93-#964-12341

12/84

POTENTIAL RESOURCES LTD.

450 WEST GEORGIA STREET
VANCOUVER, B. C.

GEOPHYSICAL REPORT

on the

PHELP 300 MINERAL CLAIM

NICOLA MINING DIVISION

N. Lat. 50° 21' W. Long. 120° 44'

NTS 92I/7E

by

NIGEL J. HULME, B.Sc.

STRATO GEOLOGICAL ENGINEERING LTD.

103 - 709 DUNSMUIR STREET

VANCOUVER, B. C. V6C 1M9

February 10, 1984

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SUMMARY

The Phelp 300 claim comprises twenty mineral claim units located about 28 kilometers north of Merrit, British Columiba.

The property is situate more or less astride Phelps Creek and about 2 kilometers north of the Rey lake property where extensive drilling has indicated substantial tonnage of low grade copper and molybdenum mineralization.

Detail VLF electromagnetic surveys and reconnaissance soil sampling was carried out in two locations in the western property area to further define and test two previously interpreted faults in the area.

Survey results on Grid B, in the west central claim area, shows a series of near parallel, north-south trending faults and/or shear zones. Anomalous copper and silver geochemistry is associated with one of thse zones and more detail sampling of the immediate area is warranted.

Reconnaissance scale soil sampling is recommended for the claim area with more detail sampling over the previously defined central fault system. A low frequency electromagnetic survey is also recommended to better delineate previously interpreted faults.

Respectfully submitted,
Strato Geological Engineering Ltd.

Nigel J. Hulme, B.Sc.
Geologist

R. J. Englund, B.Sc.
Geophysicist

February 10, 1984

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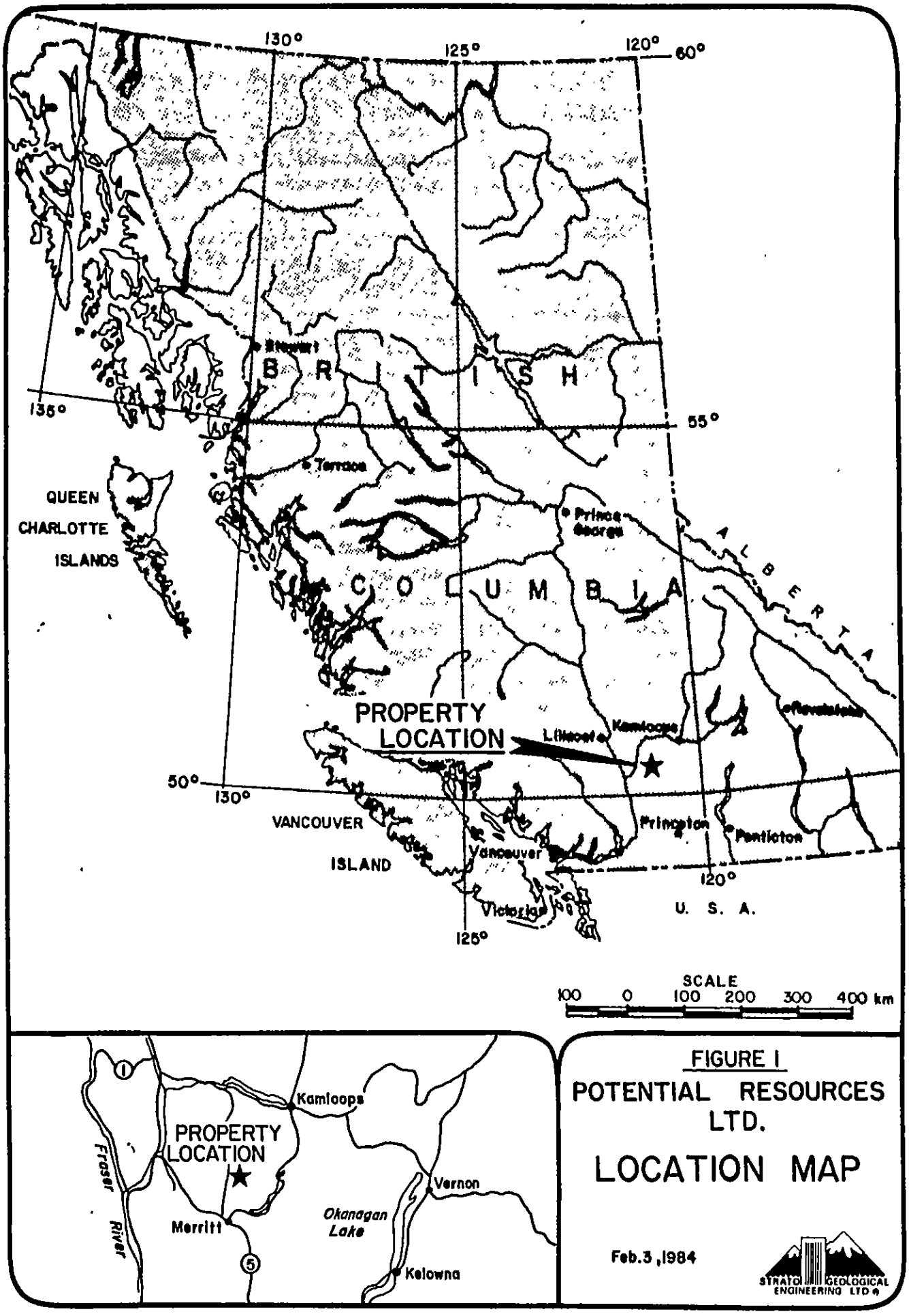
INTRODUCTION

Pursuant to a request by the directors of Potential Resources Ltd.,a detailed VLF-EM survey and soil sampling was conducted over two previously outlined magnetic and VLF-EM anomalous zones on the Phelp 300 mineral claim, located approximately 28 kilometers north of Merrit, B.C. Work consisting of VLF-EM and geochemical soil sampling was carried out by Strato Geological Engineering Ltd. during the period November 10 - November 16, 1983.

LOCATION, ACCESS, TOPOGRAPHY

The property is located on Phelps Creek, some 28 kilometers north of Merrit, British Columbia. Access to the claim is west via Highway 8 from Merrit for approximately 8 kilometers; the Mamit Lake paved road is then followed north for about 25 kilometers to a point just south of Mamit Lake where a gravel road is followed eastwards for 6 kilometers to the property.

The topography is gentle with elevations ranging between 1310 and 1370 meters above sea level. Some of the area has been cleared for pasture.


130°
125°
120°
60°
B R I T I S H
135°
55°
Stewart
Terrace
QUEEN
CHARLOTTE
ISLANDS
Prince George
A L B E R T A
C O L U M B I A
PROPERTY
LOCATION
Lillooet
Kamloops
50°
130°
VANCOUVER
ISLAND
Vancouver
Princeton
Penticton
120°
Victoria
U. S. A.
125°
SCALE
100 0 100 200 300 400 km
Kamloops
PROPERTY
LOCATION
Fraser
River
Merritt
Okanagan
Lake
Vernon
Kelowna
FIGURE I
POTENTIAL RESOURCES
LTD.
LOCATION MAP
Feb.3 ,1984
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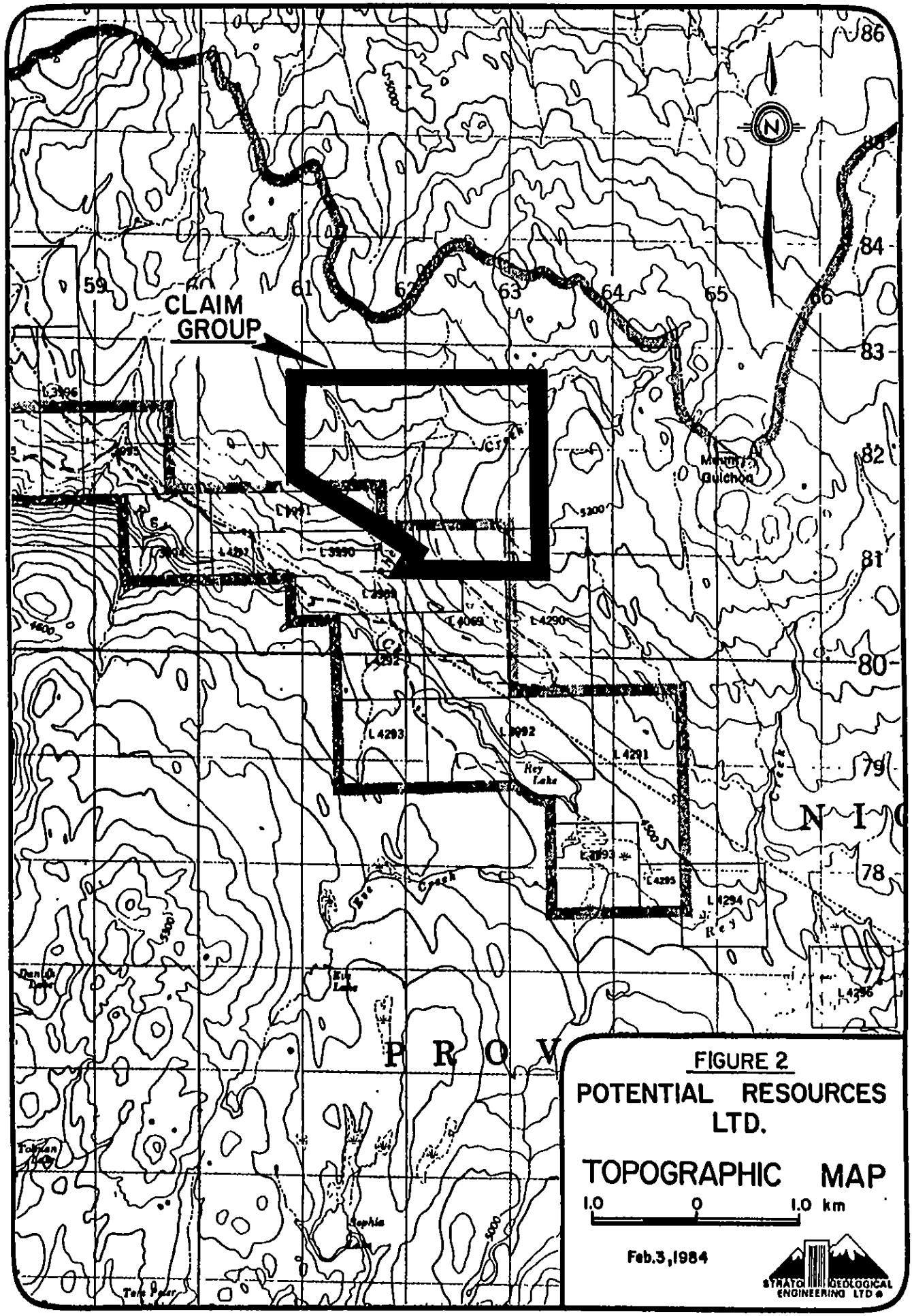

FIGURE 2

POTENTIAL RESOURCES LTD.

TOPOGRAPHIC MAP

1.0 0 1.0 km

Feb.3,1984

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CLAIMS

The Phelp 300 mineral claim comprises 20 units situated in the Nicola Mining Division. The claims are recorded as follows:

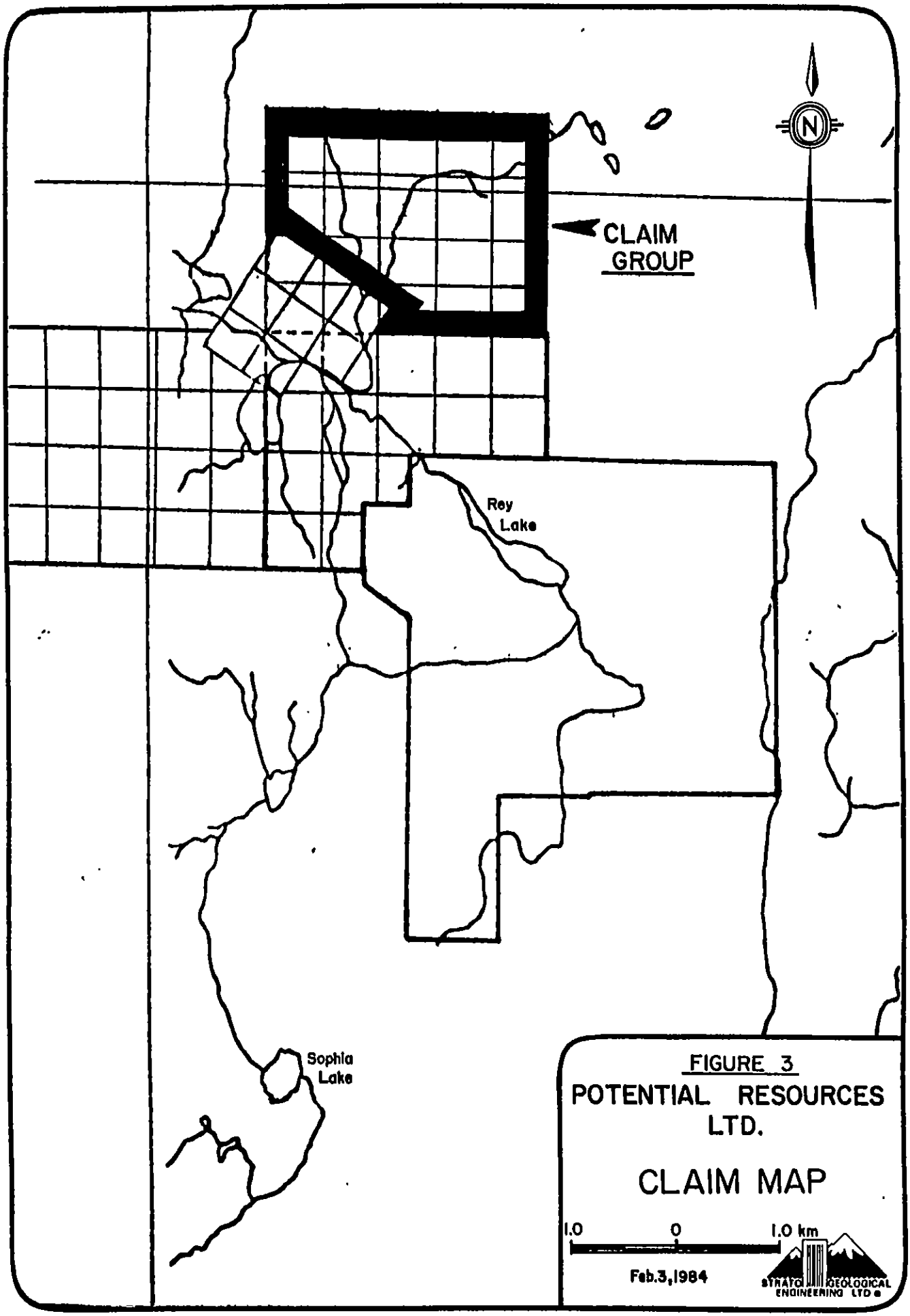
Claim Name	Units	Record No.	Expiry Date
Phelp 300	20	831 (4)	April 8, 1984

The claim is shown on British Columbia Mineral Titles Reference Map 92I/7E (Figure 3). The legal corner post is located in accordance with the specifications of the Mining Act. Assessment work has been filed, this report being a part of the work to maintain the claims in good standing until April 1985.

HISTORY

A ground VLF-EM and magnetometer survey was carried out over the Phelp 300 claim by Columbia Geophysical Services Ltd. in 1980 and is described by W. G. Timmins in his report dated February 23, 1982.

The survey delineated two anomalous areas, in the southeastern and southwestern portions of the property. The southeastern anomalous zone was characterized by a magnetic high


CLAIM
GROUP
Rey
Lake
Sophia
Lake
FIGURE 3
POTENTIAL RESOURCES
LTD.
CLAIM MAP
1.0
0
1.0 km
Feb.3,1984
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ENGINEERING LTD.

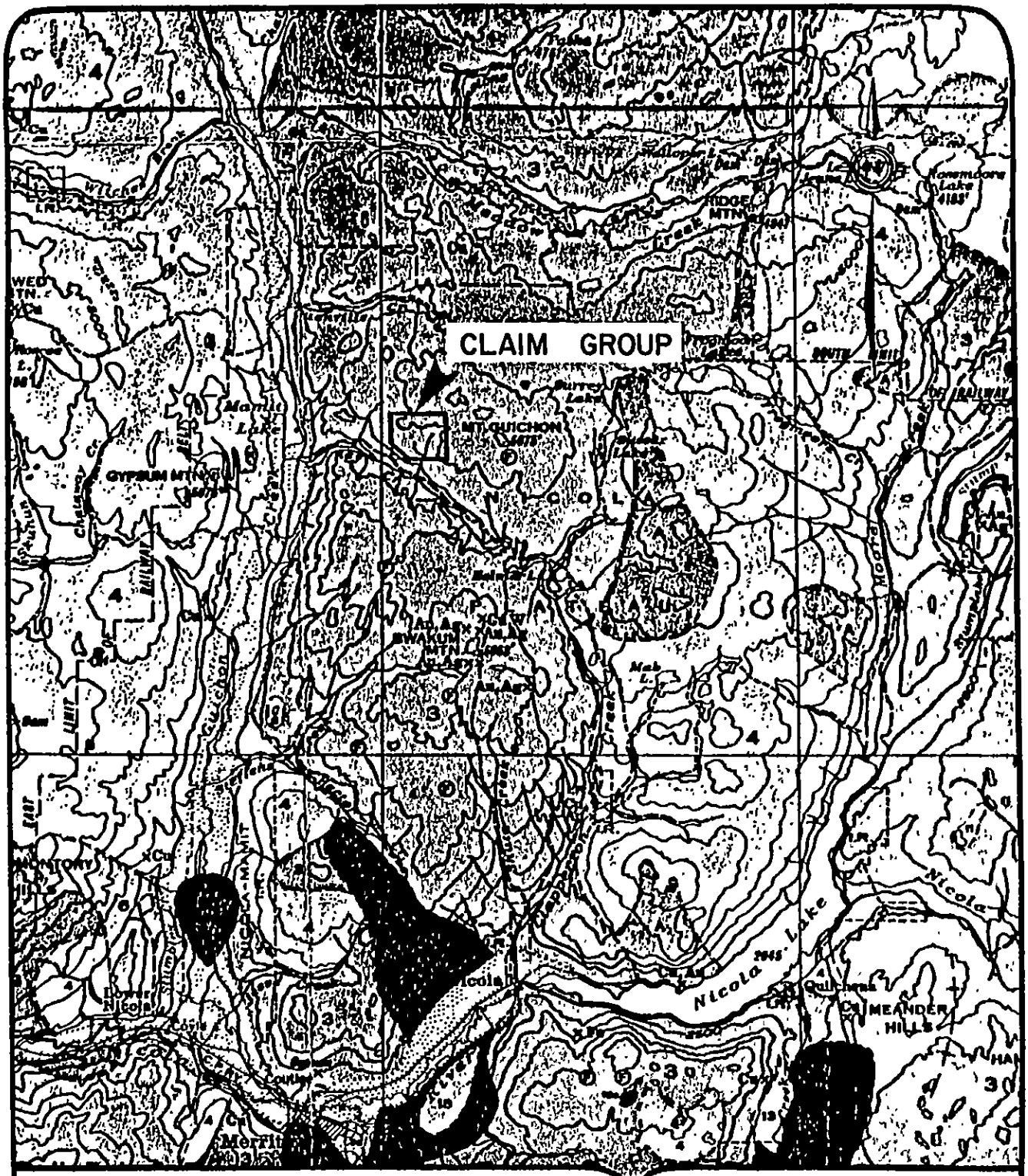
coincident with moderate VLF-EM conductors. The southwestern anomalous zone was charactertized by a magnetic high split by a postulated north-south trending fault. The eastern half of this anomally showed some correlation with the electromagnetic results. Northwest of this zone, a second fault was postulated to coincide with a magnetic low.

REGIONAL AND LOCAL GEOLOGY

The property is underlain by the Nicola Group, which consists largely of Triassic andesitic tuffs and flows, with minor basalts, limestones, argillites and conglomerates. Jurassic plutonic rocks have intruded to the east and west; the Central Nicola and Guichon batholiths. These intrusive bodies host a number of gold, silver, copper and molybdenum showings.

Extensive drilling near Rey Lake to the south has outlined substantial tonnage of low grade copper and molybdenum associated with northerly and westerly trending faults and fractures (Timmins, 1982). Timmins also reports that narrow quartz-carbonate veins containing gold, silver, copper, lead and zinc are present in outcrop on Rey Creek.

Most of the property is covered by overburden which appears to overlie the Nicola Group volcanics.



LEGEND

13	Valley Basalt
11	Kamloops Group
10	Coldwater Bed
6	Kingsvale Group
4	Coast Intrusions
3	Nicola Group
A	Chlorite schist, quartz-mica schists, amphibolite, granitic intrusions

AFTER W.E. COCKFIELD, 1947

FIGURE 4

POTENTIAL RESOURCES LTD.

REGIONAL GEOLOGY

3.0 0 3.0 km

Feb.3,1984

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INSTRUMENTATION AND SURVEY PROCEDURE

A detailed VLF-EM survey was carried out over two previously established magnetic and VLF electromagnetic zones in the western portion of the claim. The detail survey was tied into the previous grid and survey lines were established at 100 meter intervals with 10 meter station separation. Soil samples were collected over previously interpreted fault zones to determine any mineral association with the faults. A total of 30 samples were taken from B horizon soils over selected areas of the detail survey grids.

Two detail survey grids, A and B, were re-established and tied into Baseline No. 2 of the 1980 grid.

The VLF-EM survey was conducted with a Sabre Electronics Model 27 receiver. The transmitter station used was NPG, Jim Creek, Washington at a frequency of 24.8 KHz and a radiated power of 250 kilowatts. Both dip angle and field strength measurements were recorded; dip angle measurements were filtered using the Fraser Filter Method to permit presentation of data in contour map form. The method is well known and fully described in literature.

DISCUSSION OF RESULTS

Grid A

VLF-EM results outline two weak conductive zones in the northwest section of the grid (Figures 5 and 6). The previously postulated fault was not delineated by the detail survey. Geochemical results from this grid were inconclusive and no anomalous geochemical values were located over the previously postulated fault structure (Figure 9).

Grid B

Conductive zones trending north-south run through the central and eastern portions of Grid B (Figures 7 and 8). These conductive zones are interpreted as being a fault network and/or a series of shear zones. The previously interpreted north-south trending fault shows as a series of near parallel, north-south conductive zones. Geochemical results indicate some anomalous copper and one silver anomaly associated with a series of EM conductors in the central grid area (Lines 6N and 7N at 8+75 to 9+00E). Geochemical results are shown on Figure 10 with anomalous results also present on Figure 8.

CONCLUSIONS AND RECOMMENDATIONS

The results of detailed VLF-EM survey work on the Phelp 300 mineral claim shows a possible north-south trending network of faults or shear zones in the central Grid B area. Anomalous copper and silver values are also associated with this conductive zone and further examination is warranted.

A program of reconnaissance geochemical soil sampling is recommended for the claim. More detail sample spacing should be used over previously defined magnetic and electromagnetic targets. A low frequency JENIE or C.E.M. Shootback electromagnetic survey is recommended to better delineate previously interpreted faults and/or shear zones.

Respectfully submitted,
Strato Geological Engineering Ltd.

Nigel J. Hulme, B.Sc.
Geologist

R. J. Englund, B.Sc.
Geophysicist

February 10, 1984

STRATO GEOLOGICAL ENGINEERING LTD.

REFERENCES

Cockfield, W. E., (1947)
Map 886A, Nicola, Kamloops and Yale Districts, B.C.;
Geological Survey of Canada, Ottawa, Ontario.

Timmins, W. G., (1982)
Geophysical Report on the Phelp 300 Claim; W. G. Timmins
Exploration and Development Ltd., Vancouver, B.C.

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CERTIFICATE

I, NIGEL J. HULME, of the City of Vancouver, Province of British Columbia, hereby certify as follows:

1. I am a Consulting Geologist with offices at 103 - 709 Dunsmuir Street, Vancouver, B. C., Canada.

2. I graduated with a degree of Bachelor of Science, Geology, from Carleton University, Ottawa, Ont. in 1982.

3. I have worked as a Geological Assistant each summer from May 1980 with the Ontario Geological Survey, Gold Fields Mining Corporation, and St. Joe Canada Incorporated.

4. I have worked as a Geologist in Canada since December 1982.

5. I have no direct, indirect, or contingent interest in the securities of Potential Resources Ltd., or the Phelps 300 Mineral Claim, nor do I expect to receive any such interest.

6. This report is based upon field examinations made by myself during the month of November, 1983, and on a study of available private and public data and reports pertaining to the area.

Dated at Vancouver, Province of British Columbia, this 10 th day of February, 1984.

Nigel Hulme

N. J. Hulme, B.Sc.

CERTIFICATE

I, Ralph J. Englund, of 1112 Grover Ave., Coquitlam, British Columbia, do hereby certify as follows:

1. I am a Consulting Geophysicist with offices at 103 - 709 Dunsmuir Street, Vancouver, B. C. V6C 1M9

2. I graduated in 1971 from the University of British Columbia, with a degree of Bachelor of Science.

3. I have been engaged in the study, teaching, and practice of exploration geophysics continuously for a period of 11 years. I have worked as a geophysical consultant on numerous projects in Western North America since 1972.

4. I am a member in good standing of the British Columbia Geophysical Society.

5. The field work and the interpretation of results in this report were done under my direct supervision.

6. I have no direct, indirect, or contingent interest in the properties of Potential Resources Ltd., nor do I expect to receive any such interest.

Dated at Vancouver, Province of British Columbia, this 10th day of February, 1984.

R.J. Englund, B.Sc.

TIME-COST DISTRIBUTION

The geophysical survey was conducted over the Phelp 300 Claim by Strato Geological Engineering Ltd. during the period of November 10 to November 16, 1983.

A listing of personnel and distribution of costs are as follows:

Personnel

N. Hulme, B.Sc.	Geologist
J. Gibson	Geophysical Technician

Cost Distribution

Labour	$1,675.00
Room and Board (11 man days)	550.00
Transportation - 4WD (incl. gas, oil, etc.)	540.00
Equipment Rental and Field Supplies	175.00
Geochemical Assay Costs	305.35
Maps and Report - Drafting, Reproduction, Typing, etc.	317.50
Report - Data Reduction, Interpretation, etc.	1,300.00
Total	$4,862.85

SIGNED _____

Strato Geological Engineering Ltd.

STRATO GEOLOGICAL ENGINEERING LTD.

A P P E N D I X A

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS, VANCOUVER B.C.
PH:253-3158 TELEX:04-53124

DATE RECEIVED NOV 21 1983

DATE REPORTS MAILED Nov 25/83

ICP GEOCHEMICAL ANALYSIS

A .500 GRAM SAMPLE IS DIGESTED WITH 3 ML OF 3:1:3 HCL TO HNO3 TO H2O AT 90 DEG.C. FOR 1 HOUR.
THE SAMPLE IS DILUTED TO 10 MLS WITH WATER.
THIS LEACH IS PARTIAL FOR: Ca,P,Mg,Al,Ti,La,Na,K,W,Ba,Si,Sr,Cr AND B. Au DETECTION 3 ppm.
AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.
SAMPLE TYPE - SOIL

ASSAYER _____ DEAN TOYE, CERTIFIED B.C. ASSAYER

STRATO GEOLOGICAL PROJECT # 511 POT FILE # 83-2977 PAGE# 1

SAMPLE	MO ppm	CU ppm	PB ppm	ZN ppm	AG ppm	Au* ppb
L6 710	1	41	9	63	.1	5
L6 730	1	30	7	61	.1	5
L6 750	1	45	9	67	.2	5
L6 860	1	60	8	54	.1	5
L6 880	1	45	9	46	.2	5
L6 900	1	72	9	68	.5	5
L6 920	1	28	6	85	.3	5
L6 940	1	26	9	76	.2	5
L7 680	1	46	7	61	.1	5
L7 690	1	47	9	58	.3	5
L7 700	1	45	8	59	.1	5
L7 820	1	28	7	83	.2	5
L7 840	1	42	9	82	.1	5
L7 860	1	61	7	60	.2	5
L7 880	1	55	7	73	.2	5
L7 900	1	30	8	74	.1	5
L7 920	1	28	9	69	.1	5
L9 820SS	1	22	6	46	.1	5
L12 260	1	23	9	79	.2	5
L12 280	1	34	11	68	.3	5
L12 300	1	24	7	67	.2	5
L12 320	1	24	9	52	.1	5
L12 340	1	34	11	73	.2	5
L12 360	1	30	9	72	.2	5
L14 240	1	22	10	48	.1	5
L14 260	1	32	7	90	.2	5
L14 280	1	25	12	54	.1	5
L14 300	1	20	8	68	.1	5
L14 320	1	35	8	56	.1	5
L14 340	1	23	10	49	.1	5
2001 ROCK	2	11	8	78	.2	5
STD A-1/AU 0.5	1	29	40	183	.3	530

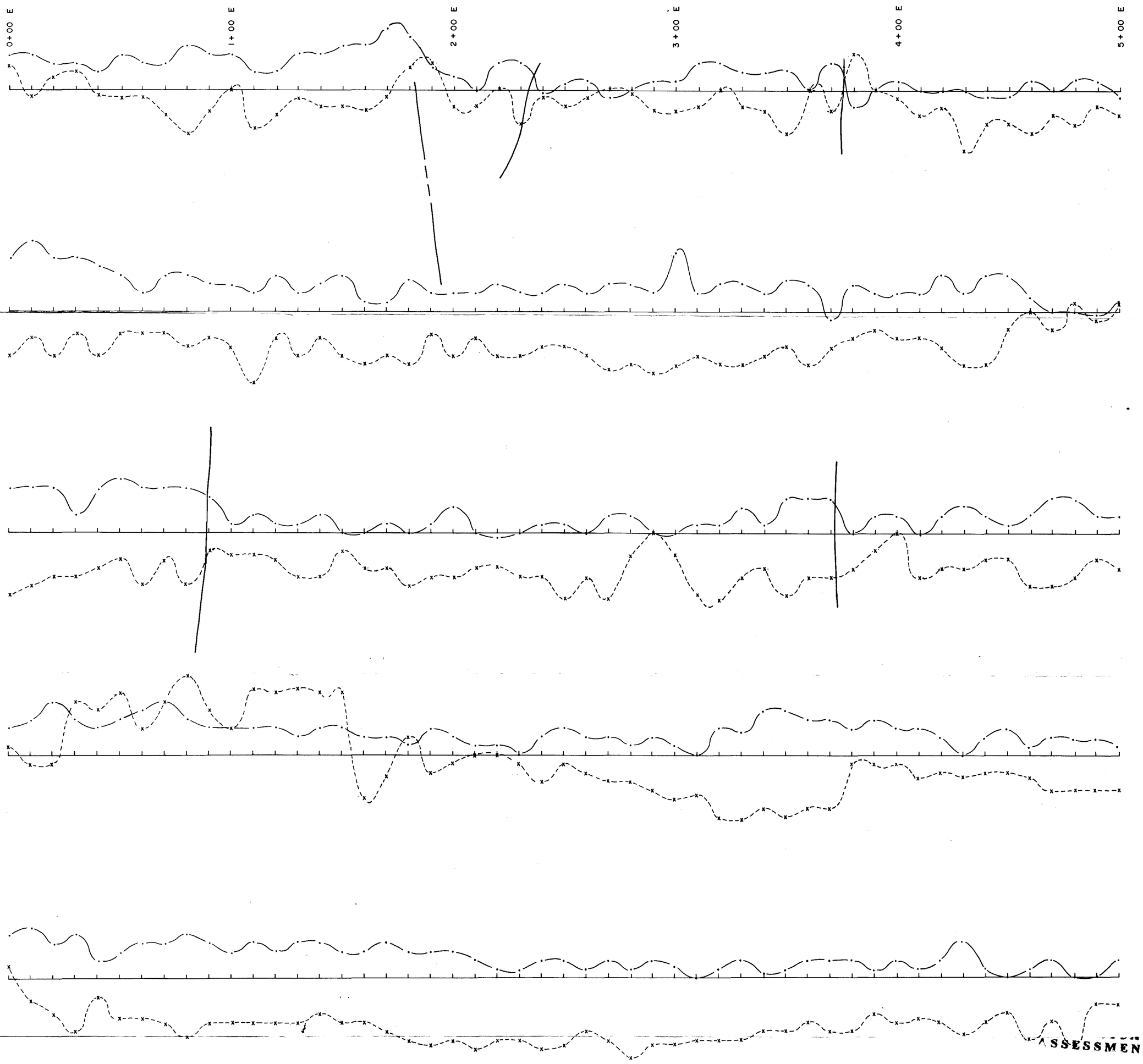

FIGURE 5

LEGEND

5 / 0 / 5 — Dip-angle scale

65 / 60 / 55 — Field-strength scale

NOTES:
Instrument - Sabre Electronics, Model 27 receiver
Transmitter - NPG: Jim Creek, frequency 24.8 KHz

Weak VLF-EM conductor trend

claim boundary

Grid A Location

POTENTIAL RESOURCES LTD.

PHELP 300 CLAIM
NICOLA M.D. 92 I/7

GRID A
VLF - EM SURVEY
(PROFILE PLOT PLAN)

50 0 50 m

To accompany a report by: N.HULME, B.Sc.
STRATO GEOLOGICAL ENGINEERING LTD.

DRAWN BY NH/DNH

DATED: Feb.3,1984

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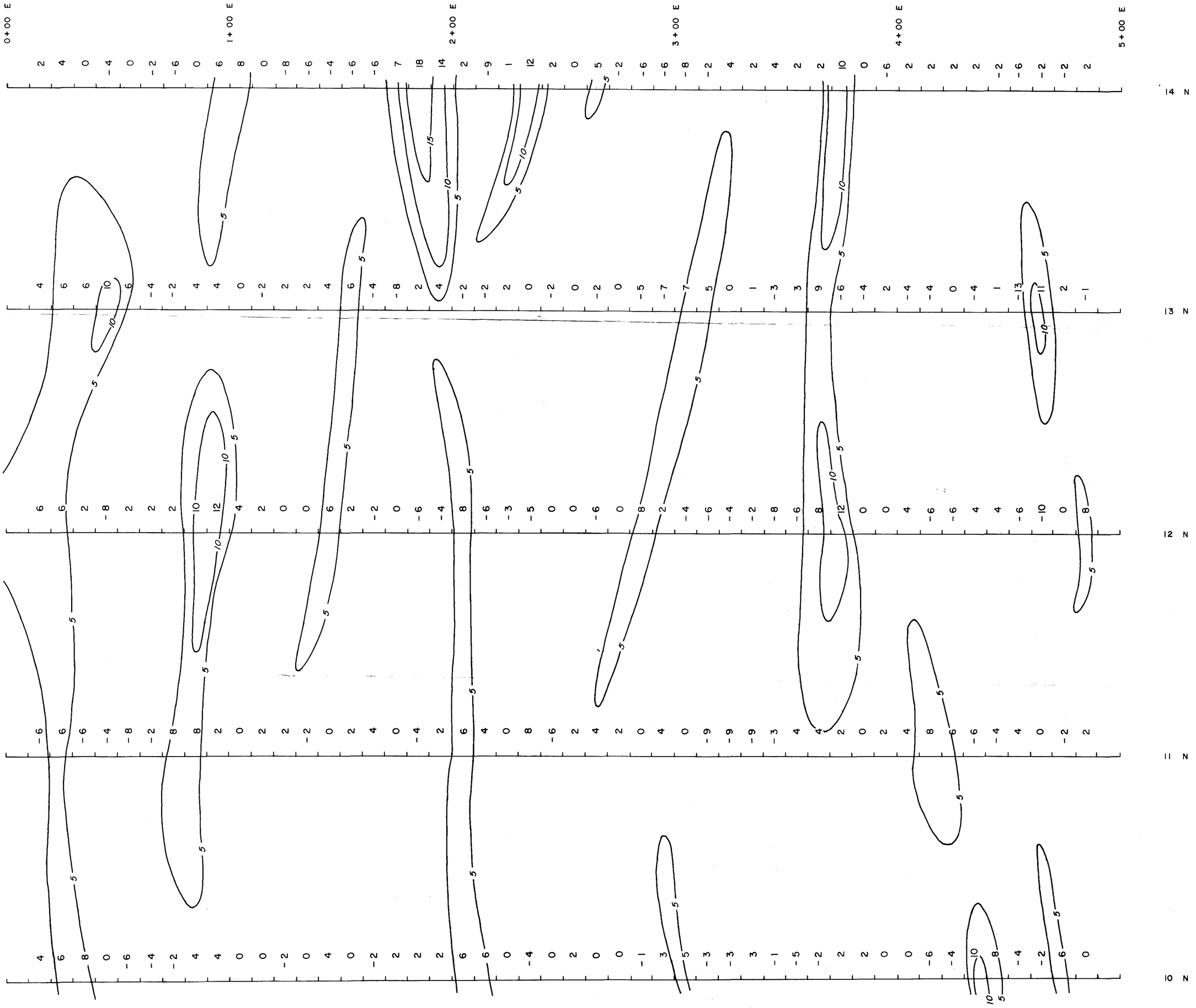

NOTES

Instrument – Sabre Electronics, Model 27 receiver
Transmitter – NPG: Jim Creek , frequency 24.8 KHz
Contour interval: 5,10,15,

4
2
Fraser filter data plotted

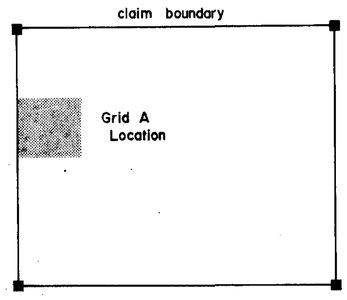

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FIGURE 6

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PHELP 300 CLAIM
NICOLA M.D. 92 I / 7

GRID A

VLF-EM SURVEY

FRASER FILTER CONTOUR MAP

50 0 50 m

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7+00 E

8+00 E

9+00 E

10+00 E

11+00 E

L 10 N

L 9 N

L 8 N

L 7 N

L 6 N

L 5 N

N

LEGEND

5
0
-5
Dip-angle scale

45
40
35
Field-strength scale

NOTES:

Instrument - Sabre Electronics, Model 27 receiver

Transmitter - NPG: Jim Creek, 24.8 KHz

··· Moderate VLF-EM conductor trend

··· Weak VLF-EM conductor trend

claim boundary

Grid B Location

FIGURE 7

POTENTIAL RESOURCES LTD.

PHELP 300 CLAIM
NICOLA M.D. 92 I/7

GRID B

VLF - EM SURVEY
(PROFILE PLOT PLAN)

50 0 50 m

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7+00 E
8+00 E
9+00 E
10+00 E
11+00 E
L 10 N
L 9 N
L 8 N
L 7 N
L 6 N
L 5 N
N
61
60
72.05

Cu ☐ ≥ 60 ppm

Ag △ ≥ 0.5 ppm

NOTES

Instrument – Sabre Electronics, Model 27 receiver
Transmitter – NPG : Jim Creek , frequency 24.8 KHz
Contour interval : 5,10,15,20,25

6
2
Fraser filter data plotted

claim boundary

Grid B
Location

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FIGURE 8

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PHELP 300 CLAIM
NICOLA M.D. 92 I/7

GRID B

VLF – EM FRASER FILTER &
ANOMALOUS GEOCHEMISTRY

50 0 50 m

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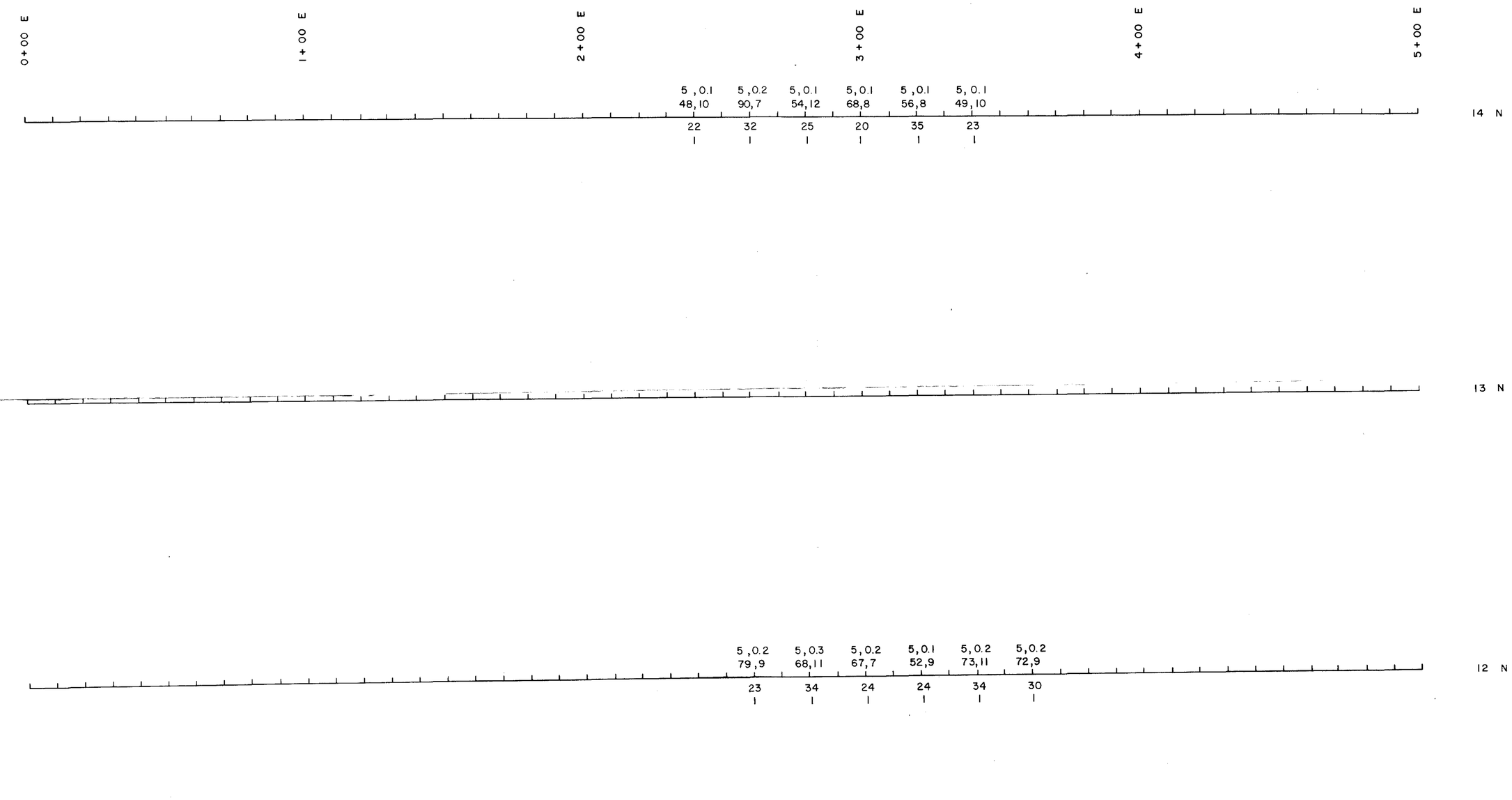

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FIGURE 9

LEGEND

5,0.1 / 68,8 / 20 / 1 = ppb Au, ppm Ag / ppm Zn, ppm Pb / ppm Cu / ppm Mo ... Soil sample location and results

claim boundary

Grid A Location

POTENTIAL RESOURCES LTD.

PHELP 300 CLAIM
NICOLA M.D. 92I/7

GRID A
SOIL GEOCHEMISTRY
(Au, Ag, Zn, Pb, Cu, Mo)

50 0 50 m

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DATED: Feb.3,1984

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7+00 E
8+00 E
9+00 E
10+00 E
11+00 E

L 10 N

5 ,0.1
46 , 6
22

L 9 N

L 8 N

5,0.1 5,0.3 5,0.1
61,7 58,9 59,8
46 47 45

5,0.2 5,0.1 5,0.2 5,0.2 5,0.1 5,0.1
83,7 82,9 60,7 73,7 74,8 69,9
28 42 61 55 30 28

L 7 N

5,0.1 5,0.1 5,0.2
63,9 61,7 67,9
41 30 45

5,0.1 5,0.2 5,0.1 5,0.3 5,0.2
54,8 46,9 68,9 85,6 76,9
60 45 72 29 26

L 6 N

5,0.2
78,8
2

L 5 N

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FIGURE 10

LEGEND

5,0.1 / 63,9 / 41 = ppb Au, ppm Ag / ppm Zn, ppm Pb / ppm Cu / ppm Mo — Soil sample location and results

Road

Creek

Stream sediment sample location

Swamp

Rock sample location

claim boundary

Grid B Location

POTENTIAL RESOURCES LTD.

PHELP 300 CLAIM
NICOLA M.D. 92 I/7

GRID B
SOIL GEOCHEMISTRY
(Au, Ag, Zn, Pb, Cu, Mo)

50 0 50 m

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DATED: Feb.3,1984

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