'79-#575-# 7686

Geophysical Report

on an

Induced Polarization Survey
on portions of the

Big Missouri, Winer and Packers Fractional Claims

Situated 20 kilometres north
of
Stewart, B. C.
(Skeena Mining Division)
N.T.S. 104B/1 (E 1/2)

on behalf of

CONSOLIDATED SILVER BUTTE MINES LTD.

Field Work August 11 to August 18, 1979.

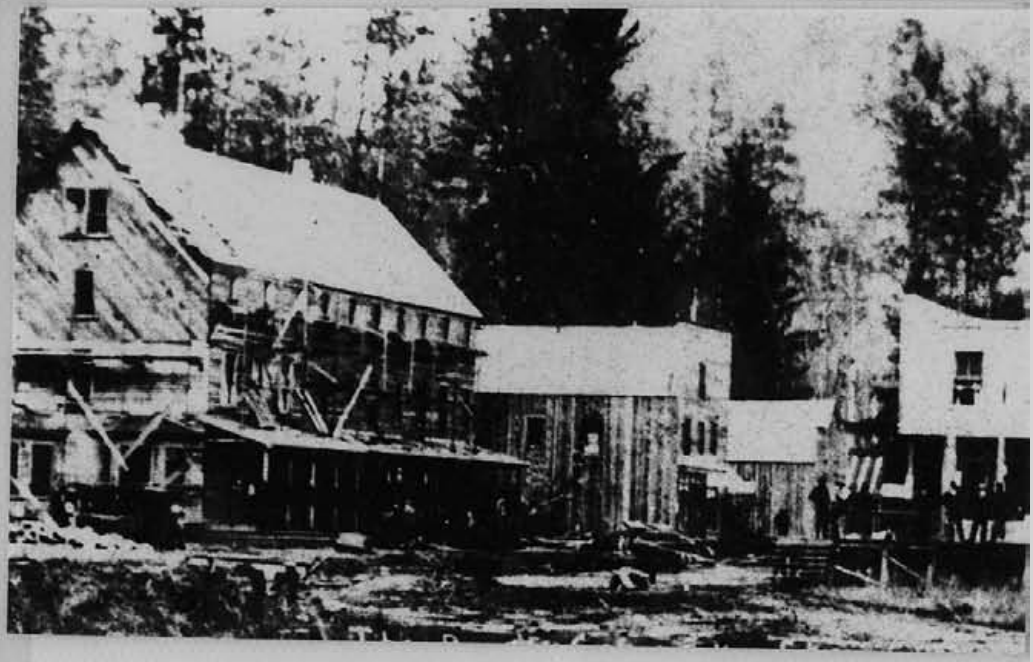
Report by

D. R. Cochrane, P. Eng.
September 18, 1979,
Delta, B. C.

Cochrane Consultants Limited
4882 Delta St., Delta, B.C. V4K 2T8 946-9221
Geotechnical Consulting / Exploration Services

geology
geophysics
geochemistry

King Edward Hotel,
Downtown Stewart, B.C., early 1900's
(Courtesy Stewart Chamber of Commerce)..



Horses on showshoes,
Big Missouri Mine, 1922
(Courtesy Stewart Chamber of Commerce).

Fetter Lake,
between Long Lake and Hog Lake
August, 1979.
(Photo by W.F.C.).

Field men at Bear Glacier,
August, 1979.
(Photo by D. I.)

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PART A:

Section A-1 INTRODUCTION

Cochrane Consultants Ltd., were engaged by Consolidated Silver Butte Mines Ltd., to conduct an induced polarization (I.P.) survey on the Winer, Big Missouri and Packers claims situated on the Big Missouri Ridge, north of Stewart, B. C. The field work was completed in August 1979, using a Hewitt pulse type (time domain) I.P. unit, in the same manner as a similar survey completed to the north in 1976.

The area surveyed covers a geochemical soil anomaly, and "showing" and the purpose of the work was to determine the I.P. response of these areas in order to guide further exploration.

This report contains assessment work details, and costs incurred in the event that assessment work credits are claimed.

PART A

Section A-2 SUMMARY AND CONCLUSIONS

1. Cochrane Consultants Ltd., were engaged by Consolidated Silver Butte Mines to conduct an induced polarization (IP) survey on portions of the Big Missouri, Winer and Packer claims situated north of Stewart, B. C. The field work was completed by an experienced IP crew between Aug. 11 and 18, 1979 and under the direct field supervision of the author between August 16 and 18.

2. There is facile road access to the survey area by proceeding west from Stewart B.C., through Hyder Alaska, then northerly along the Granduc road a distance of some 25 odd kilometres. The property lies on the west flank of the Big Missouri Ridge, and just south of the Province Claim, which was previously and periodically mined between 1927 and 1942. The Big Missouri Mine, on the Province Claim produced 58,000 troy ounces of gold from 848,000 tons treated.

4. The August 1979 reconnaissance type IP survey was completed on east-west directed cross lines spaced 100 metres apart and with along-line station intervals of 50 metres. A Hewitt 200 pulse type IP unit was deployed with a Wenner field array in an "a" spacing arrangement of 50 metres.

5. Gradient self potential results ranged from a low of a few millivolts per 50 metres to a high of 424 millivolts per 50 metres (about 8 millivolts per metre). The high SP response is highly anomalous, and coincides with a peak apparent chargeability (IP) response.

6. Apparent resistivity results range from a low of 2230 ohm-feet to a high of 8900 ohm-feet. The most important apparent resistivity feature is an irregularly shaped, less than 3000 ohm-feet low trending northerly through the west side of the survey area.

7. The apparent chargeability (IP) results ranged from a low of 8.6 to a high of 36.7 milliseconds. A broad and arcuate plus 20 millisecond IP anomaly trends northerly through the survey area and is approximately coincident with the resistivity low (conductivity high).

8. Metal factor (MF) values were calculated (ratio between IP and resistivity response) and the MF anomaly has somewhat better definition than the IP anomaly.

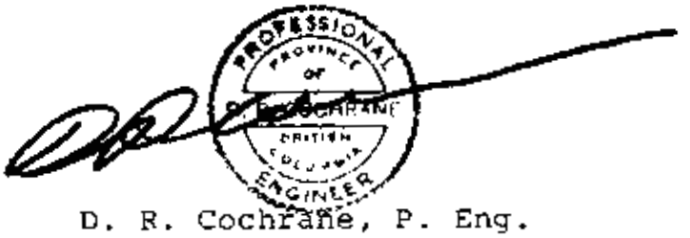
9. Geophysical results are similar to those found in previous IP survey work conducted on the Province claim to the north. The "Province anomaly" roughly outlines an area previously mined and is characterized by disseminated pyrite, chalcopyrite, galena and sphalerite in an altered and silicified zone with accompanying gold and silver values.

10. The "Winer anomaly", in addition to being similar to the "Province anomaly", lies immediately east of a rather impressive Cu, Pb, Zn, Au and Ag showing, and in an area found to be anomalous in copper, zinc, and silver during a previous soil sampling survey. (El Paso 1971).

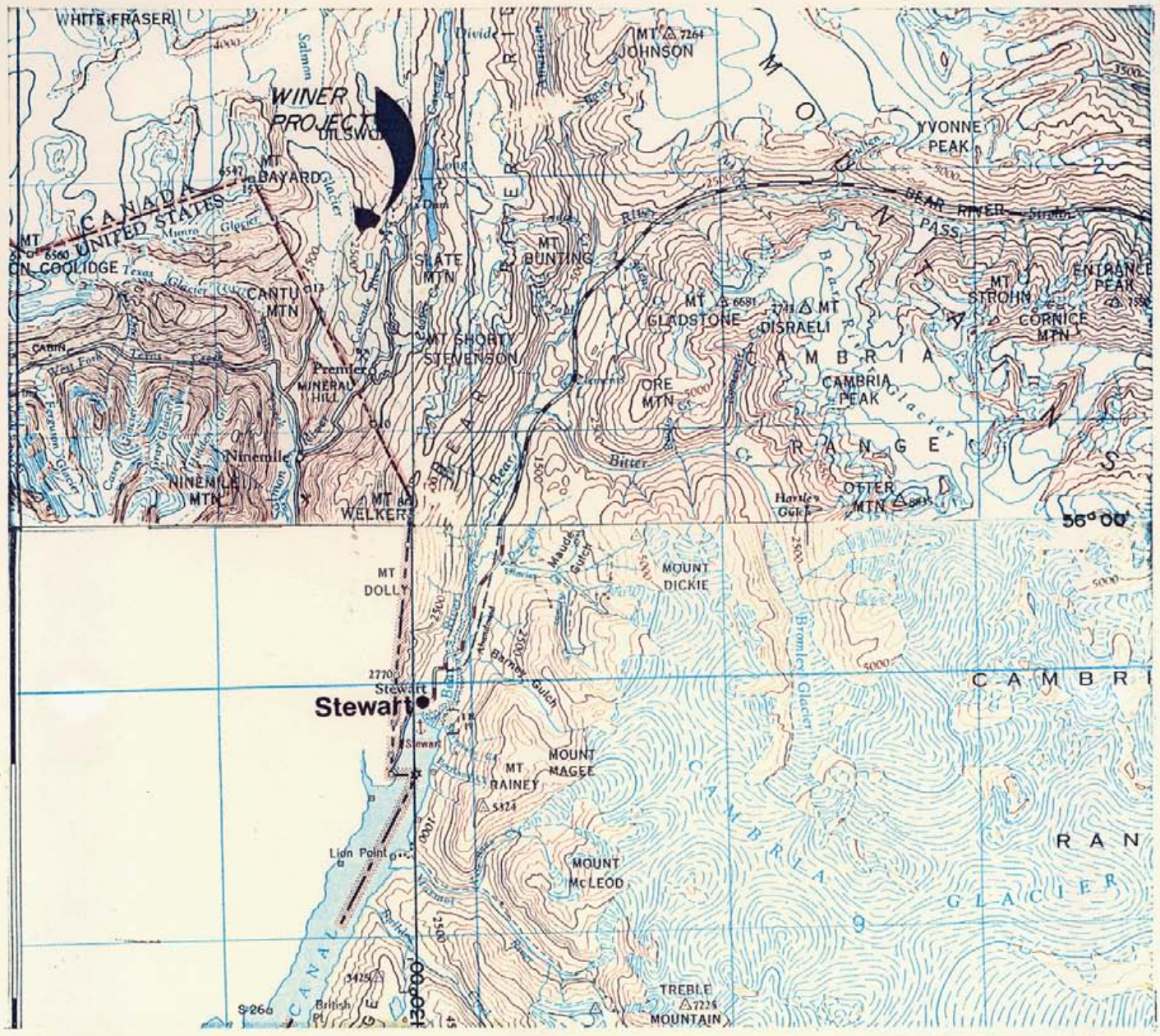
11. The survey area is largely covered by overburden, however mineralized "float" was found in Anomaly Creek which cuts the geophysical anomalies. Thus there is good evidence to suggest that the Winer anomaly is due to mineralized bedrock similar in character to the Province Zone.

12. The author strongly recommends further investigation of the Winer anomaly by bulldozer trenching and diamond drilling.

Respectfully submitted



D. R. Cochrane, P. Eng.
September 18, 1979.



Consolidated Silver Butte Mines Ltd.

Winer Project Near Stewart, British Columbia
Skeena Mining Division N.T.S. 104A & 104B

Figure 1
Location Map

Scale : 1 to 250,000 or 1 inch equals approx. 4 miles.

0 1 2 3 4 5 10 miles

0 1 2 3 4 5 10 15 kilometres

P.K.C. September' 1979

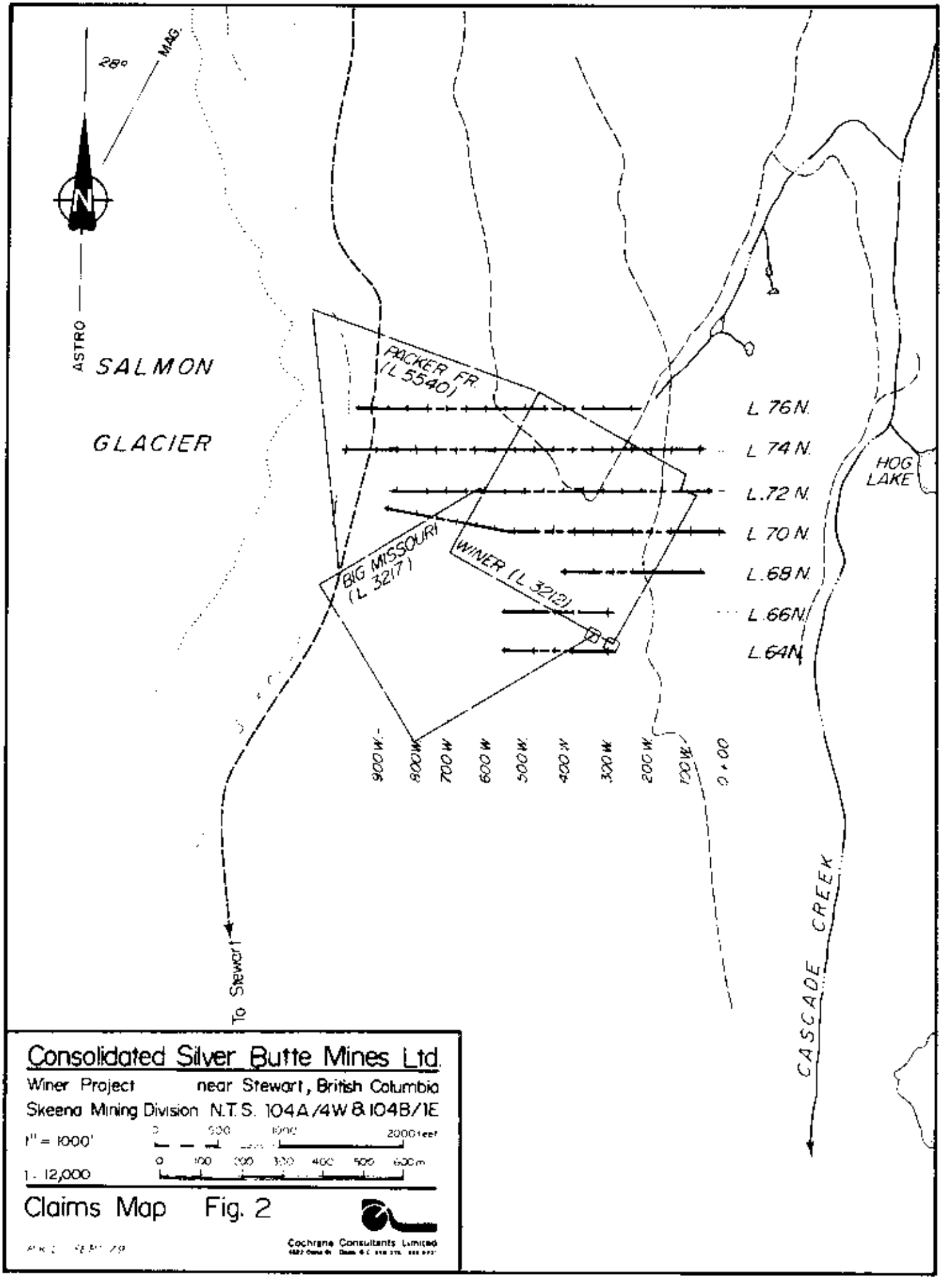
Cochrane Consultants Limited
4882 Delta St. Delta B.C. V4K 2T5 946-8231

PART B

Section B-1 LOCATION AND ACCESS

The claims are located in a rather rugged and spectacular portion of the Coast Mountains of Northern B. C. and the Alaska Panhandle. The Stewart area lies at the head of Portland Canal, some 200 air kilometres due north of Prince Rupert. Access to Stewart is either by Trans-Provincial Airlines from Rupert or by vehicle north from Kitwanga (or Terrace) to Meziadin then southwest to Stewart on the Cassiar-Stewart gravel highway. Access to the property from Stewart is west through Hyder Alaska, then north on the Granduc Road to mile 11 1/2 a distance of about 25 kilometres. The Granduc road passes through the west side of the claims.

The latitude is 56°05'N, longitude 130°W and N.T.S. 104B/1 (E).



Consolidated Silver Butte Mines Ltd.

Winer Project near Stewart, British Columbia

Skeena Mining Division N.T.S. 104A/4W & 104B/1E

1" = 1000' 0 500 1000' 2000 feet

1:12,000 0 100 200 300 400 500 600 m

Claims Map Fig. 2

Cochrane Consultants Limited

B-2 CLAIMS INFORMATION

The property consists of three (3) contiguous reverted crown granted mineral claims registered in the Skeena Mining Division and owned by Consolidated Silver Butte Mines Ltd. of Vancouver, B.C. Details are as follows:

Claim Name	Lot No.	Record No.	Anniversary Date
Big Missouri	3217	438	Oct. 4, 1985
Winer	3212	437	Oct. 4, 1985
Packers Fr.	5540	14	April 7, 1983

B-3 GENERAL SETTING

The Stewart area, and adjacent southern Alaskan Pan-handle is a rugged and scenic mountainous region lying within the Boundary Ranges of the northern Coast Mountains. Relief varies from sea level to peaks in excess of 2000 metres above sea level and glaciers and permanent snow fields cover many of the high ridges and upland valleys.

The area under discussion lies immediately east of the Coast Crystalline Belt and on the west edge of the Bowser Basin. The important host rocks are members of the Stewart complex consisting of metavolcanic and metasedimentary rocks of Triassic and Jurrassic age that have been deformed and intruded by dikes, sills and small acidic plugs. The area is a major metal mining district with a significant production record which includes gold, silver, copper, lead, and zinc.

The most important economic geological feature in the area is the Cascade Creek cataclasite zone, which extends from Mount Dillworth southerly across the Unicorn and Big Missouri groups to the B.C.-Alaska boundary, a distance of approximately 13 km. This belt consists of altered schists, mylonites and kakirites and they have been designated as Hazelton Series equivalents (Grove, 1970). The zone is host to numerous silver, gold, lead, zinc and copper occurences in addition to the well known Silbak Premier Mine, New Indian Mine and the Big Missouri Mine. The three mines have a total production record of close to 1/2 million ounces of gold, and 7 1/2 million ounces of silver from 2.7 million tons mined. (B.C. Dept. of Mines Records).

The north end of the Cascade Creek cataclasite zone underlies part of the Big Missouri ridge on which there are dozens of "showings", pits, trenches and adits, all of which expose some mineralization. Mineralization is of various types including, (from one extreme), high grade narrow quartz veins to disseminated sulphides in widespread altered, silicified "zones".

B-4 HISTORY

Mr. E. W. Grove has written an excellent account of the origins of the Stewart area, and this portion of his report is reproduced in full below. (B.C. Dept. of Mines Bull. 58 pg. 18).

"The history of the Stewart area is entirely tied to the mineral industry. The first parties of adventurers were led to the head of Portland Canal in search of placer gold in 1898. A ship named the "Discovery" left Seattle in the spring of 1898 with 68 men and six months' provisions, under the leadership of a man named Bruges who claimed to have visited Portland Canal and knew of gold placers equal to the Klondike. They landed near the present site of Stewart and dismissed the ship, but the promised placer was never disclosed. After six weeks of inactivity and to avert imminent trouble, Bruges took the party's only boat and hastily departed for the healthier climate of northern Alaska. The marooned group, which contained a few practical miners, broke up to search for the placer deposits and to whipsaw lumber for boats. Later, two men in the party named Brightwell and Cook found mineralized float and vein material just north of Stewart. On his way out of the district, Cook met "Dad" Rainey and told him of the occurrences. Rainey found the area, located his claims, and then settled on what became the Stewart townsite at the base of Mount Dolly, where he lived and prospected for many years without notable success.

In 1902 the isolated Rainey was joined by William Noble and "Pop" Stewart, who associated in a venture mining for placer gold at Bitter Creek. Some of their workings are still visible on the shoulder of the hill immediately south of Bitter Creek. The Roosevelt and other claims were staked along Bitter Creek in 1899, where extensive gossans still contribute iron sulphate to the waters and probably account for the notably "bitter" taste of the creek. Later in 1902, John Stewart arrived and was subsequently joined by his brother Bob and it was after these two men that the town was named."

The Big Missouri claim is first mentioned in the Annual Report of the Minister of Mines (B.C.) in 1911, where it is recorded:

"The Big Missouri group, situated at the head of Salmon river, is the oldest group on the river, having been located in the summer of 1904. A considerable amount of work has been done on this property, showing the existence of large ore-bodies with values in gold and silver. On the Tip Top claim, in a small crosscut the average values for a distance of 4½ feet are good. On the Buena Vista claim a tunnel has been run for 36 feet. On the Big Missouri a crosscut tunnel has been run for about 60 feet, which will have to be continued a further 50 feet to strike the ore-body, of which there is a big surface showing. On the Terminus a strike was made last fall of an ore-body that is at least 50 feet in width."

Since that time there has been a very long and complex history to the Big Missouri Ridge area, which ultimately led to periodic mining on the Province Claim (two claims north of the Big Missouri Claim) between the years 1927 and 1942. The most intensive period of mining was between 1939 and 1942 by the Consolidated Mining and Smelting Company of Canada. (Cominco) which produced the vast bulk of total production of 848,000 tons, and 58,000 ounces of silver from a 750 ton per day plant located underground and just north of the claims under consideration.

Since suspension of mining operations in 1942 (and the re-location of the mill to Pinchi Lake) the area has received considerable exploration attention from a large number of mining companies.

The most recent work on the property was by El Paso Mining and Milling (1971), and followup work on the geochemical anomalies by Consolidated Silver Butte Mines in 1978.

Currently Western Mines Ltd. is conducting exploration work to the north of the Winer claim on ground optioned from Tournigan Mining Explorations Ltd.

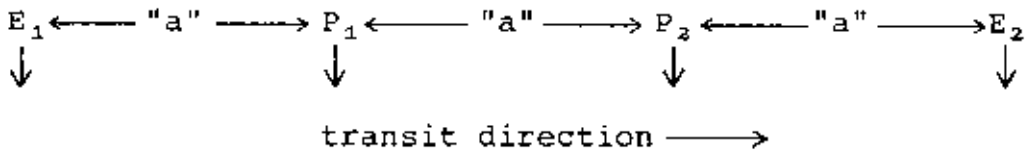
PART C

Section C-1 INSTRUMENTATION

A Hewitt-200 pulse type (time domain) IP unit was used on the project. The instrument was manufactured by Hewitt Enterprises of Draper Utah, and is a portable, battery powered integrated circuit unit. There are variable current on, delay and integration times but normally a 2 second on, 0.4 second delay and 1.2 second integration time is used in reconnaissance operations. The IP set automatically reverses current polarity and continuously cycles, however usually two or four pulses are used at any one position.

C-2 FIELD PROCEDURE

A standard Wenner Array with an "a" spacing of 50 metres was used for the IP survey of the Winer and Big Missouri. For this array, the distance between pots and electrodes is equal, as illustrated below:



Three men were employed, a front stake man at position E_2 who also compassed and flagged the line, the instrument operator at position P_2 and a rear stake - electrode man who moved from position E_1 to P_1 prior to taking a reading.

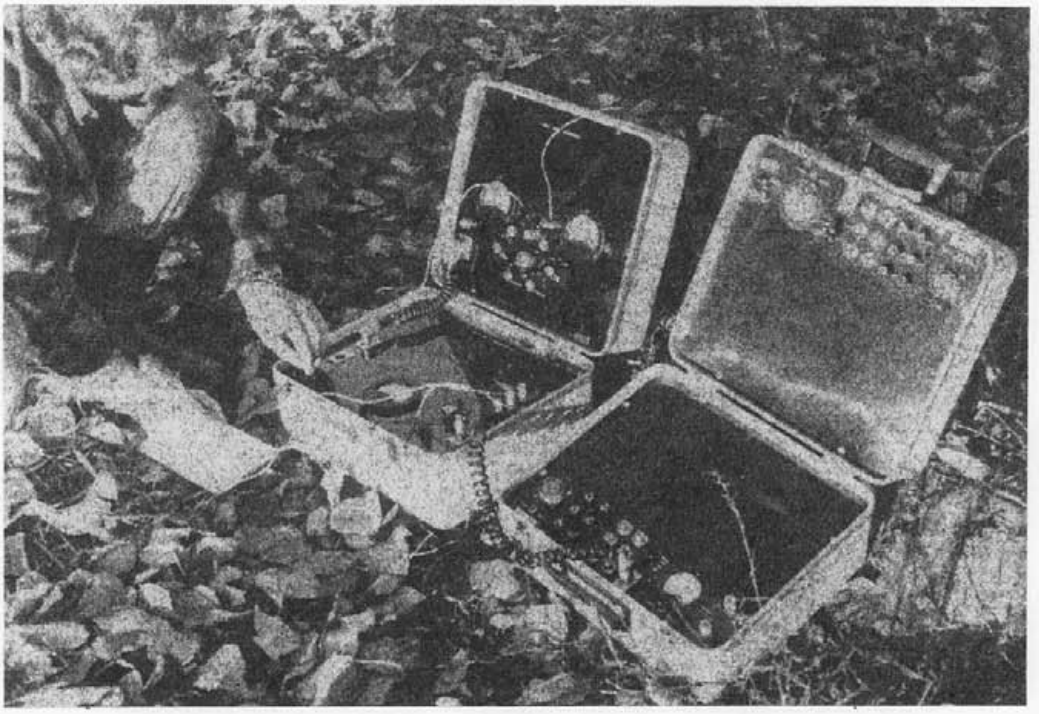
At each station a small hole was dug beneath the humus and cleared of rocks in order to seat the pots (positions P_1 and P_2). In dry soil, a small amount of salt water was added to improve electrical contact. The stakemen (positions E_1 and E_2) cleared a strip of ground (roughly 1 foot square) of moss, leaves and rocks, spread aluminum foil over the cleared part and buried the foil. Salt water was poured into

the foil to assure good ground contact. If contact was still subnormal, two more stakes were set out some 6 feet to either side of the foil.

First, at each station, the self potential of the ground between front (P_2) and rear (P_2) pots was balanced and recorded in millivolts. Secondly, a 2 second current pulse was then initiated during which the transmitter current and impressed EMF between the pots was noted. On cessation of the current pulse, an integrated value of the residual decay voltage is automatically registered on the receiver galvanometer. This value was recorded along with position of instrument, output voltage of the transmitter, notes on terrain, steadiness of SP, and after the "sharpness" of the IP.

Finally the order was then given to move on, 50 metres, to the next station.

This proceedure was repeated along all seven east west cross lines spaced 100 metres apart. The grid was tied into the pre-existing Province grid (and IP survey) established in 1976.



C-3 DATA REDUCTION

The raw I.P. data, recorded on standard note forms, was normalized in the field by Mr. W. Chase (by calculator) and checked in the office by the author. The chargeability (IP) is defined by the relationship --

$$\text{Apparent chargeability (in milliseconds)} = 10 \times \frac{\text{IP (decay voltage)}}{\text{dV (m.v.)}}$$

and resistivity by the relationship --

$$\text{apparent resistivity (ohm metres or ohm feet)} = 2\pi a \times \frac{dV}{I}$$

where IP = the integrated decay voltage

dV = impressed EMF between receiving pots

a = "a" spacing (50 metres or 164 feet in this instance)

I = electrode current

These normalized variables were plotted, contoured, and accompany this report.

PART D

Section D-1 SELF POTENTIAL

The Self Potential (SP) method of geophysical prospecting is based on the measurement of natural voltage differences which generally exist between any two points on the ground. SP is a byproduct of IP surveying, in that the difference in potential between receiving "pots" (P_1 and P_2) is "bucked out", measured and recorded at each station. With the Wenner field array, the SP results are gradient type, that is the difference in potential (or voltage) between the two receiving electrodes at any one station. Adjacent readings are completely independent of each other. Parasnis (1962) describes SP as:

"The constant and unidirectional potentials are set up due to electrochemical actions in the surface rocks or in bodies embedded in them."

"Ranging normally from a fraction of a millivolt to a few tens of millivolts self-potentials sometimes attain values of the order of a few hundred millivolts and reveal the presence of a relatively strong sub surface "battery cell". Such large potentials are observed as rule only over sulphide and graphite ore bodies."

The gradient SP results on the survey under consideration ranged from a low of a few millivolts per 50 metres to a high of 424 millivolts per 50 metres (about 8 millivolts per metre). The largest change in potential occurs on line 72N, close to the area of high geochemical response outlined by El Paso in 1971. Additional high gradients were recorded on lines 74N and 76N, to the northwest of the maximum gradient SP response.

It is assumed that this major change in natural potential is due to the presence of sub-surface oxidizing sulphide minerals.

D-2 APPARENT RESISTIVITY

When an electrical voltage is applied between two points (E_1 - E_2), a current is caused to flow. The ratio of the applied voltage (dV) to the current (I) is defined as the apparent resistivity. The units used in this report are in ohm-feet and recorded variation in apparent recorded variation in apparent resistivity ranges from a low of 2231 ohm-feet (680 ohm metres) to a high of 8900 ohm-feet (2713 ohm metres).

The most important apparent resistivity feature outlined in the August, 1979 survey is a rather irregularly shaped north-northwest trending low of less than 3000 ohm feet which, lies close to the west side of area surveyed. This apparent resistivity low (conductivity high) may suggest the overall lithologic trend to the underlying bedrock, and, in addition, since it is generally coincident with the high apparent chargeability (IP) anomaly, may indicate the trend of a high sulphide band.

D-3 APPARENT CHARGEABILITY (IP)

Apparent chargeability is the ratio between the secondary voltage (dV) developed across the receiving electrodes P_1 and P_2 after the current pulse, to the primary voltage (Vp) developed during current pulse.

$$IP = \frac{dV}{Vp}$$

The units used are millivolt seconds per millivolt or milliseconds.

The apparent chargeability response ranged from a low of 8.6 to a high of 36.7 milliseconds. Normally values in excess of 20 milliseconds are considered anomalous, and in this instance there is a widespread plus 20 millisecond IP anomaly centred on line 72N near 600 west. The general shape, amplitude and size of the anomaly corresponds well with the IP anomaly outlined on the Province Claim to the north. The Province anomaly, in turn, in general outlines the mineralized body mined by Cominco in the late

30's and early 40's. (The Province anomaly information was kindly released for comparative purposes by Mr. A.E. Soregaroli of Western Mines, see appendix).

There is the very strong suggestion then that the Winer IP anomaly outlines mineralization similar to the Province anomaly, that is, an altered and silicified zone characterized by disseminated and fracture fillings of pyrite, sphalerite, galena, chalcopyrite with accompanying gold and silver values.

This possibility is further amplified by the coincident lead and copper, but rather patchy silver in soils anomalies outlined by El Paso in 1971.

The validity of the IP anomaly is further enhanced by the rather impressive showing on the Granduc Road. (West end of line 70N). There is exposed an altered and silicified zone

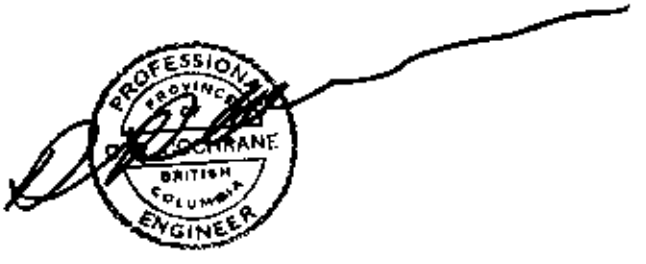
containing abundant pyrite and blebs and clusters of galena and sphalerite (blackjack). IP response in this showing area was 16.7 milli-seconds, and is west of the main anomaly.

D-4 METAL FACTOR

The ratio of the apparent chargeability (IP) to the apparent resistivity response at any one station is termed the "metal factor". The metal factor is not a pure geophysical measurement but is often useful in interpretation and has an advantage in combining the two most important IP measurements (chargeability and resistivity) into a single variable. One of the disadvantages is that in some cases if apparent resistivity is low at a particular station (perhaps due to sub-surface moisture) and the apparent chargeability is background only, then a metal factor high will be produced. In this particular case however, there is excellent correlation between apparent resistivity lows and apparent chargeability (IP) highs and therefore the metal factor is a useful interpretive variable.

The metal factor (MF) response ranged from a low of 1.7 to a high of 15.3 (seconds per ohm-foot). The metal factor plus 10 anomaly trends northerly through the survey area similar to the IP high, but MF is somewhat more linear and definitive. In addition the showing area on the road is better defined by MF than IP.

Respectfully submitted



APPENDIX I

ASSESSMENT WORK DETAILS

PROJECT: Winer, Big Missouri and Packers Fr. Claims
SPONSOR: Consolidated Silver Butte Mines Ltd.
LOCATION: 25 km north of Stewart B. C., on the west flank of the Big Missouri Ridge.
N.T.S.: 104B/1 (E 1/2)
Latitude: 56°05'N;
Longitude: 130°W.
MINING DIVISION:
Skeena
WORK DONE: 4 km of linecutting and induced polarization survey, geological examination of anomalous areas.
FIELD WORK: 3 members of IP crew, Aug. 12, 13, 14, 15, 16, 17, 1979;
Geological work, August 15, 16, and 17, 1979.
OFFICE WORK: September, 1979, Draftspersons and typist.

COSTS:

1. Wages

(a)	IP operator, 7 1/2 days at $125/day	$ 937.50
(b)	Two IP helpers, 7 1/2 days at $120/day.....	1,800.00
(c)	D.R. Cochrane, P. Eng, 3 field days, 2 office days, at $250/day.....	1,250.00
(d)	Drafting, 48 hrs at $14.00/hr	672.00
(e)	Typing, 12 hrs at $10/hr	120.00
	Total wages.....	$ 4,779.50

Cont'd.....

ASSESSMENT COSTS (cont'd)

Balance forward		$ 4,779.50

2. Mobilization/Demobilization/Transportation

(a)	4 x 4 rental, 9 days at $25/day	$ 225.00
(b)	2174 km at $0.15/km	326.10
(c)	D.R. Cochrane, air fare to Stewart	127.00

3. Instrument Rentals

(a)	One IP unit and ancillary equipment 6 working days at $150/day	900.00
(b)	Supplies and equipment rental	128.06

4. Food and Accomodation

D. R. Cochrane	196.61
Crew	266.52
3 days Western Mines Camp	180.00

5. Report Preparation

(a)	Reproduction	55.12
(b)	Collation and binding	30.00
	Total Costs.....	$ 7,213.91

APPENDIX II

CERTIFICATE

I, Donald Robert Cochrane, of the Municipality of Delta, British Columbia, do hereby certify that:

1. I am a consulting geological engineer with an office at 4882 Delta Street, Delta, B. C.

2. I am a graduate of the University of Toronto (1962) with a degree in Applied Geology (B.A.Sc.) and a graduate of Queen's University (1964) with a degree in Economic Geology (M.Sc., Eng.).

3. I have practiced my profession continuously since graduation while being employed by such companies as Noranda Exploration Co. Ltd., Quebec Cartier Mines, and Meridian Explorations Syndicate. I have been in private independant practice since 1969.

4. I have no interest, either direct or indirect in the properties or securities of Consolidated Silver Butte Mines Ltd., nor do I expect to acquire any such interest.

5. I am a member in good standing of the Association of Professional Engineers (A.P.E.) of the Province of British Columbia, and also a member of the A.P.E. in the Province of Ontario, Saskatchewan, Alberta, and the Yukon Territories.

D. R. Cochrane, P. Eng.
September, 1979,
Delta, B. C.

(APPENDIX III)

WESTERN MINES LIMITED

HEAD OFFICE
1103 THREE BENTALL CENTRE, P.O. BOX 49066
595 BURRARD STREET, VANCOUVER, B.C. V7X 1C4
PHONE: (604) 681-2253 TELEX: 04-51573

September 10, 1979

Mr. D. R. Cochrane,
Cochrane Consultants Limited,
4882 Delta Street,
DELTA, B. C.
V4K 2T8

Dear Don :

RE: BIG MISSOURI - CONSOLIDATED SILVER BUTTE
INDUCED POLARIZATION

In response to your request of August 31, 1979, regarding the release of the Province I.P. data, please feel free to use the data as suggested. I hope the comparison is of use to Mr. McKay. We look forward to viewing the geophysical results on the Consolidated Silver Butte claims.

Thank you for suggesting an exchange of data.

Yours very truly,

WESTERN MINES LIMITED

A. E. Soregaroli
Vice-President, Exploration

AES:dt.

1800N.
1700N.
1600N.
1500N.
1400N.
1300N.
1200N.
1100N.
1000N.

28°2' MAG
N
ASTRO

WORK DONE IN 1976

SALMON GLACIER

PACKERS FR (L 5540)

ANOMALY CREEK

WINER (L 3212)

BIG MISSOURI (L 3217)

CREEK

CASCADE

HOG LAKE

600E. 700E. 800E. 900E. 1000E. 1100E. 1200E. 1300E. 1400E.

L. 76 N.
L. 74 N.
L. 72 N.
L. 70 N.
L. 68 N.
L. 66 N.
L. 64 N.

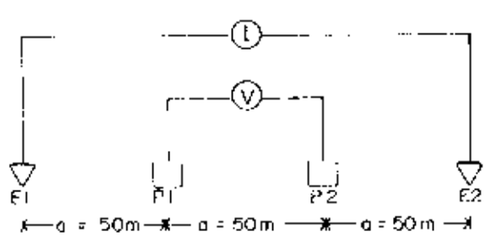
900 W. 800 W. 700 W. 600 W. 500 W. 400 W. 300 W. 200 W. 100 W. 0+00

APPROX. CLAIMS BOUNDARY

NOTES :

TIME CONSTANTS *NEW 200*
0.2 seconds CURRENT ON
0.8 seconds DELAY
1.2 seconds INTERGRATION TIME

WENNER ARRAY



TRANSIT DIRECTION ---->

7686

Consolidated Silver Butte Mines Ltd.

Winer Project — Near Stewart, British Columbia
Skeena Mining Division — N.T.S. 104A/4W & 104B/1E

Scale 1:5,000 — 0 50 100 150 200 300 400 500 metres

Topo Map courtesy Tournigan Mining. 1976 Work courtesy Western Mines
To accompany a report by D.R COCHRANE, P.Eng. on WINER PROJECT dated September 18, 1979.

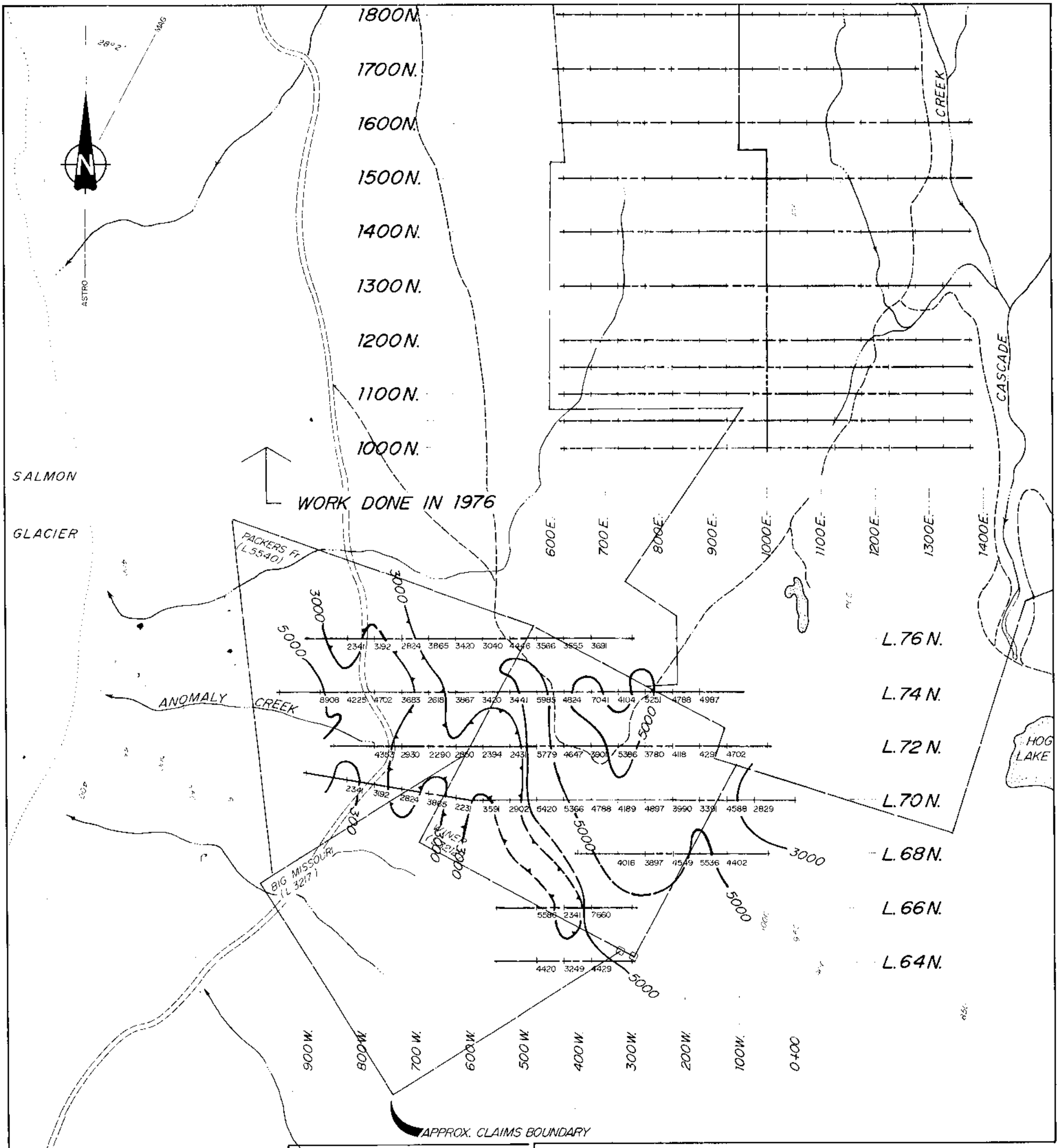
CHARGEABILITY
(Milliseconds)

FIG. 3

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — D. R. COCHRANE

Cochrane Consultants Limited
4882 Delta St., Delta, B.C. V4K 2T8 946-9221

P.K.C. SEPTEMBER, 1979



NOTES :

TIME CONSTANTS — *VIEW 200*
0.2 seconds CURRENT ON
0.8 seconds DELAY
1.2 seconds INTERGRATION TIME

WENNER ARRAY

TRANSIT DIRECTION ——→

MISSION RESOURCES DIVISION
ASSESSMENT REPORT
7686
NO.

Consolidated Silver Butte Mines Ltd.

Winer Project — Near Stewart, British Columbia
Skeena Mining Division — N.T.S. 104A/4W & 104B/1E

Scale 1:5,000 — 0 50 100 150 200 300 400 500 metres

Topo Map courtesy Tournigan Mining.
To accompany a report by D.R COCHRANE, P. Eng. on WINER PROJECT dated September 18, 1979.

APPARENT RESISTIVITY — FIG. 4

(ohm – feet)

FOR ohm – metres X 0.3048

PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — D. R. COCHRANE

P.K.C. SEPTEMBER, 1979

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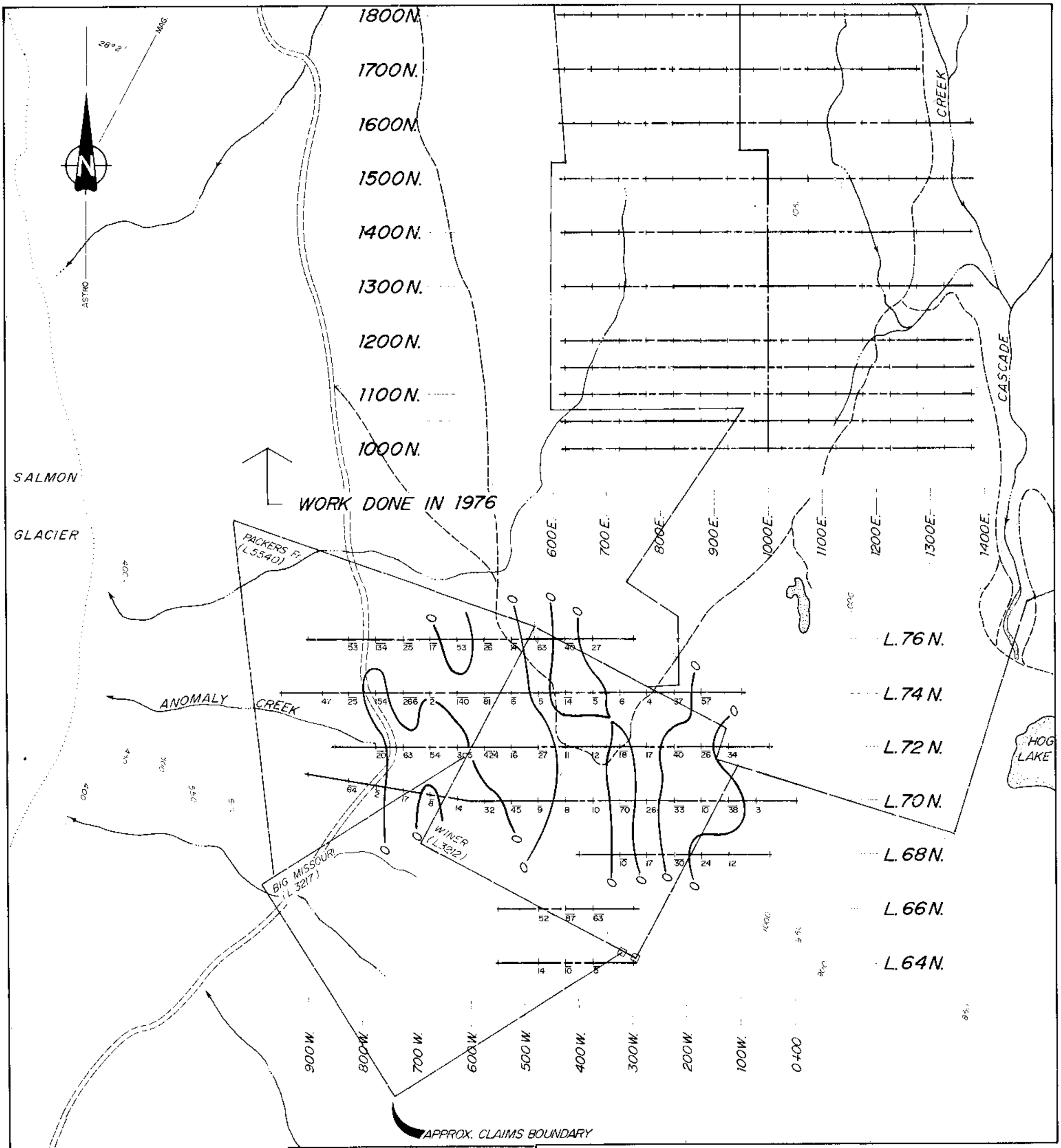
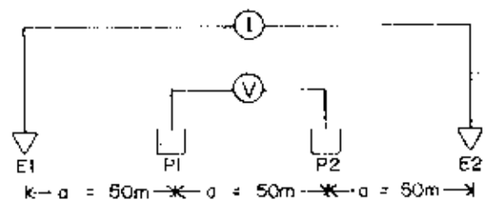


NOTES :

TIME CONSTANTS -- *HEW 200*
02 seconds CURRENT ON
0.8 seconds DELAY
1.2 seconds INTEGRATION TIME

WENNER ARRAY



TRANSIT DIRECTION →

7686

Consolidated Silver Butte Mines Ltd.

Winer Project — Near Stewart, British Columbia
Skeena Mining Division — N.T.S. 104A/4W & 104B/1E

Scale 1:5,000 — 0 50 100 150 200 300 400 500 metres

Topo Map Courtesy Tournigan Mining
To accompany a report by O.R. COCHRANE, P.Eng. on WINER PROJECT dated September 18, 1979.

SELF POTENTIAL (millivolts)

FIG. 5

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28°2' MAG

ASTRO

1800N.
1700N.
1600N.
1500N.
1400N.
1300N.
1200N.
1100N.
1000N.

WORK DONE IN 1976

SALMON GLACIER

PACKERS Fr (L 5540)

ANOMALY CREEK

BIG MISSOURI (L 3217)

WINER (L 3212)

600E. 700E. 800E. 900E. 1000E. 1100E. 1200E. 1300E. 1400E.

CREEK

CASCADE

HOG LAKE

L.76N.
L.74N.
L.72N.
L.70N.
L.68N.
L.66N.
L.64N.

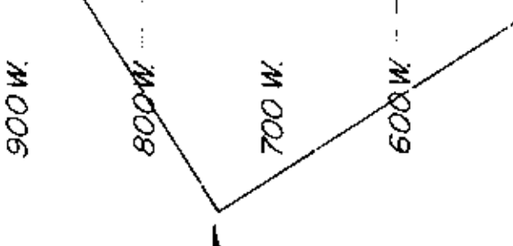
900W. 800W. 700W. 600W. 500W. 400W. 300W. 200W. 100W. 0+00

APPROX. CLAIMS BOUNDARY

NOTES :

TIME CONSTANTS — *HEW 200*
0.2 seconds CURRENT ON
0.8 seconds DELAY
1.2 seconds INTERGRATION TIME

WENNER ARRY



TRANSIT DIRECTION → ←

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
7686
NO.

Consolidated Silver Butte Mines Ltd.

Winer Project Near Stewart, British Columbia
Skeena Mining Division N.T.S. 104A/4W & 104B/1E

Scale 1:5,000 — 0 50 100 150 200 300 400 500 metres

Topo Map courtesy Tournigan Mining.
To accompany a report by O.R.COCHRANE, P.Eng. on WINER PROJECT dated September 18, 1979

METAL FACTOR $\left(\frac{\text{chargeability}}{\text{resistivity}}\right) \times 1000$

FIG. 6

P.K.C. SEPTEMBER, 1979

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