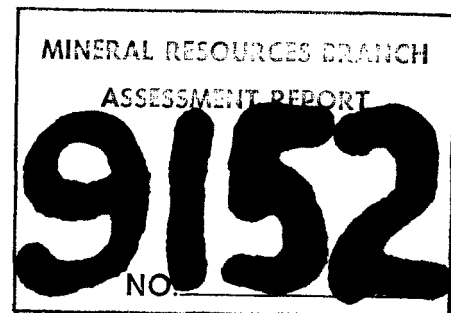


356-# 9152

ELECTRO-MAGNETIC
and
MAGNETIC SURVEYS
on
THE JOHN AND HEIDI MC
in the SIMILKAMEEN M. D.
Map 92H/6W
Latitude 49° 27' North^o
Longitude 121° 01' West
for
HULDRA SILVER INC.



E. Livgard, B. Sc., P. Eng.
Livgard Consultants Ltd.
Vancouver, B. C.
April 2, 1981

INDEX

	<u>Page</u>
Introduction	1
Property	2
Location and Access	3
Topography	3
Instruments	3
Grid	3
History	5
Electro-Magnetic Survey	76
Magnetometer Survey	76
Appendix	
Statement of Costs	9
Statement of Experience	10
Certificate	11
Maps	
Claim Map	page 4
Composite Geophysical Map	1:5000
Magnetometer Map	1:2500
Electro-Magnetic Survey Fig. 2	1:2500
Electro-Magnetic Survey Fig. 3	1:2500

INTRODUCTION

A geophysical survey consisting of electro-magnetic and magnetic readings was carried out over part of the John and Heidi mineral claims at the request of Magnus Bratlien, president of Huldra Silver Inc.

The survey was carried out by Steve Presunka and Magnus Bratlien acted as helper. The writer supervised the survey.

Mr. S. Presunka is a very able geophysical instrument man and has long experience in the field.

The survey was carried out in October 20 - November 2, 1980

PROPERTY

The property consists of the following reverted Crown grants and staked claims:

	Rec. No.
Reverted Crown grant: WHY NOT FR.	377
" " " #3	378
Eureka Fr.	379
Tamarac	380
" #2	381
LakeView	382
WHY NOT #2	383

STAKED CLAIMS

	Rec. No.	
Heidi #1-3	1289-1291	
John	712(8)	8 units
Hill	569(5)	6 "
Vale	570(5)	8 "
Bill #1-6	404-409	
Summit FR	583	

All reverted Crown grants and claims are owned by Huldra Silver.

LOCATION AND ACCESS

The claims are in the Similkameen M. D map sheet 92H/6 at the headwaters of Tulameen River about 20 miles southwest of the town of Tulameen.

The claims can be reached by a dirt road from Tulameen. The road is not kept open in winter.

TOPOGRAPHY

The claims lie at an elevation of about 4000 feet on a part of the south slopes of Treasure Mtn. and on the river flat adjacent to it.

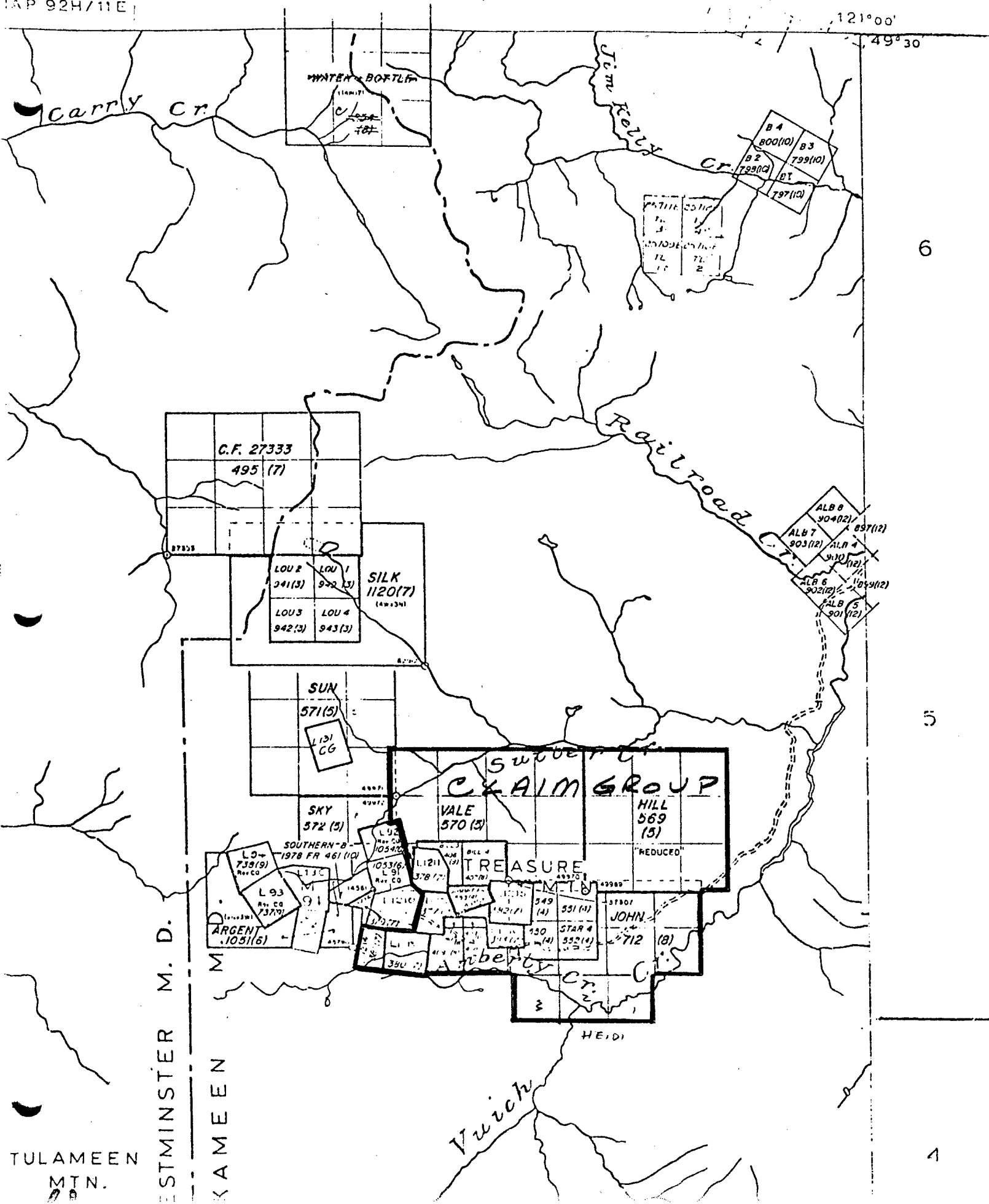
INSTRUMENTS

The electro-magnetic instrument used was a Ronka EM16, Serial No. 2. The VLF stations used were 21.4 and 18.6.

The magnetometer used was a Sintrex MF1 Fluxgate, serial No. 905-454. The instrument was adjusted to read 300 gammas for background.

GRID

The baseline was laid out in a northwest, southeast (135°). The survey lines were run at right angles to the baseline, first at 100 metres interval, the intermediate lines were put in as required.



6

5

4

ESTMINSTER M. D.
KAMEEN

TULAMEEN
MTN.

HISTORY

The Treasure Mtn mineralization was discovered before the turn of the century. Extensive underground work was carried out on the claim ground in the 1920's and 1950's.

A total of about 5000 feet of drifts, cross-cuts and raises were put in. A small mill was built in 1954-55, but it never operated.

The mineralization indicated by the underground work consists of about 100,000 ton grading approximately 9 oz Ag, 4%Pb and 9% Zn per ton.

ELECTRO-MAGNETIC SURVEY:

Instrument Ronka E. M. 16, V. L. F. Station 21.4 (Fig.) these readings were taken at 12.5 m intervals along the lines. The readings were plotted on 2 plans on a scale of 1:2500. One plan was contoured and the other was profiled. The contoured plan (Fig 1) is particularly useful for indicating geological structures. The five conductors shown on this plan are numbered from 1 to five. The most prominent of these, No. 1 strikes east-westerly, extending from station 112m NE on line 500 SE to station 650m SW on line 200m NW, and beyond. The eastern part of this conductor appears to be terminated by a massive sheared sandstone arkose. This conductor is interrupted by two minor NS faults, one in the area of station 300m SW on line 2SE and the other in the area of st. 50m SW on line 400m SE. No. 1 conductor correlates with anomalous magnetics on line 9, 25m SE, 50m SE and line 100m SE. The magnetic survey was done on these lines to check the No. 1 conductor for magnetic correlation. The No. 1 conductor is further dealt with on the profiled plan (Fig 2) for estimated depth and dip and location of proposed D. D. H. targets.

The No. 2 conductor, located north-east of the base line between lines 100m and 200m SE, indicates a tight fold. This conductor should be checked for magnetic correlation for better evaluation. The No. 3 conductor between lines 450m and 600m SE, southwest of the base line, strikes north easterly and is probably caused by a shear or a fault. The weak No. 4 conductor requires more work before any assessment is possible. The No. 5 conductor, between lines 300m and 350m SE, on the NE side of the base line is likely due to a shear or a fault related to the No. conductor.

Fig. 2, V. L. F. Station 2i.4 (Profiled):

The profiled plan is useful in determining depth and dip of conductors. Conductors 1 to 5 on the profiled plan are the same as those shown in the contoured plan (fig. 1). Depth to conductor #1 on station 625m SW on line 200m NW is approximately 75m. Dip of conductor is nearly vertical. Depth to the same conductor in the vicinity of station 400m SW on line 50m SE is approximately 100m. In this location there is also good magnetic correlation, and represents a likely D. D. H. target. At this location a secondary conductor lies about 25m to NE. The proposed D. D. H. #1 spotted on station 285 SW on 100m SE and drilled at -60° SW to a depth of 150m would intersect both secondary and main

conductors. D. D. H. #2, located about 112m SW on line 200m SE and drilled due south at 60° to a depth of 150m would intersect mid section of conductor #1.

V. L. F. St. 18.6 (fig 3)

This V. L. F. station did not respond to the #1 conductor because the strike of the conductor, the angle between conductor and V. L. F. station being too sharp. Station 18.6 V. L. F. shows the #1 conductor between lines 0 and 50m SE, extending from about 300m SW to 550m SW for a length of about 250 meters. This conductor has a good magnetic correlation and is a good drill target. A proposed D. D. H. #3 spotted between lines 50m and 100m SE at 425m SW and drilled northwest at -60° for 120m would intersect this magnetic conductor, which here is nearly vertical.

Conductor #2, crossing the base line at 250m SE also correlates well with a magnetic anomaly. The extent of the magnetic anomalies cannot be established until further work is done. Depth to the #2 conductor at station 250 SE base line is approximately 120 meters. D. D. H. #4 is spotted at base line 175m SE to be drilled to a depth of 160m at -60° striking southeast would intersect this magnetic conductor.

The short and weak conductor on line 450 SE and about 285m SW requires additional work to determine its full extent.

The #4 conductor on line 150m SE and about 360m SW correlates with #1 of V. L. F. Station 21.4.

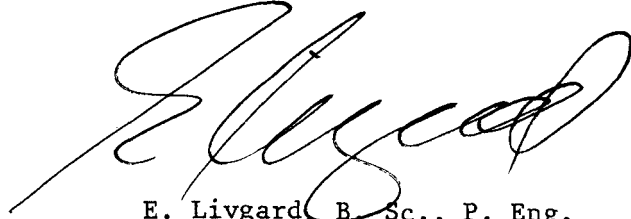
MAGNETOMETER SURVEY

The magnetic bases were established along the base line for diurnal control. A value of 300 gammas was used for background. The magnetic relief is from 145 to 985 gammas which suggests possibilities of anything from minor amounts of magnetite to good pyrrhotite mineralisation present. The correlation between the magnetic and electro-magnetic conductivity, the conductor could be caused by sulphides. However, the magnetometer work covered only part of the E. M. 16 survey. Therefore, further work is required to fully relate magnetics to the E. M. 16 conductors.

The composite geophysical plan (Fig 5) shows the position of the survey grid in relation the old Silver Hill Mine on Treasure Mtn. The reconnaissance E. M. 16 done on the known mineralized zones responded similarly to the main conductors in the grid survey on the John and Heidi claims. The three trenches

on Treasure Mtn. responded well to E. M. 16. The strike of the conductor in the three trenches is about 250° which lines them up with the ore zone outcropping just below the adit at the #1 level. Several interesting conductors were located on top of Treasure Mtn. and the mineralized Zones responded favourably to the E. M. 16 survey. A grid system geophysical survey should be done on Treasure Mtn. This grid would establish among other things, the relationship between the conductors evident in the trenches and the conductors of the ore zone at the #1 level adit.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'E. Livgard', written in a cursive style.

E. Livgard, B. Sc., P. Eng.

Livard Consultants Ltd.

Statement of Costs

EM and Mag. Survey

October 30-31, November 1-2	4 days
October 20-23	4 days
Mapwork	4 days

Surveys

S. Presunka	12 days at \$200.	\$2400.
Vehicle milage	360 miles @ 0.30	108.
M. Bratlien	8 days @ \$100.	800.
Room & Board - 2 men - 8 days @ \$25/man/day		400.
Engineering supervision and report - 3 days @ \$300./day		<u>900.</u>

TOTAL COST

\$4608.

A large, stylized handwritten signature in black ink, likely belonging to the person who prepared the cost statement.

STATEMENT OF EXPERIENCE


I have worked in the field of geophysical exploration since 1957 - both operating the instruments and mapping and interpreting the data obtained. In this capacity I worked for Ventures Ltd. and later Falconbridge Nickel Mines from 1957 to 1972 except for 2 years spent with Stratmat Geophysics of Toronto - also in the same capacity.

Since 1972 - I have carried out geo-physical surveys on a contract basis for a number of clients through my own B.C. company, Presunka Geophysical Explorations Ltd. Some of this work has been for my previous employers.

My work consists chiefly of electro-magnetics, both horizontal loop and vertical E.M., magnetometer surveys, self-potential and spectrometrics.

I use only self-owned instruments in good working condition. All instruments are serviced at least once a year by the manufacturers.

DATED AT VANCOUVER, BRITISH COLUMBIA, THIS 22nd DAY OF APRIL, 1981



Steve Presunka

Addresses - 232 Pembina Street,
NEW WESTMINSTER, B.C.
or 203 - 9th Ave.,
DAUPHIN, Manitoba

LIVGARD CONSULTANTS LTD.

1199 West Pender, Vancouver, B.C. V6E 2R1 Ph. 669-4025

C E R T I F I C A T E

I, EGIL LIVGARD, of 409-1199 West Pender Street, Vancouver, B. C. DO HEREBY CERTIFY:

1. I am a Consulting Geological Engineer.
2. I am a graduate of the University of British Columbia, B. Sc., 1960. Geological Sciences.
3. I am a Member of the Association of Professional Engineers of the Province of British Columbia.
4. From 1960 to 1962 I was employed as geologist with United Keno Hill Mines, Elsa., Yukon Territories.

From 1962 to 1963 I was employed as geologist with the Geologic Survey of Norway.

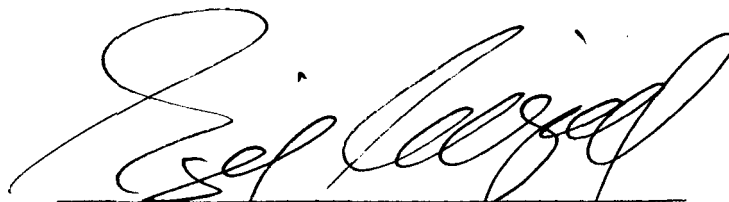
From 1963 to 1966 I was employed as Mine Geologist and Engineer at the Portage Mine, Chibougamau, Quebec.

From 1966 to 1968 I was employed as Chief Geologist and Engineer at Utica Mines, Keremeos, B. C.

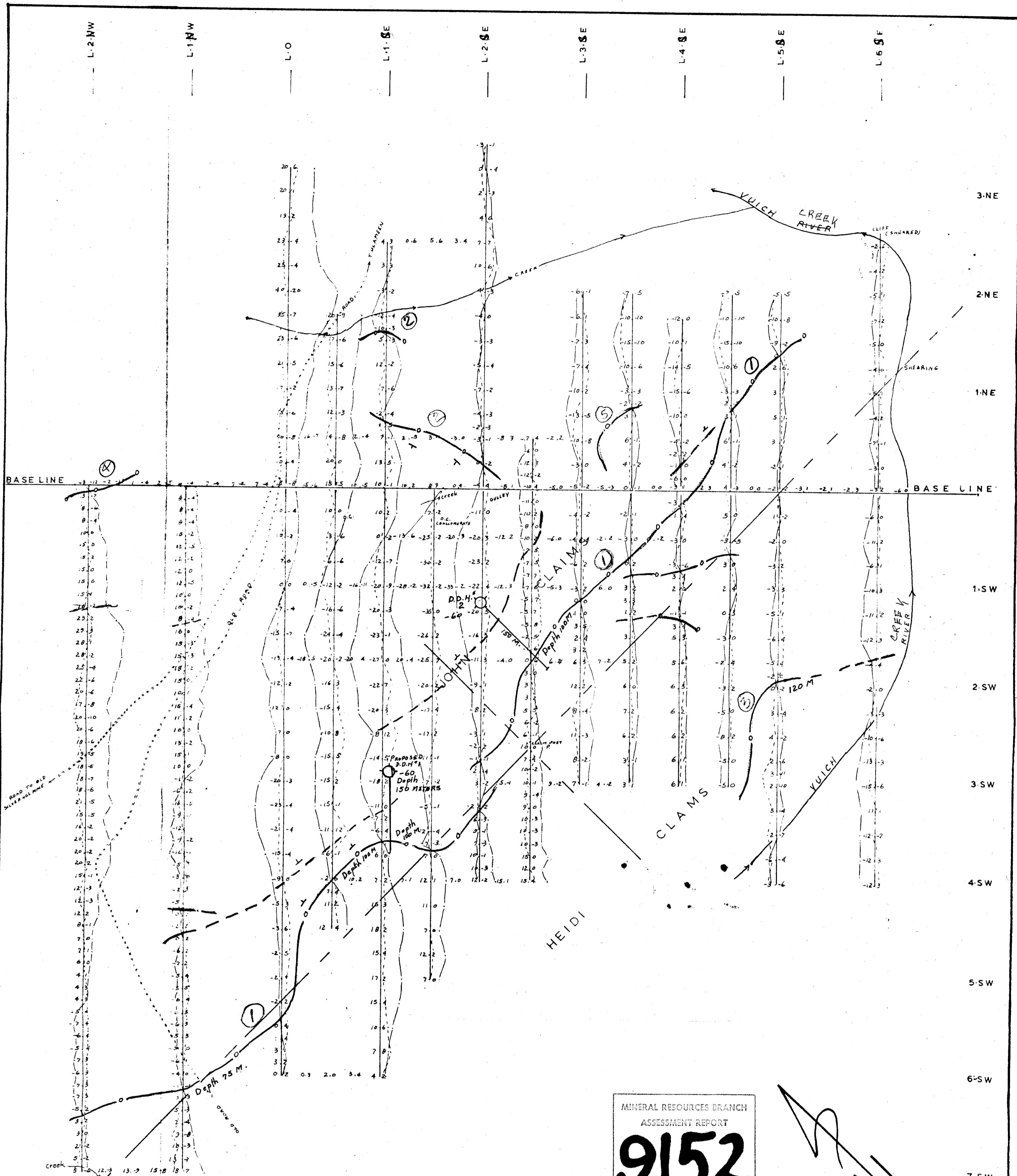
From 1968 to 1970 I was employed by S & N Mine Management, Consultants. Vancouver, B. C.

From 1970 to the present I have been self-employed as a Consultant in Vancouver, B. C.
5. I have not, directly or indirectly received, nor do I expect to receive, any interest, directly or indirectly in the properties here described, or in any company that has an interest in these properties, or in any affiliate, and I do not beneficially own, directly or indirectly, any securities in any such company.

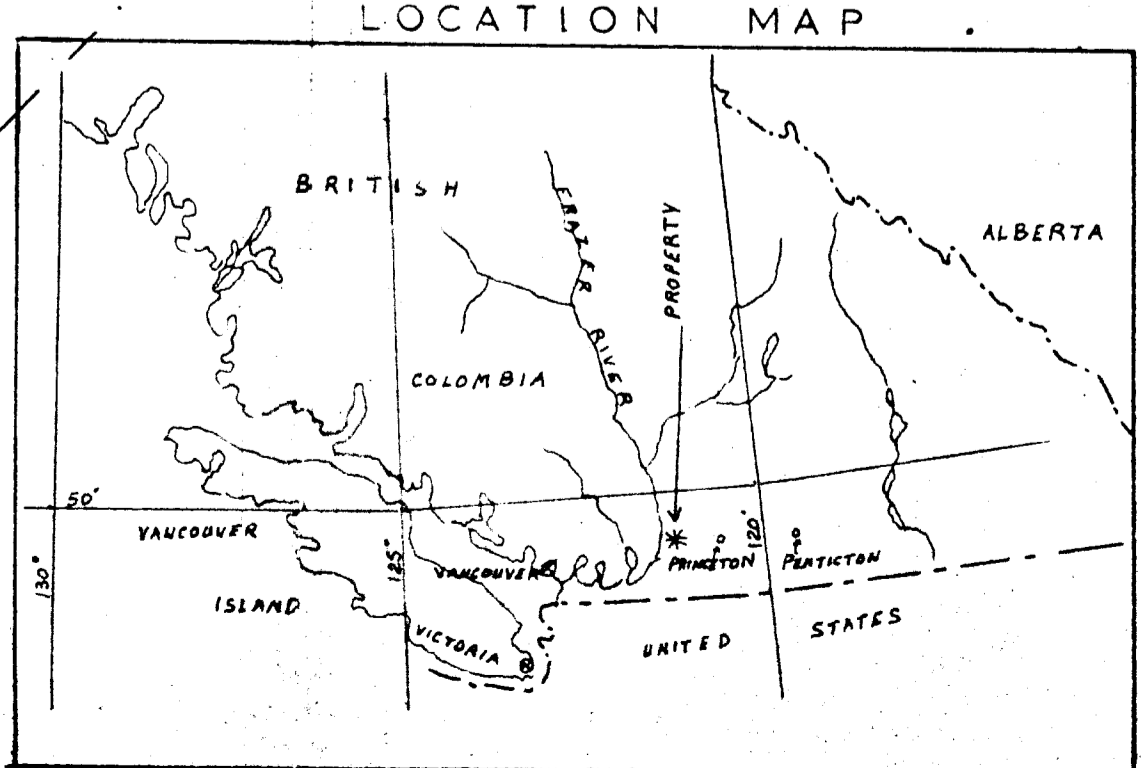
DATED AT VANCOUVER, BRITISH COLUMBIA, THIS 1ST DAY OF APRIL, 1981.



Egil Livgard, B. Sc., P. Eng.



MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
9152
 NO.

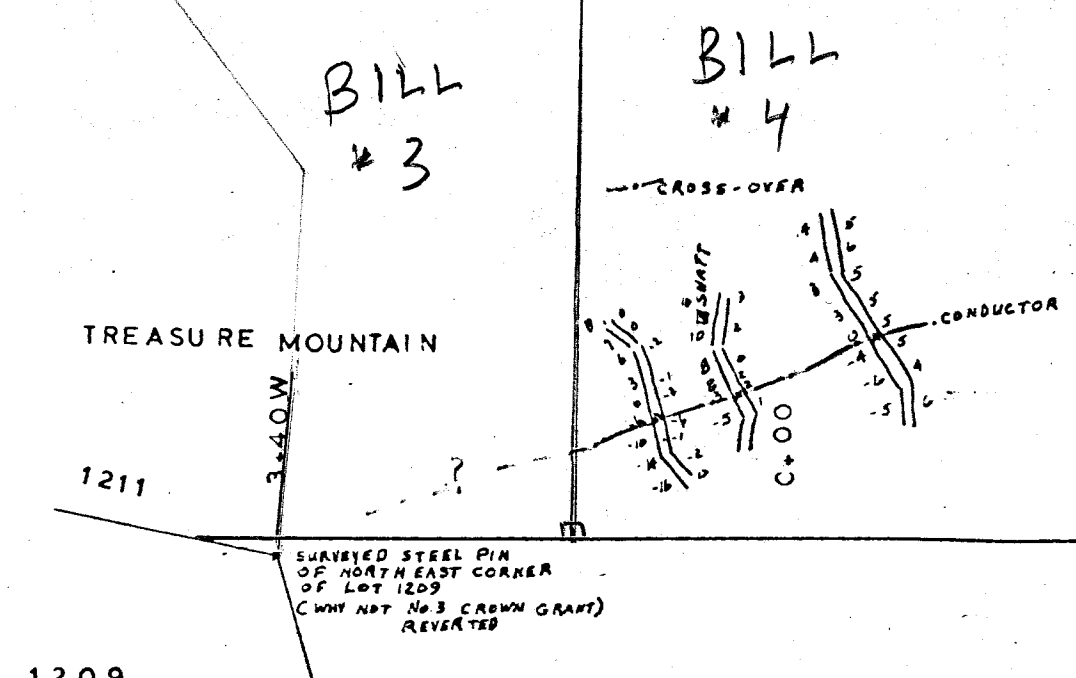


HULDRA SILVER INC.
 TULAMEEN AREA B.C.
 SIMILKAMEEN M.D., B.C.

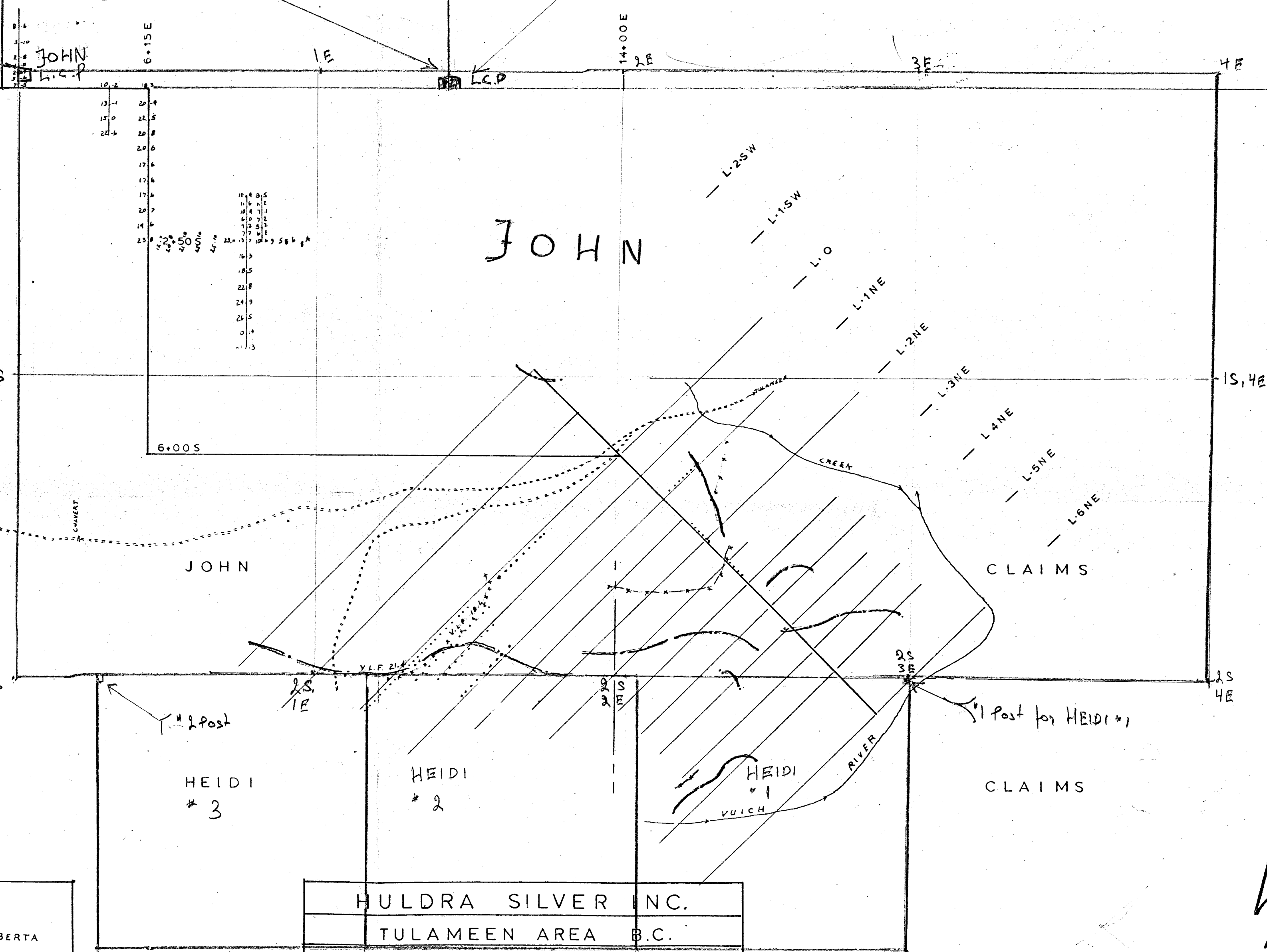
ELECTROMAGNETIC SURVEY
 INSTRUMENT-RONKA E.M.16 SERIAL No.2 V.L.F. 21.4
 INPHASE PROFILE —————
 QUADRATURE PROFILE - - - - -
 CONDUCTORS ○ — ○ — ○
 SECONDARY CONDUCTORS ————
 SCALE: 1:2500 NOVEMBER 1980

50 25 0 25 50 75 100 METRIC
 S. PRESUNKA

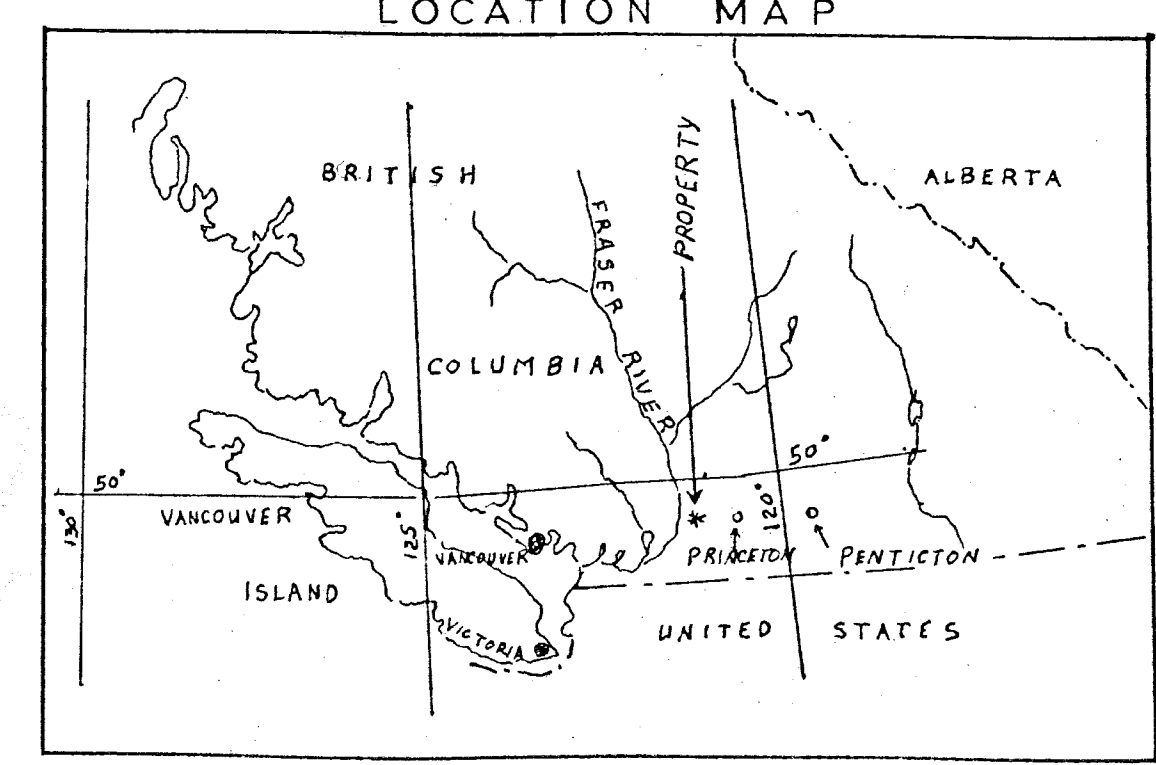
FIG. 2



V A L E H I L L



LOCATION MAP



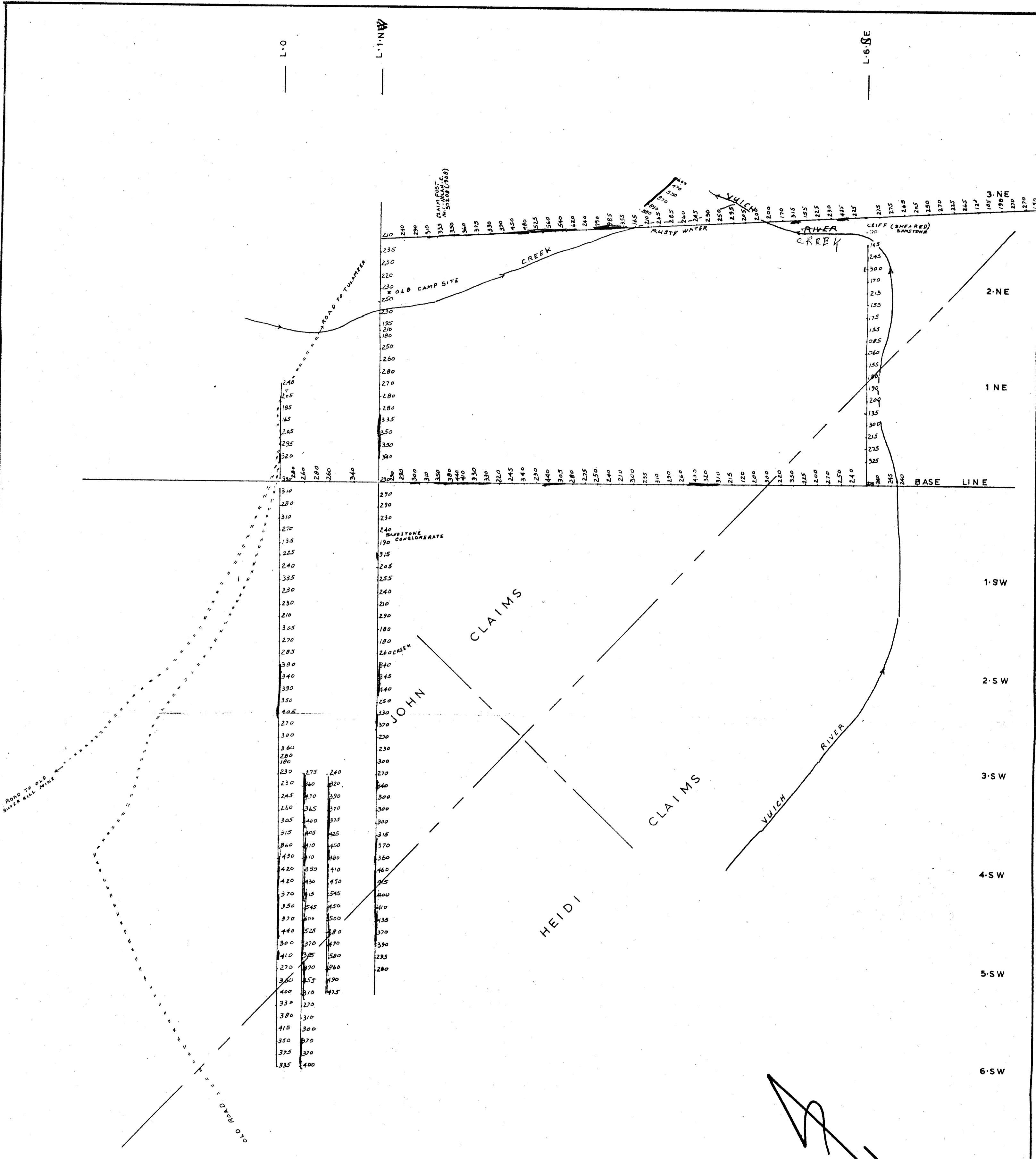
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ASSESSMENT REPORT
9152
NO.

HULDRA SILVER INC.
TULAMEEN AREA B.C.
SIMILKAMEEN M.D. B.C.
COMPOSITE GEOPHYSICAL MAP

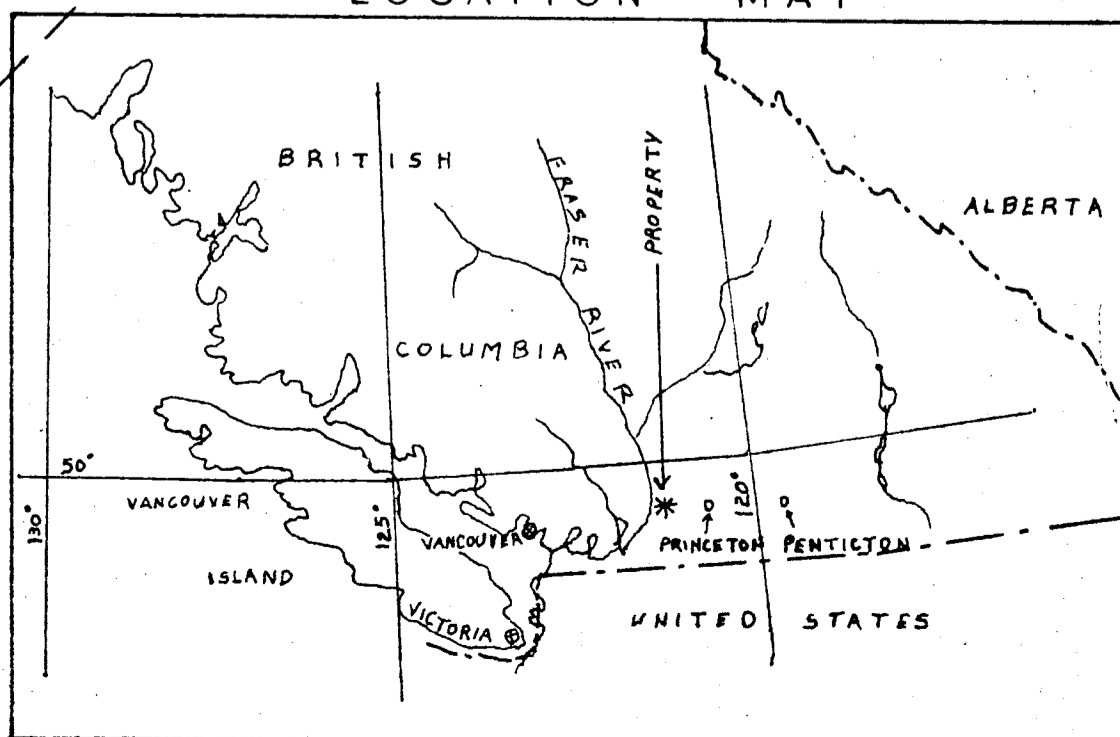
EM 16-V.L.F. ST. 214 CONDUCTORS —————
EM 16-V.L.F. ST. 186 CONDUCTORS - - - - -
MAGNETIC ANOMALLY ·······

SCALE: 1:5000 NOVEMBER 1980
50 0 50 100 150 200 METRIC
S. PRESUNKA

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[Signature]



LOCATION MAP



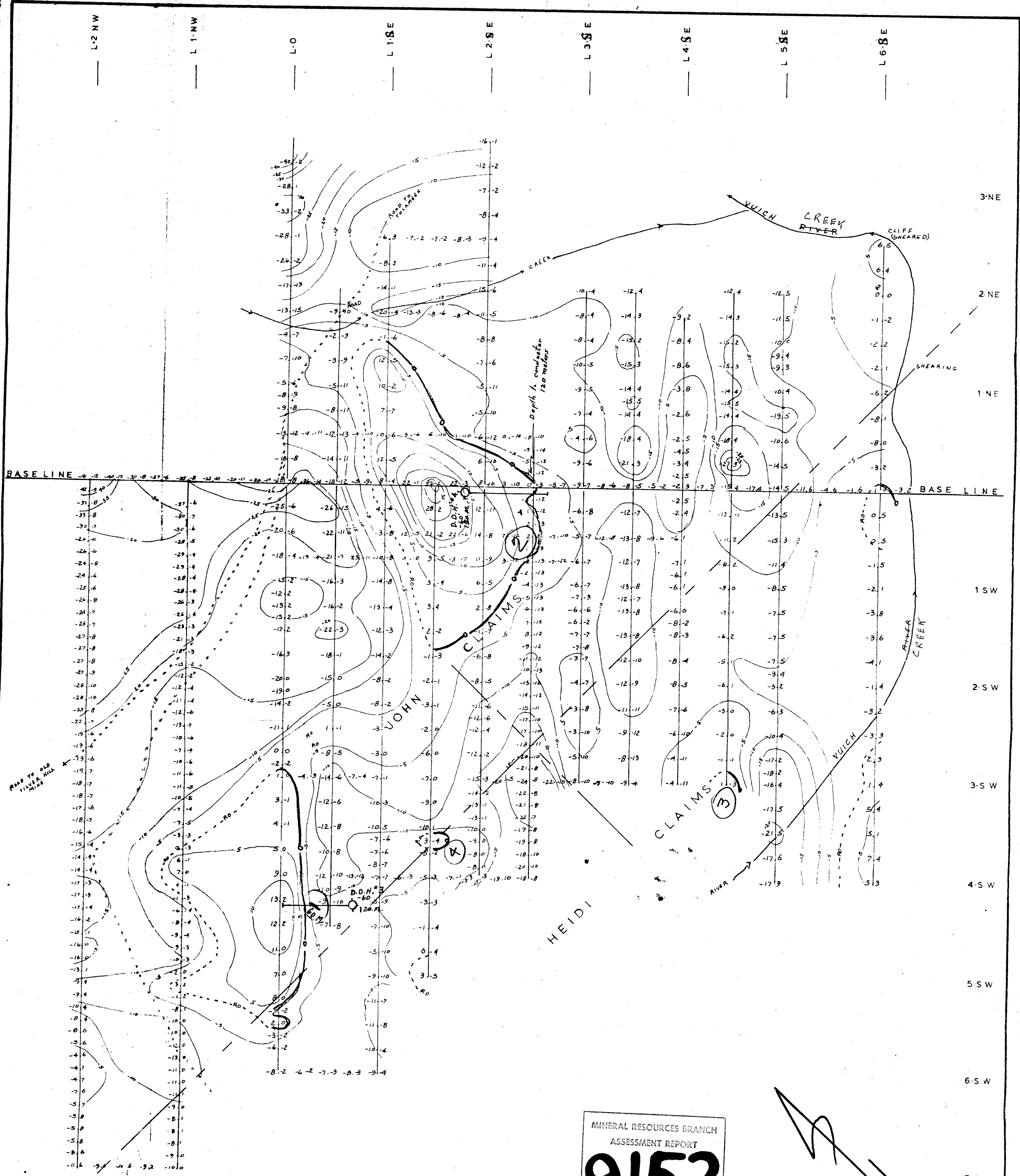
HULDRA SILVER INC.
 TULAMEEN AREA B.C.
 SIMILKAMEEN MD, B.C.
 MAGNETOMETER SURVEY

INSTRUMENT-SCINTREX M.F.1 FLUXGATE, SERIAL No. 905-454
 INSTRUMENT ADJUSTED TO READ 300 GAMMAS FOR BACKGROUND.

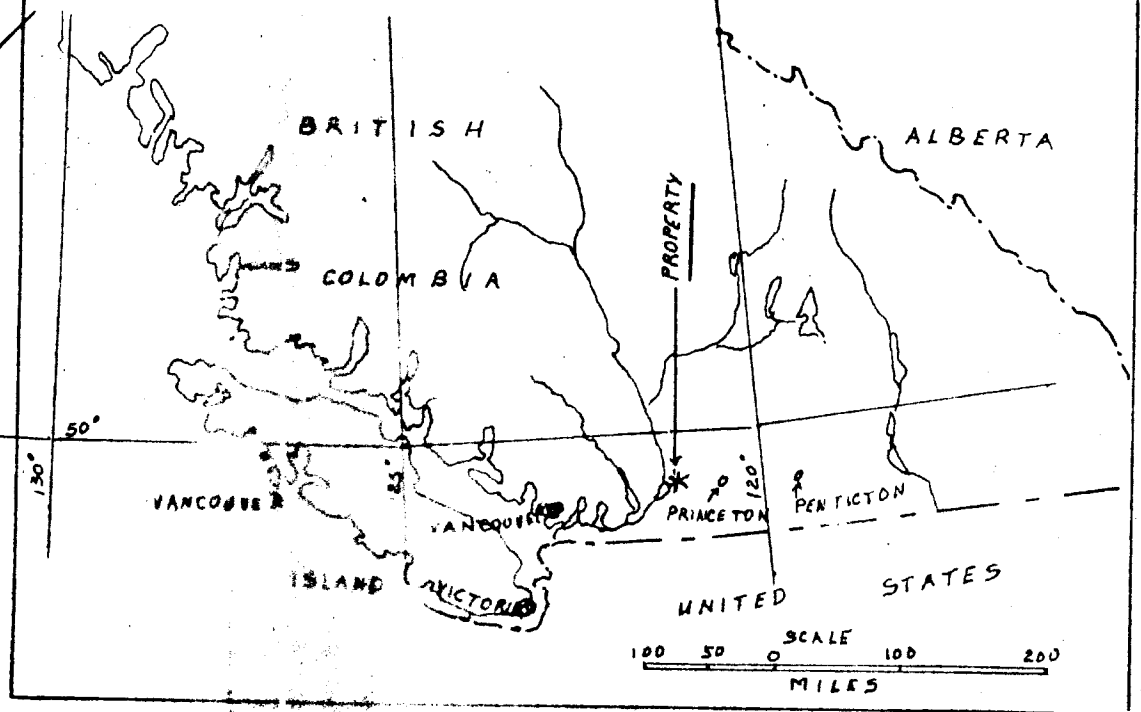
SCALE: 1 : 2500 NOVEMBER 1980
 50 25 0 25 50 75 100 METRIC
 S. PRESUNKA

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LOCATION MAP



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
9152
NO.

HULDRA SILVER INC.
TULAMEEN AREA B.C.

ELECTROMAGNETIC SURVEY
INSTRUMENT-RONKA E.M.16 SERIAL NO.2.V.L.F.18.6
INPHASE CONTOURS ---S---S---S---
REVERSE CROSS-OVER ---RO---RO---
CONDUCTORS o---o---o---o---
SECONDARY CONDUCTORS ---
SCALE: 1:2500 NOVEMBER, 1980

50 25 0 25 50 75 100 METRIC
S. PRESUNKA

FIG. 3

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