

5703

ASSESSMENT REPORT ON

EALUE LAKE PROPERTY

LIARD M. D.

LAT. $57^{\circ} 30' 00''$ N., LONG. $129^{\circ} 50' 00''$ W.

GEOPHYSICAL SURVEYS - E.M. & MAGNETOMETER

PERIOD: MAY 23 to 25, 1975

J. SCHUSSLER - OWNER & OPERATOR.

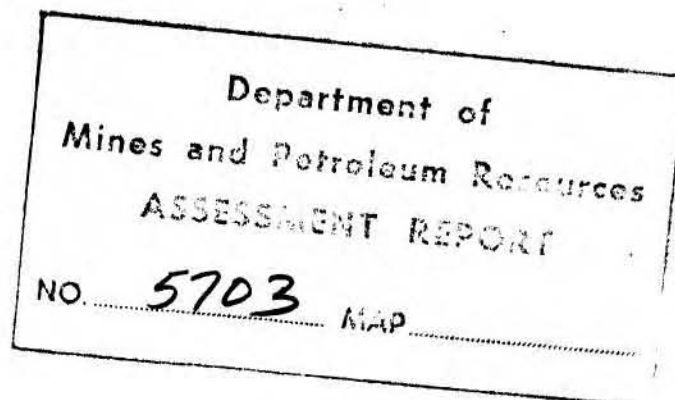
N.T.S. 104-H-13

Vancouver, B. C.

November 7, 1975

S. Presunke

D. H. Brown, P. Eng.

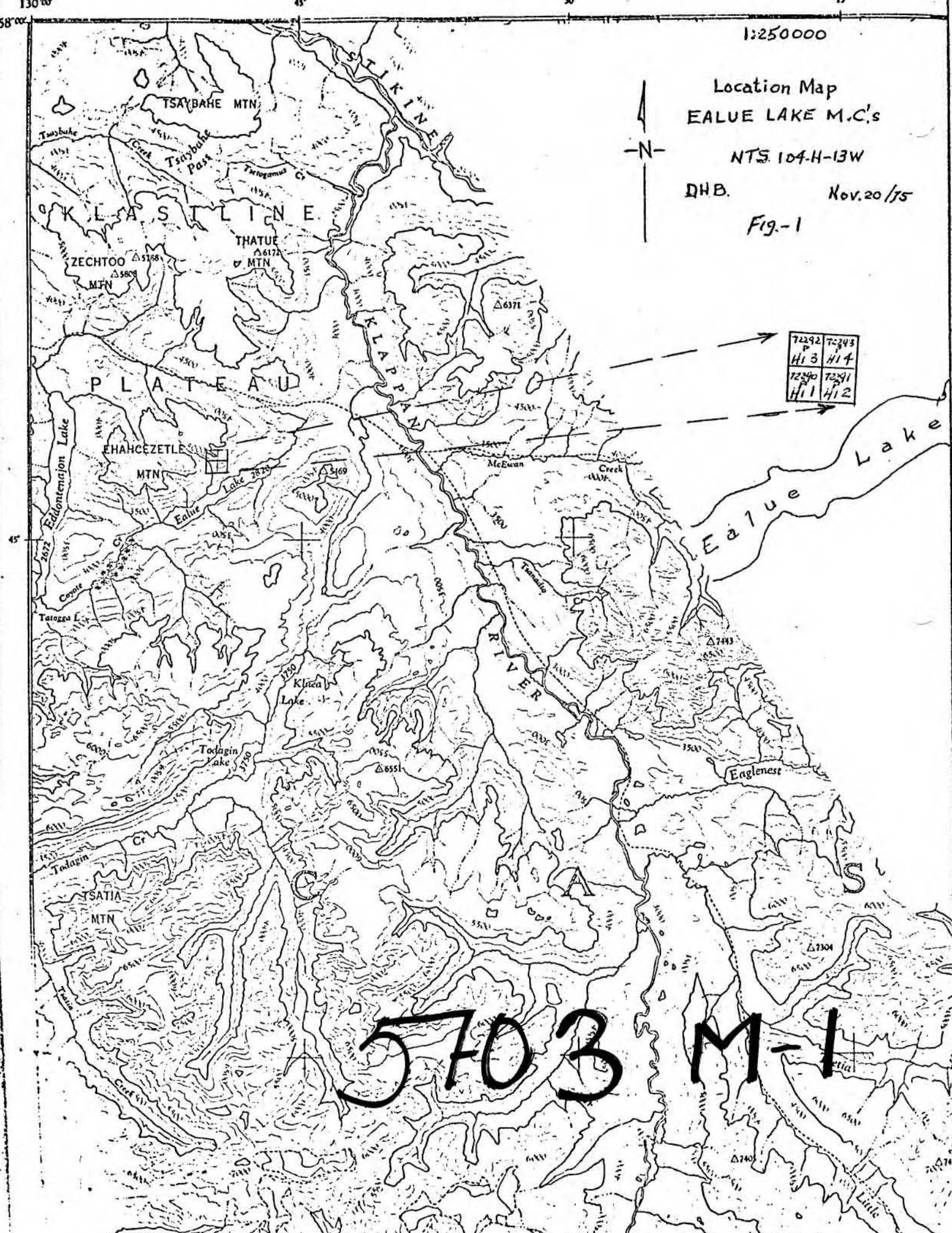


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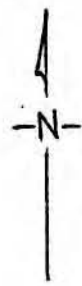
Location Map
EALUE LAKE M.C.'s

NTS 104-H-13W

DHB.

Nov. 20/75

Fig.-1



72292	72343
H13	H14
72290	72291
H11	H12

5703 M-1

ASSESSMENT REPORT ON
EALUE LAKE PROPERTY
LIARD M. D.
GEOPHYSICAL SURVEYS - E.M. & MAGNETOMETER
PERIOD - MAY TO . 1975

Introduction

The Ealue Lake (Hi) Property includes four located claims, Hi 1 - 4, which are recorded as the Hi Group. The present assessment report covers geophysical work carried out during the anniversary year ending November 21, 1975 on J. Schussler M.C.'s Hi 1 and Hi 2, and includes electromagnetic and magnetometer surveys conducted in the period May 23 to 25, 1975. The work was done for J. Schussler, owner and operator of the property. The purpose of the survey was to check for geophysical response, if any, over a known mineralized zone and then to locate, if possible, hidden zones.

Property Location and Access (Lat. $57^{\circ} 30' 00''$, Long. $129^{\circ} 50' 00''$)

The property is located on Ehahcezetle Mtn. on the Klastline Plateau, seven miles northeast of the south end of Eddontenajon Lake and one to two miles north of Ealue Lake. Elevations on the property range between 3500 and 4500 feet. The topography of the surveyed area lies on the side of a steep, south-sloping hill which is lightly forested. The northern part of the grid has a considerable amount of outcrop. An adit is located 100 feet west of L-0 and about 300 feet north of the base line. The adit is in a copper mineralized zone.

Scope of Survey

The survey was carried out by S. Presunka, geophysical operator, and Stanley Bridcutt, helper. The magnetometer and E.M.-16 surveys were run simultaneously firstly along the trail to the property. The trail followed a deep-cut stream. Two good E.M.-16 conductive zones were picked up and were found to coincide with visible copper mineralized zones. The approximate distance along the trail to the showing was 5600 feet. The conductive zones located along the trail should be further prospected.

A short east-west base line was established which extended from L-0 to L-6E. Lines were run at right angles to the base line every 200 feet. These lines were established by chain and compass. The stations were flagged every 100 feet along the lines indicating stations and their line number.

Methods of Survey

a) Ronka E.M.-16 - Principle of Operation

The VLF-radio stations designed for communications with submarines have vertical antennae which create a concentric horizontal magnetic field around them when energized. When these magnetic fields encounter conductive bodies in the ground (through which they readily penetrate), a secondary field radiates from the latter. The Ronka E.M.-16 equipment which is simply a sensitive Very Low Frequency receiver measures the vertical components of these secondary fields.

The receiver has two receiving coils, one horizontal, and one vertical. The signal picked up by one of the coils (vertical axis) is first minimized by tilting the coil through a measured angle which is calibrated in percentages. The remaining signal in this coil is then balanced out by a measured percentage of a signal from the other coil, which is oriented at right angles to the first coil. This coil is normally kept parallel to the primary field.

Thus, if the secondary signals are small compared to the primary horizontal field, the mechanical tilt-angle is an accurate measure of the vertical real component, and the compensation $\Pi/2$ signal from the horizontal coil is a measure of the quadrature vertical signal.

The selection of the proper transmitter station is accomplished by the use of a plug-in unit in the receiver. The magnetic field lines from the station are always at right angles to the direction to the station. Therefore, a station should be selected which gives the field approximately at right angles to the main strike of the conductor or geological structure of the area presently being worked on. After the proper station has been selected the survey lines are selected at right angles to the direction of the station and hence, parallel to the magnetic field from the station.

<u>Transmitting Station</u>	<u>Location</u>	<u>Frequency</u>	<u>Bearing to the Property</u>
VLF Station N.A.A.	Cutler, Maine	17.8 k.c.	N65°W. appr.
VLF Station N.P.G.	Seattle, Wash.	18.6 k.c.	N15°W. appr.
	Baseline, Hi Group		E,-W.

b) Scintrex MF₁ Magnetometer

This is a fluxgate magnetometer with I.C. circuitry and temperature compensation of less than one gamma/° C. over the range -40°C to + 40°C. It has a full terrestrial range of 0 - 100,000 gammas and an orientation independent internal sensor and an accuracy of ± 0.5%. The magnetometer was adjusted to read zero for background.

E.M.-16 Survey - VLF Station 18.6 - Seattle, U.S.A.

The E.M.-16 readings were taken at 50 foot intervals along the lines. Some random readings were taken (not plotted) across the showings. The readings are plotted on a scale of 1 in. to 200 feet. The in-phase results are contoured every 5%.

Only a slight N-S. striking secondary conductor was picked up between L-0 and L-2E. north of the base line. The fact that the showings on L-0 in the vicinity of the edit did not respond geophysically suggests that the mineralized zone has not sufficient depth or length to be responsive to the electromagnetic method. See Fig. 75-1.

E.M.-16 Survey - VLF Station I7.8 - Maine, U.S.A.

The in-phase results of transmissions from this station are contoured every 10%. Two weak conductive zones were picked up on L-0, one at 125 feet north and the other at 300 feet north over the adit with good mineralization showing. This E-W conductive zone has no magnetic correlation.

At 750 feet north on L-0, a weak conductive zone was picked up indicating a north trend which correlates closely with the magnetic trend. This zone should be geophysically followed up to the north and west. See Fig. 75-2.

Magnetometer Survey - Instrument: MF1 Fluxgate

The magnetometer was adjusted to read zero for background. The magnetic relief was from -270 gammas on L-2E, approximately 500 feet north to 830 gammas on L-0 at 650 feet north of the baseline. The mineralized adit area lies in a magnetic background zone. See Fig. 75-3.

Conclusions.

There was not enough area covered geophysically to indicate definite magnetic or conductive trends. The grid area should be extended to the north, west and south to determine possible conductive zones due to mineralization.

Steve Presunka
S. Presunka

A. W. Brown, P. Eng.

DOMINION OF CANADA:

PROVINCE OF BRITISH COLUMBIA.

To Wit:

In the Matter of a GEOPHYSICAL and MAGNETOMETER

Survey over Hi #2 and Hi #4 M. C.'s of
the Hi Group, Ealue Lake.

Lat. 57° 30' 00" N., Long. 129° 50' 00" W.

I,

of

in the Province of British Columbia, do solemnly declare that

COST STATEMENT

Personnel

May 23 - 25, 1975	S. Presunka, Geophysical Operator - 3 da. @ \$150. -	\$ 450.00
May 23 - 25, 1975	S. Bridcut, Geophysical Assistant - 3 da. @ \$ 50. -	150.00
Equipment Rental-	Ronka E.M. 16 and M.F.1 Magnetometer 3 da. @ \$ 50. -	150.00
Living Expenses	Accomodation and Meals	135.00
Transportation from Watson Lake and return (350 mi.)		<u>137.50</u>
	Total cost	\$ <u>962.50</u>

STATEMENT

May - 26 1975

Mr. John Shuster
 13135 - 20th Ave.
 SURREY B.C.

In apt With PRESUNKA GEOPHYSICAL Expl. Ltd.,
 232 - Pembina ST.
 New Westminister B.C.

TERMS

	Geophysical survey - Magnetometer and Electromagnetic				
	S. Presunke 3 days @ 150. ⁰⁰				450. ⁰⁰
	S. Bridcut 3 days @ 50. ⁰⁰				150. ⁰⁰
	Rental Geophysical E.M and magnetometer equip.				150. ⁰⁰
	Living expenses (3 x 25) + (6 x 10)				135. ⁰⁰
	Transportation from Watson Lake return 550 miles				137. ⁵⁰
					962. ⁵⁰
	Thank you Steve Presunke				

Nov. 18, 1975

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

Dear Sir:

Statement of Qualifications of Participants

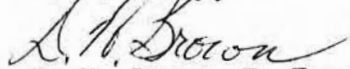
This is to certify that the geophysical work done on the Top Group of mineral claims in the Liard M. D. was done under my direction.

Mr. S. Presunka is a fully qualified geophysical operator with over 18 years experience in this capacity.

Mr. S. Bridcut, a former pilot-pro prospector with Falconbridge Nickel Mines Limited (1953 - 1963) received training as a geophysical assistant during this period and was adequately competent in this capacity during the current geophysical survey.

I, D. H. Brown, P. Eng. (B. C.), in conjunction with S. Presunka carried out the interpretation and the writing of the report.

Yours truly,



D. H. Brown, P. Eng. (B. C.)



DEPARTMENT OF MINES AND PETROLEUM RESOURCES

FORM B (Section 51) MINERAL ACT

SUB-MINING RECORDER RECEIVED NOV 10 1975

Affidavit on Application to Record Work

1. I, D. H. Brown Agent for John Schussler
504 - 1112 West Pender St., 13135 - 208th Ave.,
Vancouver, B.C. V6E 2S3 Surrey, B.C.
Free Miner's Certificate No. 136737 Free Miner's Certificate No. 136804
Date issued Dec. 30, 1974 Date issued Dec. 30, 1974

MAKE OATH AND SAY:

2. I have done, or caused to be done, work on the H1 Group Mineral Claim(s)
H1 #2, H1 #4

Record No.(s) 72291, 72293

Situate at Ealue Lake in the Liard Mining Division,

to the value of at least 800 dollars. Work was done from the 23rd day of May 1975, to the 25th day of May 1975

3: The following is a detailed statement of such work done in the 12 months in which such work is required to be done.

(COMPLETE APPROPRIATE SECTION(S) A, B, C, D, BELOW)

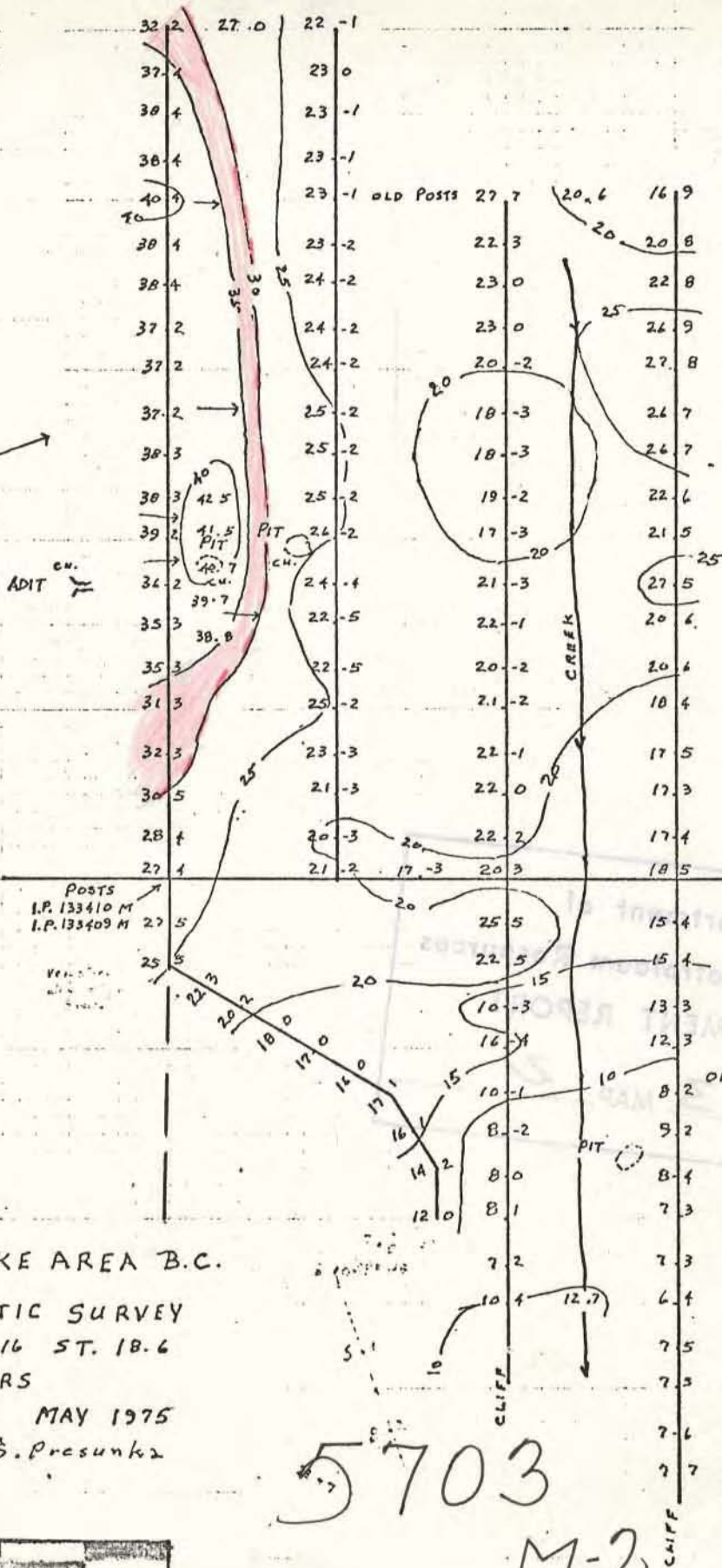
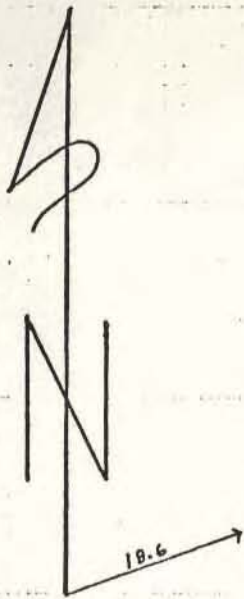
A. PHYSICAL (Trenches, open cuts, adits, pits, shafts, reclamation, and construction of roads and trails)

(Give details as required by regulations)

Table with columns for details and COST. Includes a TOTAL row at the bottom.

I wish to apply \$ of this work to the claims listed below. (State number of years to be applied to each claim and its month of record)

L-0 L-2.E L-4.E L-6.E



72292-P
HI-3 M.C.

72293-P
HI-4 M.C.

72290-P
HI-1 M.C.

72291-P
HI-2 M.C.

Posts
I.P. 133410 M
I.P. 133409 M

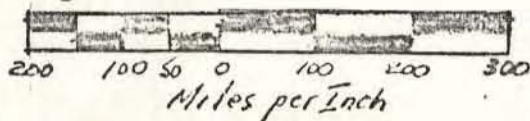
OLD POSTS [WATSON]
F.P. # 39
F.P. # 40

EALUE LAKE AREA B.C.
ELECTROMAGNETIC SURVEY
INST. RONKA E.M. 16 ST. 18.6
INPHASE CONTOURS
SCALE: 1" = 200' MAY 1975
S. Presunka

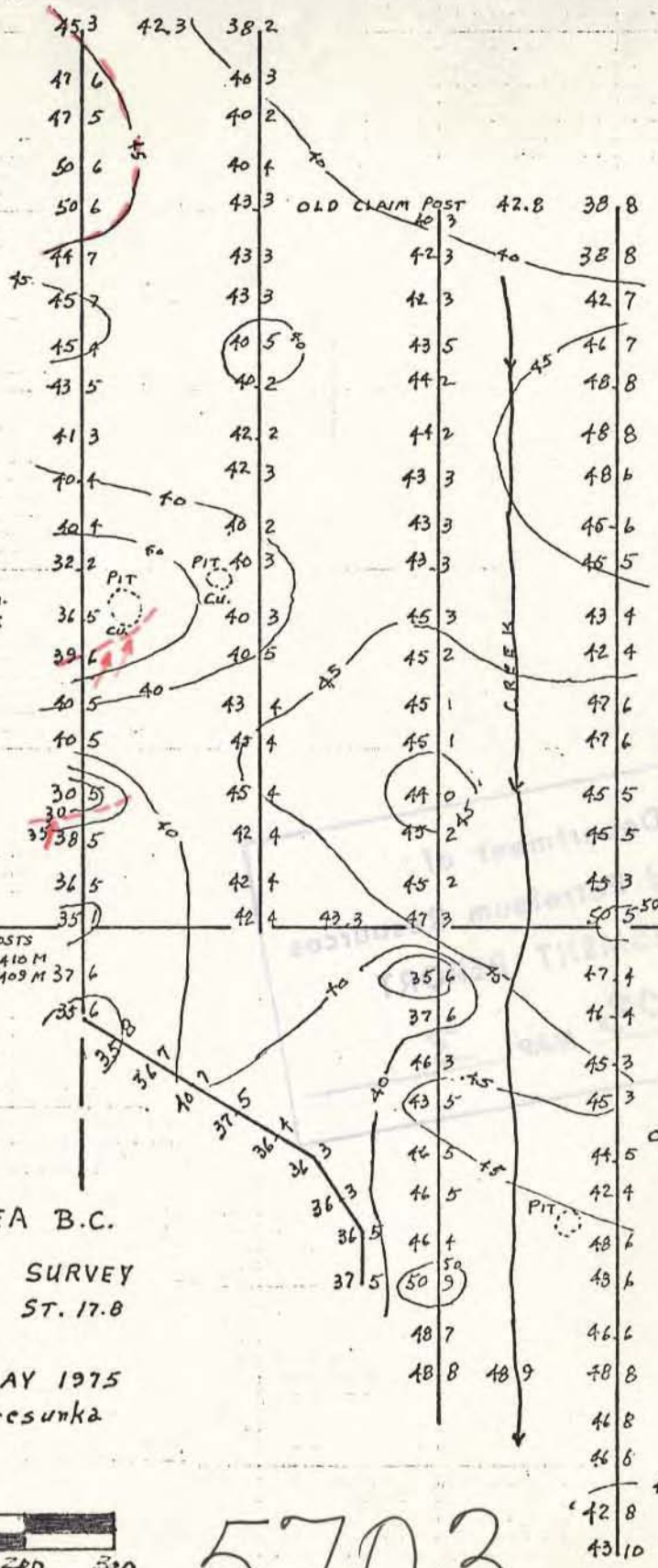
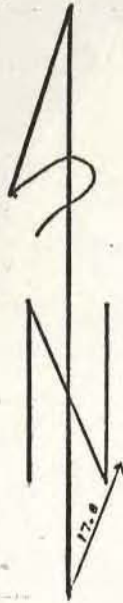
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M-2

Al Brocon



L-0 L-2-E L-4-E L-6-E



72292-P
HI-3 M.C.

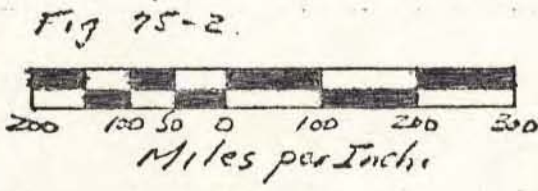
72293-P
HI-4 M.C.

72290-P
HI-1 M.C.

72291-P
HI-2 M.C.

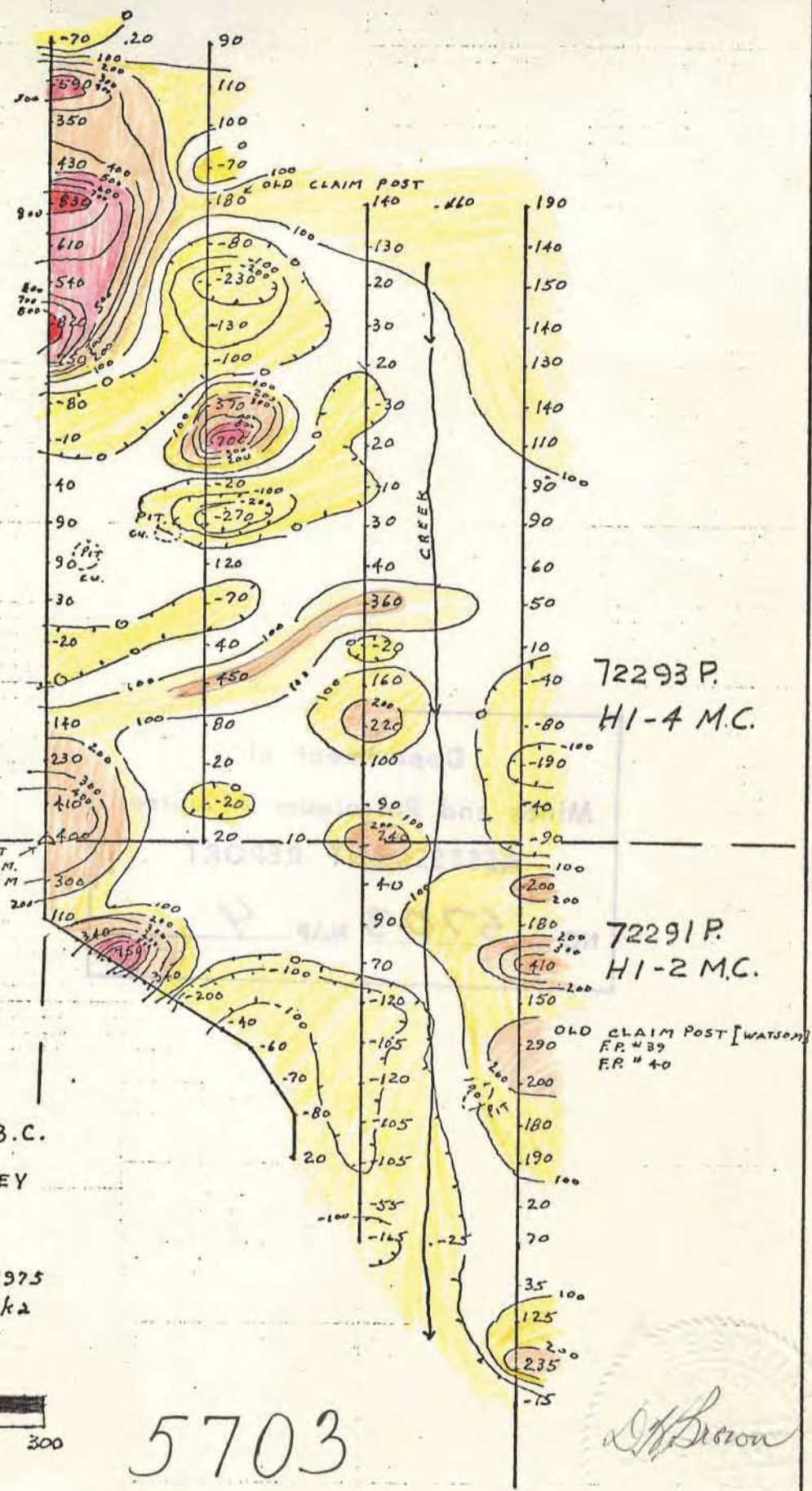
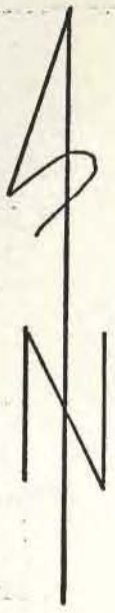
EALUE LAKE AREA B.C.
ELECTROMAGNETIC SURVEY
INST. RONKA EM-16 ST. 17.8
INPHASE CONTOURS
SCALE: 1" = 200' MAY 1975
S. Presunka

OLD CLAIM POSTS [WATSON]
F.R. #39
F.P. #40



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M-3





72292P
HI - 3 M.C.

72293P
HI - 4 M.C.

72290P
HI - 1 M.C.

72291P
HI - 2 M.C.

EALUE LAKE AREA B.C.
MAGNETOMETER SURVEY
INST. SER. No 945045

SCALE: 1" = 200' MAY 1975
S. Presunka

Fig. 75-3



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M 4

S. Brown