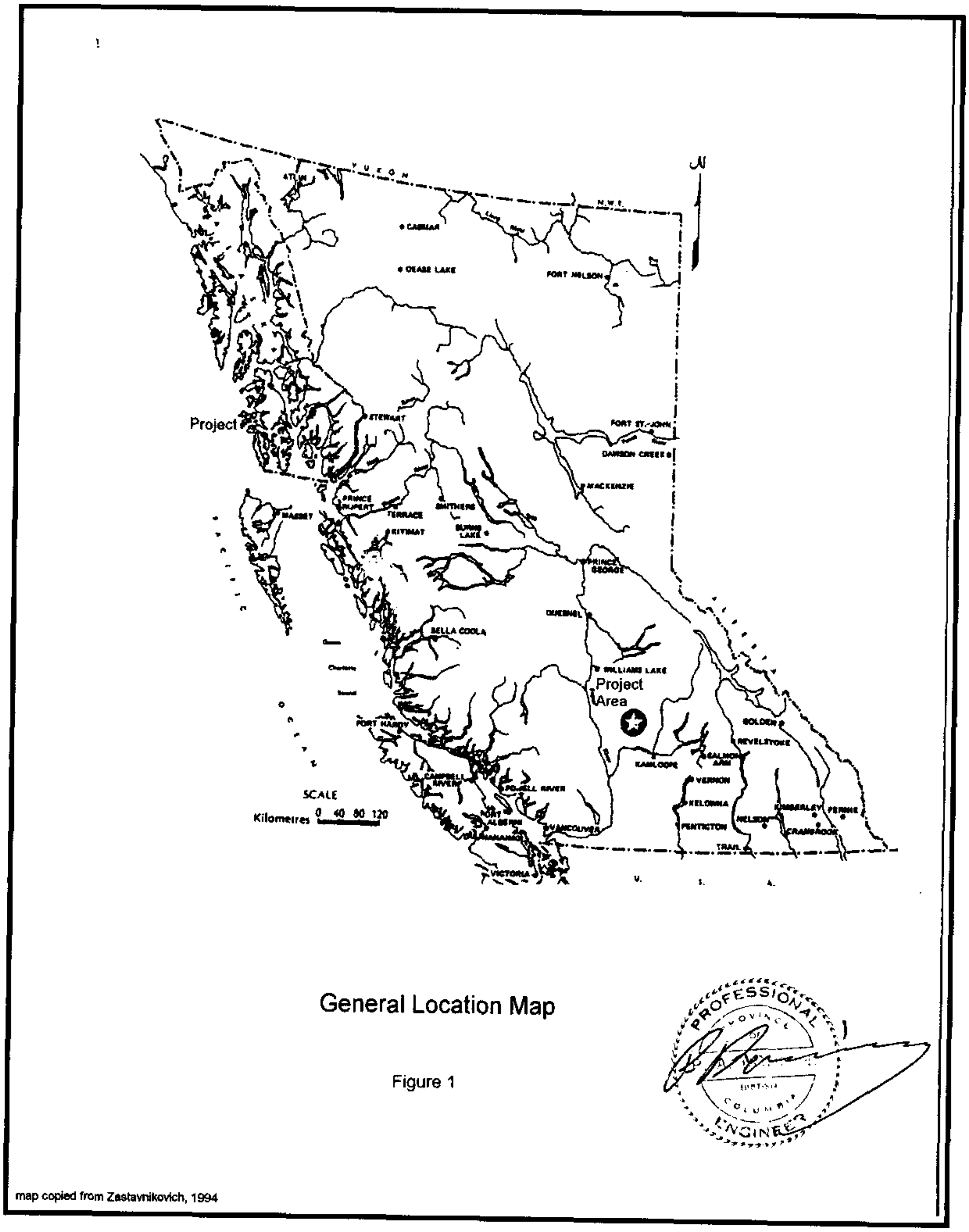


Figure 1: General Location Map

B. Physiography

The property is in the Interior Plateau of B.C., a rolling, hilly upland with elevations ranging from about 1,400 meters to about 1,600 meters. Some low-lying areas are swampy.

Timber consists of mature spruce and jackpine (Rebagliati, 1988), while swamps are brushy and grassy. Streams are typically 3 to 5 meters across and a few centimeters deep. Small lakes are abundant.

C. Property Definition

1. Claims

Table 1: List of Claims

Claim Name	Tenure Number	Issue Date	Good To Date*	Units	Registered Owner	Current Grouping
FRI 1	324810	5 April 1994	5 April 1997	16	Electrum Resources Corporation	3066458
FRI 2	324811	5 April 1994	5 April 1997	18	Electrum...	3066458
FRI 3	324274	18 March 1994	18 March 1997	16	Electrum...	3066458
FRI 4	344527	19 March 1996	19 March 1997	16	Electrum...	n/a
FL 1	350558	31 Aug 1996	31 Aug 1997	1	Electrum...	n/a
FL 2	331247	21 Sept 1994	21 Sept 2001	1	Electrum...	3066458
FL 3	331248	21 Sept 1994	21 Sept 2001	1	Electrum...	3066458
FL 4	331249	21 Sept 1994	21 Sept 2001	1	Electrum...	3066458
FL 9	350559	1 Sept 1996	1 Sept 1997	1	Electrum...	n/a
FL 10	350560	1 Sept 1996	1 Sept 1997	1	Electrum...	n/a
FL 11	350561	1 Sept 1996	1 Sept 1997	1	Electrum...	n/a
FL 12	350562	1 Sept 1996	1 Sept 1997	1	Electrum...	n/a
FL 13	350563	1 Sept 1996	1 Sept 1997	1	Electrum...	n/a
FL 14	350564	1 Sept 1996	1 Sept 1997	1	Electrum...	n/a
RO # 15	220746	16 Aug 1965	16 Aug 2000	1	Fleck Resources Ltd.	n/a
RO # 16	220747	16 Aug 1965	16 Aug 2000	1	Fleck...	n/a
RO # 17	220748	16 Aug 1965	16 Aug 2000	1	Fleck...	n/a
RO # 18	220749	16 Aug 1965	16 Aug 2000	1	Fleck...	n/a
			Total Units:	80		

Notes: the above information was obtained from the British Columbia Mineral Titles Branch as of 20 January 1997. It does not reflect any changes since that date.

* the "Good to Date" listed reflects the claim status **prior** to acceptance of the work described in this report.

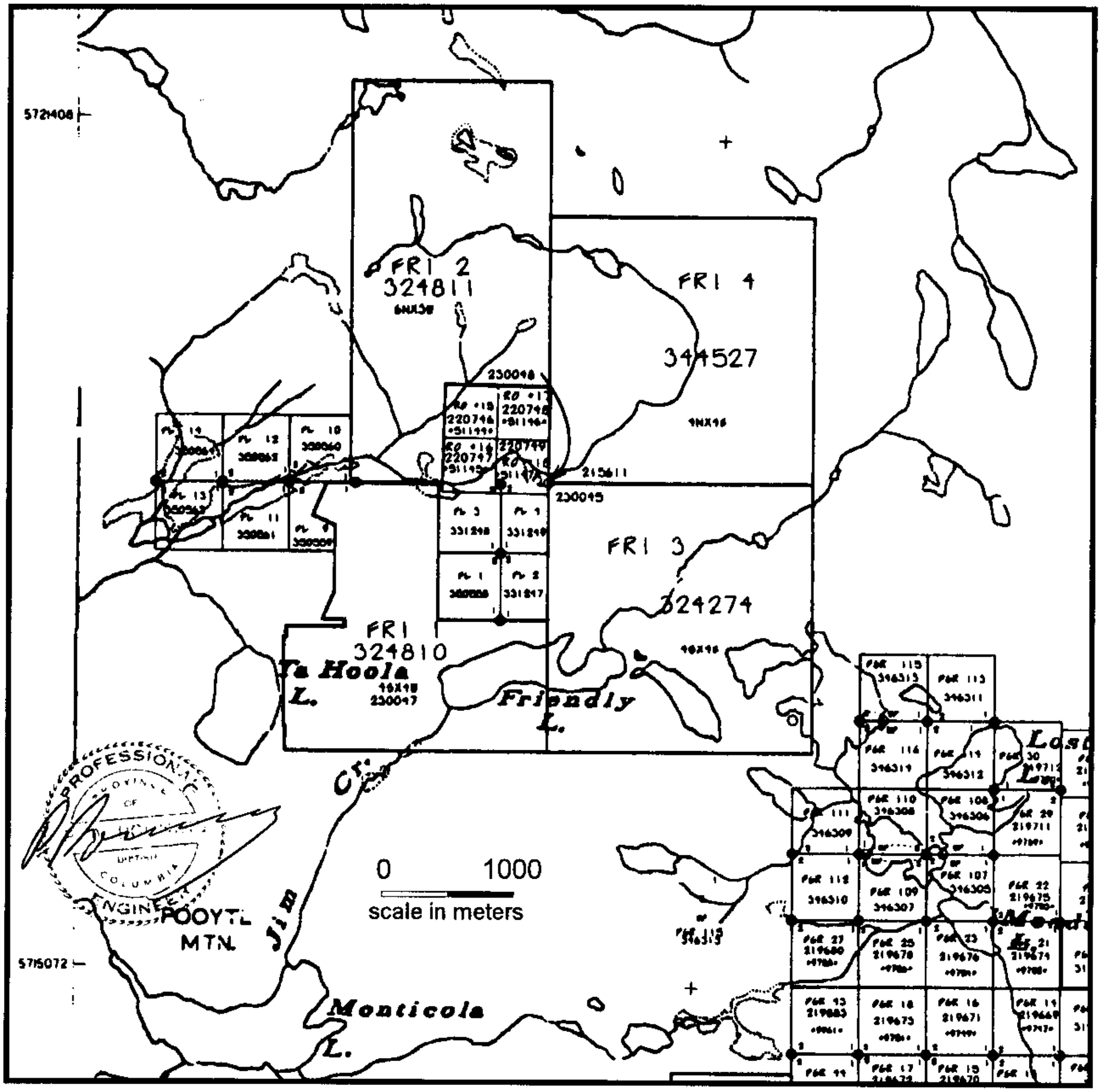


Figure 2: Claim Map

This claim map is copied from Mineral Titles Branch, Mineral Title Map 092P09W, as updated 6 Oct 1996.

2. History

(the following discussion of history is largely adapted from Rebagliati, 1988)

Anaconda American Brass Ltd. staked a large block of ground in the area of the present Fri property in 1965. Their staking was based on stream sediment anomalies in the drainage north of Friendly Lake. Their work led to the discovery of fracture controlled copper-molybdenum porphyry mineralization on the eastern part of the current claim block and stockwork/breccia silver-lead mineralization north of Friendly Lake. Considerable trenching and diamond drilling was done during the period 1966-68.

SMD Mining Co. Ltd. optioned the Anaconda claims in 1982, and did further geochemical, geological and geophysical surveys.

Lornex Mining Corporation Ltd. optioned the Anaconda ground in 1983 and drilled 17 short vertical percussion holes.

Electrum Resource Corporation staked the first claims of the present Fri property in 1994. That same year Electrum undertook a rock and stream sediment geochemical survey (Zastavnikovich, 1995). During 1996 Electrum undertook VLF-EM geophysical surveys, rock geochemistry, photogeology and geological reconnaissance. This report describes the 1996 work.

3. Economic Potential

The area under exploration has potential for porphyry copper-molybdenum or copper-gold mineralization. The present report demonstrates potential for gold (copper) mineralization controlled by and contained within a district-scale fracture system.

D. Work Program

1. Geological Survey

Part of the work undertaken in 1996 consisted of reconnaissance, or "spot check" geology, walking recent logging roads and clear-cuts looking for recently-created outcrops. The result is not a geological map, but forms a starting point for future mapping.

2. Geochemical Survey

During the course of the geological reconnaissance, 27 rock chip samples were collected. Results appear in Appendix 4, while descriptions of the samples appear in Appendix 5. The samples are plotted on Plate 1.

3. Geophysical Survey

3,825 meters of VLF survey, with readings from two transmitters at stations every 25 meters, were completed, on two grids. A further 2,300 meters were covered using only one transmitter, on a third grid. Although all of the VLF data are included herein for completeness, only the work on two of the grids is claimed for assessment purposes. The instrument used was an EM 16.

4. Photo-Geological Interpretation

Two sets of colour aerial photographs, with approximate scales of 1:15,000 and 1:30,000, were obtained and used for photo-interpretation of structural features.

5. Grid Establishment

In order to facilitate the VLF surveys, three grids were created on the ground, using wooden lathe to mark stations and surveyor's ribbon to mark the lines and stations. No vegetation was cut. A hip chain and a compass were used to survey the lines.

6. Claims Covered by Work

The claims will be grouped for the purpose of applying assessment work. The actual claims on which work was done are:

FL 3	FL 4
FL 9	FL 11
RO 15	RO 16
RO 17	RO 18
FRI 3	FRI 4

III. Geology

(this discussion of geology incorporates, as appropriate, results of the 1996 work.)

A. Regional Geological Setting

(the information in this section has been taken almost verbatim from Rebagliati, 1988)

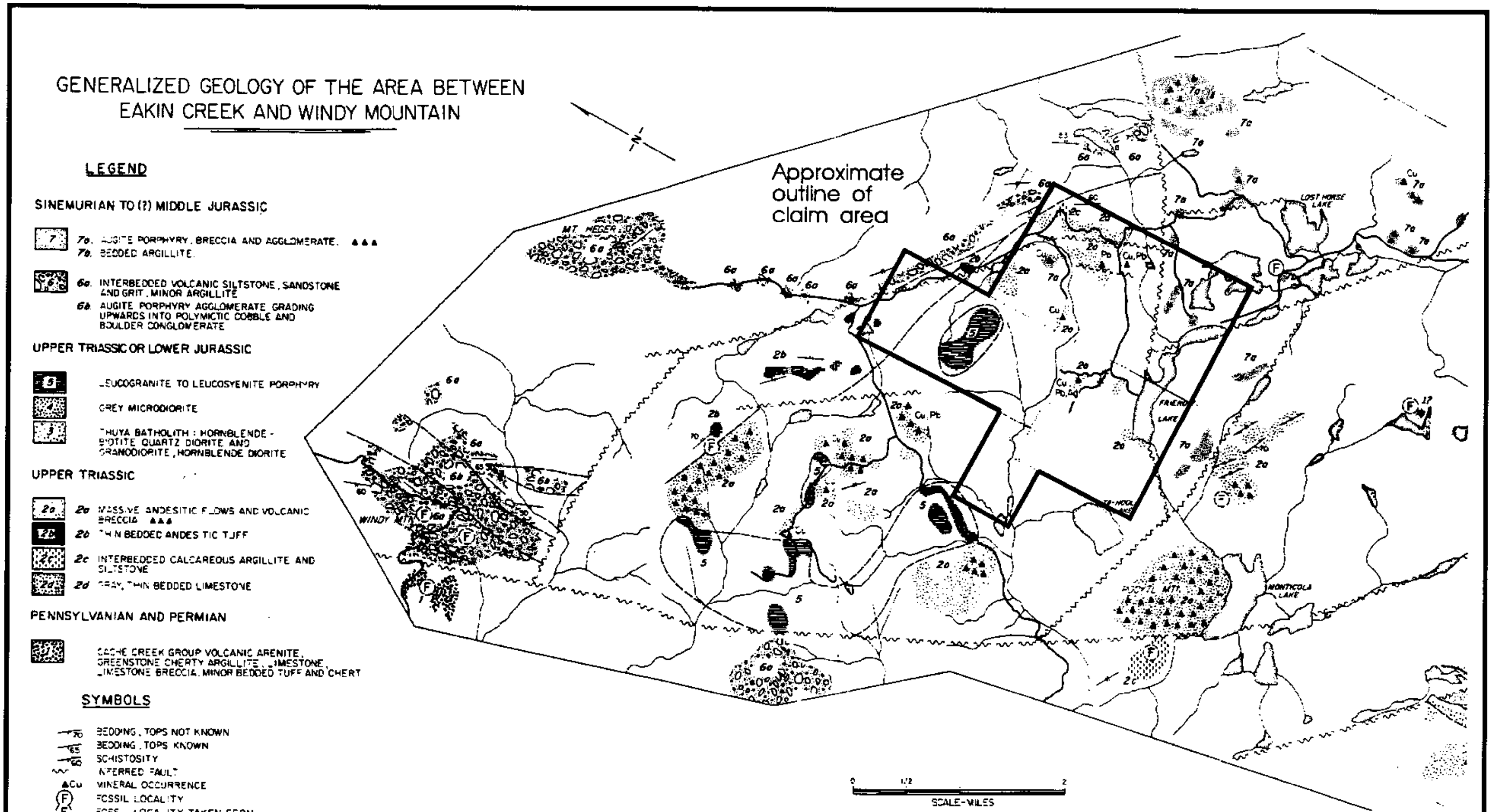
The Fri property is situated within the Quesnel Trough, a 2,000 kilometer long northwesterly-trending belt consisting of upper Triassic to lower Jurassic volcanic rocks, derived sedimentary rocks and intrusives. The belt is characterized by a volcanic core of Triassic subaqueous andesite pyroxene porphyritic flows, tuffs and breccias. Interbedded with the volcanics are calcareous argillite, siltstone, siliceous cherty sediments and limestone. On the eastern and western margins of the volcanic core is an overlying and flanking sequence of lower Jurassic pyroxene porphyritic volcaniclastic breccias with proximal to distal epiclastic sediments consisting of conglomerate, greywacke and argillite. To the extreme east are fine clastic sediments, consisting of siltstone, shale and argillite, which appear to form the base of the Triassic sequence.

Regional mapping indicates that the property area is underlain by Nicola Group alkaline volcanic and sedimentary rocks intruded by numerous comagmatic diorite to syenite stocks (Preto, 1970, Campbell and Tipper, 1971)

Hydrothermal events believed to be related to the plutons introduced volatiles and metal into the volcanics and extensively altered and mineralized large volumes of shattered volcanic rocks. The Copper Mountain, Afton, Mount Polley and several other porphyry copper-gold deposits are found in a similar geologic setting within the Nicola Group or, in northern British Columbia, the related Takla Group.

Auriferous carbonate alteration zones are known to exist on the Fri and nearby properties.

The Fri property lies within an area of intense block faulting, formed where the North Thompson Fault bifurcates into a multitude of northwesterly trending splays.



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Friendly Lake Project
Regional Geology
(Copied from Preto, 1970)

Drawn by: copy	Project: NCG-51	Drawing: 51-1-3
Date: February 1997	Report: 51-1	Revision: 1
NCG		Figure 3

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B. Local and Property Geology

Extensive glacial overburden one to a few meters deep covers the Fri property. In the area of 1996 field work new logging roads have created a few "artificial" outcrops and these are the basis for any new observations made in this discussion of property geology.

1. Lithologic Units

The Fri property is underlain by Nicola Group volcanic rocks intruded by syenitic plutons (Figure 3, Plate 1). The volcanic rocks encountered during the 1996 field work are principally hornblende phyric andesites. In most of the exposures encountered, details of the original petrology are obscured by alteration.

2. Structural Geology

(this discussion incorporates both field observations and photo-interpretations)

As noted by Rebagliati (1988) the property lies within an area of intense block faulting. On the Fri claims the block faulting manifests itself geomorphologically as surface depressions that form photo linears with two prominent trends and a third less prominent one (Plate 1). These trends are approximated as:

65°   320°   0°

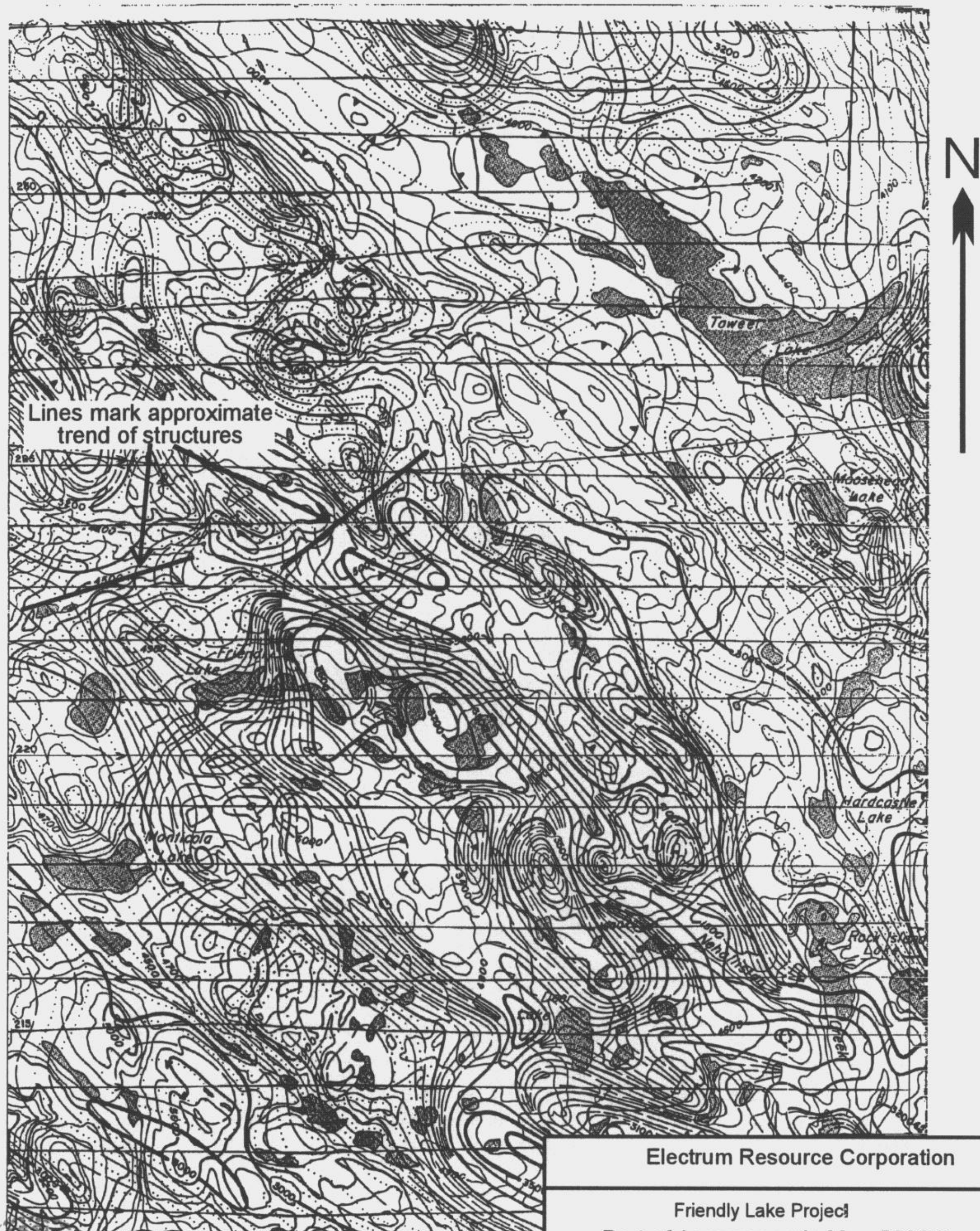
These depressions, forming photo-linears, are believed to be the surface expressions of major fracture systems. Their dips aren't known but are presumed to be steep, based on the lack of deflection of the linears with topographic elevation changes. Similarly the degree of displacement on any of the fracture systems isn't known.

Since the fractures form topographic depressions filled with sediment they can't be directly observed in outcrop, so details of their character are unknown. The character of the surrounding rocks and the many minor fractures that are observable indicates that the fractures are probably brittle rather than ductile.

Along the northeastern edge of the Fri property, one of the 320° structures forms the demarcation between Triassic Nicola volcanics to the west and Jurassic epiclastic sediments to the east.

Recent interest on the Fri property has focused on a major swampy topographic depression on the west side of the property (Plate 1). From Spectacle Lakes it trends about 65° towards the center of the property. Just west of the RO claims it crosses a 320° structure and then appears to weaken towards the northeast as it enters the syenite plug on the Fri 2 claim. For convenience this 65° structure is referred to as the Spectacle Lakes "a", or SLa Structure.

The writer believes that the strain taken up by the Spectacle Lakes "a" Structure southwest of the syenite plug has been accommodated by a stepwise series of smaller 65° structures south of the plug. Two such structures are apparent on the aerial photographs and illustrated on Plate 1, labeled SLb and SLc. Together, the SLa, SLb and SLc structures, (collectively called the SL structures) form an east-northeast trending lowland between Friendly Lake to the south and the syenite plug to the north.



bar is approximately 2 kilometers long

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Friendly Lake Project

Part of Aeromagnetic Map 5229G
Showing Trend of Spectacle Lakes Structures

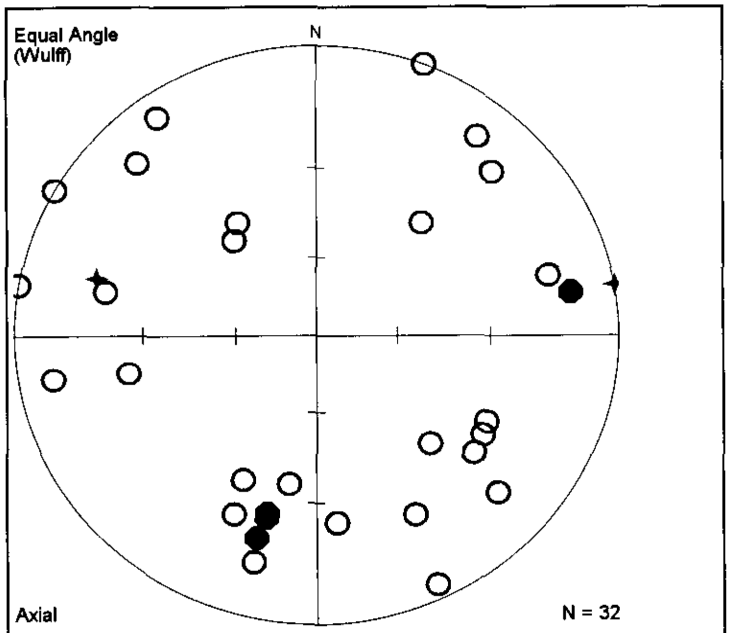
Drawn by: copy	Project: NCG-51	Drawing: 51-1-4
Date: December 1996	Report: 51-'	Revision: 1

NCG

Figure 4

Aeromagnetic map 5229G (part of which is reproduced as Figure 4) shows a disruption of aeromagnetic contours that is generally coincident with the trend of the SL structures, further evidence for the existence of the structures and their probable district-scale significance.

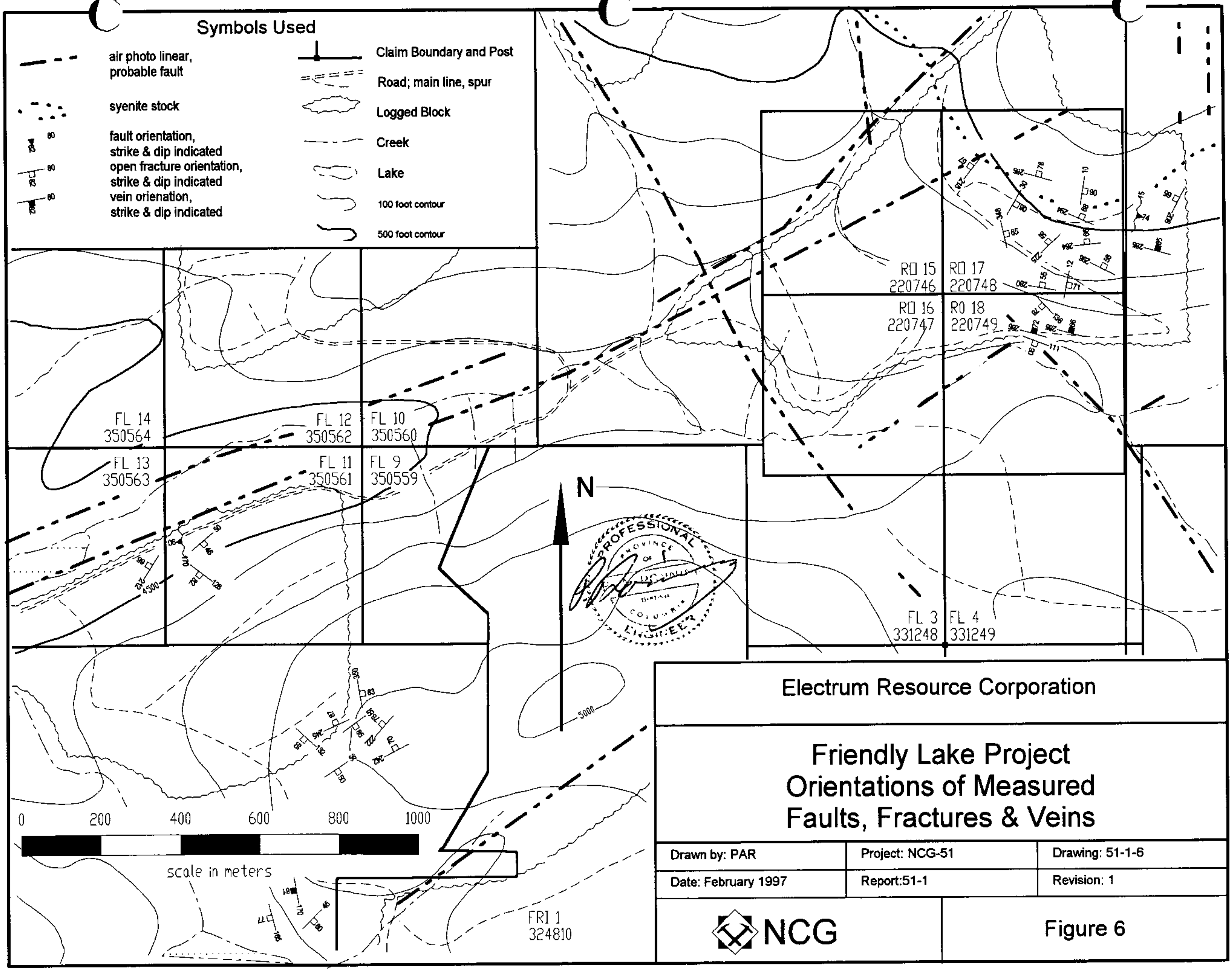
During the course of geological reconnaissance, 32 measurements of planar structural features were collected. These are primarily joints and open fractures in small outcrops. They appear in map form on Figure 6. Figure 5, following, is a stereo net plot of poles to planes. It illustrates a broad scatter of fracture orientations, too broad to reach any meaningful conclusions except to say that fractures of numerous different orientations are present throughout the study area. More detailed and systematic field work would be required to sort them out.



Stereo net illustrating poles to planar features.
open circles: poles to open fractures
closed circles: poles to quartz veins
crosses: poles to fault planes

Figure 5: Stereo Net Plot of Planar Features

Of three veins measured, two which are spatially separated by 400 meters have almost identical orientations striking 285° to 286° and dipping 65° to 72° northeastward (Figure ???). Both contain copper and gold mineralization, in the range 100 ppm to 300 ppm copper and 600 ppb to 1,200 ppb gold (see following section). They are south of the syenite plug in the area where the SL structures cross 320° trending structures.



Electrum Resource Corporation

Friendly Lake Project Orientations of Measured Faults, Fractures & Veins

Drawn by: PAR	Project: NCG-51	Drawing: 51-1-6
Date: February 1997	Report:51-1	Revision: 1

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Figure 6

C. Alteration and Mineralization

Preto (1970) described half a dozen types of mineral occurrences in the district. His second type, lead-silver mineralization, is localized on the present Fri property about 900 meters north of Friendly Lake. Preto describes it as disseminated argentiferous galena, pyrite and some chalcopyrite in andesite that is strongly altered to bluish antigorite, pyroxene, chlorite and calcite. Reportedly it is localized in a shear zone striking about 120° and dipping 65° southwest.

Mineralized intercepts from some 1960's era drill holes in this area are shown on Plate 1. They include 15.3 meters of 0.96% lead with 1.18 oz silver/ton, 12.2 meters of 1.30% lead with 0.95 oz silver/ton and 10.5 meters of 1.14% Pb with 1.16 oz silver/ton.

Recent work on the Fri property has focused on gold mineralization related to the SL structural trend. Encouragement for this has come from rock samples collected from four locations spread over 2.6 kilometers along the margins of the swamps that mark the structure. Gold in the samples ranges from 593 ppb to 2,930 ppb (see Plate 1). It is accompanied by copper in the 35 ppm to 405 ppm range and lead in the 66 ppm to 1,118 ppm range.

The gold and copper are found in quartz veins with typical thicknesses of 20 cm to 30 cm and local thicknesses as high as a meter. Mineralization consists of pyrite with minor chalcopyrite and/or galena, disseminated in the vein quartz. The host rocks are variably silicified and carbonatized and usually contain disseminated pyrite.

These quartz veins are not thought to be exploration targets in and of themselves, but they are indicators of mineralization spatially associated with the SL structures. The main target for gold is the SL structures themselves. The structures are believed to be part of a large fracture system that could contain larger bodies of structurally controlled gold-quartz mineralization than are seen exposed at surface.

The original objective of the 1960's era work in this area was copper (molybdenum) porphyry-style mineralization. The porphyry target remains valid, although experience elsewhere in the Nicola Group suggests that a copper-gold porphyry may be a more likely target.

IV. Geochemistry

(see Plate 1)

The 27 rock chip samples collected in 1996 were analyzed for 32 elements using the ICP method, and gold using a fire assay prep with an AA finish. Ten samples which contained high gold values were fire assayed. Results of these analyses appear in Appendix 4. Locations, with gold, silver, copper and lead results, are shown on Plate 1.

The results show a clustering of anomalous[1] gold, silver and copper values, with some lead, in the area on and immediately east of the RO 17 and RO 18 claims. This is the area where the Spectacle Lakes "a" structure is intersected and displaced by a northwest trending structure. About half a kilometer to one kilometer further south, still in the area influenced by the intersecting structures, several 1960's era drill holes intersected lead-silver mineralization (shown on Plate 1).

[1] The term "anomalous" is used in a purely subjective sense, as no statistical interpretation has been attempted. It is used for values which are, in the writer's experience, high.

The highest of the anomalous gold values in the 1996 samples are in quartz veins less than a meter wide, and these aren't thought to be targets per se. However, they are indications of gold mineralization along the fringes of the major structures. Such indications suggest the possibility that more significant gold mineralization might be found in the most structurally disrupted area, a swampy zone near the south boundary of the Fri 2 claim.

Within the swamp is a small area where a relict ferricrete "hard pan" exists a few centimeters above the present swamp water table. On the theory that this concentration of iron oxides within the generally reducing swamp environment might have formed in a chemical trap that captured other metals as well, seven samples were collected from shallow hand trenches in the ferricrete. They are described in Appendix 5, and their locations with some results are illustrated in the inset map on Plate 1. Gold, silver and copper values in these samples are generally low. There are a few slightly elevated lead values in the range 100 ppm to 200 ppm. Zinc values are slightly elevated in comparison to rocks of the area, in the range 100 ppm to 200 ppm. Iron and manganese concentrations in the ferricrete are, as expected, high.

Several maps illustrating the results of geochemical soil sampling during the 1960's were made available to the writer. They were received without backup documentation, but did indicate anomalies as interpreted by workers at the time. The copper, molybdenum and lead anomalies are illustrated on Plate 1. The anomalous thresholds used were 200 ppm for copper, 20 ppm for molybdenum and 1 ppm for lead.

A crude zoning in the soils is apparent. Two large areas of high molybdenum values lie on the Fri 3 and Fri 4 claims, east of the area of present activity. One of those is associated with a smaller but coincident copper anomaly.

There is a large lead anomaly on the FL 1, 2, 3 and 4 claims, surrounding the area where drilling intersected lead-silver mineralization. It lies to the west of the molybdenum anomalies.

Two copper anomalies in soils exist in the general area where 1996 rock chip samples showed high copper and gold values.

The overall geochemical pattern suggests a focus for gold and copper mineralization on or near the RO claims, where major northeast and northwest trending structures intersect. Rock chip and soil sample geochemistry provide evidence for this. Lead mineralization, as illustrated by soil sample and drill hole results, is present on the FL 3 and FL 4 claims, south of the copper-gold zone.

V. Geophysics (VLF EM)

3,825 meters of VLF survey, with readings from two transmitters at stations every 25 meters, were completed, on two grids, using an EM 16. The raw geophysical data, with line profiles, are contained in Appendix 2. Instrument specifications appear in Appendix 3. Figures 7 through 11 are plans of each grid with dip angles and quadratures plotted as profiles. Plate 1 indicates the locations of the grids.

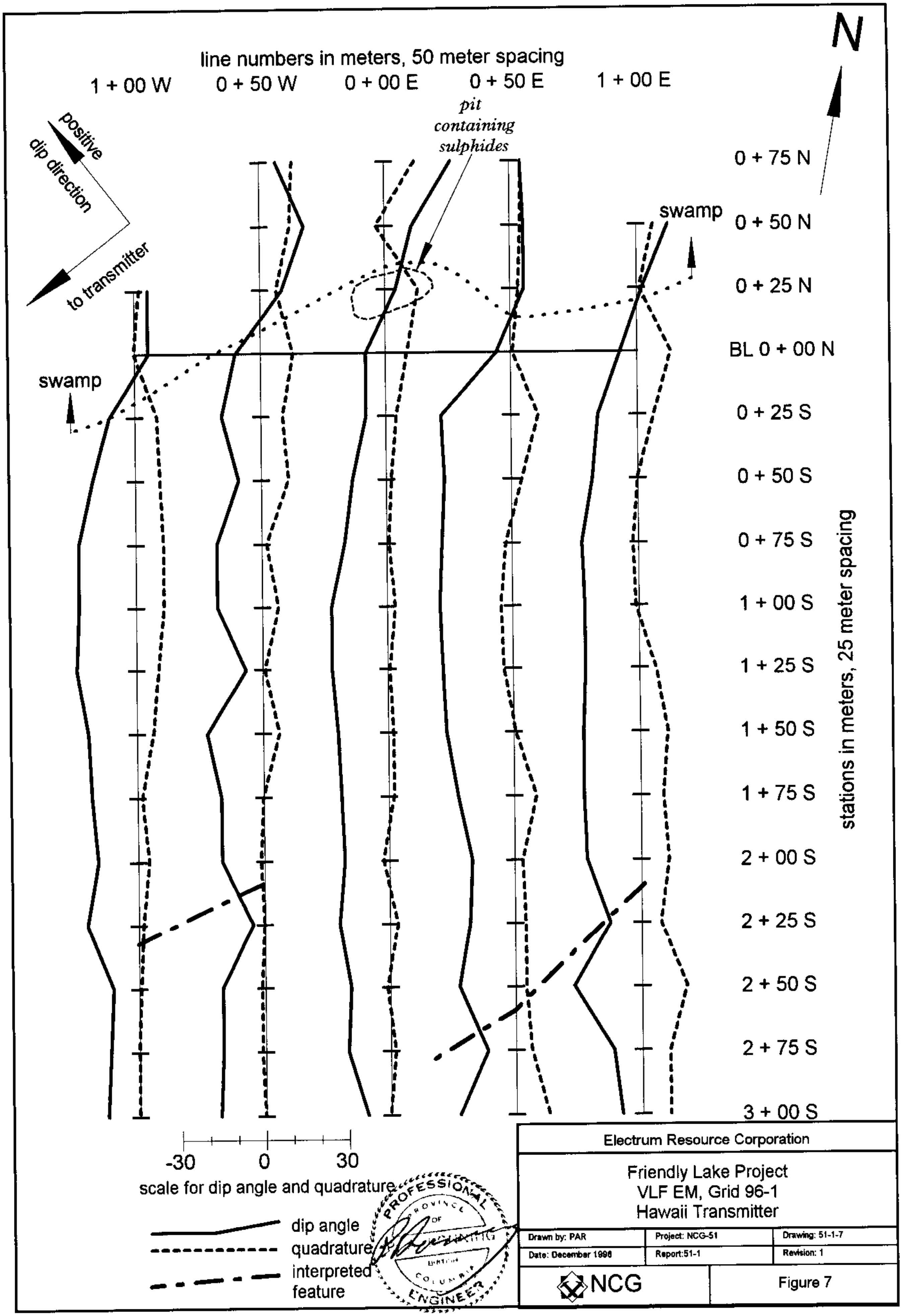
Hawaii and Seattle were the two transmitters used. The orientations of the grids were compromises between crossing the hoped-for features at sufficiently high angles and maintaining an appropriate orientation relative to the EM field. Hawaii is situated at the best location for the grid orientation, but Seattle had a much stronger signal, making it easier to read, hence the use of both transmitting stations. On grids 1 and 2 the Hawaii data are much more amenable to meaningful interpretation than the Seattle data.

An earlier VLF EM survey was done in March of 1996, near grid 1 but with east-west oriented lines. That survey included 2,300 meters on four lines, with lines 100 meters apart and stations every 25 meters. Only the Seattle transmitter was used. The data from the earlier survey are included herein for completeness, but the work is not claimed for assessment purposes. The earlier grid is called Grid 3.

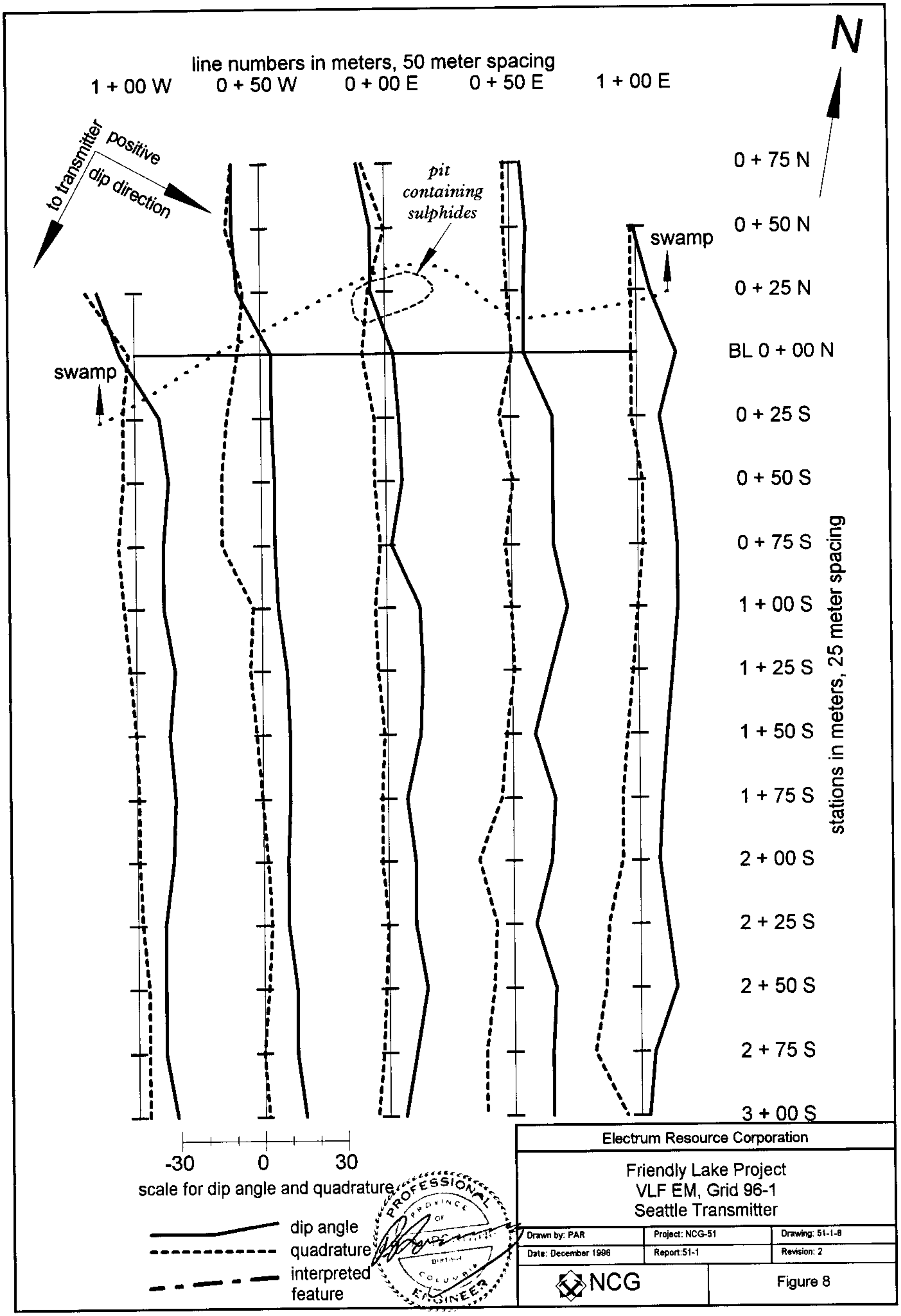
A. Grid 1, Hawaii Transmitter

(see Figure 7)

Grid 1 was laid out such that the lines intersect the expected Spectacle Lakes "a" structure at a high angle and trend southerly up the fall line of the adjacent slope. It wasn't possible to cross the swamp in the valley bottom during September, so it wasn't possible to get a full VLF profile across the structure. At the northerly 50 to 75 meters of each line there is what appears to be the beginning of a cross-over that would indicate a significant structure corresponding to the expected Spectacle Lakes "a".



Electrum Resource Corporation		
Friendly Lake Project VLF EM, Grid 96-1 Hawaii Transmitter		
Drawn by: PAR	Project: NCG-51	Drawing: 51-1-7
Date: December 1996	Report:51-1	Revision: 1
NCG		Figure 7



N
line numbers in meters, 50 meter spacing
1 + 00 W
0 + 50 W
0 + 00 E
0 + 50 E
1 + 00 E
to transmitter
positive
dip direction
pit containing sulphides
swamp
swamp
0 + 75 N
0 + 50 N
0 + 25 N
BL 0 + 00 N
0 + 25 S
0 + 50 S
0 + 75 S
1 + 00 S
1 + 25 S
1 + 50 S
1 + 75 S
2 + 00 S
2 + 25 S
2 + 50 S
2 + 75 S
3 + 00 S
stations in meters, 25 meter spacing
-30
0
30
scale for dip angle and quadrature
dip angle
quadrature
interpreted feature
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Electrum Resource Corporation
Friendly Lake Project
VLF EM, Grid 96-1
Seattle Transmitter
Drawn by: PAR
Project: NCG-51
Drawing: 51-1-8
Date: December 1996
Report:51-1
Revision: 2
NCG
Figure 8

B. **Grid 3, Seattle Transmitter**

(see Figure 9)

(Note: the survey on Grid 3 is not to be claimed for assessment purposes but is discussed herein for the sake of completeness)

Grid 3 was put in place and surveyed prior to Grids 1 and 2, in March of 1996. At that time the swamp was frozen and it was possible to cross it, although surveying was otherwise difficult. Lines were run east-west, at a low angle to expected structures but a good direction for the use of the Seattle transmitter. Significant dip angle cross-overs are present near both edges of the swamp, further serving to indicate the Spectacle Lakes "a" structure.

C. **Grid 2, Hawaii Transmitter**

(see Figure 10)

The most prominent feature on Grid 2 is a distinct cross-over trending almost east-west, 10 to 40 meters south of the base line. The trace of the cross-over corresponds closely to an abrupt change in slope which the writer believes is due to a bedrock structure. The latter is probably a subsidiary splay to the Spectacle Lakes system of fractures.

On lines 1+00E, 1+50E and 2+00E there is a dip angle cross-over near 1+75 south that is in part coincident with the creek, but continues as a straight feature where the creek takes an abrupt jog to the north. The creek is generally surrounded by swamp, making it difficult to relate this cross over to any bedrock structure, but the writer speculates that it correlates to another east-west structure parallel to the one discussed in the preceding paragraph.

At 0+50 N on line 2+00E, there is a very abrupt dip angle cross-over that appears only on the one line. This cross-over is so abrupt that it was possible in the field to locate it within a few centimeters by taking readings at one meter intervals near station 0+50 N. It isn't apparent on line 1+50E and the writer believes it to be due to something very local and near surface; perhaps to a bit of now-buried cable left behind by loggers.

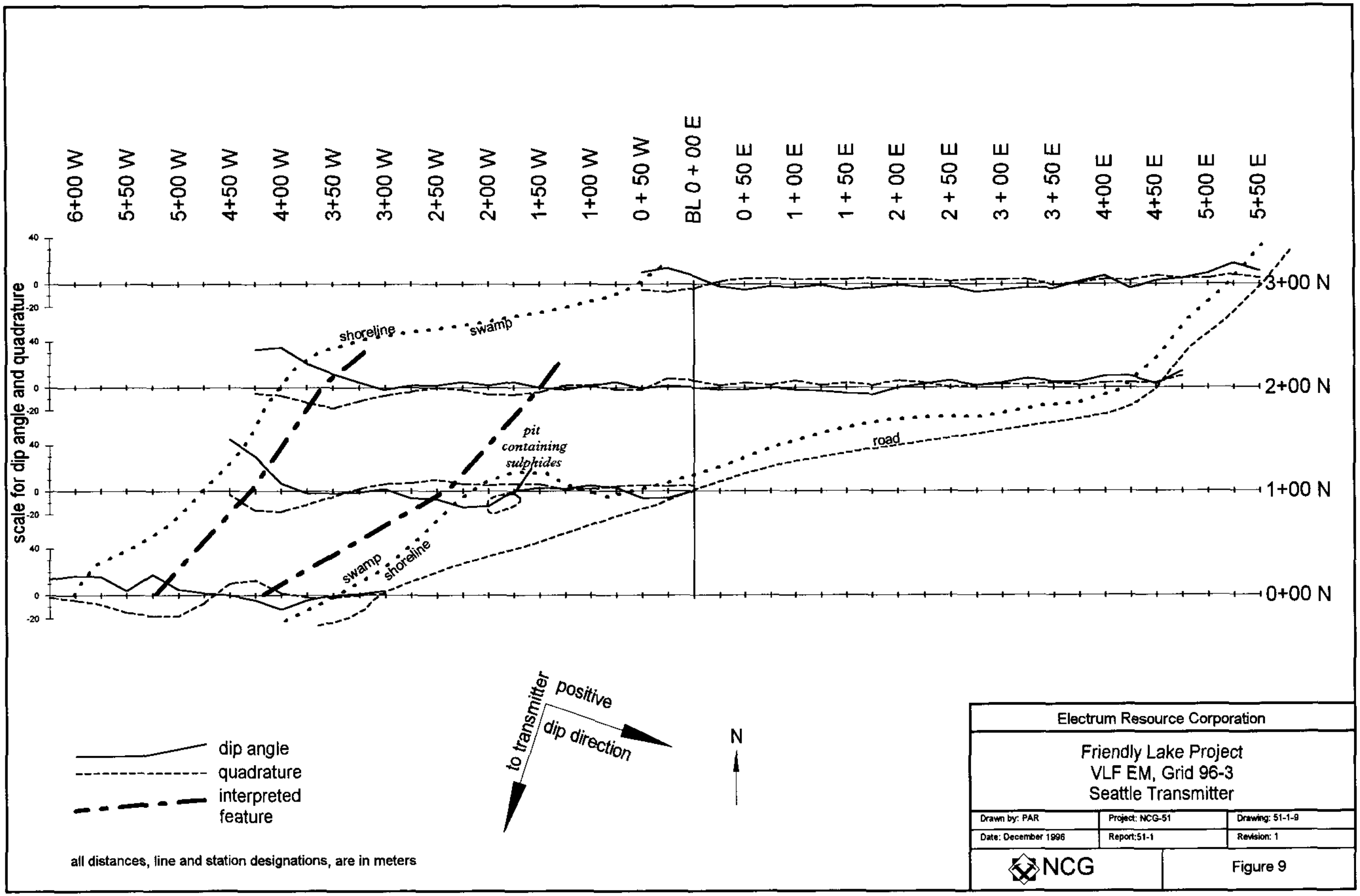
D. **Grid 2, Seattle Transmitter**

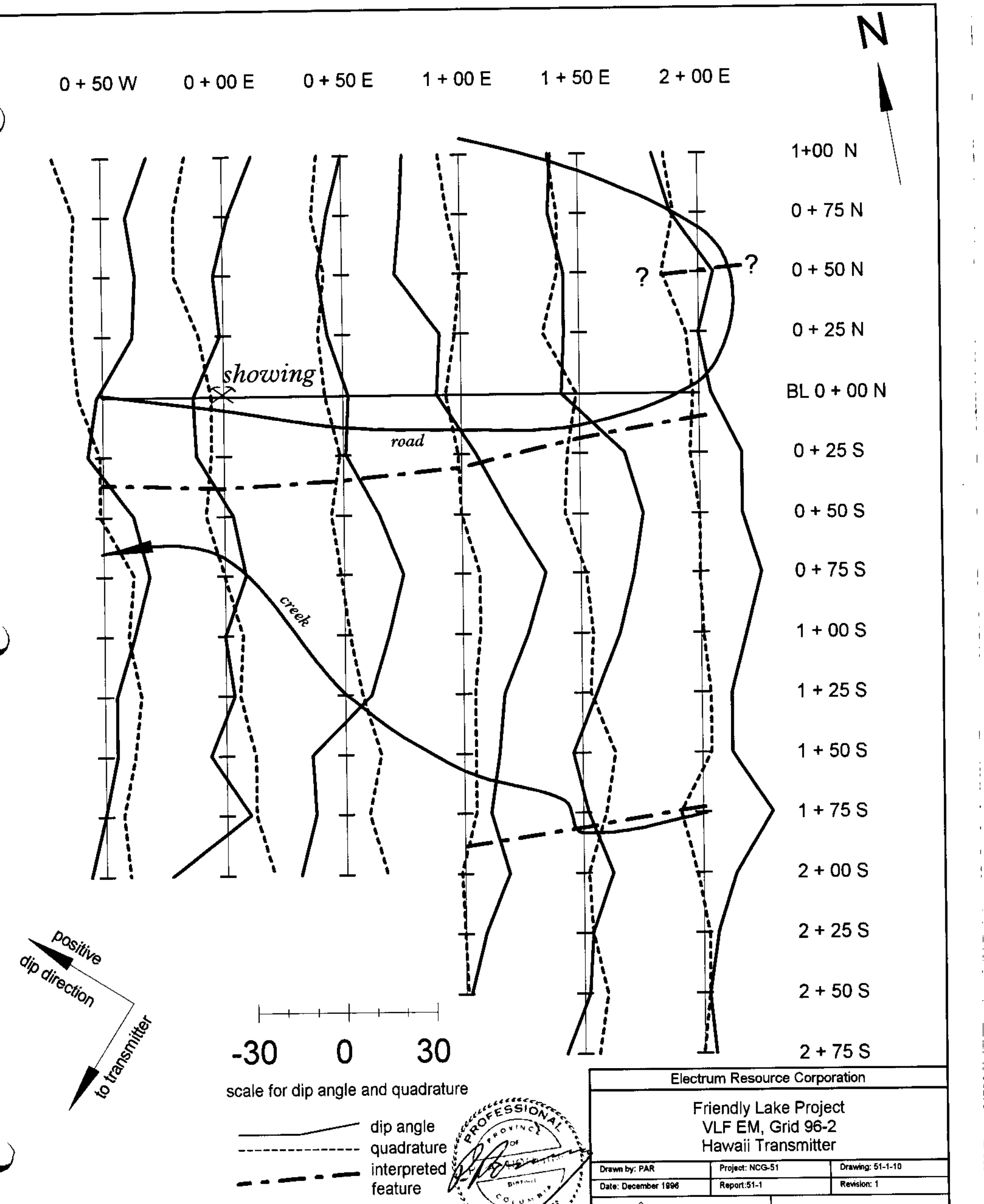
(see Figure 11)

The orientation of the grid and expected structures is very poor relative to the Seattle transmitter, and not much was expected from readings using that station. Nevertheless, there is a suggestion of a cross-over on lines 0+00 E, 0+50 E, 1+00 E, 1+50 E and 2+00 E, within 30 meters south of the baseline. It is reasonably coincident with the cross-over south of the base line that appears in the data from the Hawaii transmitter, corroborating the Hawaii data.

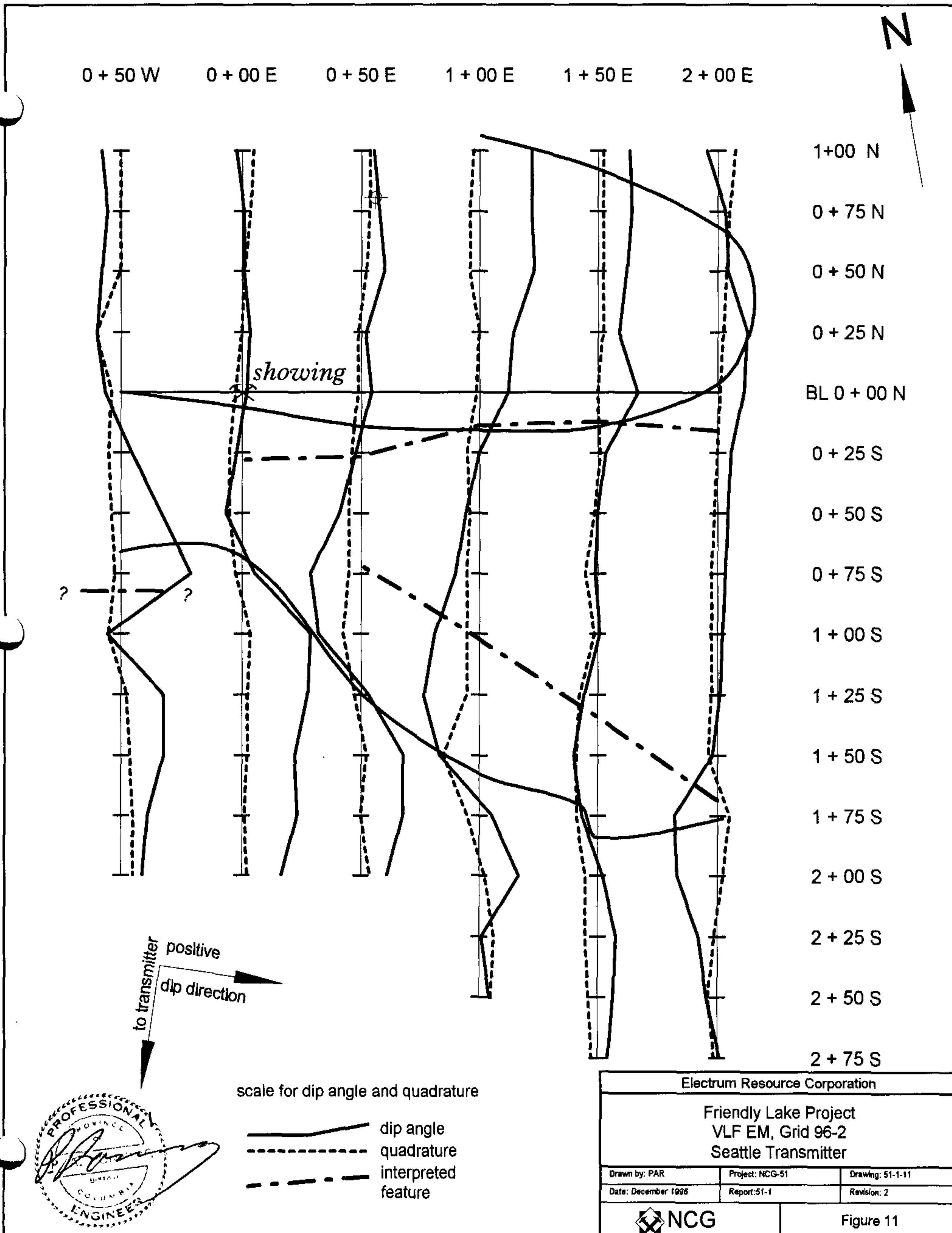
There is a very subtle cross-over in the Seattle data that trends from about 1+70 S on line 2+00 E to 0+75 S on line 0+50 E. It hints at the presence of a hitherto unsuspected northwest oriented structure.

An abrupt cross-over at about 1+80 S on line 0+50 W appears on no other lines and is unexplained. An interpreted feature is shown at that location on Figure 11 with question marks indicating doubt as to its extent and direction.


6+00 W
5+50 W
5+00 W
4+50 W
4+00 W
3+50 W
3+00 W
2+50 W
2+00 W
1+50 W
1+00 W
0 + 50 W
BL 0 + 00 E
0 + 50 E
1 + 00 E
1 + 50 E
2 + 00 E
2 + 50 E
3 + 00 E
3 + 50 E
4+00 E
4+50 E
5+00 E
5+50 E
3+00 N
2+00 N
1+00 N
0+00 N
scale for dip angle and quadrature
40
0
-20
shoreline
swamp
pit containing sulphides
road
swamp
shoreline
to transmitter
positive
dip direction
N
dip angle
quadrature
interpreted feature
all distances, line and station designations, are in meters
Electrum Resource Corporation
Friendly Lake Project
VLF EM, Grid 96-3
Seattle Transmitter
Drawn by: PAR
Project: NCG-51
Drawing: 51-1-9
Date: December 1996
Report:51-1
Revision: 1
NCG
Figure 9



Electrum Resource Corporation		
Friendly Lake Project VLF EM, Grid 96-2 Hawaii Transmitter		
Drawn by: PAR	Project: NCG-51	Drawing: 51-1-10
Date: December 1996	Report:51-1	Revision: 1
NCG		Figure 10



Electrum Resource Corporation

Friendly Lake Project
VLF EM, Grid 96-2
Seattle Transmitter

Drawn by: PAR	Project: NCG-51	Drawing: 51-1-11
Date: December 1996	Report:51-1	Revision: 2

NCG | Figure 11

E. Summary of VLF-EM

The VLF-EM serves to confirm the presence of structures, probably faults, which are believed to be related to mineralization. On Grid 1, the survey is incomplete due to the impossibility of surveying across deep swamp, but it at least provides partial confirmation of the structure, Spectacle Lakes "a", interpreted from aerial photographs and landforms in general.

The principal accomplishment of the survey on Grid 2 was to indicate the presence of a generally east-west structure just south of the baseline. The gold-bearing vein at 0+00 E, 0+00 N (see samples PR 10, PR 14, JFR 4 & 5) is close to the indicated structure and may be an offshoot of a mineralized body along the structure.

VI. Recommendations

The key target on the Fri property is on the RO and FL 3 & 4 claims, where two major structural trends intersect and geochemistry indicates the presence of gold and copper in soils and rocks. Much of the target area forms a topographic depression largely covered by swamp. This condition makes most direct methods of exploration such as prospecting and soil or rock geochemical sampling, only marginally useful. Electrical geophysical methods, though also affected by the presence of swamp, probably have the best chance of seeing through the saturated overburden. The writer suggests consultation with a geophysicist about applicable methods and the implementation of orientation surveys using one or more techniques.

Geological mapping where outcrop is available, aimed at better understanding the structural controls on mineralization, would be useful.

Partial Bibliography

1968: Aeromagnetic Series, Map 5229G, Clearwater, sheet 92 P 9, scale 1:63,360; part of Geophysics Paper 5229; Province of British Columbia Department of Mines and Petroleum Resources; Canada Department of Energy Mines and Resources, Geological Survey of Canada.

Rebagliati, C.M.
1988: Overview, Friendly Lake Precious Metals Project, RD Claims, Kamloops Mining Division, British Columbia; unpublished consultant's report.

Preto, V.A.G.
1970: Geology of the Area Between Eakin Creek and Windy Mountain; Geology, Exploration and Mining in British Columbia, 1970, pp. 307 - 312; British Columbia Department of Mines and Petroleum Resources.

Zastavnikovich, S.
1995: Geochemical Assessment Report on the FRI Group Mineral Claims; consultant's report for Electrum Resource Corporation.

Statement of Qualifications

I, Peter Arthur Ronning, of 1450 Davidson Road, Langdale, B.C., hereby certify that:

1. I am a consulting geological engineer, doing business under the registered name New Caledonian Geological Consulting. My business address is 912 - 510 West Hastings Street, Vancouver, B.C., V6B 1L8.

2. I am a member in good standing of the Association of Professional Engineers and Geoscientists of the Province of British Columbia.

3. I am a graduate of the University of British Columbia in geological engineering, with the degree of B.A.Sc. granted in 1973.

4. I hold the degree of M.Sc. (applied) in geology from Queen's University in Kingston, Ontario, granted in 1983.

5. I have worked as a geologist and latterly as a geological engineer in the field of mineral exploration since 1973.

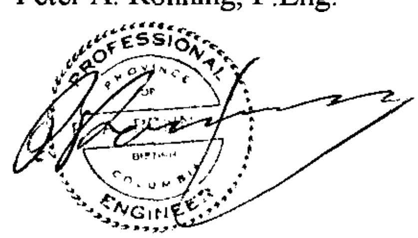
6. I am the author of the report entitled "1996 Exploration Program on the Friendly Lake Project" and dated February 1997.

7. I carried out or supervised the work described in this report.

8. I hold no beneficial interest in the mineral claims which are the subject of this report, nor in any corporation or other entity whose value could reasonably be expected to be affected by the conclusions expressed herein.

9. I authorize Electrum Resource Corporation to use this report, but only in its entire and unabridged form, for any lawful purpose.

Peter A. Ronning, P.Eng.



Appendix 1: Statement of Costs

1996 Friendly Lake Project - Statement of Expenditures				
Date	**Description of Item**	**Amount**	**GST**	**Total**
18 - 25 Sept. 1996	**Professional Services, P. Wilson**: Geophysics, line surveying, and other technical services, 8 days @ $165 per day	$1,320.00	$92.40	$1,412.40
18 - 27 Sept 1996	**Professional Services, P. Ronning, P.Eng.**: supervise geophysics & line surveying; reconnaissance geology, geochemical sampling, other travel related to field work, 8.6 days @ $375 per day	$3,225.00	$225.75	$3450.75
18 - 27 Sept. 1996	use of NCG vehicle as per attached log, 8.1 days @ $50.00 per day	$405.00	$28.35	$433.35
3 - 9 Dec 1996	**Professional Services, P. Ronning, P.Eng.**: reduction and plotting of geophysical data, 1.3 days @ $375 per day	$487.50	$34.13	$521.63
7 - 9 Jan 1997	**Professional Services, P. Ronning, P.Eng.**: review old reports, do rough compilation of geochemical data and drill holes from 1960's, 2 days @ $375 per day	$750.00	$52.50	$802.50
17 Jan 1997	**Professional Services, P. Ronning, P.Eng.**: Air photo interpretation, 1 day @ $375 per day	$375.00	$26.25	$401.25
20 Jan - 9 Feb 1997	**Professional Services, P. Ronning, P.Eng.**: complete report and drafting, 6.4 days @ $375 per day	$2,400.00	$168.00	$2,568.00
16 - 25 Sept. 1996	disbursements as per attached list	$2,988.37	$196.41	$3,184.78
	Totals ⇒	$11,950.87	$823.79	**$12,774.58**

Friendly Lake Project - Disbursements

13-Feb-97

Type	Date	Item	Base Cost	GST	Other Taxes	Total Cost
Communications						
	23-Sep-96	phone call to JJB from field	$2.14	$0.15	$0.15	$2.44
			$2.14	**$0.15**	**$0.15**	**$2.44**
Data						
	16-Sep-96	purchase aerial photos	$223.60	$15.65	$14.95	$254.20
			$223.60	**$15.65**	**$14.95**	**$254.20**
Fares						
	17-Sep-96	ferry from Victoria	$6.50	$0.00	$0.00	$6.50
	18-Sep-96	highway toll	$10.00	$0.00	$0.00	$10.00
	25-Sep-96	ferry fare enroute from Fri	$29.25	$0.00	$0.00	$29.25
	25-Sep-96	highway toll	$10.00	$0.00	$0.00	$10.00
			$55.75	**$0.00**	**$0.00**	**$55.75**
Field Supplies						
	18-Sep-96	field supplies	$53.38	$3.74	$3.74	$60.86
	18-Sep-96	pickets for grid lines	$27.90	$1.95	$1.95	$31.80

Type	Date	Item	Base Cost	GST	Other Taxes	Total Cost
	20-Sep-96	batteries for VLF & GPS	$18.60	$1.30	$1.30	$21.20
			$99.88	**$6.99**	**$6.99**	**$113.86**
Groceries						
	18-Sep-96	water & groceries	$15.03	$0.00	$0.00	$15.03
			$15.03	**$0.00**	**$0.00**	**$15.03**
Hotels						
	18-Sep-96	motel in Little Fort	$40.00	$2.80	$3.20	$46.00
	25-Sep-96	hotel rooms, 13 man nights	$553.00	$38.71	$44.24	$635.95
			$593.00	**$41.51**	**$47.44**	**$681.95**
Meals						
	25-Sep-96	lunch, 2 persons	$14.33	$0.00	$0.00	$14.33
	25-Sep-96	meals, 13 man days	$491.04	$34.31	$3.75	$529.10
			$505.37	**$34.31**	**$3.75**	**$543.43**
Office Supplies						
	13-Feb-97	report covers & supplies	$14.33	$1.00	$1.00	$16.33
			$14.33	**$1.00**	**$1.00**	**$16.33**
Services						
	21-Oct-96	analyses, 27 rocks	$712.80	$49.90	$0.00	$762.70

Type	Date	Item	Base Cost	GST	Other Taxes	Total Cost
	07-Jan-97	*mylar prints of FL* Maps	*$85.50*	*$5.99*	*$5.99*	$97.48
	20-Jan-97	courier maps to Scan Services	$11.50	$0.00	$0.00	$11.50
	28-Jan-97	draughting	$289.56	$20.27	$0.67	$310.50
	28-Jan-97	scan maps to digital form	$86.00	$6.02	$0.00	$92.02
	13-Feb-97	plot & print maps	$19.41	$1.36	$1.09	$21.86
			$1,204.77	**$83.54**	**$7.75**	**$1,296.06**
Vehicle Operation						
	18-Sep-96	fuel for field vehicle	$44.38	$3.10	$0.00	$47.48
	18-Sep-96	fuel for field vehicle	$56.78	$3.97	$0.00	$60.75
	20-Sep-96	gasoline	$30.37	$2.13	$0.00	$32.50
	25-Sep-96	gasoline	$57.94	$4.06	$0.00	$62.00
	25-Sep-96	parking	$3.00	$0.00	$0.00	$3.00
			$192.47	**$13.26**	**$0.00**	**$205.73**
	Grand Total:		**$2,906.34**	**$196.41**	**$82.03**	**$3,184.78**

Appendix 2: Raw VLF EM Data

VLF EM Data - September 1996

Grid 1		.Seattle		..Hawaii	
Line	Station	Dip	Quad	Dip	Quad
100	-300	3	-5	-7	10
100	-275	5	-16	-10	10
100	-250	13	-12	-24	16
100	-225	10	-11	-11	7
100	-200	7	-6	-19	10
100	-175	8	-6	-20	8
100	-150	10	-4	-20	10
100	-125	12	-2	-19	6
100	-100	14	0	-19	-1
100	-75	14	2	-20	-2
100	-50	12	2	-16	0
100	-25	8	-2	-14	6
100	0	14	-2	-6	12
100	25	5	-2	2	1
100	50	-1	-2	11	6
100	75				
50	-300	14	-10	-20	12
50	-275	14	-10	-10	6
50	-250	15	-7	-20	4
50	-225	8	-6	-16	4
50	-200	14	-12	-15	3
50	-175	15	-4	-20	8
50	-150	8	-2	-24	1
50	-125	14	1	-25	-3
50	-100	20	0	-26	-4
50	-75	15	-2	-25	-2
50	-50	15	1	-24	4
50	-25	15	-4	-25	10
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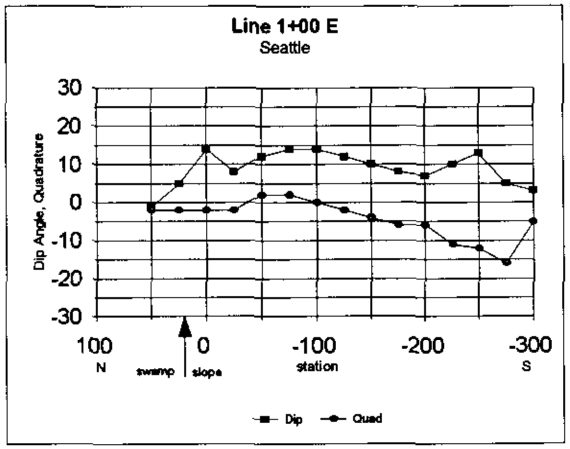
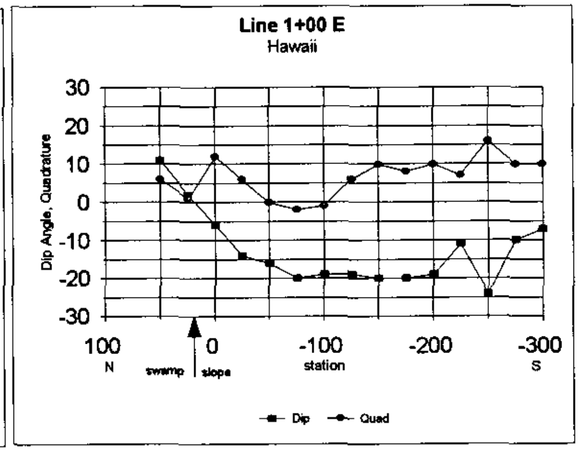
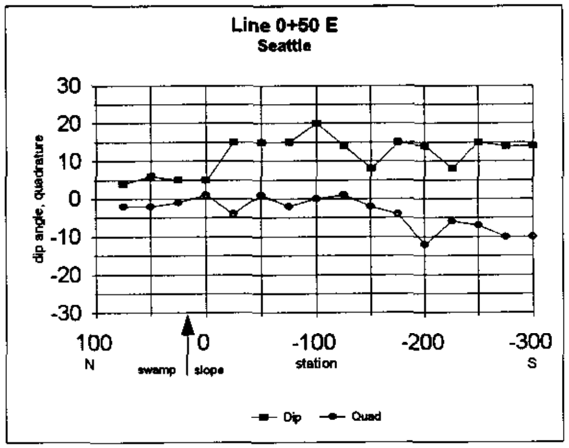
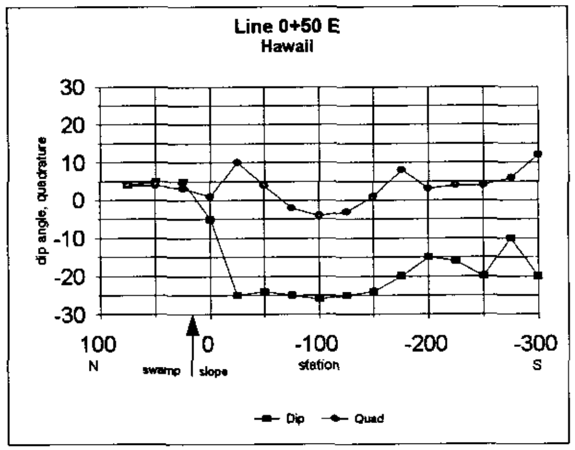
50	50	6	-2	5	4
50	75	4	-2	4	4



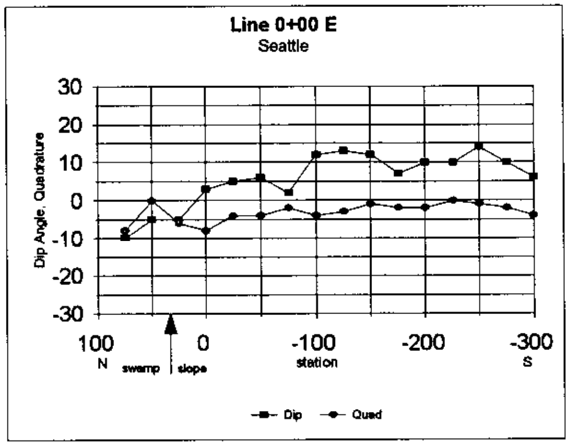


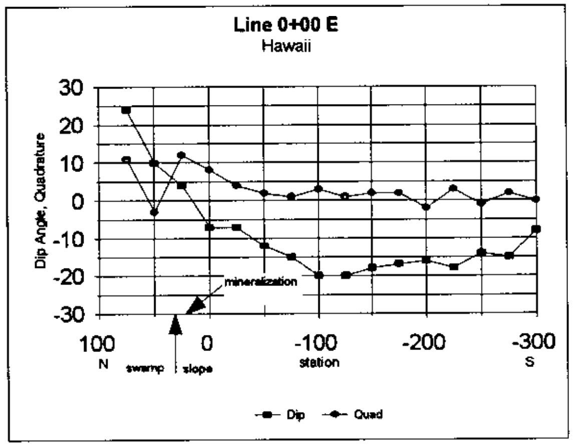


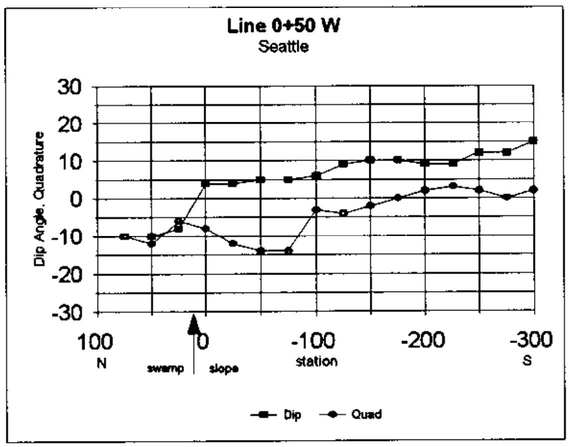


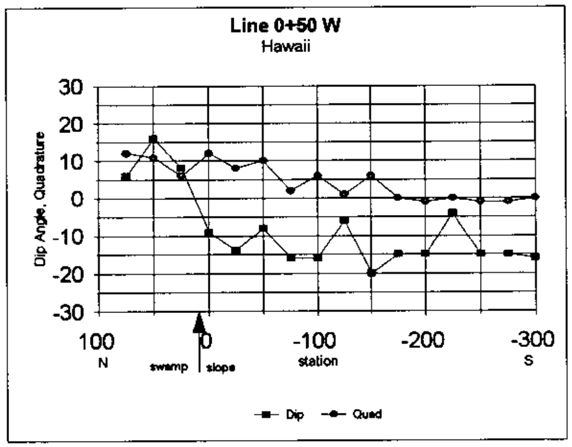
VLF EM Data - September 1996

Grid 1		.Seattle		..Hawaii	
Line	Station	Dip	Quad	Dip	Quad
0	-300	6	-4	-8	0
0	-275	10	-2	-15	2
0	-250	14	-1	-14	-1
0	-225	10	0	-18	3
0	-200	10	-2	-16	-2
0	-175	7	-2	-17	2
0	-150	12	-1	-18	2
0	-125	13	-3	-20	1
0	-100	12	-4	-20	3
0	-75	2	-2	-15	1
0	-50	6	-4	-12	2
0	-25	5	-4	-7	4
0	0	3	-8	-7	8
0	25	-5	-6	4	12
0	50	-5	0	10	-3
0	75	-10	-8	24	11
-50	-300	15	2	-16	0
-50	-275	12	0	-15	-1
-50	-250	12	2	-15	-1
-50	-225	9	3	-4	0
-50	-200	9	2	-15	-1
-50	-175	10	0	-15	0
-50	-150	10	-2	-20	6
-50	-125	9	-4	-6	1
-50	-100	6	-3	-16	6
-50	-75	5	-14	-16	2
-50	-50	5	-14	-8	10
-50	-25	4	-12	-14	8
-50	0	4	-8	-9	12
-50	25	-8	-6	8	6
-50	50	-10	-12	16	11
-50	75	-10	-10	6	12



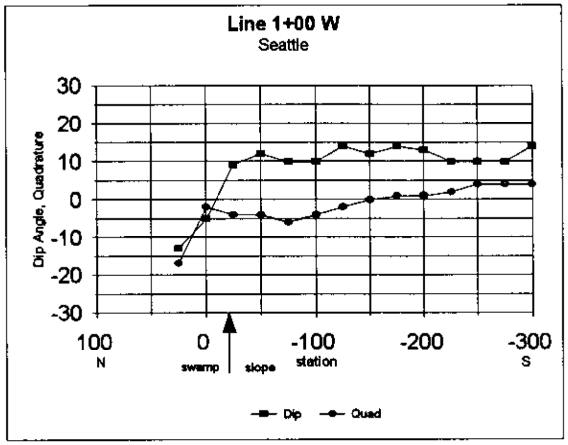


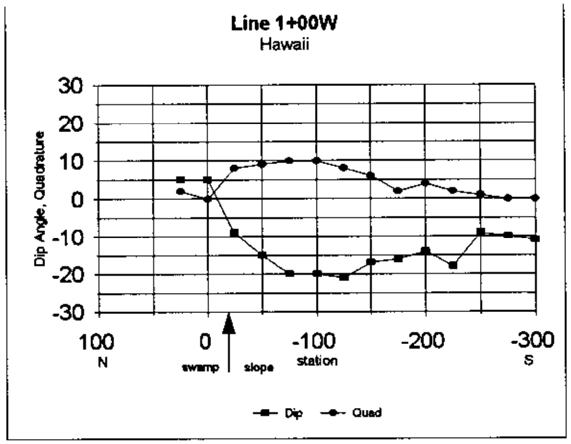




VLF EM Data - September 1996

Grid 1		.Seattle		..Hawaii	
Line	Station	Dip	Quad	Dip	Quad
-100	-300	14	4	-11	0
-100	-275	10	4	-10	0
-100	-250	10	4	-9	1
-100	-225	10	2	-18	2
-100	-200	13	1	-14	4
-100	-175	14	1	-16	2
-100	-150	12	0	-17	6
-100	-125	14	-2	-21	8
-100	-100	10	-4	-20	10
-100	-75	10	-6	-20	10
-100	-50	12	-4	-15	9
-100	-25	9	-4	-9	8
-100	0	-5	-2	5	0
-100	25	-13	-17	5	2
-100	50				
-100	75				

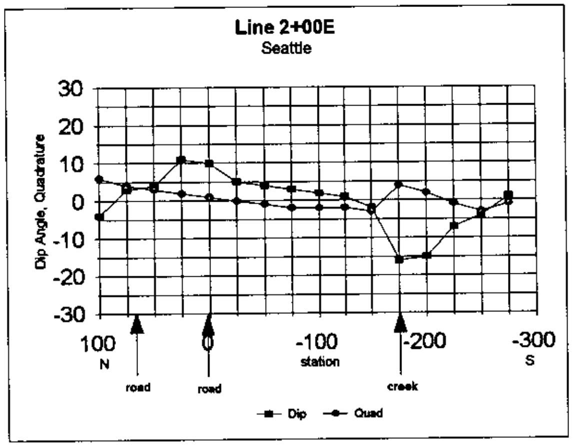


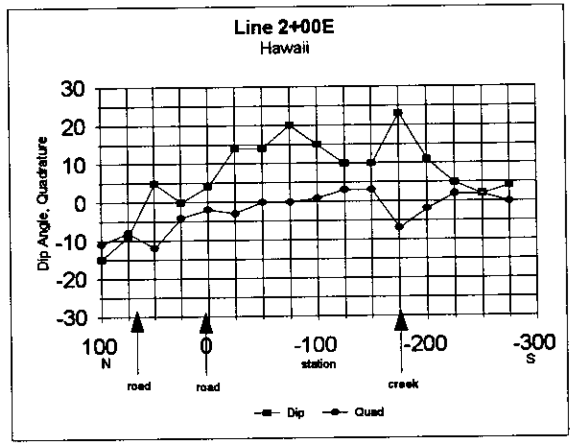


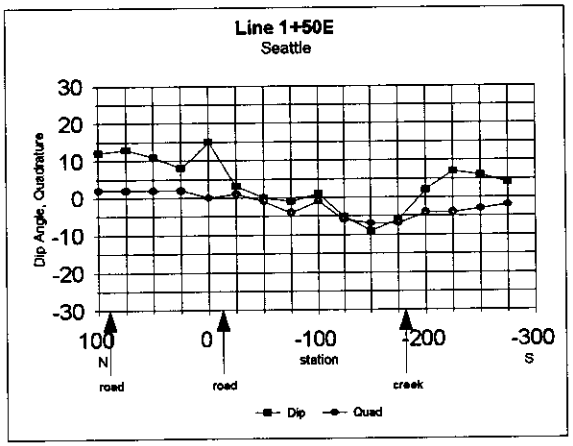
Notes: orientation of base line is 80 degrees
individual lines are oriented 170 degrees
Line & Station Numbering: east +ve
north +ve
Dip Angle Orientations: Seattle, east +ve
Hawaii, north +ve

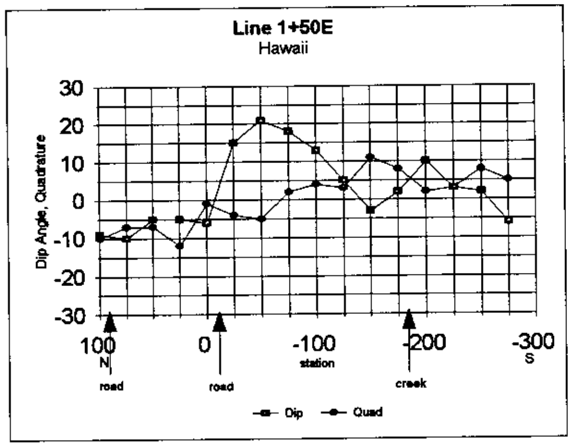
VLF EM Data - September 1996

Grid 2		.Seattle		..Hawaii	
Line	Station	Dip	Quad	Dip	Quad
200	100	-4	6	-15	-11
200	75	3	4	-9	-8
200	50	4	3	5	-12
200	25	11	2	0	-4
200	0	10	1	4	-2
200	-25	5	0	14	-3
200	-50	4	-1	14	0
200	-75	3	-2	20	0
200	-100	2	-2	15	1
200	-125	1	-2	10	3
200	-150	-2	-3	10	3
200	-175	-16	4	23	-7
200	-200	-15	2	11	-2
200	-225	-7	-1	5	2
200	-250	-4	-3	2	2
200	-275	1	-1	4	0
150	100	12	2	-9	-10
150	75	13	2	-10	-7
150	50	11	2	-5	-7
150	25	8	2	-5	-12
150	0	15	0	-6	-1
150	-25	3	1	15	-4
150	-50	0	-1	21	-5
150	-75	-1	-4	18	2
150	-100	1	-1	13	4
150	-125	-5	-6	5	3
150	-150	-9	-7	-3	11
150	-175	-6	-7	2	8
150	-200	2	-4	10	2
150	-225	7	-4	3	3
150	-250	6	-3	2	8
150	-275	4	-2	-6	5



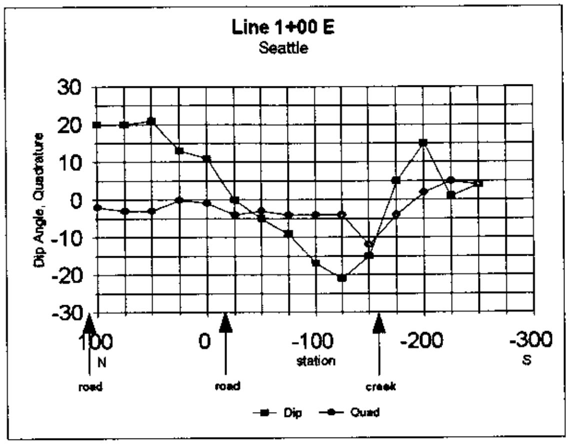


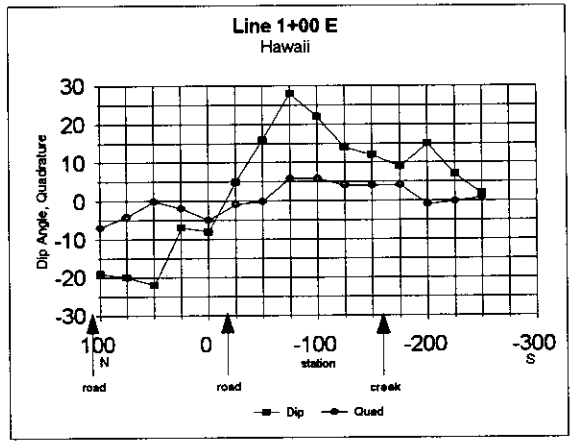


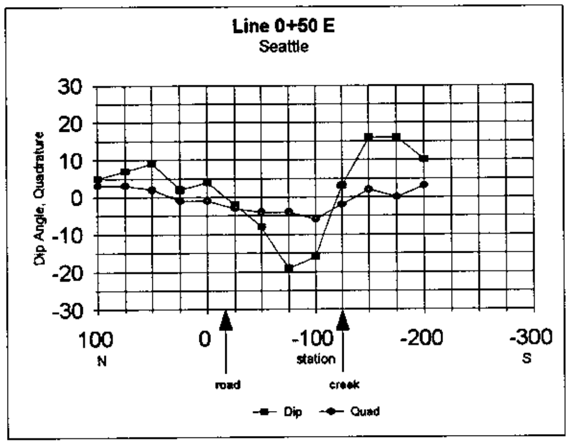


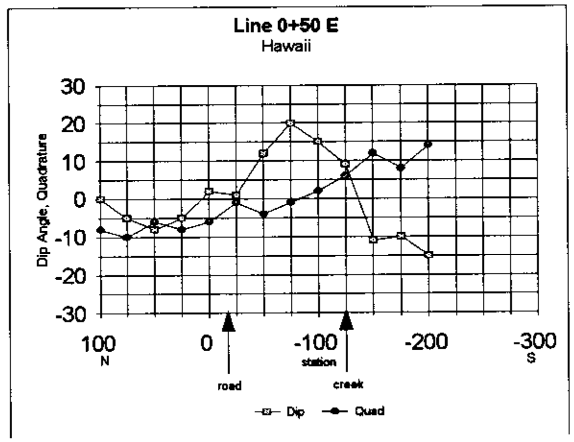
VLF EM Data - September 1996

Grid 2		.Seattle		..Hawaii	
Line	Station	Dip	Quad	Dip	Quad
100	100	20	-2	-19	-7
100	75	20	-3	-20	-4
100	50	21	-3	-22	0
100	25	13	0	-7	-2
100	0	11	-1	-8	-5
100	-25	0	-4	5	-1
100	-50	-5	-3	16	0
100	-75	-9	-4	28	6
100	-100	-17	-4	22	6
100	-125	-21	-4	14	4
100	-150	-15	-12	12	4
100	-175	5	-4	9	4
100	-200	15	2	15	-1
100	-225	1	5	7	0
100	-250	4	4	2	1
50	100	5	3	0	-8
50	75	7	3	-5	-10
50	50	9	2	-8	-6
50	25	2	-1	-5	-8
50	0	4	-1	2	-6
50	-25	-2	-3	1	-1
50	-50	-8	-4	12	-4
50	-75	-19	-4	20	-1
50	-100	-16	-6	15	2
50	-125	3	-2	9	6
50	-150	16	2	-11	12
50	-175	16	0	-10	8
50	-200	10	3	-15	14



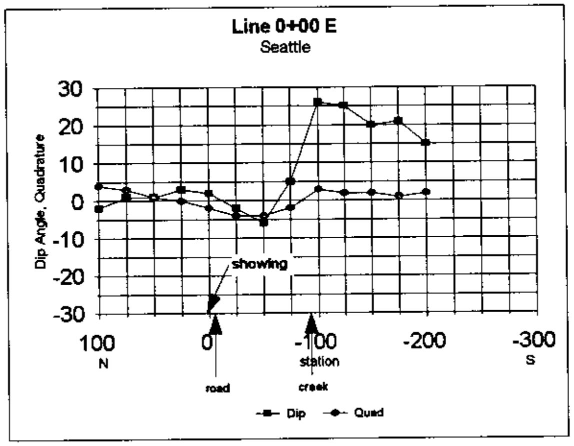


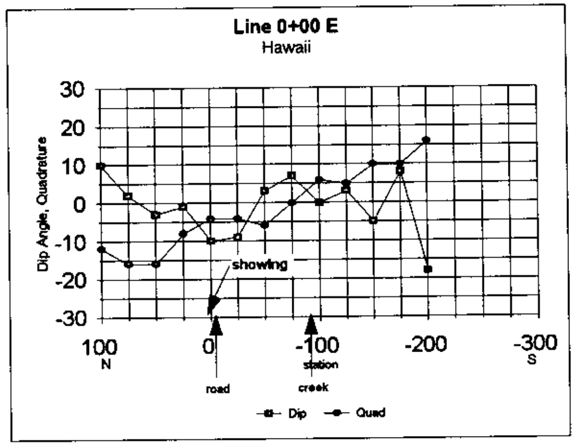


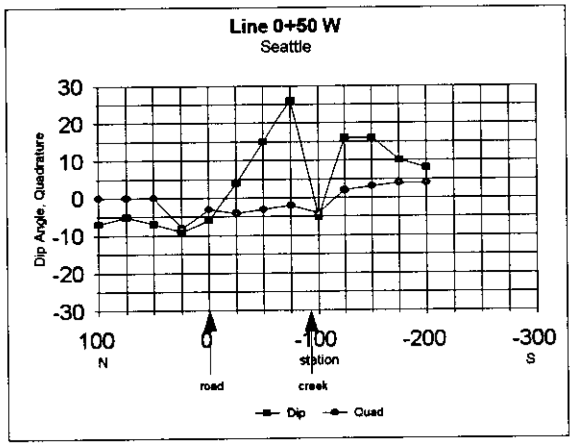


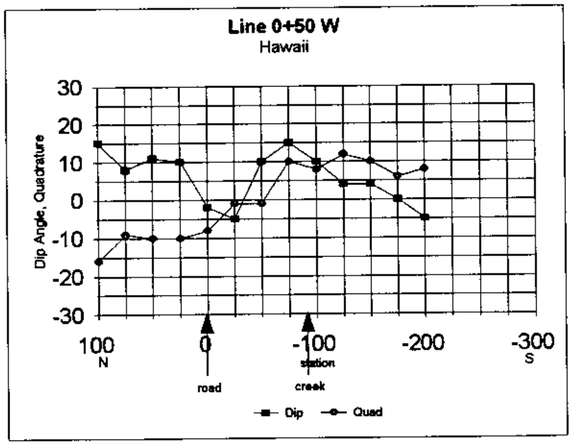
VLF EM Data - September 1996

Grid 2		Seattle		Hawaii	
Line	Station	Dip	Quad	Dip	Quad
0	100	-2	4	10	-12
0	75	1	3	2	-16
0	50	1	1	-3	-16
0	25	3	0	-1	-8
0	0	2	-2	-10	-4
0	-25	-2	-4	-9	-4
0	-50	-6	-4	3	-6
0	-75	5	-2	7	0
0	-100	26	3	0	6
0	-125	25	2	3	5
0	-150	20	2	-5	10
0	-175	21	1	8	10
0	-200	15	2	-18	16
-50	100	-7	0	15	-16
-50	75	-5	0	8	-9
-50	50	-7	0	11	-10
-50	25	-9	-8	10	-10
-50	0	-6	-3	-2	-8
-50	-25	4	-4	-5	-1
-50	-50	15	-3	10	-1
-50	-75	26	-2	15	10
-50	-100	-5	-4	10	8
-50	-125	16	2	4	12
-50	-150	16	3	4	10
-50	-175	10	4	0	6
-50	-200	8	4	-5	8





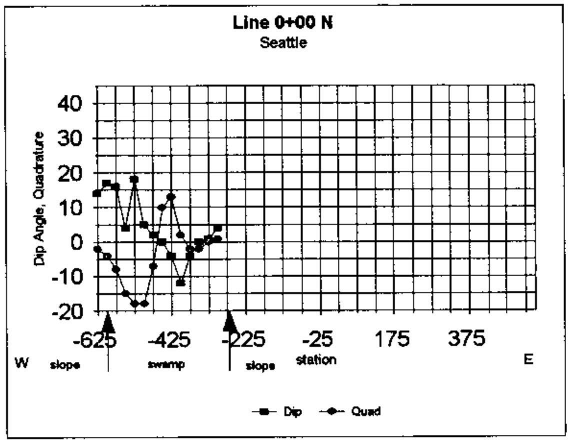


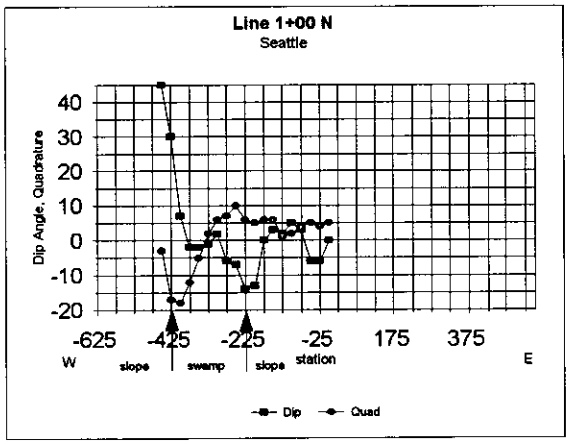


Notes: orientation of base line is 100 degrees
individual lines are oriented 190 degrees
Line & Station Numbering: east +ve
north +ve
Dip Angle Orientations: Seattle, east +ve
Hawaii, north +ve

VLF EM Data - March 1996

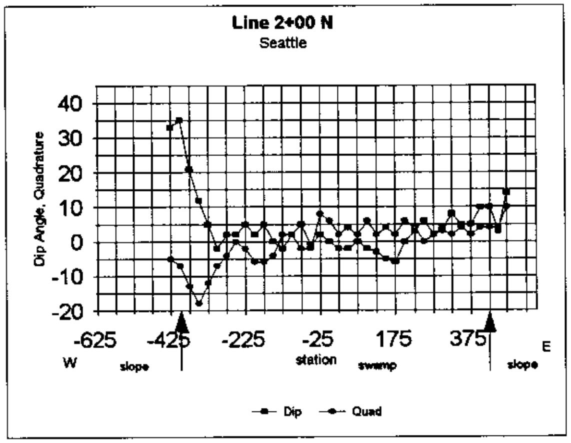
Grid 3		.Seattle	
Line	Station	Dip	Quad
0	-300	4	1
0	-325	1	0
0	-350	0	-2
0	-375	-4	-2
0	-400	-12	2
0	-425	-4	13
0	-450	0	10
0	-475	2	-7
0	-500	5	-18
0	-525	18	-18
0	-550	4	-15
0	-575	16	-8
0	-600	17	-4
0	-625	14	-2
100	0	0	5
100	-25	-6	4
100	-50	-6	5
100	-75	3	4
100	-100	5	2
100	-125	2	1
100	-150	3	6
100	-175	0	6
100	-200	-13	5
100	-225	-14	6
100	-250	-7	10
100	-275	-6	7
100	-300	2	6
100	-325	-1	2
100	-350	-2	-5
100	-375	-2	-12
100	-400	7	-18
100	-425	30	-17
100	-450	45	-3





VLF EM Data - March 1996

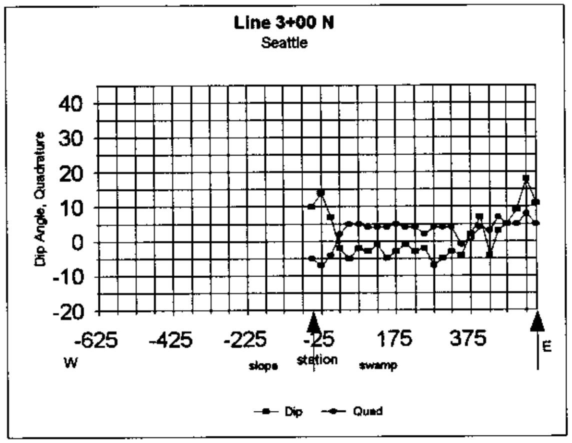
Grid 3		.Seattle	
Line	Station	Dip	Quad
200	475	14	10
200	450	3	4
200	425	10	4
200	400	10	4
200	375	5	2
200	350	5	4
200	325	8	2
200	300	4	3
200	275	2	2
200	250	6	0
200	225	3	4
200	200	0	6
200	175	-6	2
200	150	-5	4
200	125	-3	2
200	100	-2	6
200	75	0	2
200	50	-2	4
200	25	-2	2
200	0	0	6
200	-25	2	8
200	-50	-1	-2
200	-75	5	-2
200	-100	2	2
200	-125	-2	2
200	-150	0	-4
200	-175	5	-6
200	-200	2	-6
200	-225	5	-2
200	-250	2	0
200	-275	2	-4
200	-300	-2	-7
200	-325	5	-12
200	-350	12	-18
200	-375	21	-13
200	-400	35	-7
200	-425	33	-5



C C C

VLF EM Data - March 1996

Grid 3		.Seattle	
Line	Station	Dip	Quad
300	550	11	5
300	525	18	8
300	500	9	5
300	475	5	5
300	450	3	7
300	425	-4	3
300	400	7	4
300	375	2	1
300	350	-4	-1
300	325	-3	4
300	300	-5	4
300	275	-7	4
300	250	-2	2
300	225	-3	4
300	200	-1	4
300	175	-3	5
300	150	-5	4
300	125	-1	4
300	100	-3	4
300	75	-2	5
300	50	-5	5
300	25	-2	2
300	0	7	-4
300	-25	14	-7
300	-50	10	-5



Notes: orientation of base line is 360 degrees
individual lines are oriented 90 degrees
Line & Station Numbering: east +ve
north +ve
Dip Angle Orientations: Seattle, east +ve

Appendix 3: Instrument Specifications

VLF EM

EM16

One of the most popular and widely used electromagnetic instruments, the EM16 VLF receiver makes the ideal reconnaissance EM. This can be attributed to its field reliability, operational simplicity, compactness and mutual compatibility with other reconnaissance instruments such as portable magnetometers and radiometric detectors.

The VLF method of EM surveying, pioneered by Geonics, has proven to be a simple economical means of mapping geological structure and fault tracing. The applications are many and varied, ranging from direct detection of massive sulphide conductors to the indirect detection of precious metals and radioactive deposits.

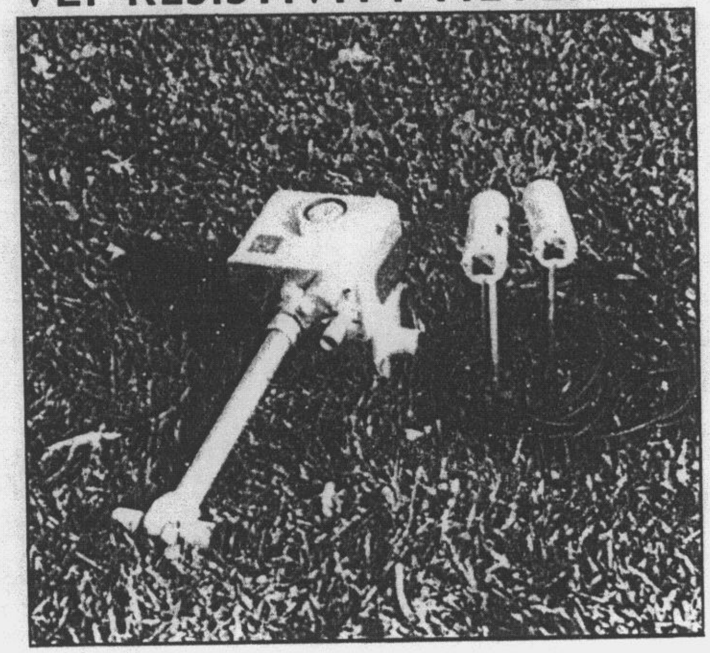
FEATURES

- The EM16 measures the quad-phase as well as the in-phase secondary field. This has the advantage of providing an additional piece of data for a more comprehensive interpretation and also allows a more accurate determination of the tilt angle.
- The secondary fields are measured as a ratio to the primary field making the measurement independent of absolute field strength.

Specifications

MEASURED QUANTITY	In-phase and quad-phase components of vertical magnetic field as a percentage of horizontal primary field. (i.e. tangent of the tilt angle and ellipticity)
SENSITIVITY	In-phase : ±150% Quad-phase : ± 40%
RESOLUTION	±1%
OUTPUT	Nulling by audio tone. In-phase indication from mechanical inclinometer and quad-phase from a graduated dial.
OPERATING FREQUENCY	15-25 kHz VLF Radio Band. Station selection done by means of plug-in units.
OPERATOR CONTROLS	On/Off switch, battery test push button, station selector switch, audio volume control, quadrature dial, inclinometer.
POWER SUPPLY	6 disposable 'AA' cells
DIMENSIONS	42 x 14 x 9 cm
WEIGHT	Instrument: 1.6 kg Shipping : 5.5 kg

VLF RESISTIVITY METER



EM16/16R

The EM16R is a simple, button on attachment to the EM16 converting it to a direct reading terrain resistivity meter. The EM16R interfaces a pair of potential electrodes to the EM16 enabling the measurement of the ratio of, and the phase angle between, the horizontal electric and magnetic fields of the plane wave propagated by distant VLF radio transmitters.

The EM16R is direct reading in ohm-meters of apparent ground resistivity. If the phase angle is 45°, the resistivity reading is the true value and the earth is uniform to the depth of exploration (i.e. a skin depth). Any departure from 45° of phase indicates a layered earth. Two layer interpretation curves are supplied with each instrument to permit an interpretation based on a two layer earth model.

This highly portable resistivity meter makes an ideal tool for quick geological mapping and has been used successfully for a variety of applications.

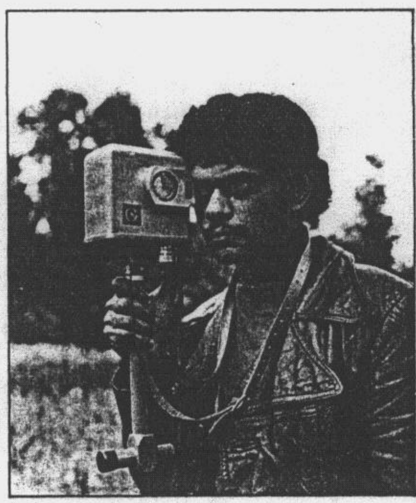
- Detection of massive and disseminated sulphide deposits
- Overburden conductivity and thickness measurements
- Permafrost mapping
- Detection and delineation of industrial mineral deposits
- Aquifer mapping

Specifications EM16R ATTACHMENT

MEASURED QUANTITY	• Apparent Resistivity of the ground in ohm-meters • Phase angle between E_x and H_y in degrees
RESISTIVITY RANGES	• 10 – 300 onm-meters • 100 – 3000 ohm-meters • 1000 – 30000 ohm-meters
PHASE RANGE	0-90 degrees
RESOLUTION	• Resistivity : ±2% full scale • Phase : ±0.5°
OUTPUT	Null by audio tone. Resistivity and phase angle read from graduated dials.
OPERATING FREQUENCY	15-25 kHz VLF Radio Band. Station selection by means of rotary switch.
INTERPROBE SPACING	10 meters
PROBE INPUT IMPEDANCE	100 MΩ in parallel with 0.5 picofarads
DIMENSIONS	19 x 11.5 x 10 cm. (attached to side of EM16)
WEIGHT	1.5 kg (including probes and cable)

LEADERS IN ELECTROMAGNETICS

Incorporated in 1962, Geonics Limited is the only designer and manufacturer of geophysical instrumentation to specialize entirely in electromagnetic exploration systems. Commencing with the famous "Ronka EM" horizontal loop system the Company went on to pioneer the patented EM16 and EM18 ground and airborne VLF equipment. In the field of terrain conductivity the patented EM31 and EM34-3 permit the measurement of terrain conductivity without ground contact and with unprecedented speed and resolution to depths of 6m and up to 60m respectively. The Geonics EM33 systems provide the most advanced and comprehensive helicopter electromagnetic survey capability in use throughout the world. The latest addition to the Geonics EM family is the transient EM37 system for "large-target" depths of exploration exceeding 500 meters. Combined with a bore hole probe (BH 43) and a digital acquisition system (DAS 40) and a comprehensive computer library for data editing and interpretation it represents the most versatile, advanced, state-of-the-art system on the market today.

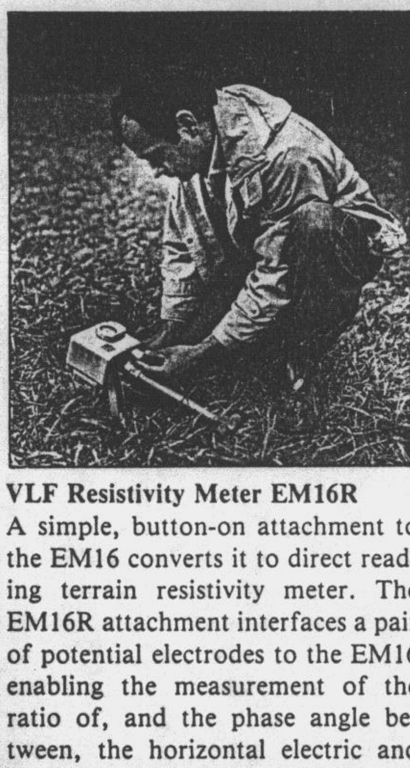


VLF SYSTEMS

VLF EM 16

The VLF method of EM surveying, pioneered by Geonics, has proven to be a simple economical means of mapping geological structure and fault tracing. The applications are many and varied, ranging from direct detection of massive sulphide conductors to the indirect detection of precious metals and radioactive deposits.

- The EM16 is the only VLF instrument that measures the quadphase as well as the in-phase secondary field. This has the advantage of providing an additional piece of data for a more comprehensive interpretation and also allows a more accurate determination of the tilt angle.
- The secondary fields are measured as a ratio to the primary field making the measurement independent of absolute field strength.
- The EM16 is the only VLF receiver that can be adapted to measure VLF resistivity.



VLF Resistivity Meter EM16R

A simple, button-on attachment to the EM16 converts it to direct reading terrain resistivity meter. The EM16R attachment interfaces a pair of potential electrodes to the EM16 enabling the measurement of the ratio of, and the phase angle between, the horizontal electric and magnetic fields of the plane wave propagated by distant VLF radio transmitters.

This highly portable resistivity meter makes an ideal tool for quick geological mapping and has been used successfully for a variety of applications.

- Detection of massive and disseminated sulphide deposits
- Overburden conductivity and thickness measurements
- Permafrost mapping
- Detection and delineation of industrial mineral deposits
- Aquifer mapping

TERRAIN CONDUCTIVITY METERS

There are three instruments in the Geonics terrain conductivity meter family using a patented inductive electromagnetic technique to measure terrain conductivity without contact.

EM31

The Geonics EM31 instrument is direct reading in millimhos per meter and surveys are carried out simply by traversing the ground. The effective depth of exploration is approximately six meters making it ideal for engineering geophysics. By eliminating ground contact, measurements are easily carried out in regions of high resistivity such as gravel, permafrost and bedrock. Over a uniform half space the EM31 reads identically with conventional resistivity and the measurement is analogous to a coventional galvanic resistivity survey with a fixed array spacing.

The advantages of the EM31 are the speed with which surveys can be carried out, the ability to measure precisely small changes in conductivity, and the continuous readout while traversing a survey area which provides a previously unobtainable lateral resolution.

Appendix 4: Analytical Results

COMP: N.C.G.CONSULTANTS
PROJ: FRI
ATTN: PETER RONING

MIN-EN LABS — ICP REPORT

8282 SHERBROOKE ST., VANCOUVER, B.C. V5X 4E8
TEL:(604)327-3436 FAX:(604)327-3423

FILE NO: 6V-0833-RJ1+2
DATE: 96/10/18
* * (ACT:F31)

SAMPLE NUMBER	AG PPM	AL %	AS PPM	BA PPM	BE PPM	BI PPM	CA %	CD PPM	CO PPM	CR PPM	CU PPM	FE %	GA PPM	K %	LI PPM	MG %	MN PPM	MO PPM	NA %	NI PPM	P PPM	PB PPM	SB PPM	SN PPM	SR PPM	TH PPM	TI %	U PPM	V PPM	W PPM	ZN PPM	Hg PPB
PR-96-09-19 01	2.1	.01	116	60	1.3	14	>15.00	.1	10	10	138	.77	1	.01	1	.10	>10000	23	.01	178	160	69	13	2	695	1	.01	1	5.4	3	69	5
PR-96-09-19 02	.4	.01	1	228	2.4	27	>15.00	.1	26	13	34	4.05	1	.02	1	.10	>10000	64	.01	412	190	154	18	7	777	1	.01	1	7.3	3	102	10
PR-96-09-19 03	.1	.01	1	451	4.8	22	>15.00	.1	49	15	23	8.86	1	.04	1	.09	>10000	109	.01	638	310	229	23	11	701	1	.01	1	9.6	1	208	5
PR-96-09-19 04	.1	.33	1	346	3.2	15	12.53	.1	52	21	35	9.45	1	.06	9	.21	>10000	98	.02	473	370	202	19	11	595	1	.02	1	25.9	1	189	5
PR-96-09-19 05	.1	.14	1	482	35.2	1	2.26	.1	47	17	59	>15.00	1	.03	1	.06	>10000	163	.01	365	160	64	10	21	396	1	.01	1	164.5	1	210	10
PR-96-09-19 06	.1	.07	1	766	9.9	1	2.42	.1	58	14	56	>15.00	1	.05	1	.07	>10000	147	.01	657	130	164	16	23	551	1	.01	1	19.6	1	200	10
PR-96-09-19 07	.1	.25	1	798	5.8	1	4.07	.1	62	16	84	14.99	1	.06	1	.10	>10000	100	.01	698	450	210	27	16	622	1	.01	1	16.4	1	216	45
PR-96-09-19 08	42.2	.06	88	415	.8	1	2.60	.1	8	190	106	2.13	1	.02	1	.79	4631	125	.01	75	130	373	28	3	147	1	.01	1	79.4	9	39	10
PR-96-09-19 09	20.3	.62	173	332	.1	1	1.87	.1	27	232	405	4.52	1	.23	15	.50	2313	70	.02	81	1250	141	26	4	95	1	.02	1	330.0	15	82	55
PR-96-09-19 10	8.4	.03	97	1307	.1	5	4.59	.1	7	120	226	2.48	1	.01	1	.81	4083	37	.01	57	3820	1118	1	3	543	1	.01	1	69.7	5	47	5
PR-96-09-22 11	1.4	1.97	77	218	.1	1	1.23	.1	20	49	61	4.03	1	.10	15	1.75	1146	19	.02	27	1590	14	1	4	84	1	.08	1	76.9	1	58	10
PR-96-09-22 12	1.0	1.95	13	117	.1	1	2.39	.1	20	36	61	4.81	1	.10	12	1.58	1094	15	.04	29	1570	1	1	5	77	1	.09	1	98.1	1	51	5
PR-96-09-22 13	1.0	.63	18	88	.1	2	.75	.1	6	31	28	1.88	1	.10	6	.43	287	6	.03	11	1190	3	2	2	76	1	.10	1	34.1	1	28	5
PR-96-09-23 14	4.6	.03	132	921	.1	1	8.29	.1	7	92	283	2.70	1	.01	1	1.45	3207	65	.01	48	70	286	1	3	495	1	.01	1	67.7	2	41	15
PR-96-09-23 15	2.6	.91	100	458	.1	3	1.86	.1	13	56	281	2.89	1	.93	40	1.67	888	20	.06	33	790	69	1	3	149	1	.12	1	86.6	1	62	5
PR-96-09-24 16	.8	.15	64	597	.1	1	3.45	.1	12	63	208	2.70	1	.12	8	1.24	899	9	.04	34	960	1	1	3	136	1	.02	1	118.3	1	30	5
PR-96-09-24 17	1.7	.41	1	195	.1	1	4.38	.1	10	38	130	2.69	1	.30	15	.60	1295	9	.03	21	700	23	1	3	133	1	.07	1	131.8	3	41	10
PR-96-09-24 18	2.0	.71	104	287	.1	8	2.13	.1	11	43	377	1.87	1	.76	36	1.17	589	20	.05	21	880	1	1	2	112	1	.09	1	71.4	5	49	5
PR-96-09-24 19	1.5	.90	97	210	.1	4	2.62	.1	14	81	209	2.26	1	.69	40	1.18	615	9	.03	31	1100	1	1	3	105	1	.09	1	83.3	2	29	10
PR-96-09-24 20	1.0	.12	169	279	.1	1	3.14	.1	13	64	128	3.19	1	.12	2	.57	750	41	.01	30	820	1	1	3	76	1	.01	1	115.0	3	18	5
PR-96-09-24 21	1.0	.08	182	200	.1	1	5.14	.1	16	68	111	4.48	1	.07	2	.66	1313	66	.01	36	480	25	1	4	291	1	.01	1	123.7	2	32	10
PR-96-09-24 22	1.8	.45	69	220	.1	6	1.78	.1	18	50	462	2.22	1	.47	25	.93	468	12	.05	27	930	54	1	3	73	1	.09	1	56.8	1	41	5
JFR-1	1.8	.48	69	220	.1	9	1.66	.1	18	46	460	2.23	1	.50	26	.96	442	11	.05	27	940	47	1	2	69	1	.09	1	58.2	1	42	15
JFR-2	3.8	.01	377	133	.1	1	>15.00	.1	7	32	40	3.88	1	.01	3	6.46	2366	20	.01	44	340	1	1	6	656	1	.01	1	109.4	1	63	25
JFR-3	13.3	.25	163	341	.1	1	3.03	.1	9	121	113	2.04	1	.07	5	1.09	902	30	.01	29	520	124	14	2	93	1	.01	1	129.8	5	55	120
JFR-4	14.3	.08	178	1210	.1	3	6.78	.1	6	104	332	3.30	1	.03	1	1.37	2977	27	.02	42	9100	2034	1	4	778	1	.01	1	140.3	3	56	5
JFR-5	7.2	.03	266	494	.1	1	8.80	.1	6	86	161	3.55	1	.02	2	2.83	2716	25	.01	45	6100	730	1	4	676	1	.01	1	139.4	1	69	10

COMP: N.C.G.CONSULTANTS
PROJ: FRI
ATTN: PETER RONING

MIN-EN LABS — ICP REPORT

8282 SHERBROOKE ST., VANCOUVER, B.C. V5X 4E8
TEL:(604)327-3436 FAX:(604)327-3423

FILE NO: 6V-0833-RJ1+2
DATE: 96/10/18
* * (ACT:F31)

SAMPLE NUMBER	Au-fire PPB
PR-96-09-19 01	4
PR-96-09-19 02	7
PR-96-09-19 03	5
PR-96-09-19 04	2
PR-96-09-19 05	6
PR-96-09-19 06	2
PR-96-09-19 07	4
PR-96-09-19 08	2930
PR-96-09-19 09	1758
PR-96-09-19 10	635
PR-96-09-22 11	47
PR-96-09-22 12	21
PR-96-09-22 13	6
PR-96-09-23 14	593
PR-96-09-23 15	84
PR-96-09-24 16	8
PR-96-09-24 17	14
PR-96-09-24 18	6
PR-96-09-24 19	8
PR-96-09-24 20	828
PR-96-09-24 21	1180
PR-96-09-24 22	24
JFR-1	23
JFR-2	620
JFR-3	1235
JFR-4	494
JFR-5	665

MINERAL
·ENVIRONMENTS
LABORATORIES
(DIVISION OF ASSAYERS CORP.)

SPECIALISTS IN MINERAL ENVIRONMENTS
CHEMISTS • ASSAYERS • ANALYSTS • GEOCHEMISTS

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SMITHERS LAB:
3176 TATLOW ROAD
SMITHERS, B.C., CANADA V0J 2N0
TELEPHONE (604) 847-3004
FAX (604) 847-3005

Assay Certificate

6V-0833-PA1

Company: **N.C.G.CONSULTANTS**
Project: FRI
Attn: PETER RONING

Date: NOV-13-96

We hereby certify the following Assay of 10 PULP samples submitted NOV-04-96 by John Barakso.

Sample Number	Au-fire g/tonne
PR-96-09-19 08	3.09
PR-96-09-19 09	1.84
PR-96-09-19 10	.57
PR-96-09-23 14	.48
PR-96-09-24 20	.78
PR-96-09-24 21	1.22
JFR-2	.59
JFR-3	1.14
JFR-4	.45
JFR-5	.61

Certified by ____________

MIN-EN LABORATORIES

The following two pages are copied from Min-En Laboratories' 1997 catalogue. They provide information as to analytical techniques and detection limits used. The prices indicated are not necessarily those which applied during 1996, when the samples from the Friendly Lake property were analyzed.

The analyses actually obtained are marked with an "x".

MULTI ELEMENT ICP ANALYSIS

Element	Lower Limit	Upper Limit
Aluminum (Al - %) *	0.01 %	15 %
Silver (Ag - ppm)	0.2 ppm	200 ppm
Arsenic (As - ppm)	5 ppm	10000 ppm
Barium (Ba - ppm) *	10 ppm	10000 ppm
Beryllium (Be - ppm) *	0.5 ppm	100 ppm
Bismuth (Bi - ppm)	5 ppm	10000 ppm
Calcium (Ca - %) *	0.01 %	15 %
Cadmium (Cd - ppm)	1 ppm	100 ppm
Cobalt (Co - ppm)	1 ppm	10000 ppm
Chromium (Cr - ppm) *	1 ppm	10000 ppm
Copper (Cu - ppm)	1 ppm	10000 ppm
Iron (Fe - %)	0.01 %	15 %
Gallium (Ga - ppm) *	10 ppm	10000 ppm
Potassium (K - %) *	0.01 %	10 %
Lithium (Li - ppm) *	1 ppm	10000 ppm
Magnesium (Mg - %) *	0.01 %	15 %
Manganese (Mn- ppm)	5 ppm	10000 ppm
Molybdenum (Mo - ppm)	2 ppm	10000 ppm
Sodium (Na - %) *	0.01 %	5 %
Nickel (Ni - ppm)	1 ppm	10000 ppm
Phosphorous (P - ppm)	10 ppm	10000 ppm
Lead (Pb - ppm)	2 ppm	10000 ppm
Antimony (Sb - ppm)	5 ppm	10000 ppm
Tin (Sn - ppm) *	10 ppm	1000 ppm
Strontium (Sr - ppm) *	1 ppm	10000 ppm
Thorium (Th - ppm)	1 ppm	1000 ppm
Titanium (Ti - ppm) *	0.01%	10 %
Uranium (U - ppm)	5 ppm	10000 ppm
Vanadium (V - ppm)	1 ppm	10000 ppm
Tungsten (W - ppm) *	10 ppm	10000 ppm
Zinc (Zn - ppm)	1 ppm	10000 ppm

-Aqua Regia digestion: Dissolution may not be complete for elements marked with an asterisk (*).

Any 6 - 12 elements	$6.30
X All 31 elements	$7.30

GOLD AND PRECIOUS METALS ANALYSIS

Geochemical (Trace level) Analysis

X Gold, 10g Aqua Regia leach, MIBK-A.A. finish	5 ppb. det.	$7.50
Gold, 15g Fire Geochem, A.A. finish	1 ppb. det.	$8.50
Gold, 30g Fire Geochem, A.A. finish	1 ppb. det.	$9.50
Platinum, 30g Fire Geochem, ICP finish	5 ppb. det.	$9.50
Palladium, 30g Fire Geochem, ICP finish	5 ppb. det.	$9.50
Pt and Pd, 30g Fire Geochem, ICP finish	5 ppb. det.	$15.00
Rhodium, 30g Fire Geochem, ICP finish, Au inquart	5 ppb. det.	$25.00

Precious Metal (Ore grade) Assays

X Gold,1/2 Assay ton fire assay, A.A. finish	.01 g/tonne det.	$9.50
Gold, 1 Assay ton fire assay, A.A. finish	.01 g/tonne det.	$10.50
Gold, 1/2 Assay ton fire assay, gravimetric	.03 g/tonne det.	$10.00
Gold, 1 Assay ton fire assay, gravimetric	.03 g/tonne det.	$11.00
Platinum, 1 Assay ton fire assay, ICP finish	.01 g/tonne det.	$10.50
Palladium, 1 Assay ton fire assay, ICP finish	.01 g/tonne det.	$10.50

Gold and Silver Concentrate Analysis

Gold, 1 Assay ton fire assay, gravimetric	.3 g/tonne det.	$40.00
Silver, 1 Assay ton fire assay, gravimetric	3 g/tonne det.	$40.00

Other Precious Metal Analysis

Bullion Fineness - Gold or Silver	$75.00
Metallic Gold Assay	$25.00
Hg Amalgamation - 300 g sample	$35.00

Cyanide Leaching

- 30 g sample for 24 hours	$10.00
- 300 g sample for 24 hours	$30.00
- 500 g sample for 24 hours	$40.00
- 1000 g sample for 24 hours	$50.00

TRACE LEVEL GEOCHEMICAL ANALYSIS

Multi-Element Packages (Aqua Regia - A.A. finish)

Element	**Range**	Lead (Pb)	1- 10000 ppm
Cadmium (Cd)	0.1 - 200 ppm	Manganese (Mn)	5 - 10000 ppm
Cobalt (Co)	1 - 10000 ppm	Nickel (Ni)	1 - 10000 ppm
Copper (Cu)	1- 10000 ppm	Silver (Ag)	0.1 - 200 ppm
Iron (Fe)	10 - 10000 ppm	Zinc (Zn)	1 - 10000 ppm

$3.50 per sample for the first element. (minimum 10 samples)
$1.50 for each additional element on the same sample solution.

Single Element Geochem Analysis

Element	**Range**	**Method Description**	**Price**
Antimony (Sb)	0.2 - 1000 ppm	Hydride - A.A.	$6.50
Arsenic (As)	1 - 10000 ppm	Hydride - A.A.	$6.50
Barium (Ba)	5 - 10000 ppm	$LiBO_2$ Fusion - I.C.P.	$10.00
Beryllium (Be)	2 - 1000 ppm	Total Digestion - I.C.P.	$6.50
Bismuth (Bi)	0.1 - 1000 ppm	HNO_3,HCl,$KClO_3$ - A.A.	$5.50
Boron (B)	1 - 10000 ppm	KOH Fusion - I.C.P.	$9.50
Chlorine (Cl)*	100 - 10000 ppm	Neutron Activation	$30.00
Chromium (Cr)	1 - 10000 ppm	Total Digestion - A.A.	$5.50
Cu-Oxide	1 - 10000 ppm	Weak H_2SO_4 Leach - A.A.	$5.50
Fluorine (F)*	10 - 10000 ppm	Specific Ion Electrode	$9.50
Gallium (Ga)*	5 - 10000 ppm	Total digestion - I.C.P.	$6.50
Germanium (Ge)*	5 - 1000 ppm	KOH Fusion - I.C.P	$9.50
X Mercury (Hg)	5 - 50000 ppb	Digestion - Cold Vapor A.A.	$6.50
Molybdenum(Mo)	1 - 1000 ppm	Digestion - A.A.	$5.50
Niobium (Nb)*	10 - 10000 ppm	$LiBO_2$ Fusion - I.C.P.	$9.50
Phosphorous (P)	10 - 10000 ppm	$LiBO_2$ Fusion - I.C.P.	$9.50
Selenium (Se)*	1 - 100 ppm	Digestion - Hydride A.A.	$7.00
Strontium (Sr)	1 - 10000 ppm	Digestion - I.C.P.	$5.50
Tellurium (Te)*	2 - 100 ppm	Digestion - Hydride A.A.	$6.50
Tin (Sn)*	2 - 1000 ppm	NH_4I Fusion - Colourmetric	$9.50
Thorium (Th)*	2 - 10000 ppm	Digestion - I.C.P.	$7.50
Tungsten (W)*	5 - 1000 ppm	Fusion - Colourmetric	$5.50
Vanadium (V)	5 - 10000 ppm	Total digestion - A.A.	$5.50
Thallium (Tl)	5 - 10000 ppb	Aqua Regia - MIBK - A.A.	$6.50

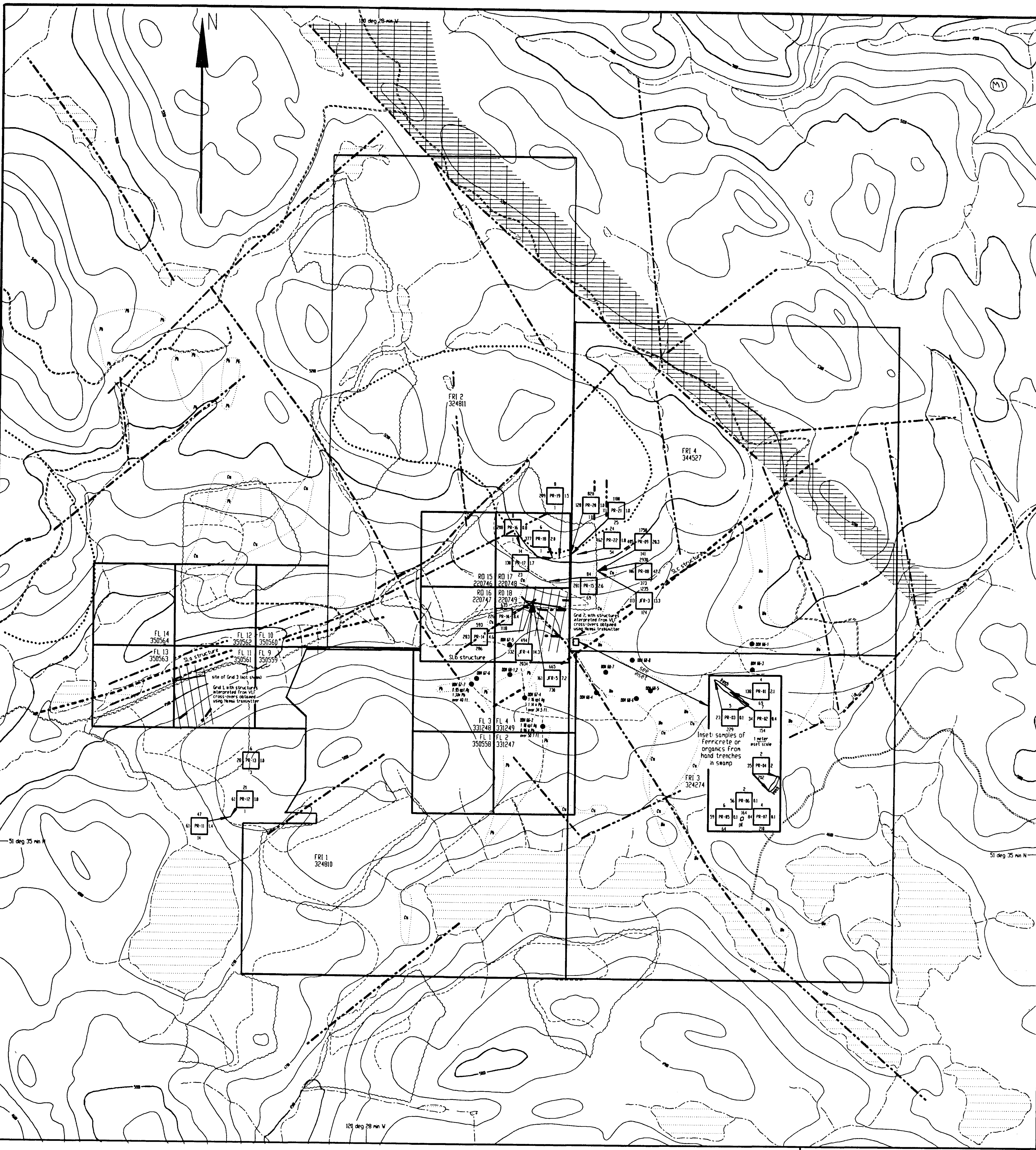
* minimum batch of 10 samples

Appendix 5: Descriptions of Samples

Sample Number	Location (UTM, Zone 10, obtained from GPS)		Description
	East	North	
PR 96/09/19 1	676 674	5 718 820	Site of hand trench in valley bottom on south side of creek. Low-lying area with ferricrete on surface. Some of the material at the immediate surface is creamy beige colour, porous, probably dominated by exsolved calcium carbonate. Sample is a grab dominated by the creamy beige material. See inset map, Plate 1
PR 96/09/19 2	676 674	5 718 820	Ferricrete from same hand trench as 1, above, but collected from a depth of about 20 cm. Dominated by dark red and black Fe and Mn oxide minerals. See inset map, Plate 1.
PR 96/09/19 3	676 674	5 718 820	Collected from hand trench near 1 & 2, above. Dark red ferricrete collected at about 20 cm depth over a length of about 5 meters. See inset map, Plate 1
PR 96/09/19 4	676 674	5 718 820	Collected from hand trench near 1, 2 & 3, above. Dark red ferricrete collected at about 20 cm depth over length of about 2 meters. inset map, Plate 1
PR 96/09/19 5	676 674	5 718 820	Dark red ferricrete collected from the bottom of a hand-dug pit about 50 cm deep, flooded. See inset map, Plate 1.
PR 96/09/19 6	676 674	5 718 820	Dark red ferricrete collected from the wall of the same pit as 5, above. Depth about 25 cm. Not flooded at this depth. See inset map, Plate 1.
PR 96/09/19 7	676 674	5 718 820	Black organic soil collected from the wall of the same pit as 5 & 6, above. Represents upper 10 cm of soil profile. See inset map, Plate 1.
PR 96/09/19 8	676 929	5 719 190	In bed of old road, probable outcrop of quartz vein material. True width not visible; trend about 163/steep. Very hard, tough, grey-white sucrosic quartz. Trace galena and pyrite. Only a chip could be broken off.
PR 96/09/19 9	676 929	5 719 190	Same site as 8, above. Sample is Fe oxide powder, reddish brown, found coating fractures in the quartz described for 8.
PR 96/09/19 10	676 533	5 718 982	Road cut exposure, quartz-carbonate vein, general trend 285/66NW, width variable 20 - 30 cm. Least weathered material is dense crystalline quartz, laced with white carbonate. Weathered material is porous where the carbonate has weathered out. Vugs are partly filled with red-brown Fe oxides. Sample is a grab of several pieces from various parts of the vein.
PR 96/09/22 11	674 664	5 717 547	Outcrop in road cut on new logging road at height of land. Andesite, medium to finely crystalline, semi-massive, mainly equi-granular. Feldspars

Sample Number	Location (UTM, Zone 10, obtained from GPS)		Description
	East	North	
			saussuritized and mafics chloritized. Locally hornblende phenocrysts present. Weakly silicified, less than 10% secondary silica. Pyrite disseminated, about 1%. Rare quartz veinlets, 1 - 2 cm wide, with sericitized envelopes 2 - 3 cm wide on either side. About 5% pyrite in veinlets and sericitized envelopes. Sample is grab of pieces from several parts of outcrop, selected to contain vein and vein-envelope material with pyrite.
PR 96/09/22 12	674 664	5 717 547	Same site as 11, above. Sample is grab of pieces from several parts of outcrop, selected to avoid vein and vein-envelope material.
PR 96/09/22 13	674 807	5 718 007	Upper part of clear cut, south of "Sam's Showing" and grid 1. Fine to medium crystalline andesite, massive and equigranular. Mafics are chloritized, feldspar is saussuritized. Traces of epidote. Pyrite disseminated, about 1%. Weathers rusty orange to buff. Open fractures are coated with orange-red Fe oxides. Sample is grab of several pieces within about a 1 meter radius.
PR 96/09/23 14	676 533	5 718 982	Same site as 10, above. Further excavation reveals vein over about 4 meters length. Attitude is 286/72NW. Pyrite, up to 1%, disseminated, is visible in least weathered material. Traces of chalcopyrite. Country rock is medium crystalline andesite with saussuritized feldspars and chloritized mafics. Epidote is locally prominent. Sample is a grab of several pieces selected to represent the vein material, both weathered and fresh.
PR 96/09/23 15	676 624	5 719 099	Logging road cut exposure. Andesite, finely crystalline, equigranular. Feldspars saussuritized, mafics altered to chlorite & epidote. Pyrite trace to ½%, disseminated. Minor calcite veinlets and stringers. Sample is random grab of pieces from all over outcrop.
PR 96/09/24 16	676 454	5 719 332	In borrow pit on logging road. Not true outcrop, but very abundant rubble of rusty red, highly oxidized material. In places looks like "C" horizon soil, ie. weathered in place. Alteration masks protolith, but presumed to have been volcanic. Silicified and carbonatized to form very finely crystalline grey-brown material. Laced by later quartz veinlets about a cm thick. Dustings of black metallic Fe oxides, possibly a mixture of goethite and hematite. Fracture surfaces coated with orange-brown Fe oxides. Soil in vicinity is read. Sample is a grab of several pieces of loose rubble.

Sample Number	Location (UTM, Zone 10, obtained from GPS)		Description
	East	North	
PR 96/09/24 17	676 652	5 719 269	Contact zone between andesitic volcanics and syenitic intrusion. Fragments of volcanic rock in a matrix of syenite. Volcanics are chloritized and contain minor epidote. Traces of Fe oxides, possibly after pyrite, are present. Locally, unoxidized pyrite has survived. Minor vesicles are filled with chalcedony. Sample is a grab of several pieces from a 5 meter length of exposure along a logging road.
PR 96/09/24 18	676 652	5 719 269	Syenite dikelet, same location as 17, above. Walls of dikelet darkened (amphibolitized) and cross-cut by saussuritization along fractures. Pyrite disseminated and in hairline veinlets. Very weakly magnetic. Sample is selected from the wallrock of the dikelet.
PR 96/09/24 19	676 696	5 719 324	Road cut exposure. Amphibolitized andesite, laced with saussuritic seams. Pyrite disseminated, about 1%. One bleb chalcopyrite noted but not included in sample. Random grab from parts of outcrop.
PR 96/09/24 20	676 795	5 719 275	Road cut exposure of silicified and carbonatized rock, protolith not recognizable but probably volcanic. Silicified and spotted with patches of carbonate. When rock is weathered, the carbonate leaves vugs lined with orange-red Fe oxides. Pyrite disseminated, about 1%. Dimensions and orientations of body not clear but roughly 32 degrees with thickness of about 1 meter. Material similar to that seen at site of 10 and 14. Sample is a random grab of several pieces.
PR 96/09/24 21	676 795	5 719 275	Same site as 20, above. Sample selected for high quartz content.
PR 96/09/24 22	676 795	5 719 275	10 meters further up (east) along road from site of 20 & 21, above. Weakly carbonatized andesite displays amphibolitization and saussuritization, prior to carbonatization. Pyrrhotite and pyrite disseminated, up to 3%. Sample is selected for high sulphide content.
JFR 1	676 929	5 719 190	In bed of old road, probable outcrop of quartz vein material. True width not visible; trend about 163/steep. Very hard, tough, grey-white sucrosic quartz. Trace galena and pyrite. Same site as PR 08 and PR 09.
JFR 2			
JFR 3			
JFR 4	676 533	5 718 982	Same site and material as PR 10 and PR 14, above.
JFR 5	676 533	5 718 982	Same site and material as PR 10 and PR 14, above.



Note regarding contours:

The topographic contours shown are from a 1:50,000 scale topographic map whereas all other topographic features such as roads and streams are from a larger scale source map. Hence certain apparent inconsistencies, such as streams appearing to curve briefly uphill.

0 200 400 600 800 1000

scale in meters

Symbols Used

- syenite stock
- sediments
- metal anomaly in soils, element indicated; thresholds used are: copper 200 ppm, lead 120 ppm, molybdenum 20 ppm
- air photo linear, probable fault
- DDH 68-6 Diamond Drill Hole
- VLF EM Dip Angle Cross Over
- Break in Aeromagnetics
- Sample Site, number & four elements indicated (gold, copper, number, silver, lead)
- Claim Boundary and Post
- Road; main line, spur
- Logged Block
- Creek
- Lake
- 100 foot contour
- 500 foot contour

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

24,893

original hand drafting by Chong

Electrum Resource Corporation		
Friendly Lake Project Compilation		
Drawn by: PAR	Project: NCG-51	Drawing: 51-1-P1
Date: December 1996	Report:51-1	Revision: 1
NCG	Plate 1	