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HUDSON BAY EXPLORATION AND
DEVELOPMENT COMPANY LTD.
GEOPHYSICAL REPORT ON AN
INDUCED POLARIZATION SURVEY

92C/15E

Tam & Easy Claim Groups, Nitinat Lake Area
Latitude 49° 50' North Longitude 124° 45' West

AUTHOR: Glen E. White, Chief Geophysicist

P. ENGINEER: W. G. Stevenson

DATE OF WORK: July 25 to September 4, 1971

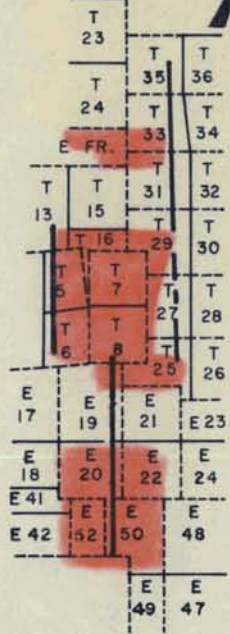
Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3649 MAP

C O N T E N T S


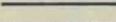

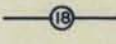


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#5	Location and Claims Map



L E G E N D

-  *Area Surveyed*
-  *Outline of Claims.*
-  *Base Lines*
-  *Highway and number*
-  *Shore Line*
-  *Creeks & Rivers*

HUDSON BAY EXPLORATION AND DEVELOPMENT CO. LTD.

FOUR MILE CREEK PROPERTY

TAM & EASY CLAIMS

LOCATION AND CLAIMS MAP

SCALE: LOCATION MAP: 1" = 80 MILES APPROX. - CLAIMS MAP: 1" = 5000 FEET APPROX.



Fig. 1
File: C16

INTRODUCTION

Due to fire season forest closures, Tri-Con Exploration Surveys Ltd. intermittently from July 25 - September 4, 1971, conducted an induced polarization survey over the Tam and Easy Mineral Claims.

The purpose of the induced polarization survey was to try and locate the source of interesting copper bearing float and to examine an area of previously located geochemical soil sample anomalies for a chargeable body possibly indicative of sulphide mineralization of economic interest.

LOCATION AND ACCESS

The Tam and Easy Mineral Claims discussed in this report are located on the drainage of 4 Mile Creek, approximately 4.6 miles east of the headwaters of Nitinat Lake, Latitude $49^{\circ} 50'$ North, Longitude $124^{\circ} 45'$ West. N.T.S. 92C/15.

Access to the main base camp is by all weather gravel road from Yubou on Lake Cowichan for a distance of some 28 miles. From here the northern Tam claims can be reached by 6.8 miles of logging road and the Easy 50-52 claims by 16 miles of logging road and a 1.8 mile hike up the old Caycuse to Nitinat pack trail.

PROPERTY

The induced polarization survey covered completely or partially the 18 mineral claims listed as follows:

Easy 19-22 inclusive, 50 and 52
Tam 5, 6-8 inclusive, 14, 16, 25, 27,
29, 31 and 33 and E Fr.

SURVEY SPECIFICATIONS

The Survey Grid

The induced polarization survey was conducted along a previously

established flagged, chain and compass grid consisting of east-west lines turned off every 400 feet from a north-south baseline. The stations were flagged at 100 foot intervals. The property in general lies on the upper slopes of a mountain, thus a minor amount of induced polarization surveying could not be completed due to hazardous topographic conditions.

The Induced Polarization Survey

The induced polarization survey was conducted with a Hewitt 1KW I.P. transient pulse type unit deployed in the Wenner electrode configuration with an "a" spacing and traverse interval of 200 feet. In the pulse (also known as time domain) method a steady direct current is impressed into the ground for a few seconds, abruptly terminated for a short time (usually equal to the length of pulse time) and then a steady current is impressed in the reverse direction for a few seconds and then abruptly terminated for a few seconds. This is one cycle which can be repeated. A fraction of a section after each cessation of the current pulse the decay voltage is integrated and measured. The current and total integrated primary voltage and total integrated decay voltage are then recorded for the given number of cycles. From these three measurements the chargeability in millivolts/volt and apparent resistivity in ohm-feet are calculated. The values calculated are then plotted at the center position of the array for a given set of readings.

Data Presentation

The results of the induced polarization survey accompany this report as contour maps drawn at a scale of 1 inch equals 200 feet and are presented as follows:

Figure 2 Induced polarization-
Chargeability, contour interval 2 mv/v.

Figure 3 Induced polarization-Resistivity, contoured logarithmically at 750, 1000, 1500, 2000, 3000, 5000, 7500, 10,000, 15,000 and 20,000 ohm-feet levels.

DISCUSSION OF RESULTS

Composite Map A, compiled by Hudson Bay Exploration and Development Company Ltd. showing the geological and geochemical data over the survey area was used to help evaluate the induced polarization data.

The induced polarization-resistivity data Figure 3, shows moderate variations which can be attributed to changes in the near surface conductivity of the overburden and bedrock and in the depth to bedrock. Several well-defined resistivity lows were delineated, these occur in claims Tam 7, and Tam (6-8), Easy 20 and Easy 52. The resistivity lows in claims Easy 52 and Tam (6-8) are in areas of anomalous copper-molybdenum geochemical response, however, the correlation may only be coincidental.

The chargeability data varied from a low of 2.0 mv/v to a high of 33.5 mv/v. The induced polarization survey was conducted in a geologically and geochemically interesting area, thus the background chargeability values are in the weakly anomalous range of 6-10 mv/v. Several of the interesting chargeability features cover a large area indicating that possibly a portion of the chargeability response may be due to syngenetic chargeable material in the bedrock.

Correlation of the chargeability data with assay and geochemical soil sampling data on Map A indicates that several interesting chargeability anomalies were delineated. The chargeability anomaly originating at 90+00S 45+00E and trending in a southeast direction may possibly be associated with the interesting grab sample obtained in this area and may account for the occurrence of high grade float located on,

and downslope from the chargeability trend. The major chargeability feature in claim Tam 8 is undefined to the northwest, to the south it would appear to be directly associated with interesting copper, silver and molybdenum geochemical values. From here this anomaly trends northeast into claim Tam 7 to connect with a large, broad chargeability high, which reaches a peak of 30.0 mv/v on line 36+00E. The detail induced polarization profile, Plate 1, over this line indicates the presence of a narrow zone of highly chargeable material such as a vein of sulphide mineralization and or graphite at 42+50E. Plate 1 also shows this zone to be associated with a small resistivity low. The interesting rock sample some 200 feet to the south substantiates the presence of mineralization of economic interest.

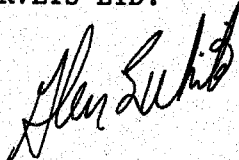
CONCLUSIONS AND RECOMMENDATIONS

An induced polarization survey was conducted over a number of the Tam and Easy mineral claims, Nitnat Lake area on behalf of Hudson Bay Exploration and Development Company Ltd.

The survey located several strong chargeability anomalies which when correlated with soil sampling and rock assay data appear to be particularly interesting. A limited amount of packsack diamond drilling would likely be the most feasible method of evaluating the chargeability anomalies, however, because of the severe topographic conditions each chargeability anomaly will have to be evaluated in situ since the induced polarization method is reading perpendicular to the topographic plane.

Respectfully submitted,

TRI-CON EXPLORATION SURVEYS LTD.



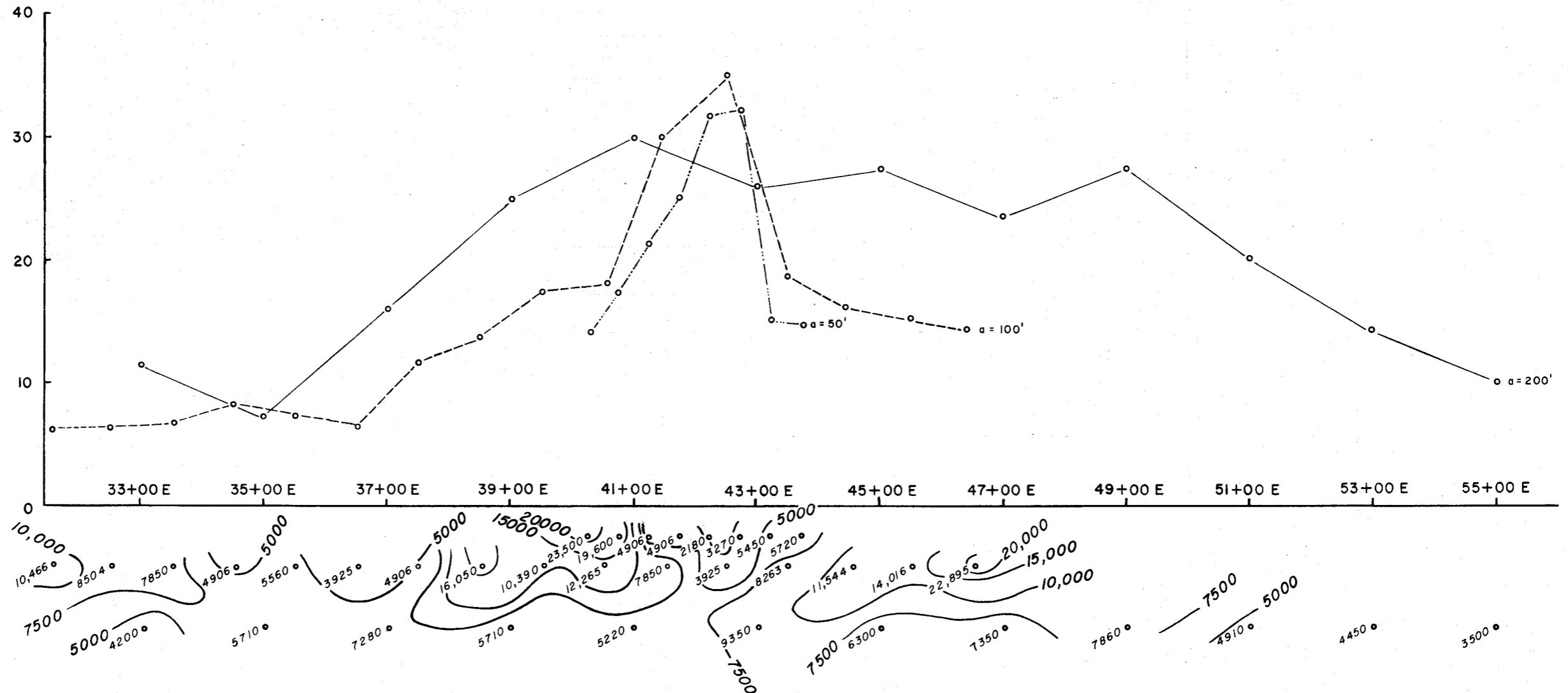
Glen E. White
Chief Geophysicist

LINE 36 S

CHARGEABILITY
(millivolts/volt)

RESISTIVITY
ohm-feet

a = apparent depth in feet.



DETAIL INDUCED POLARIZATION SURVEYING
CHARGEABILITY & RESISTIVITY PROFILES

SCALE : 1" = 200'

HUDSON BAY EXPLORATION
AND DEVELOPMENT CO. LTD.
FOUR MILE CREEK PROPERTY
TAM & EASY CLAIMS

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3649 MAP # 2

Ken Postma

A P P E N D I X

Instrument Specification

INDUCED POLARIZATION

A Instrument

- (a) Type - Transient Pulse Prospecting Equipment
- (b) Make - Hewitt Enterprises 200
- (c) Size - 13 $\frac{1}{4}$ "W x 15 $\frac{1}{2}$ "L x 9 $\frac{1}{2}$ " Deep

B Specifications

(a) Transmitter

- (1) 1,000 Watt nickle cadmium battery supply
- (2) operation mode 2 seconds on, 2 seconds off, 2 seconds reverse
4 seconds on, 4 seconds off, 4 seconds reverse
- (3) Cycles .5, 1, 2, 3, 4 selected on switch.
- (4) Timing - solid state logic circuitry
- (5) Current Ranges 10, 50, 100, 500, 1,000, 5,000, milliampere.

(b) Receiver

- (1) Solid State
- (2) dV and I.P. solid state memory storage.
- (3) dV ranges 10, 50, 100, 1,000, 1,500 millivolts
- (4) I.P. ranges .1, .5, 1.0, 5, 10, 15, millivolts
- (5) Self-potential-direct dial reading from polartometer
- (6) A.C. filtering-low pass active filter
- (7) Transient delay period .4 seconds
- (8) Integrating period 1.2 seconds
- (9) Power supply-four 9 volt transistor radio batteries.

C Survey Procedure

- (1) Wenner, pole-dipole or Schlumberger array

D Data Presentation

- (1) Chargeability percent chargeability in milliseconds or millivolts
voltage
- (2) Resistivity - Ohm-feet
- (3) Self-potential-millivolts often not used

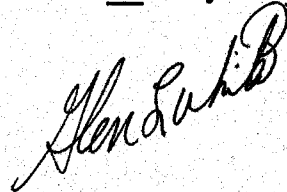
C E R T I F I C A T I O N

TO WHOM IT MAY CONCERN:

I, GLEN ELMO WHITE, of the City of Richmond in the Province of British Columbia, hereby certify:

1. That I am a Geophysicist and reside at 117-641 Gilbert Road, Richmond, B.C.
2. That I studied Geophysics and Geology and graduated from the University of British Columbia with the degree of Bachelor of Science.
3. That I have been engaged in Mining Exploration for eight years.
4. That I do not have, nor do I expect to receive, either directly or indirectly, any interest in the Tam and Easy Mineral Claims or in the securities of Hudson Bay Exploration and Development Co. Ltd.
5. That this report is based on information derived from an induced polarization survey carried out by Tri-Con Exploration Surveys Ltd. under my supervision.

Dated this 21 day of September 1971.



Glen E. White, B.Sc.
Chief Geophysicist

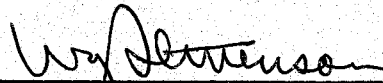
CERTIFICATE

I, William G. Stevenson, DO HEREBY CERTIFY:

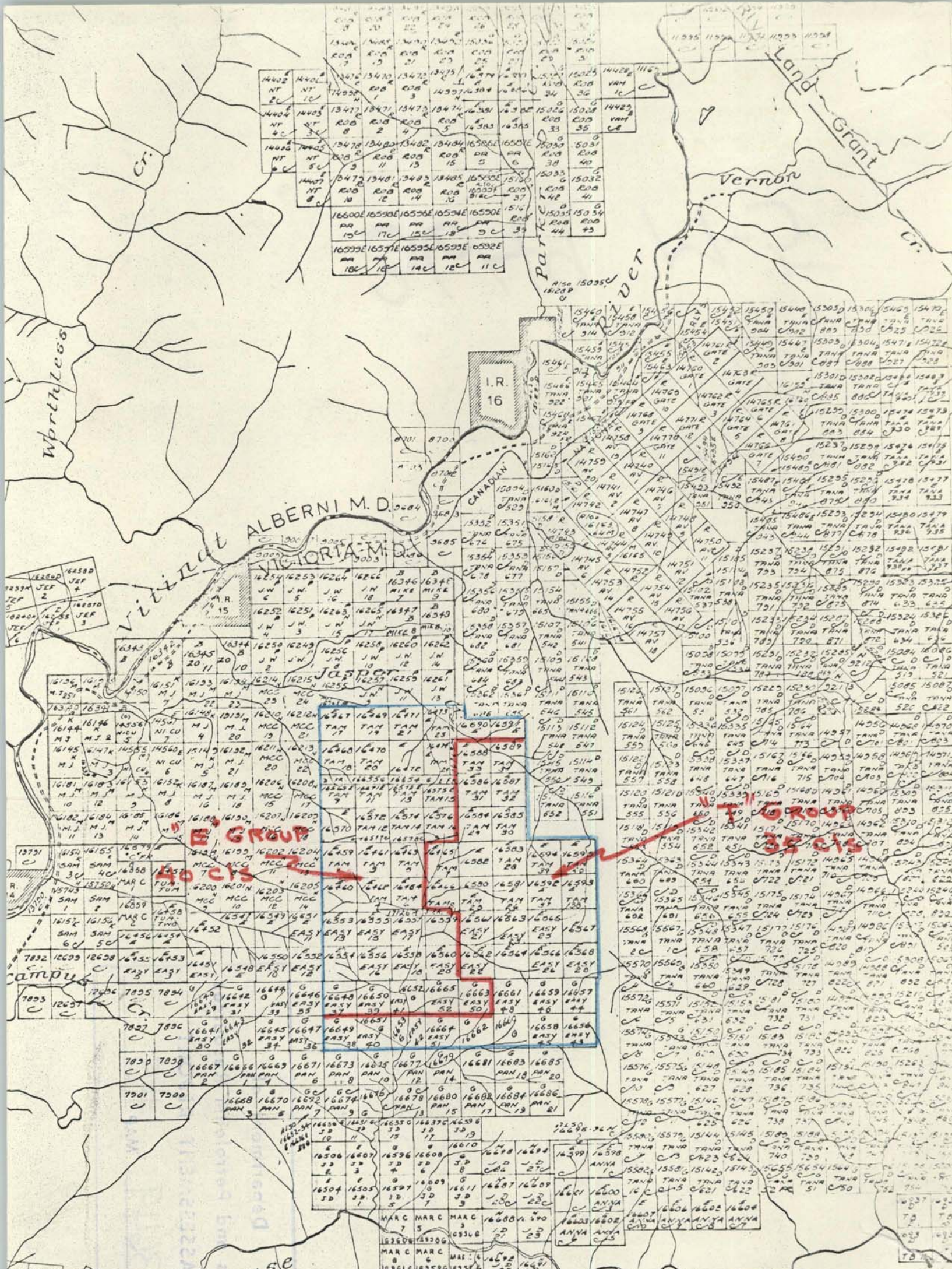
- That I am a Consulting Geological Engineer with offices at Suite 209 Stock Exchange Building, 475 Howe Street, Vancouver 1, B.C.
- That I am a graduate of the University of Utah, 1946, with a B.Sc. Degree.
- That I am a registered Professional Engineer in the Association in British Columbia.
- That I have practised my profession for 22 years.
- That I have no direct, indirect or contingent interest in the Tam and Easy Mineral Claims or in the securities of Hudson Bay Exploration and Development Co. Ltd., nor do I intend to receive any such interest.
- That I have reviewed a report dated September 21, 1971 based on work conducted by Tri-Con Exploration Surveys Ltd. under the supervision of Glen E. White, Chief Geophysicist.

DATED at Vancouver, British Columbia, this 22^d day of September 1971.

W. G. STEVENSON & ASSOCIATES LIMITED
Consulting Geologists

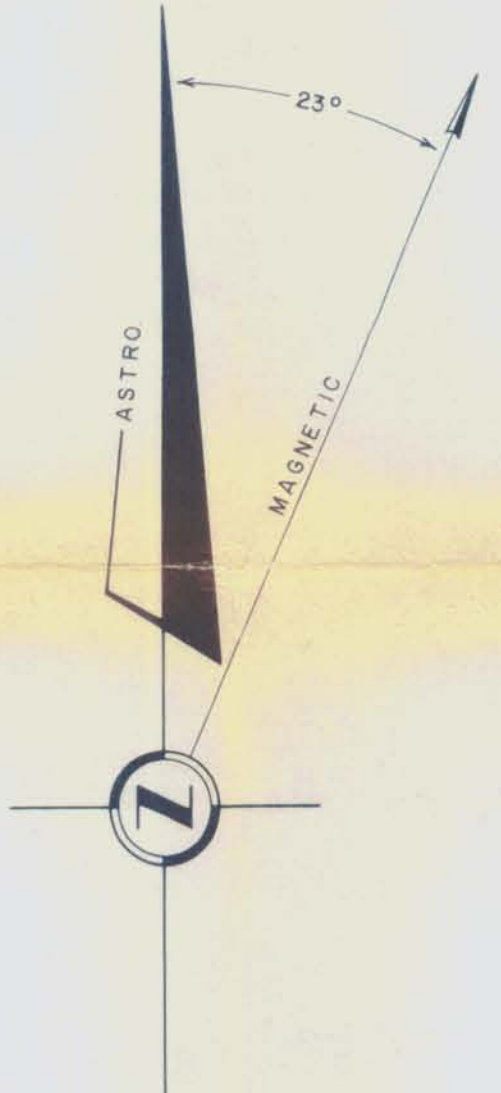
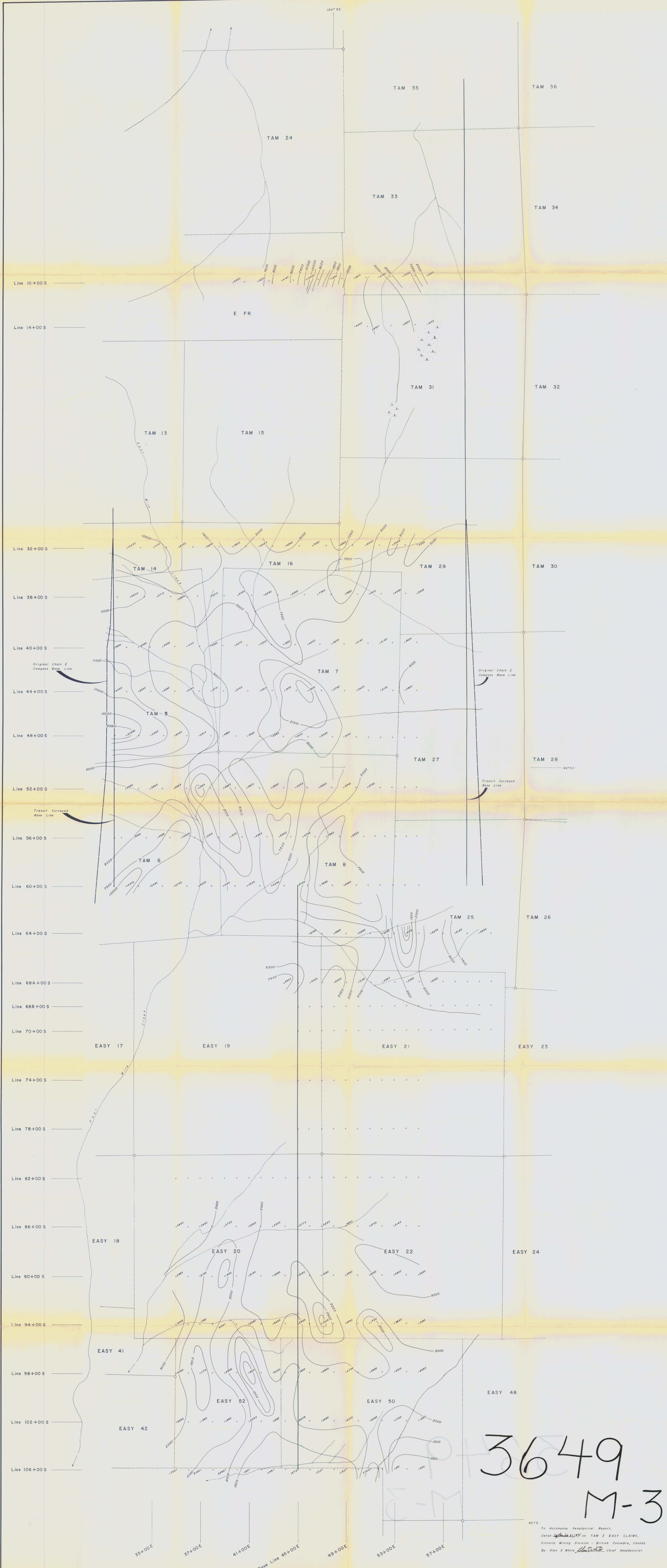


W. G. Stevenson, P. Eng.



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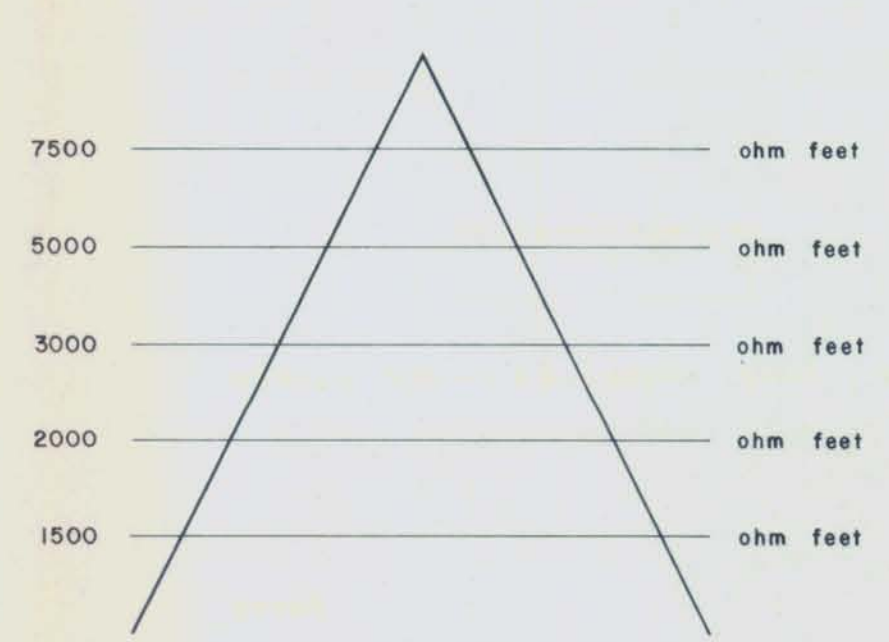
HUDSON BAY EXPL. & DEV. CO., LTD.
 TAM-EASY CLAIMS
 NITINAT LAKE AREA.



LEGEND

- Contour Line Contours at 1000, 2000, 3000, 4000, 5000, 7500 & 10000 ohm feet levels
- Stations Surveyed & Values
- Claim Boundary & Claim Post
- Location Line
- Creeks Showing Direction of Flow
- Swamp
- INSTRUMENT** HEWITT 200-1 KW (Wenner Array - a = 200 feet)

RESISTIVITY KEY



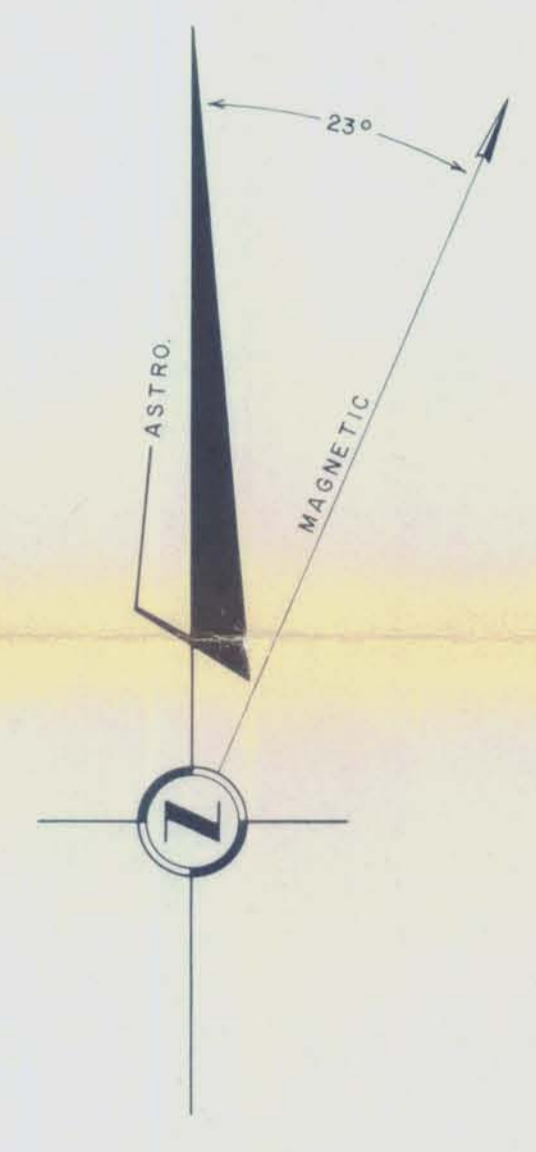
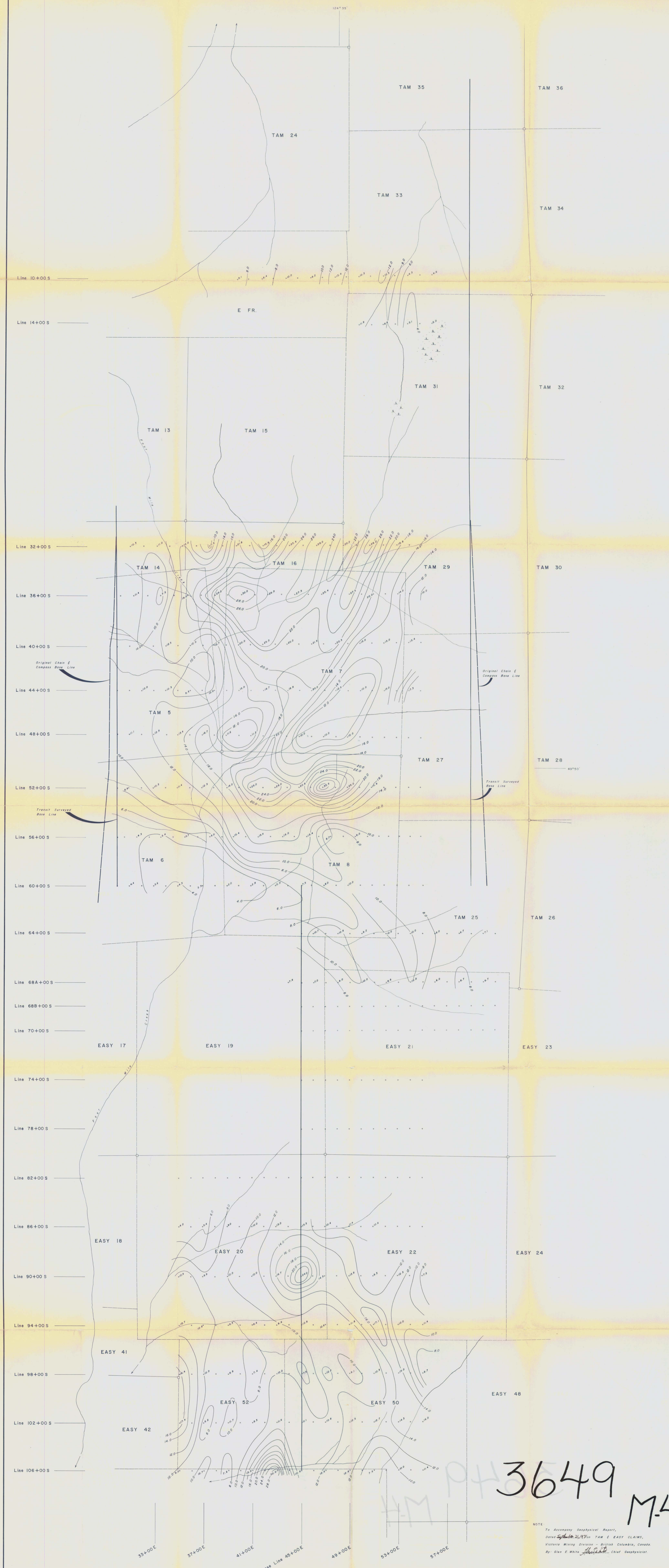
HUDSON BAY EXPLORATION AND DEVELOPMENT CO. LTD.
 FOUR MILE CREEK PROPERTY
 TAM & EASY CLAIMS
VICTORIA MINING DIVISION - BRITISH COLUMBIA, CANADA

**GEOPHYSICAL MAP
 INDUCED POLARIZATION
 - RESISTIVITY - (ohm feet)**

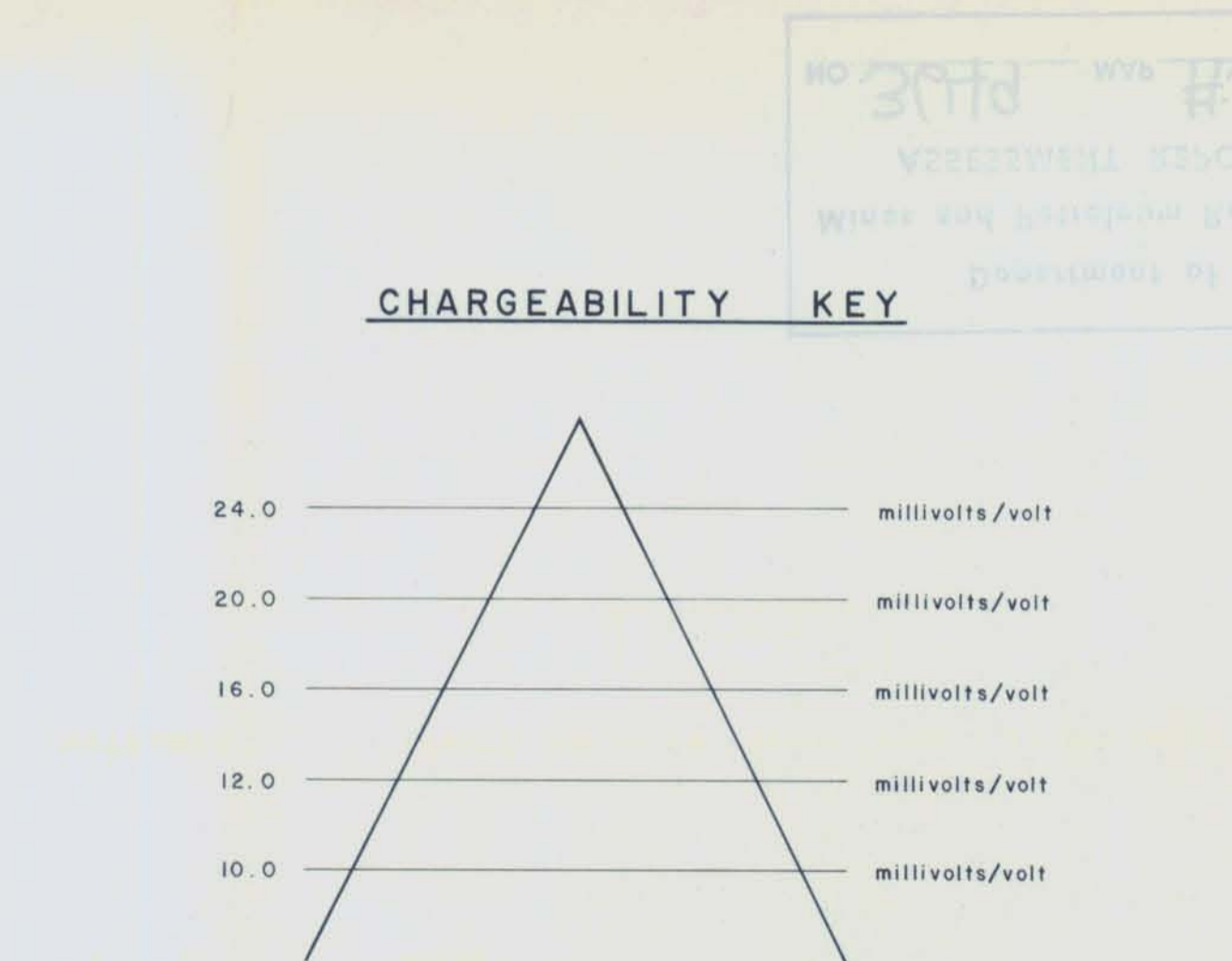
	<small>INTERPRETED BY: GLEN E. WHITE</small>
<small>EXPLORATION SURVEYS LTD.</small>	<small>DRAWN BY: ANTHONY N. SCHMIDT</small>
<small>DATE: Sept 1971</small>	<small>CHECKED BY: [Signature]</small>
<small>REVISED</small>	<small>PROJECT No. 7114</small>
<small>FILE</small>	<small>Fig. 3</small>

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M-3

NOTE: To Accompany Geophysical Report, Dated Sept 21, 1971 on TAM & EASY CLAIMS, Victoria Mining Division - British Columbia, Canada. By Glen E. White, [Signature] Chief Geophysicist



- LEGEND**
- Contour Line, Contour Interval 2.0 millivolts/volt
 - Stations Surveyed & Values
 - Claim Boundary & Claim Post
 - Location Line
 - Creeks Showing Direction of Flow
 - Swamp
- INSTRUMENT** HEWITT 200-1 KW (Wenner Array - 0-200 Feet)
-



HUDSON BAY EXPLORATION AND DEVELOPMENT CO. LTD.
FOUR MILE CREEK PROPERTY
TAM & EASY CLAIMS
VICTORIA MINING DIVISION - BRITISH COLUMBIA, CANADA

GEOPHYSICAL MAP
INDUCED POLARIZATION
PERCENT CHARGEABILITY - (millivolts/volt)

INTERPRETED BY: Glen E. White	FIG. 2
DRAFTED BY: Anthony N. Schompiur	CHECKED BY: [Signature]
DATE: Sept. 1971	REVISION: [Blank]
PROJECT No. 7114	FILE: C-18

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NOTE: To Accompany Geophysical Report, DATED 2/1/70 ON TAM & EASY CLAIMS, VICTORIA MINING DIVISION - BRITISH COLUMBIA, CANADA BY: Glen E. White, Chief Geophysicist