Geophysical Report on the

Surprise Creek Property

(Trib, Sur, Prise, Creek Mineral Claims)

Skeena, M.D.

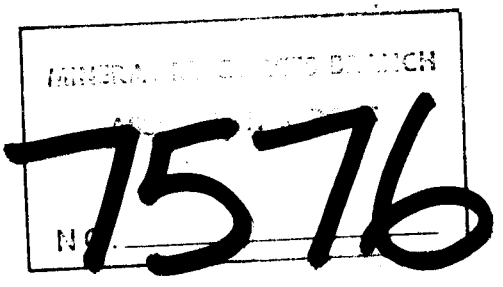
Lat. 56°14' Long. 129°35'

N.T.S. 104A/4E

July 16 - August 17, 1979

OWNER: Wesfrob Mines Limited, Vancouver, B. C.

OPERATOR: Wesfrob Mines Limited, Vancouver, B. C.



B. W. Downing

Vancouver, B. C.

September 24, 1979

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GEOPHYSICAL REPORT

(Trib, Sur, Prise and Creek Mineral Claims)

1. INTRODUCTION

The Mineral claims are located approximately 50 km. northeast of Stewart or two km. east of Mt. Patullo at the headwaters of the west tributary to Surprise Creek.

Topographically, the area is quite rugged occurring on the eastern edge of an ice field along the Coast Range Mountains. The Sur and Prise claims are partially covered (10% and 50% respectively) by glacier.

Access to the claims is by helicopter from Stewart.

A grid (36.6 km or 22.7 miles) was picketed and chained for control for the geophysical surveys. The grid is divided into three areas, Grids 1, 2 and 3 because of topography.

2. GENERAL GEOLOGY

The Surprise Creek Property occurs at the western edge of the Bowser structural basin (Upper Jurassic sediments) near the contact with the Hazelton volcanic assemblage of middle Jurassic age.

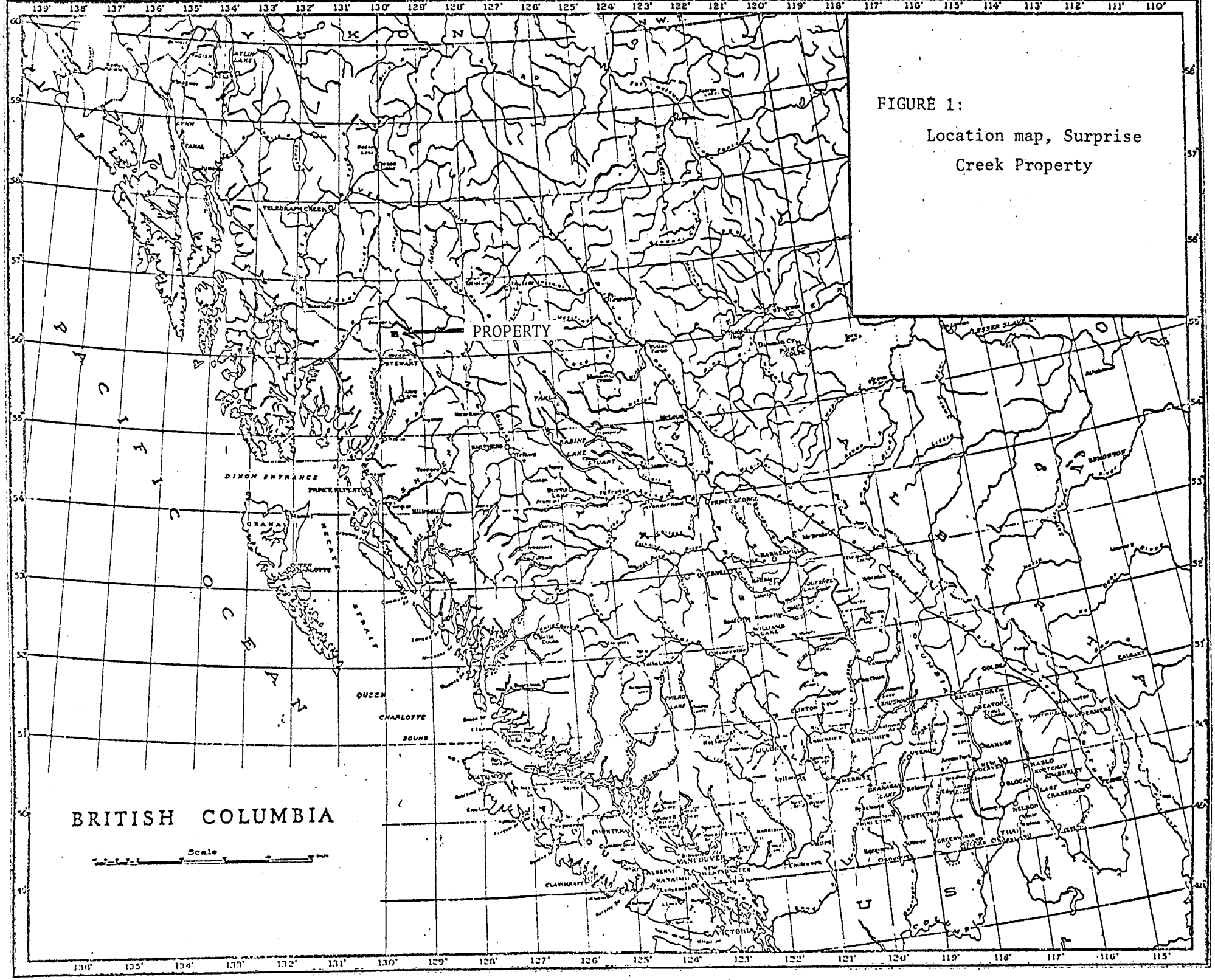


FIGURE 1:

Location map, Surprise Creek Property

A small porphyritic quartz monzonite stock intrudes the Bowser Group of sediments (shale, greywacke, siltstone) resulting in some hornfelsing of the sediments. Lamprophyre dykes intrude the sediments in a few places.

Structurally, the area has undergone local deformation due to the quartz monzonite intrusion as well as regional deformation (folding and faulting). The intrusion occurs at the junction of two major faults.

3. GEOPHYSICAL SURVEY

A magnetometer and electromagnetic (VLF) survey was carried out to define the limits of the intrusive under the talus and to map and define VLF conductors related to faults, geologic contacts and mineralization. The instruments used are listed in Appendix III.

3.1 Magnetometer Survey

Base stations were established along the base line every 100 meters for diurnal corrections. The magnetic flucuation varied from 15 to 30 gammas over an eight hour period but no days were lost due to magnetic storms. Readings were taken every 25 meters along the grid lines and the corrected results plotted and contoured at 50 gamma intervals (Figure 2).

3.2 Electromagnetic (VLF) Survey

Readings were taken every 25 meters along the grid lines using two stations (18.6, Jim Creek, Washington and 23.4, Hawaii). The results are plotted on Figures 3 and 4.

4. CONCLUSIONS

The results are taken from S. Presunka's geophysical report on the Surprise Creek property for Falconbridge Nickel Mines Limited.

4.1 Grid No. 1 (Valley Grid) (See Figure 2)

The magnetic relief ranges from 393 gammas on line 18E to 802 gammas on line 5E/2 + 25S. The 500 gamma contour (middle of grid) indicates an east-west conductor which follows the valley. From line 0 to line 2E, the 600 gamma contour indicates a northeast trend. The high reading (802 gammas) on line 5E/2 + 25S, is likely due to pyrrhotite. The weak magnetic trend along line 16E indicates a change from east-west to northeast.

The No. 1 conductor (1-1, Figure 3), between lines 10E and 11E,and south of the base line,is probably an extension of a fault zone observed in outcrop. Conductors 1-2 and 1-3 are the same fault but appear sheared off west of the baseline. A fourth conductor (1-4),

on line 8E north of the base line, is very likely due to a fault. The eastern portion of this grid from line 12E is relatively flat both in the magnetic and E.M. response. Conductor 1-5 is probably a shear or fault zone.

The northeast striking conductor (1-1, Figure 4) which starts on line 5S of Grid 2 and extends to line 7E/2 + 50E of Grid 1, is of fair magnitude and coincides with a magnetic anomaly at line 5E/2 + 25S. This conductor is likely due to sulphide , the depth to which is approximately 50 meters. The conductor is probably faulted to the northeast of the baseline by the north south, fault related conductor on Figure 3 (conductor 1-2).

4.2 Grid 2 (Glacier)

The magnetic results indicate a weak north-south trend from line 5 + 50S to 8 + 50S, some 200 meters east of the baseline. This anomaly is due to pyrrhotite observed in outcrop.

The cause of the long semi-circular conductor, No.2-1, on Figure 3 is not readily apparent since it occurs beneath the glacier. The lesser anomalies, No. 2-2, are fault related.

Conductor 2-1 , Figure 4, is the southwestern extension of the main conductor on Grid 1 and is thus described in section 4.1. The north-south conductor (No. 2-2) on Figure 4 follows a

weakly mineralized (pyrite) topographic depression which is fault related. The rather weak No. 2-3 conductor may outline a dominent fold in the sediments.

4.3 Grid 3 (Bottom Grid)

The 1000 gamma contour approximately outlines the quartz monzonite intrusive on its eastern and western edges. Because of steep topography on the northern and southern parts of the grid, the north - south extension of the intrusive was not possible to locate.

The three weak anomalies, Figure 3, show no magnetic correlation. The very short No. 3-1 conductor on line 2E is due to a weakly mineralized shear. The No. 3-2 conductor on lines 0 and 2E has a tight fold at line 0/7S and appears to strike off the grid in an eastern direction crossing line 1E/7 + 50S. This conductor requires follow-up to locate its eastern extension. Conductor 3-3 on line 3W is caused by a graphitic shear in the sediments.

Three rather weak conductors are indicated on Figure 4. The northeasterly trending conductor (No. 3-1) occurs in the middle of the magnetic anomaly and is likely due to a broad sulphide (pyrite) zone. The short No. 3-2 conductor on lines 2E and 3E approximately 300 meters south of the baseline is due to a weakly mineralized (pyrite) shear zone. The third conductor, No. 3-3 on lines 0/9S, 1E/9S is probably a shear zone.

Several of the conductors require additional work via horizontal electromagnetic survey, but because of the steep topography this is not possible. A geological survey would help interpret several of the conductors.

B. W. Darling

APPENDIX I

STATEMENT OF EXPENSES

Grid work, July 16 - 23 , 1979 (picketing, chaining lines)	
Salaries K. H. Christensen, E. Leitz }	735.00
Board (14 man days @ $16/man day)	224.00
Transportation (G47-B2 Northern Mountain Helicopter, 3.5 hours @ $225/hr)	787.50
	1746.50
Geophysical survey, July 30 - August 17 , 1979	
Presunka Geophysics, contract 19 days @ $250.00/day	4750.00
Board (2 men @ $16/man day)	608.00
Transportation (helicopter, 7 hrs @ $225/hr)	1575.00
	6933.00
Report Preparation Typing, reproduction, writing	150.00
TOTAL	$8829.50

WESFROB MINES LIMITED
(A wholly owned subsidiary of Falconbridge Nickel Mines Limited)
Suite 700-1112 West Pender Street
Vancouver 1, B.C., Canada
Tel.(604) 682-6242
Telex 04-53245

September 19, 1979

The Chief Mining Recorder
Liard Mining Division
Victoria, B. C.

Dear Sir:

This is to certify that the geophysical field work was carried out by S. Presunka of Presunka Geophysical Explorations Limited of Vancouver, a geophysical operator well known to the Falconbridge organization for over twenty years.

I, B. W. Downing, am a graduate of Queen's University (B. Sc.) and of the University of Toronto (M. Sc.) and a member in good standing of the Geological Association of Canada.

Yours sincerely,

B. W. Downing

BWD:ik

APPENDIX III

GEOPHYSICAL INSTRUMENT MODELS

1) Barringer Proton Magnetometer
   Model GM 1222, serial No. 6282
   (Vertical field component)

2) Ronka EM-16 (VLF)
   Serial No.2
   VLF Stations 23.4 Hawaii
   18.6 Jim Creek, Washington

TRIB

PRISE

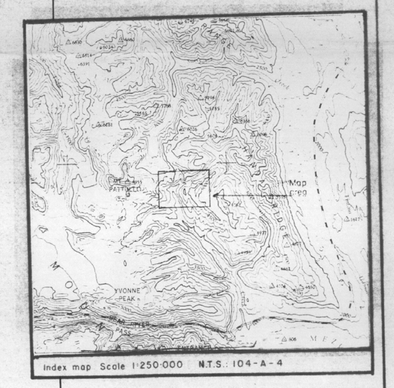
SUR

CREEK

GRID No. 1
(Valley)

GRID No. 3

GRID No. 2
(Glacier)



57500 = 0 (ALL READINGS ABOVE 57500 GAMMAS)

FIGURE 2: MAGNETOMETER SURVEY

INST.- PROTON MAGNETOMETER SER. No 6262
MODEL BARRINGER GM-1222
CONTOURS EVERY 50 GAMMAS
SCALE 1:5000 AUGUST 1979
OPERATOR PAUL PRESUNKA

N.T.S. 104A/4E

0 50 100 200
meters

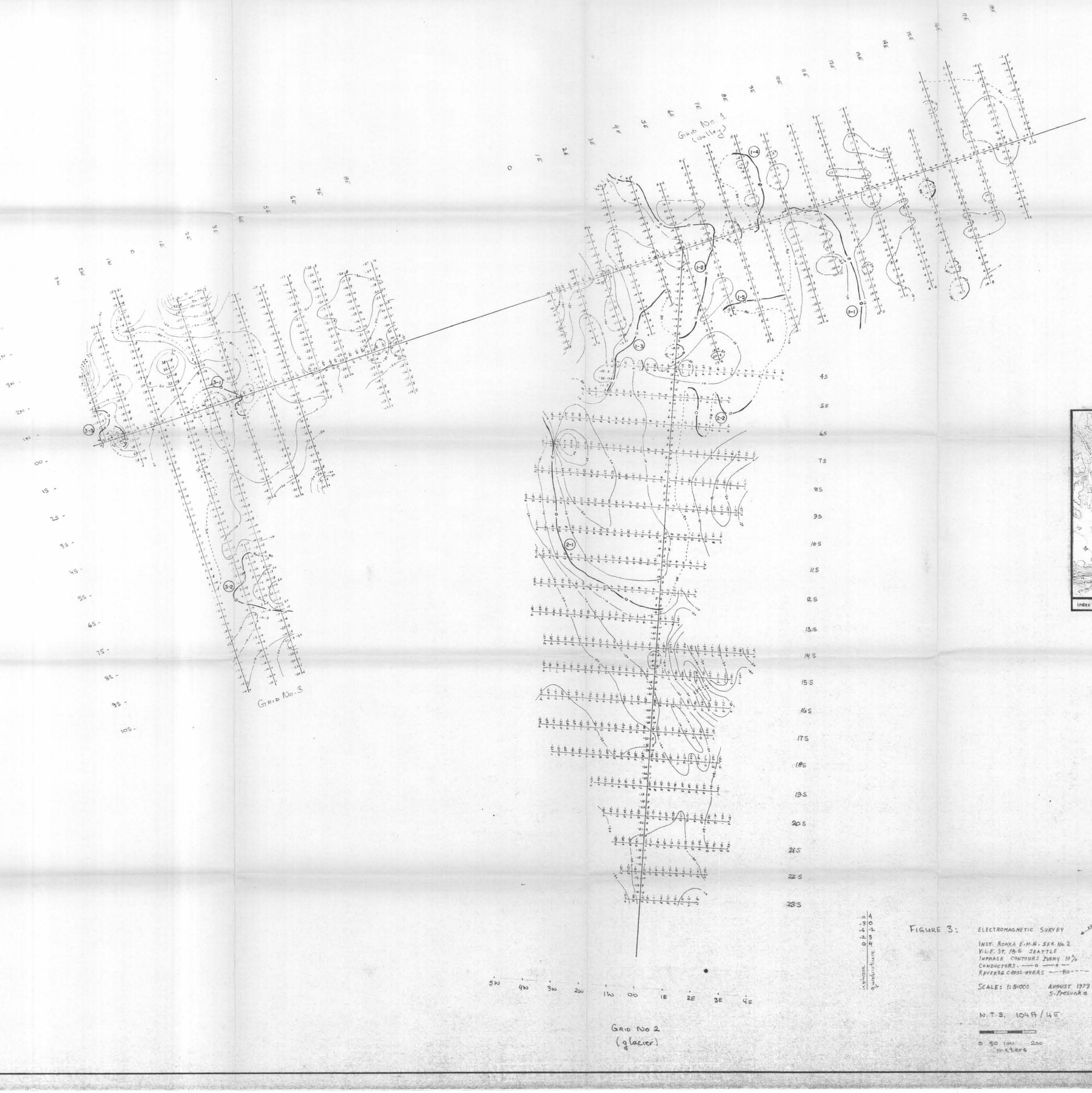


FIGURE 3: ELECTROMAGNETIC SURVEY

INST. RONKA E.M.16 SER. No. 2
V.L.F. ST. 18-G SEATTLE
INPHASE CONTOURS EVERY 10%
CONDUCTORS: ——o——
REVERSE CROSS-OVERS ——Ro——

SCALE: 1:5000 AUGUST 1979
S. Preszuka

N.T.S. 104A/4E

0 50 100 200
meters

TRIB

PRISE

SUR

CREEK

GRID No. 1
(valley)

GRID No. 3

GRID No. 2
(glacier)

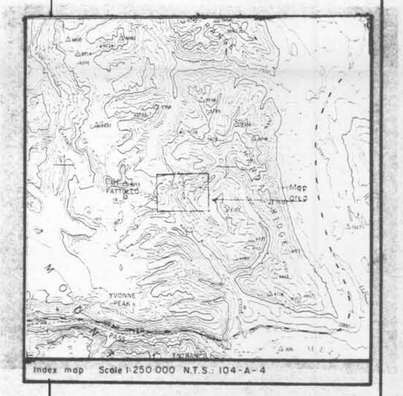


FIGURE 4: ELECTROMAGNETIC SURVEY - Surprise Creek

INST. RONKA-E-M-16 Stn No 2
V.L.F.-ST 53-4 HAWAII
IN PHASE CONTOURS EVERY 10%
CONDUCTORS ——o——o—
REVERSE CROSS-OVERS ---RO----

SCALE: 1:5000 AUGUST - 1979
Steve Tresenka

N.T.S. 104-A-4

0 50 100 200
meters