

A Geophysical Report
on
An Electromagnetic Survey
on

Mt. Sicker Property, 92B/13W
Vancouver Island, B.C.
(49° 123° N.W.)

Claims Surveyed: Crown Grants L 18G, 55G,
60G, 63G, 108G, 110G
Mineral Lease 13
C.F. Group 1-8, 13-18,
25-31, 33, Fr., Dawn 1 & 2

Survey Dates: July 17th - 28th, 1972
by

Peter E. Walcott, P.Eng.

3951

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A REPORT

ON

AN ELECTROMAGNETIC SURVEY

Mt. Sicker, Duncan Area,
Vancouver Island, B.C.

FOR

DUCANEX RESOURCES LIMITED

Vancouver, British Columbia

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

BY

NO. 3951 MAP

PETER E. WALCOTT & ASSOCIATES LIMITED

Vancouver, British Columbia

OCTOBER 1972

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ACCOMPANYING MAPS - Scale 1" = 400 ft.

MAP POCKET

#1 Claim map & grid location

#2 ELECTROMAGNETIC SURVEY W-156-1

INTRODUCTION

Between July 17th and 28th, 1972, Peter E. Walcott & Associates Limited carried out a "shoot-back" electromagnetic survey over part of a property, located in the Duncan area on Vancouver Island, optioned by Ducanex Resources Limited.

The survey was carried out over north-south lines, which were turned off from an east-west baseline, and which were chained and picketed at 100 foot intervals.

Measurements of dip angles and minimum field strengths were made every 100 feet along the picket lines with a Crone C.E.M. unit using a frequency of 1830 c.p.s. and a coil separation of 200 feet.

In addition some lines over the Tyee shaft were resurveyed on August 16th, 1972.

The data are presented in profile form on Map W-156-1 that accompanies this report.

PROPERTY, LOCATION AND ACCESS

The property is located in the Victoria Mining Division of British Columbia and consists of the following Crown Grants, Mineral Leases, Mineral Claims and Mining Agreements.

Crown Grants

<u>Lot No.</u>	<u>Name</u>
53-G	Estelle
54-G	Westholme
51-G	Blue Bell
50-G	Moline Fraction
4-G	Acme
18-G	Tony
47-G	Hellena
59-G	Westholme Fraction
21-G	Dixie Fraction
44-G	Golden Rod
18-G	Donagan
19-G	XL
63-G	Donald
108-G	Muriel Fraction
87-G	Doubtful Fraction
85-G	Thelma Fraction
86-G	Imperial Fraction
20-G	Herbert Fraction
110-G	Phil Fraction
43-G	NT Fraction
41-G	Magic Fraction
39-G	Richard III
37-G	Key City
35-G	Lenora
36-G	Tyee
60-G	International Fraction

Mineral Leases

<u>M.L. No.</u>	<u>Lot No's.</u>	<u>Date of Lease</u>
13	33G, 34G, 55G, 56G, 64G, 65G, 100G	Dec. 9th, 1969
17	5G, 6G, 7G and 89G	Aug. 3rd, 1970
18	59G	Aug. 3rd, 1970

PROPERTY, LOCATION & ACCESS cont'd

Mineral Claims

<u>Name</u>	<u>Record Numbers</u>	<u>Record Dates</u>
C.F. Group 1 - 8	14150 - 14159 incl.	Oct. 25th, 1966
C.F. Group 13 - 18	14162 - 14169 incl.	Oct. 25th, 1966
C.F. Group 25 - 28	14185 - 14188 incl.	Dec. 8th, 1966
C.F. Group 29 - 31	14197 - 14199 incl.	Dec. 20th, 1966
C.F. Group 33	14201	Dec. 20th, 1966
C.F. Group Fraction	14174	Oct. 25th, 1966
Dawn 1 & 2	16448 - 16449	Apr. 30th, 1970
B 1 - 4	16372 - 16375 incl.	Apr. 13th, 1970
B 5	16446	Apr. 21st, 1970
B 6 - 22	16376 - 16392 incl.	Apr. 13th, 1970

Mining Agreements

Mining Agreement No. 8 dated October 1st, 1963, between Canadian Pacific Oil and Gas Limited and V.H. Patriarche and assigned by Agreement dated August 1st, 1968 to Mount Sicker Mines Ltd. (N.P.L.) - total 2540 acres, approx.

Mining Agreement No. 73 dated May 1st, 1971, between Canadian Pacific Oil and Gas Limited and Mount Sicker Mines Ltd. (N.P.L.)

The property is situated on the slopes of Mt. Sicker some 5 airmiles north of Duncan, British Columbia.

Access is obtained from Duncan via the Trans-Canada Highway and some 8 miles of gravel road, the turn-off to the latter being some 7 miles north of Duncan.

PURPOSE.

The purpose of the survey was to try and locate occurrences of economic sulphide deposits as conceivably indicated by the favourable geology and known mineralization.

PREVIOUS WORK

Exploration, development and mining have been carried out on the property from 1897 to the present date.

The results of this work are well documented in reports by W.M. Sharp P.Eng. and Ivor M. Watson P.Eng. dated March 1972 and October 1972 respectively.

GEOLOGY.

The reader is referred to the forementioned reports by Messrs. W. Sharp and I. Watson.

SURVEY SPECIFICATIONS

The basic principle of any electromagnetic survey is that when conductors are subjected to primary alternating fields secondary magnetic fields are induced in them. Measurements of these secondary fields give indications as to the size, shape and conductivity of conductors. In the absence of conductors no secondary fields are obtained.

The electromagnetic survey was carried out using a Crone C.E.M. unit. This system utilizes the "shoot back" technique which requires a receiver and transmitter in each unit.

In this case the horizontal shootback technique was employed whereby each unit measures the direction of the total magnetic field (in degrees from the vertical) while the other unit acts as the transmitter (held horizontally). On addition of the two measured angles the resultant reading obtained is independent of substantial differences in elevation, and is plotted midway between the two coils.

A second measurement, the minimum field strength (a measure of the magnitude of the quadrature component) was also obtained at one of the coils and plotted at that location (the coils having been previously set up for 100% field strength in the horizontal position over neutral level ground).

Readings on the survey were taken every 100 feet along the picket lines using a coil separation of 200 feet and a frequency of 1830 c.p.s., these having been decided in advance in consultation with the Company's exploration geologists.

Some additional work was performed over the Tyee shaft using horizontal shootback with the 5010 c.p.s. frequency, vertical shootback with the 1830 c.p.s. frequency, and horizontal loop over the level part with the 1830 c.p.s. frequency.

DISCUSSION OF RESULTS

The C.E.M. survey, as performed with a 200 foot coil separation and a frequency of 1830 c.p.s., showed essentially negative results over the area surveyed as can be seen from Map W-156-1.

Check work (not plotted) done using the higher frequency of 5010 c.p.s. (horizontal shootback technique) as well as vertical shootback and horizontal loop using 1830 c.p.s. over the Tyee shaft gave the same negative results as those obtained on the original survey with all nulls less than 2° wide.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Between July 17th and 28th, 1972 and August 16th, 1972, Peter E. Walcott & Associates Ltd. carried out a Crone C.E.M. electromagnetic survey over part of a property optioned by Ducanex Resources Limited.

The property is located on the slopes of Mt. Sicker, near Duncan, on Vancouver Island.

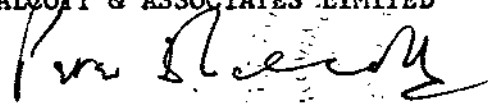
The E.M. survey failed to detect the presence of any conductors that could be associated with any massive mineralization and/or graphitic bodies of reasonable size and continuity.

As a result the writer concludes that no significant massive sulphide mineralization exists on that part of the property surveyed to a depth of some 100 feet.

He however recommends in view of the geology and known mineralization that some thought be given to run some test lines with deeper penetration E.M. systems over the known Tyee - Lenora zones.

Respectfully submitted,

PETER E. WALCOTT & ASSOCIATES LIMITED


Peter E. Walcott, P.Eng.
Geophysicist

Vancouver,
British Columbia

October 1972

(1)

COST OF SURVEY

Peter E. Walcott & Associates Limited undertook the survey on a mileage basis. Mobilization and check work charges were extra so that the total cost of services provided by Peter E. Walcott & Associates Limited was \$2,820.54.

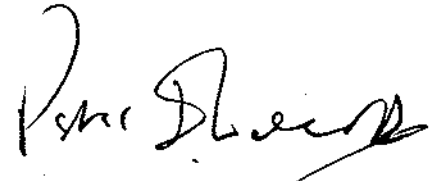
PERSONNEL EMPLOYED ON SURVEY

<u>Name</u>	<u>Occupation</u>	<u>Address</u>	<u>Dates</u>
Peter E. Walcott	Geophysicist	Peter E. Walcott & Assoc. 605 Rutland Court, Coquitlam, B.C.	Jul. 25th, Aug. 16th & Aug. 17th, Oct. 18th 1972
L. Perreault	Geophysical Operator	" "	Jul. 17th - 29th, Aug. 16th, 1972
P. Charlie	"	" "	Jul. 17th - 28th, 1972
J. Davies	Draughting	" "	Oct. 18th - 20th, 1972
J. Walcott	Typing	" "	October 19th, 72

CERTIFICATION

I, Peter E. Walcott of the Municipality of Coquitlam, British Columbia, hereby certify that:

1. I am a Graduate of the University of Toronto in 1962 with a B.A.Sc. in Engineering Physics, Geophysics Option.
2. I have been practising my profession for the last ten years.
3. I am a member of the Association of Professional Engineers of British Columbia, Ontario and the Yukon Territory.
4. I hold no interest, direct or indirect, in the securities or properties of Ducanex Resources Ltd., nor do I expect to receive any.



Peter E. Walcott, P.Eng.

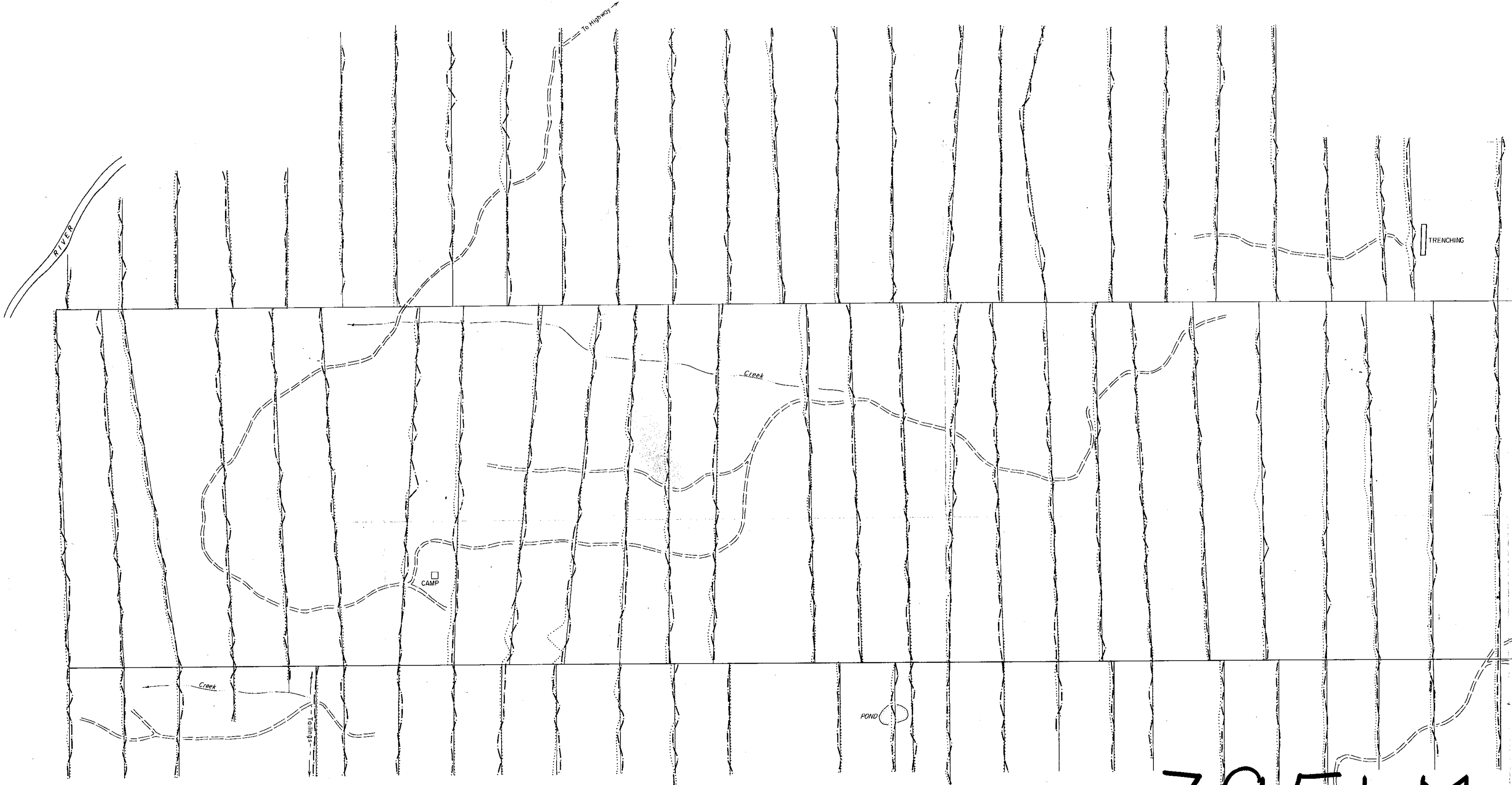
Vancouver,
British Columbia

October 1972



L 40 W L 36 W L 32 W L 28 W L 24 W L 20 W L 16 W L 12 W L 8 W L 4 W 0 L 4 E L 8 E L 12 E L 16 E L 20 E L 24 E L 28 E L 32 E L 36 E L 40 E L 44 E L 48 E L 52 E L 56 E L 60 E L 64 E L 68 E L 72 E L 76 E L 80 E L 84 E

48 N
44 N
40 N
36 N
32 N
28 N
T.L. 26 N



24 N
20 N
16 N
12 N
8 N
4 N
B.L.
4 S
8 S
12 S

LEGEND
f = 1830 cps.
Coil Separation 200 ft.
F.S. — Dip Angle
1" = 40% 1" = 40°

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 3951 MAP #2

DUCANEX RESOURCES LTD.

MT. SICKER PROPERTY VANCOUVER IS., VICTORIA M.D., B.C.

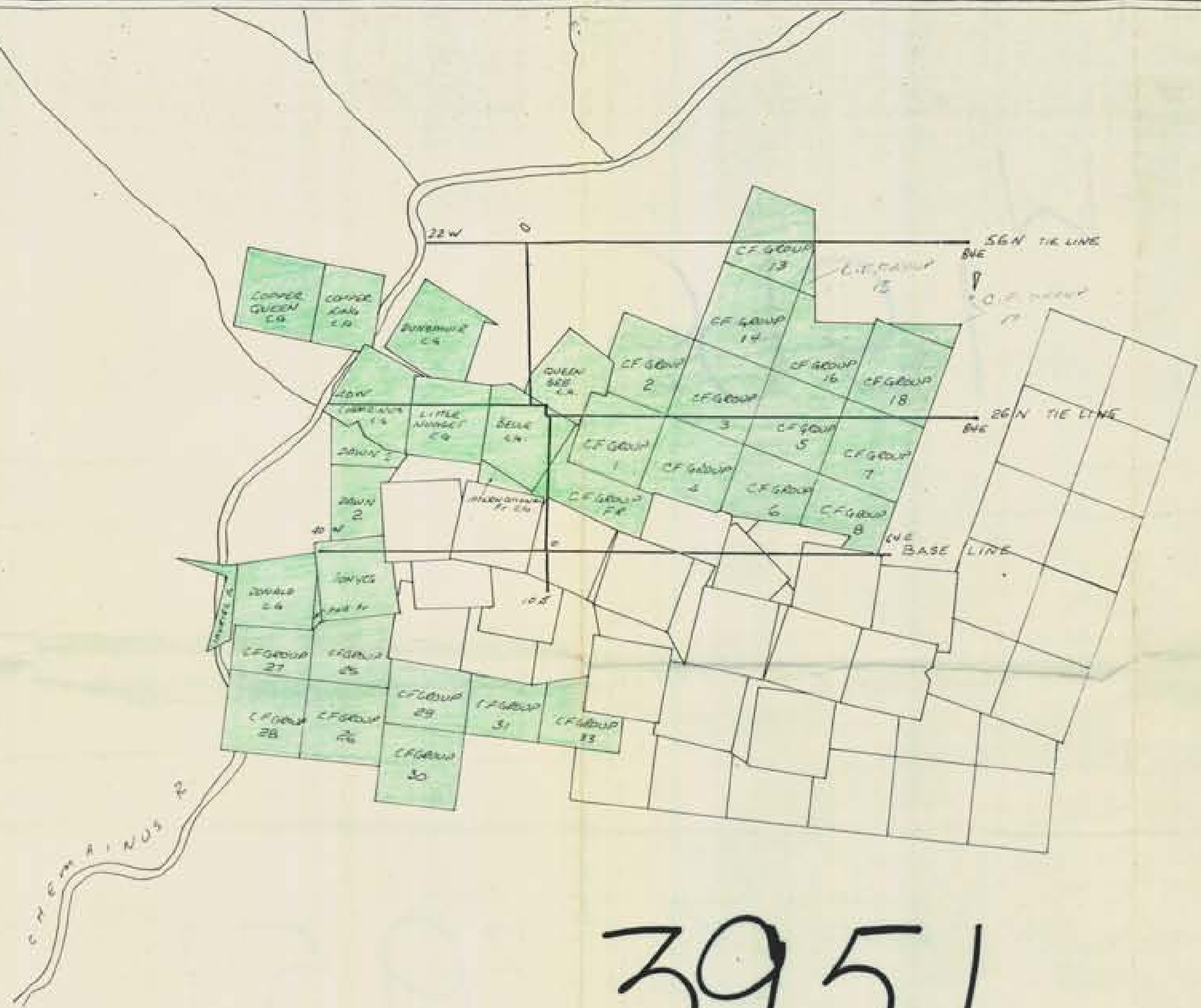
CRONE
ELECTROMAGNETIC SURVEY
PROFILES OF RESULTANT DIP ANGLE &
MINIMUM FIELD STRENGTH

SCALE: 1 INCH = 400 FEET



MAP NO. W-156-1
TO ACCOMPANY A REPORT BY
PETER E. WALCOTT P. Eng., DATED - OCT. 1972
PETER E. WALCOTT & ASSOC. LTD.
JULY-1972

3951 M-2



SCALE 1" = 1500'

3951
M-1

SAWN GROUP - SHADED IN GREEN

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
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DUCANEX RESOURCES LTD.
MOUNT SICKER PROPERTY
CLAIM MAP AND
GRID LOCATION

DATE: OCTOBER 78
DRAWN: JWF
SCALE: 1" = 1500'

