

3126

GEOPHYSICAL REPORT
ON AN
INDUCED POLARIZATION SURVEY
FOR
CONQUEST EXPLORATION LTD. (N.P.L.)

H.D.P. & GO Claim Groups, 2 miles E. of Owen Lake Smithers Area
Latitude 54° 05'N Longitude 126° 40'W

AUTHOR: Glen E. White

P. ENGINEER: W. G. Stevenson

DATE OF WORK: June 6 - 10, 1971

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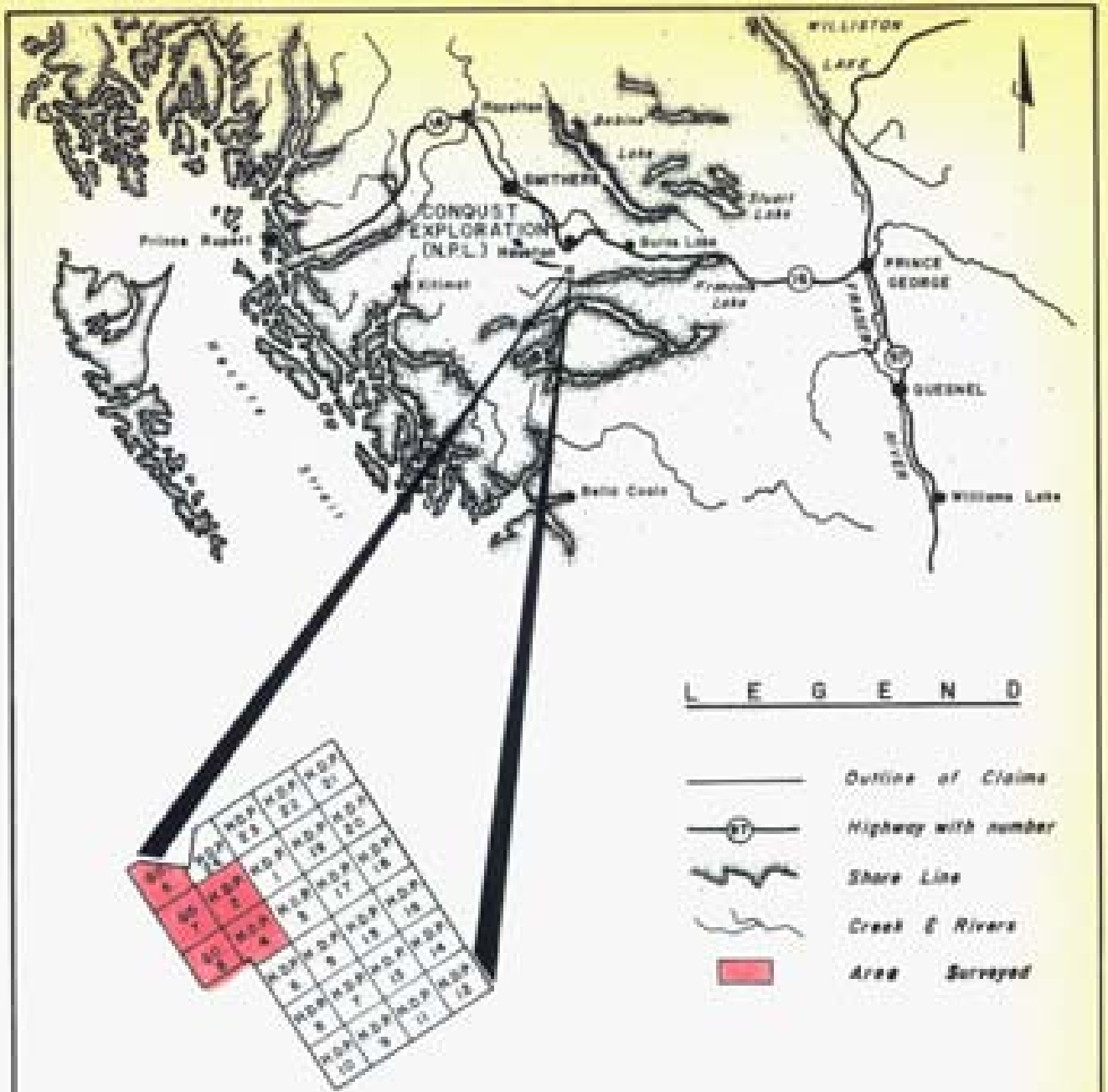
Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3126 MAP _____

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NOTE: Claims Are Taken From Mineral Claim Map 93L/28 (M)

CONQUEST EXPLORATION (N.P.L.)

OWEN LAKE AREA

H.D.P. & GO. CLAIMS

LOCATION AND CLAIMS MAP

SCALE: LOCATION MAP 1" = 50 MILES APPROX. — CLAIMS MAP 1" = 5000 FEET APPROX.

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INTRODUCTION

During the period June 6, 1971 to June 10, 1971, Tri-Con Exploration Surveys Ltd. conducted a program of line cutting and induced polarization surveying over a portion of the H.D.P. and GO claim groups, Owen Lake area Omineca Mining Division, B.C. on behalf of Conquest Exploration Ltd. (N.P.L.)

The purpose of the induced polarization survey was to examine an overburden covered area of favourable geology projected from the Nadina Explorations Ltd. claim group, for chargeable material possibly indicative of sulphide mineralization.

LOCATION AND ACCESS

The H.D.P. and GO mineral claims covered by this report are located approximately 2 miles east of the southern end of Owen Lake, some 23 miles due south of Houston, B.C. in the Omineca Mining Division. Latitude $54^{\circ} 05'N$, Longitude $126^{\circ} 40'W$ N.T.S. 93L/2

Access to the property is by the Morice River Road, some 4 miles west of Houston B.C. which is followed for approximately 20 miles to the junction with the Nadina Road. Here the east fork is followed to approximately 1 mile passed the Nadina Mine site where a private road is taken east onto the H.D.P. and GO claim groups.

THE PROPERTY

The topography varies from flat grassland to low swampy areas. No outcrop was witnessed on the area covered by the survey.

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

H.D.P. 2, 4

GO 6, 7, 8

The position of these claims are shown with respect to the complete claim group in Figure 1.

SURVEY SPECIFICATIONS

Survey Grid

A baseline 2800 feet long was established in an east-west direction

from which eight survey lines spaced 400 feet apart were turned off at right-angles and flagged at 100 foot intervals.

Some 5.5 line miles of induced polarization surveying were conducted over the traverse grid.

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 second 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 induced polarization data has been plotted and contoured at a horizontal scale of 1" = 400 feet as follows:

Figure 2 Induced Polarization - percent chargeability data contoured at an interval of 2 mv/v.

Figure 3 Induced Polarization - resistivity data contoured at an interval of 100 ohm-feet.

DISCUSSION OF RESULTS

The induced polarization resistivity data (Figure 3) showed very little variation in surface conductivity from a low of 70 ohm-feet to a high of 850 ohm-feet. In general, these changes can be attributed to variations in the

physical characteristics of the overburden and in the depth to bedrock.

The chargeability data (Figure 2) shows two areas of anomalous chargeability values, one of which rises to a high of 14.0 millivolts/volt above a background of some 3.0 mv/v. This chargeability anomaly is still undefined in that it continues to the west off of the survey area. The second chargeability anomaly is also located on the western side of the survey area and consists of a more broad feature which reaches a high of 10.8 mv/v. This anomaly also trends to the west off of the survey area. Both chargeability anomalies could possibly be caused by approximately 1-3% sulphide mineralization by volume. Larger percentages could possibly exist over narrower widths. Graphite will also yield a significant induced polarization response, however, no graphite is known to this author to exist in the surrounding area.

CONCLUSION

A program of line cutting and induced polarization surveying has been conducted over a portion of the H.D.P. and GO claim groups near Owen Lake, Omineca Mining Division, on behalf of Conquest Explorations Ltd. (N.P.L.)

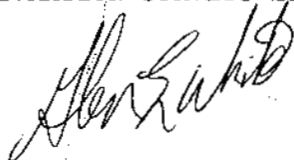
The induced polarization survey delineated two interesting chargeability anomalies which trend off of the survey area to the west towards the Nadina Explorations Ltd. ore deposit now being developed by Bralorne Can-Fer Resources Ltd.

RECOMMENDATIONS

- (A) Conduct a closely spaced soil sampling program over the chargeability anomalies to evaluate them for minerals of commercial interest.
- (B) Conduct a limited amount of detailed induced polarization surveying to further define the chargeability trends.
- (C) Conduct a limited amount of refraction hammer seismic profiling to evaluate the overburden conditions in respect to diamond drill-

ing or surface trenching.

Respectfully submitted,
TRI-CON EXPLORATION SURVEYS LTD.

A handwritten signature in cursive script, appearing to read "Glen White", is written over the typed name below.

Glen E. White, B.Sc.
Chief Geophysicist

A P P E N D I X

Instrument Specifications

INDUCED POLARIZATION

A Instrument

- (a) Type - Transient Pulse Prospecting Equipment
- (b) Make - Hewitt Enterprises 200
- (c) Size - 13½"W x 15½"L x 9½" Deep

B Specifications

(a) Transmitter

- (1) 1,000 Watt nickle cadnium 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 in 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 H.D.P. or GO mineral claims or in the securities of Conquest Explorations Ltd. (N.P.L.)
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 2 day of July 1971



Glen E. White, B.Sc.,
Chief Geophysicist

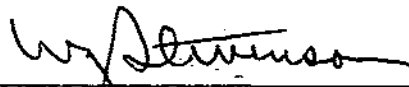
CERTIFICATE

I, William G. Stevenson, DO HEREBY CERTIFY:

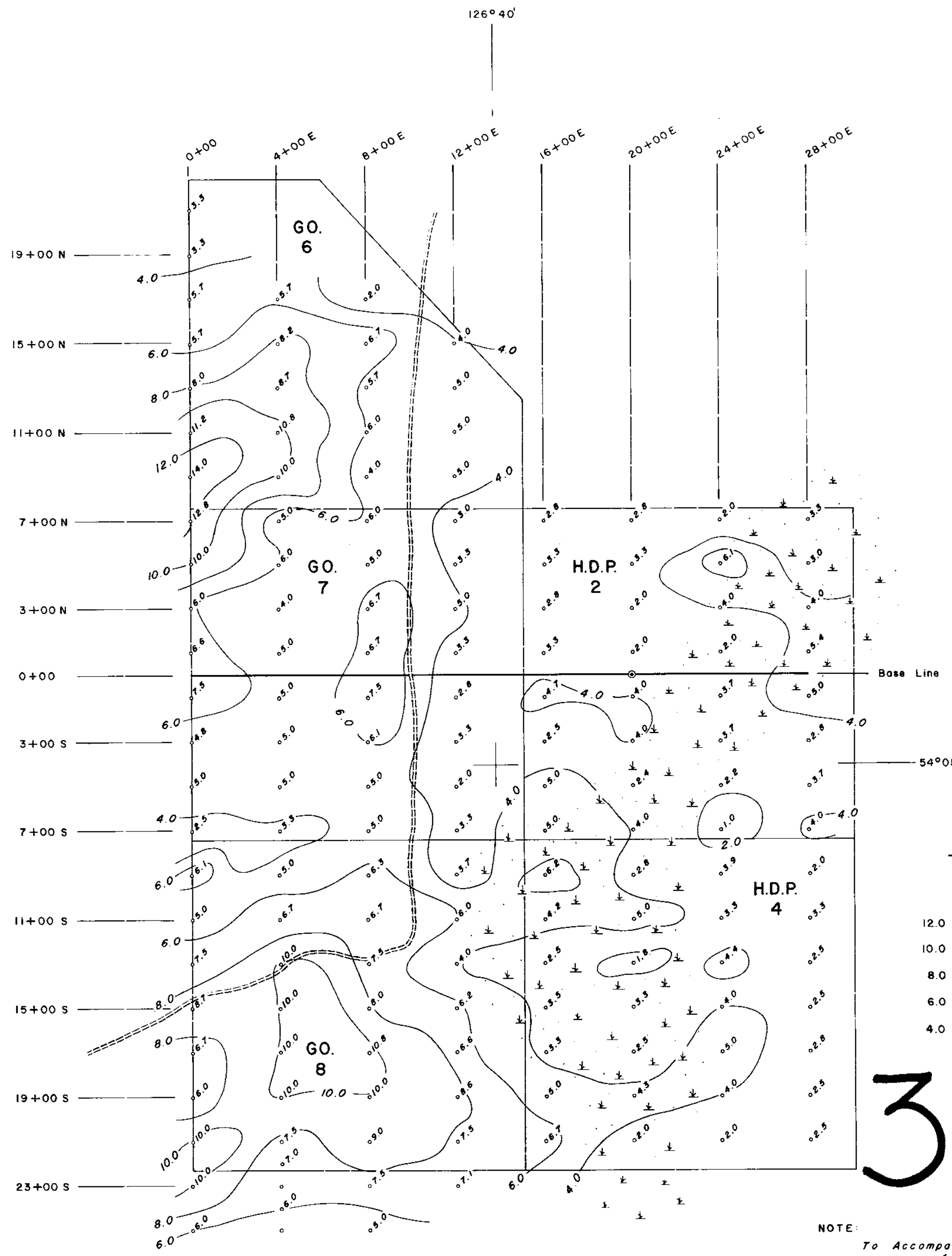
- That I am a Consulting Geological Engineer with offices at Suite 209 Stock Exchange Building, 475 Howe Street, Vancouver 1, B.C.
- That I am a graduate of the University of Utah, 1946, with a B.Sc. Degree.
- That I am a registered Professional Engineer in the Association in British Columbia.
- That I have practised my profession for 22 years.
- That I have no direct, indirect or contingent interest in the H.D.P. or GO Mineral Claims or in the securities of Conquest Explorations Ltd. (N.P.L.) nor do I intend to receive any such interest.
- That I have reviewed a report dated July 2, 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 6th day of JULY 1971.

W. G. STEVENSON & ASSOCIATES LTD.
Consulting Geologists



W. G. Stevenson, P. Engineer



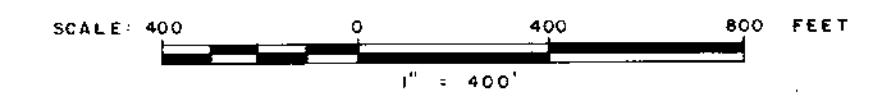
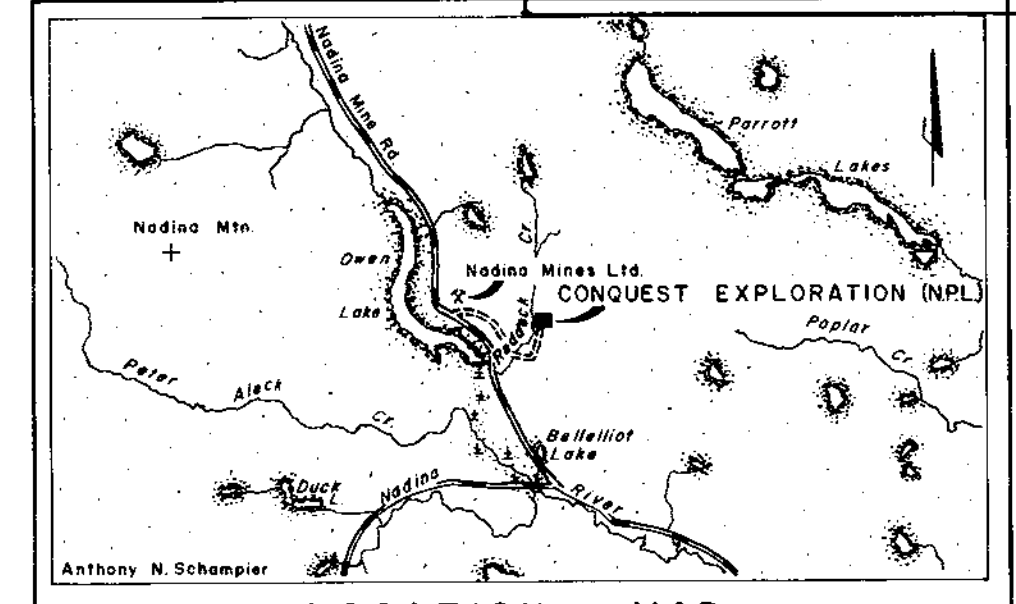
L E G E N D

- Contour Line, Contour Interval 2.0 millivolts/volt
- Stations Surveyed & Values
- Control Point
- Outline of H.D.P. & GO. CLAIMS
- Gravel Road
- Swamp

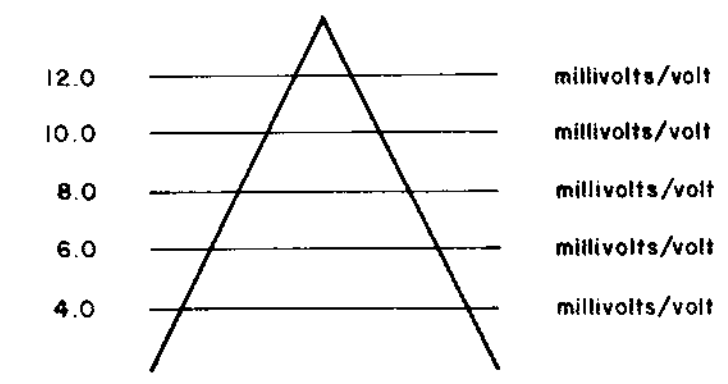
INSTRUMENT HEWITT 200-1 KW
(Wenner Array - a = 200 feet)

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N.T.S. 93 L/2



CHARGEABILITY KEY



3126

NOTE:
To Accompany Geophysical Report,
Dated July 2, 1971, on H.D.P. & GO. CLAIMS,
Omineca Mining Division - British Columbia, Canada.
By: Glen E. White - Chief Geophysicist.

M-2

CONQUEST EXPLORATION (N.P.L.)
OWEN LAKE AREA
H.D.P. & GO. CLAIMS
OMINECA MINING DIVISION - BRITISH COLUMBIA, CANADA.

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

	INTERPRETED by: Glen E. White	
	DRAFTED by: Anthony N. Schampier	
CHECKED by: <i>[Signature]</i>	Fig 2	
DATE: June 1971	REVISED:	PROJECT No. 7109
		FILE: C10