GEOSEARCH CONSULTANTS LIMITED

TURAM ELECTROMAGNETIC SURVEY

for

SCURRY-RAINBOW OIL LTD.

on a portion of the

BRIARCOURT OPTION, STURGEON LAKE

ONTARIO

(To Accompany Maps 72- 450 to 72- 455)

July 31, 1972.

INTRODUCTION

A Turam electromagnetic survey was carried out for Scurry-Rainbow Oil Ltd. on a portion of the Briarcourt Option in June and July, 1972.

The property is located in the Patricia and Kenora Mining Districts of Ontario, south of Young Lake and west of Sturgeon Lake, 34 miles northeast of Ignace.

Access to the area was made by Highway 599, located one mile east of the property.

The purpose of this survey was to located sub-surface geo-electrical conductors which might prove to be base metal orebodies. A few, generally weak, conductors were located, some of which appear to have been drilled. The accompanying maps show the area surveyed and the results obtained.

METHOD AND INTERPRETATION OF RESULTS

Turam Electromagnetic Survey

The model 2S Turam equipment was used for this survey. It was manufactured and developed in Sweden by the ABEM Instrument Group of the Craelius Company.

In common with other electromagnetic inductive systems the Turam method is based on the fact that a secondary current is induced in an electrical conduotor when the conductor is subjected to an electromagnetic field. This secondary current creates its own electromagnetic field which, together with the primary applied field, produces a resultant electromagnetic field. This resultant field, which can be detected and measured, differs both in phase and amplitude from the calculated primary field; these differences may indicate the presence of a conductor.

The primary alternating field is created by the use of a large horizontal rectangular loop, energized by a current at 660 Hz or 220 Hz. The receiving system consists of two coils 100 feet apart, connected to a compensator-amplifier which measures the complex field-strength ratios and phase-differences between successive points on traverses outside and perpendicular to a long side of the primary loop. Both the phase-difference readings and the reduced field-strength ratios are plotted as curves at points mid-way between the coil positions. The reduced ratios are the measured ratios divided by the normal ratios. The normal ratios may be calculated from the geometry of the primary loop and from the location of the points at which the readings were taken in relationship to the loop.

The conductivity of steeply dipping conductors may be estimated from the following chart:

Ratio Anomaly > 1.00	Negative Phase-difference	Conductivity
Very small or nil	Small to medium	Very poor
Small	Medium to large	Poor
Large	Medium	Good
Large	Small	Very good

In areas of conductive overburden, the amplitudes of anomalous readings, both the phase and the ratio, increase as their distance from the primary loop increases.

RESULTS

Map 72-453 - Block D

No conductors were located. The area surveyed was geo-electrically neutral.

Map 72-450 - Blocks C - D

A short conductive zone was located southeast of the road between lines 182E and 188E from 131+50N to 133+50N. The conductivity appears to be fairly low although it may be better than indicated as the Turam method does not respond well to conductors with a short strike length.

Map 72-454 - Blocks D - H

A conductor was located between lines 6S and 8N. It may be interrupted between lines 2N and 4N, as indicated on the map. The strongest portions appear to be on lines 0 and 2N.

Map 72-451 - Blocks G - H

Three weakly conductive indications were located between lines 140E and 144E from 83+70N to 85+50N. It is not clear from the results whether the conductors on lines 140E and 142E are one and the same conductor.

A weakly conductive indication occurrs on line 156E at 83+75N. A possible weakly conductive trend, extending intermittently to the east as far as line 184E, has been dotted on the map.

Map 72-452 - Blocks G - H

No conductors were located on this portion of the grid.

Map 72- 455 - Blocks G - H

No conductors were located. A few anomalous phase difference readings were obtained. These are deemed to have been caused by conductivity in the overburden.

RECOMMENDATIONS

Detailed prospecting should be carried out over the conductors which have not been drilled. The conductor on Map 72- 450 on lines 186E at 133+50N should be given first priority if diamond drilling is contemplated. A detailed horizontal loop electromagnetic survey over the conductors on Map 72- 451 between lines 140E and 144E should be considered before any drilling is planned.

Respectfully submitted,

GEOSEARCH CONSULTANTS LTD.

J. A. Woodard, P. Eng.
Consulting Geophysicist.

900

File

GEOPHYSICAL – GEOLOGICAL – GEOCHEMICAL TECHNICAL DATA STATEMENT

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey: Electromagnetic

Township or Area: Watcomb Lake and Clarkston Area

Claim holder(s): _____

_____

Author of Report: J. A. Woodard

Address: Suite 1114, 100 University Ave., Toronto 1

Covering Dates of Survey: June 15 to July 31, 1972.
(linecutting to office)

Total Miles of Line cut: (used old lines) 37.17 miles
(used new lines) 20.88 miles

SPECIAL PROVISIONS CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

DAYS per claim

Geophysical
–Electromagnetic _____
–Magnetometer _____
–Radiometric _____
–Other _____
Geological _____
Geochemical _____

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: July 31, 1972 SIGNATURE: J. A. Woodard
Author of Report

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
PA- 45970	PA- 218936
45971	218937
45972	218938
45982	218939
45983	218940
45984	218941
46097	218942
46098	221017
46099	221018
46100	221019
46101	221020
46102	221021
46103	221022
46104	248411
46105	
46106	K- 218923
46107	
46108	218924
46109	
46110	218925
46111	
46365	218926
46366	
47099	218927
47100	
47101	
47102	
47103	
47104	
47105	
47106	
47107	
47108	
47360	
218928	
218929	
218930	
218931	
218932	
218933	
218934	
218935	

TOTAL CLAIMS 61

OFFICE USE ONLY

PROJECTS SECTION

Res. Geol. _____ Qualifications _____

Previous Surveys _____

Checked by _____ date _____

GEOLOGICAL BRANCH

Approved by _____ date _____

GEOLOGICAL BRANCH

Approved by _____ date _____

PATRICIA MINING DIV.
RECEIVED
OCT - 2 1972
AM PM

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS

Number of Stations 2730 Number of Readings 2730

Station interval 100 Feet

Line spacing 400 Feet, Some Detail at 200 Feet

Profile scale or Contour intervals Ratio: 1 Inch to 20; Phase: 1 Inch to 10%
(specify for each type of survey)

MAGNETIC

Instrument

Accuracy - Scale constant

Diurnal correction method

Base station location

ELECTROMAGNETIC

Instrument A.B.E.M. Turam Model 2 S

Coil configuration Co-Planar

Coil separation 100 Feet

Accuracy ± 1% Per Scale Division

Method: ☒ Fixed transmitter ☐ Shoot back ☒ In line ☐ Parallel line

Frequency 660 HZ
(specify V.L.F. station)

Parameters measured Field Strength Ratios and Phase Differences

GRAVITY

Instrument

Scale constant

Corrections made

Base station value and location

Elevation accuracy

INDUCED POLARIZATION - RESISTIVITY

Instrument

Time domain Frequency domain

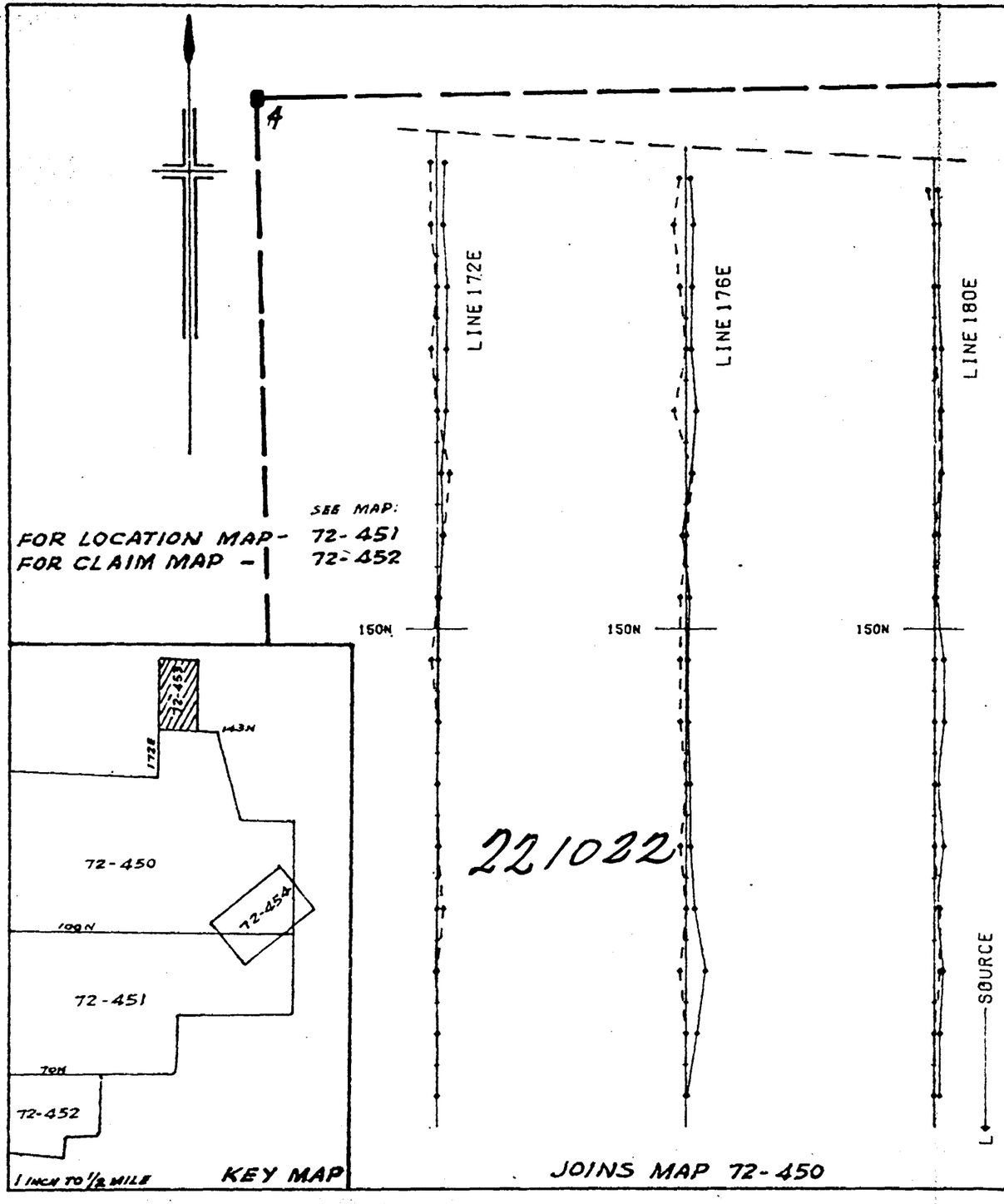
Frequency Range

Power

Electrode array

Electrode spacing

Type of electrode



FOR LOCATION MAP - SEE MAP: 72-451
FOR CLAIM MAP - 72-452

JOINS MAP 72-450

LEGEND

RATIO. 660 C.P.S.
PHASE. 660 C.P.S.
RATIO. 220 C.P.S.
PHASE. 220 C.P.S.

LOOPS

L184E 168E 140N 125N

CONDUCTOR

STRONG
WEAK
INDEFINITE

VERTICAL SCALE

RATIO 1.10 — PHASE +5°
1.00 — 0°
RATIO 0.90 — PHASE -5°

OR

RATIO 1.10 — PHASE +5°
1.00 — 0°
RATIO 0.90 — PHASE -5°

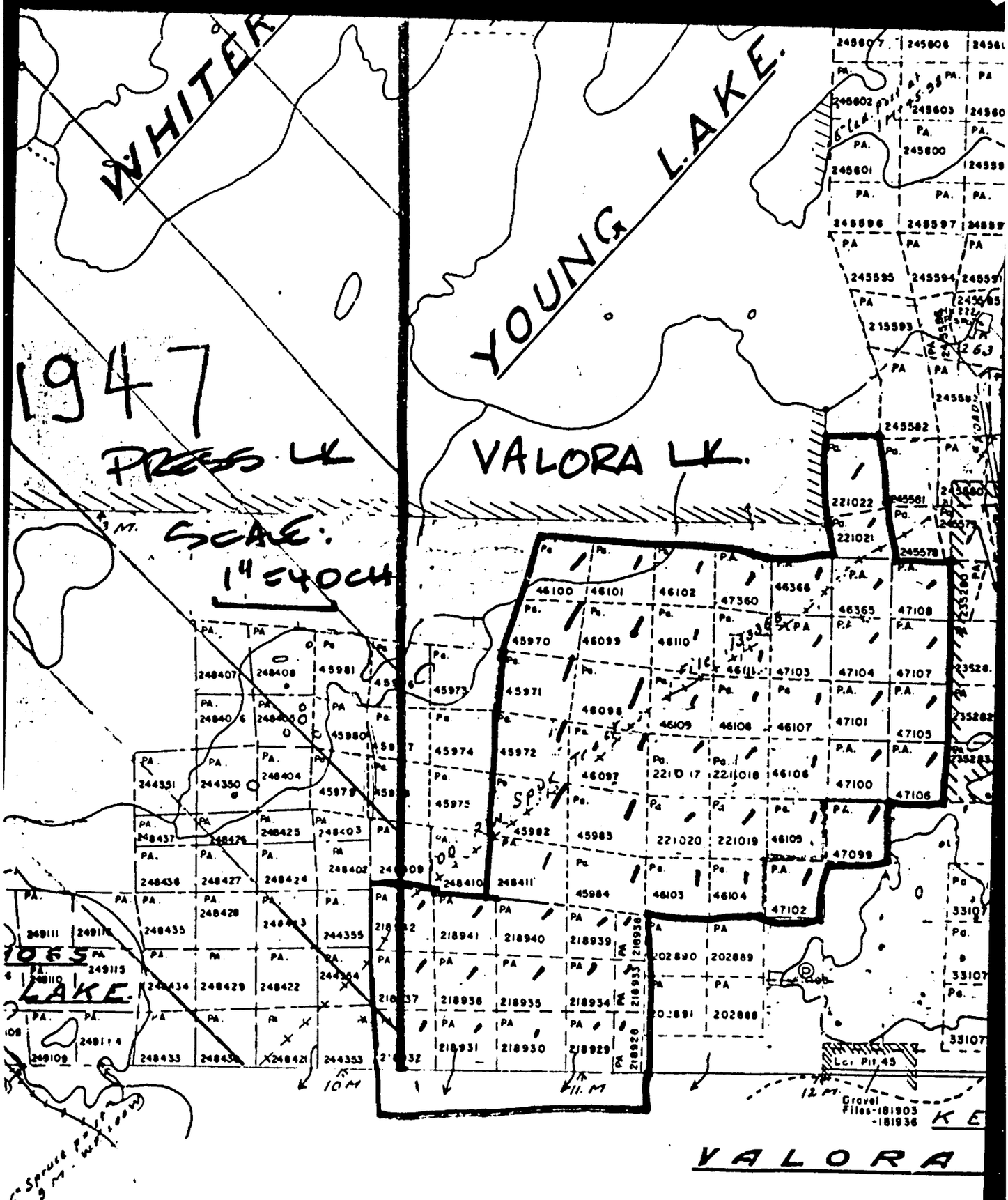
TURAM SURVEY
BY
GEOSEARCH CONSULTANTS LTD.
FOR
SCURRY RAINBOW OIL LIMITED
NORTH GRID. BLOCK D
BRIARCOURT OPTION
STURGEON LAKE. ONTARIO

JULY. 1972

SCALE: 1 INCH TO 200 FT.

72-453

2.1022


WHITE
YOUNG LAKE
1947
PRESS LK
VALORA LK.
SCALE:
1"=40CH
LAKE
VALORA

file 2.1022

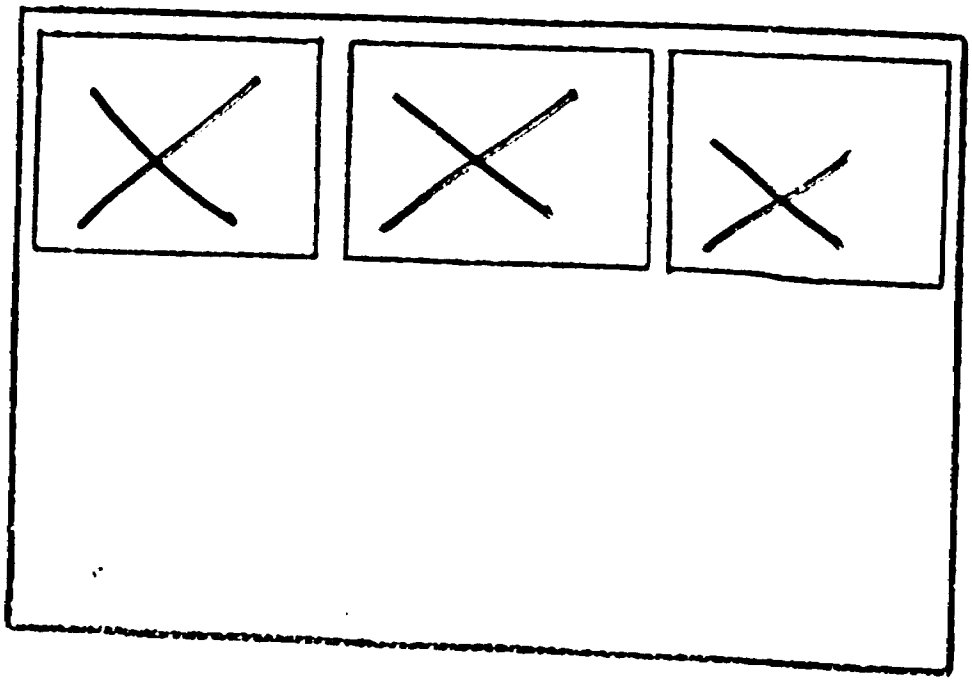
SEE ACCOMPANYING MAP(S) IDENTIFIED AS

52G/14SW-0023 #1

#2

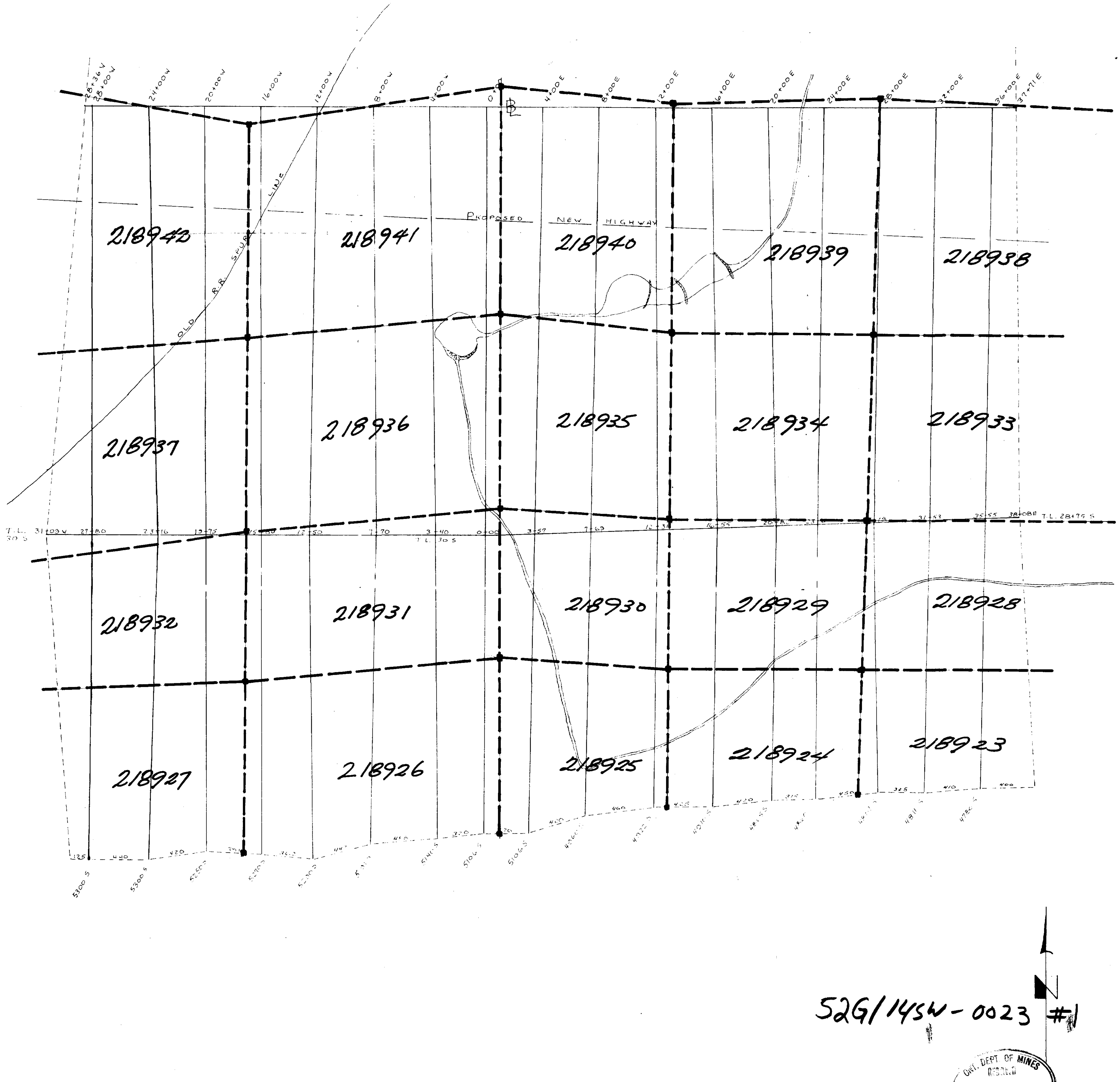
#3

LOCATED IN THE MAP CHANNEL IN THE FOLLOWING SEQUENCE (X)



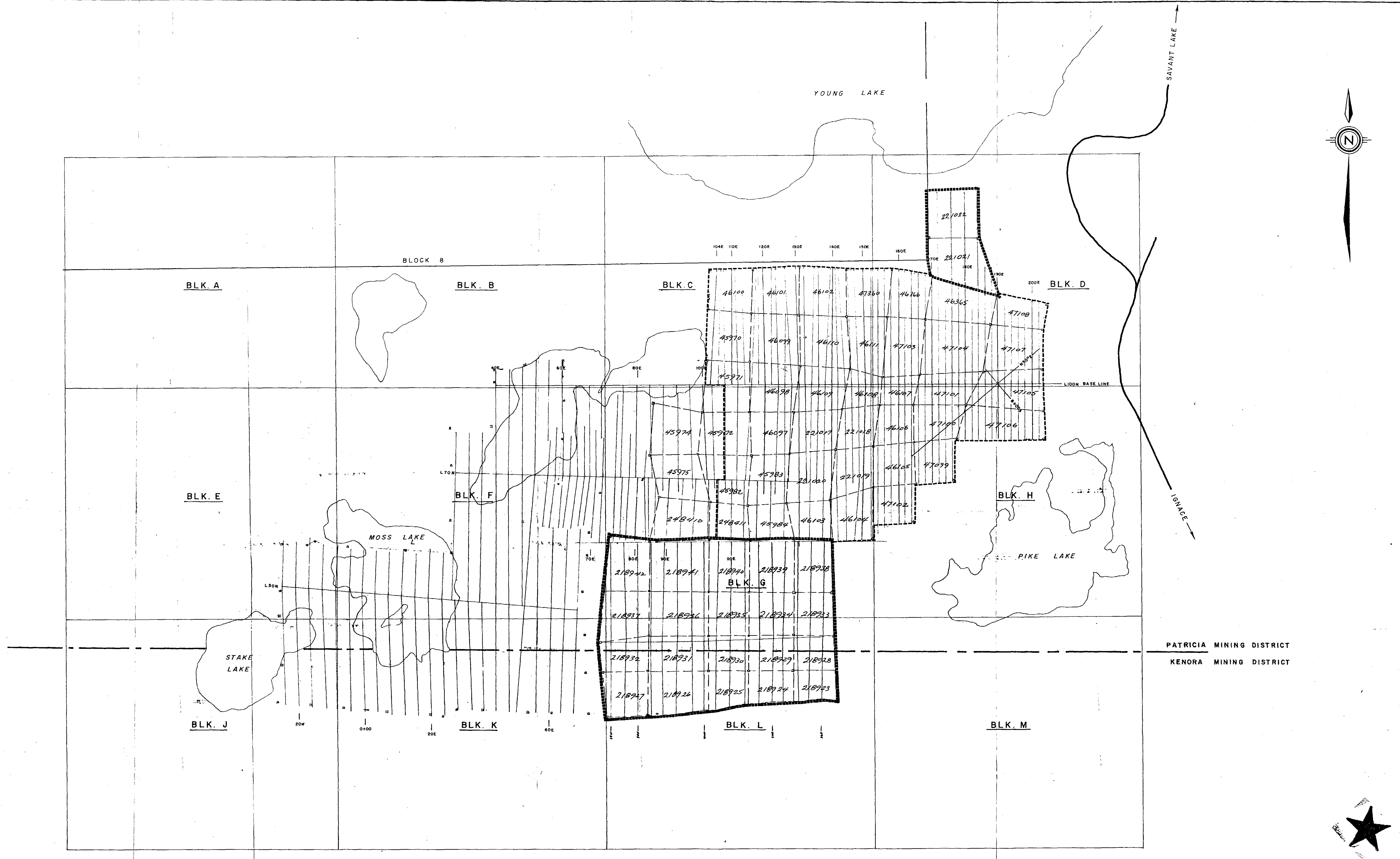
FOR ADDITIONAL INFORMATION SEE MAPS:

52G/14SW-0023 #4-#7



SCURRY-RAINBOW OIL LTD.
BRIANCOURT OPTION STURGEON LAKE, ONT.
THOREX LIMITED
LINECUTTING JUNE 1972 J. P. DUCHARME - SUPERVISOR

SCALE: 1" = 400'



52G/14SW-0023-#2

ASSESSMENT AREA

AREA LINE CUTTING & TURAM SURVEY
AREA TURAM SURVEY ONLY

DRAWN R.M.	SCALE 1" = 1320'	**SCURRY-RAINBOW OIL LTD.**	MASTER BLOCK PLAN & CUT LINES
TRACED	DATE MAR. 1970	BRIARCOURT OPTION	
APPROVED	REVISED AUG 1972	STURGEON LAKE, ONT.	FILE NO. STUR 2-6-2

2.1022

210

LEGEND

- RATIO, 660 C.P.S.
- PHASE, 660 C.P.S.
- RATIO, 220 C.P.S.
- PHASE, 220 C.P.S.

VERTICAL SCALE

RATIO 1.10 — PHASE +5°
1.00 — 0°
RATIO 0.90 — PHASE -5°

LOOPS

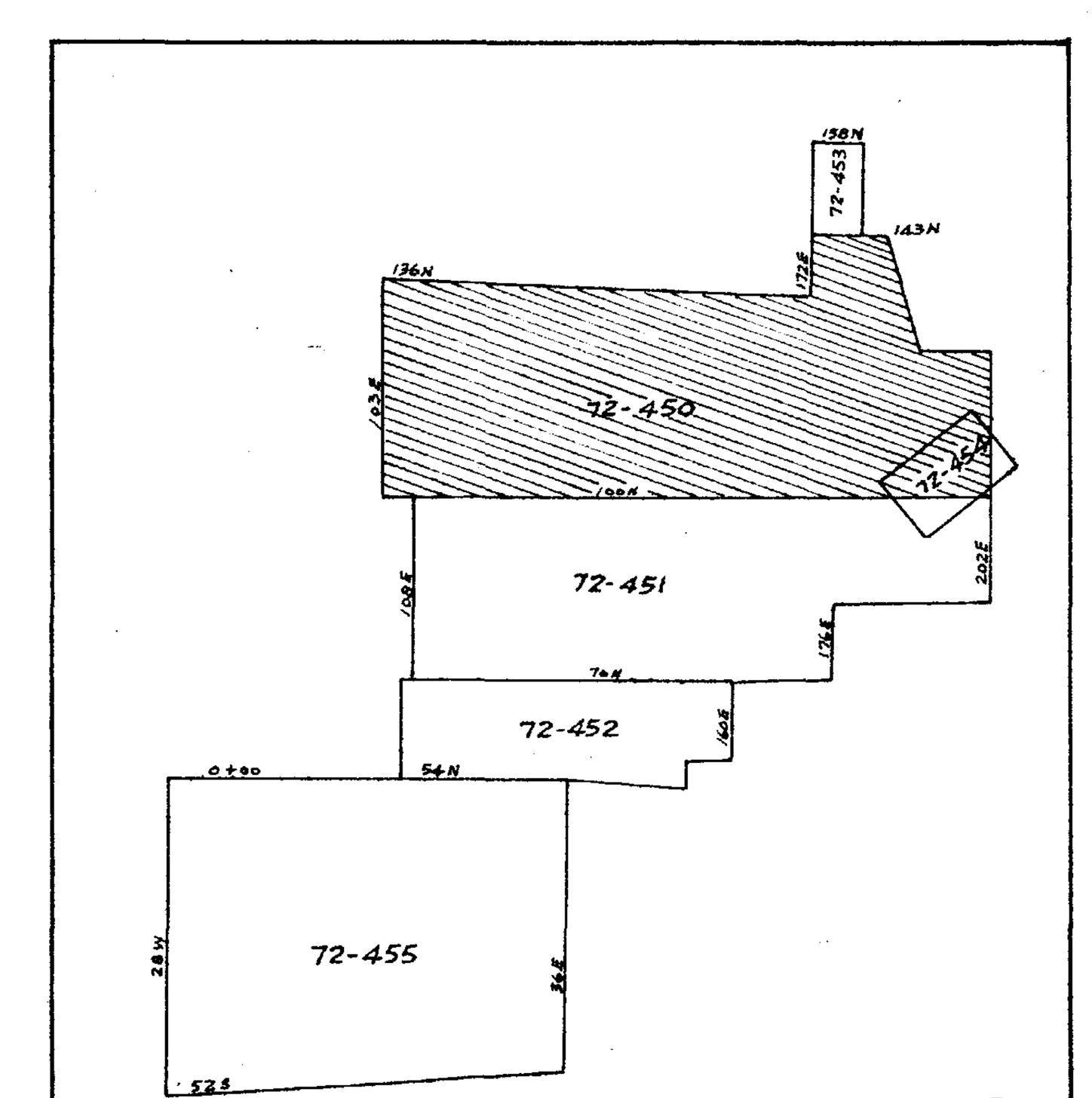
A152E	103E	120N	100N
B202E	152E	120N	100N
C152E	103E	100N	80N
D202E	152E	100N	80N
E188E	152E	105N	2012N
F152E	202E	105N	2012N
H188E	176E	125N	115N

CONDUCTOR

STRONG

WEAK

INDEFINITE



52G/14SW-0023 #3

TURAM SURVEY
BY
GEOSEARCH CONSULTANTS LTD.
FOR
SCURRY-RAINBOW
OIL LIMITED

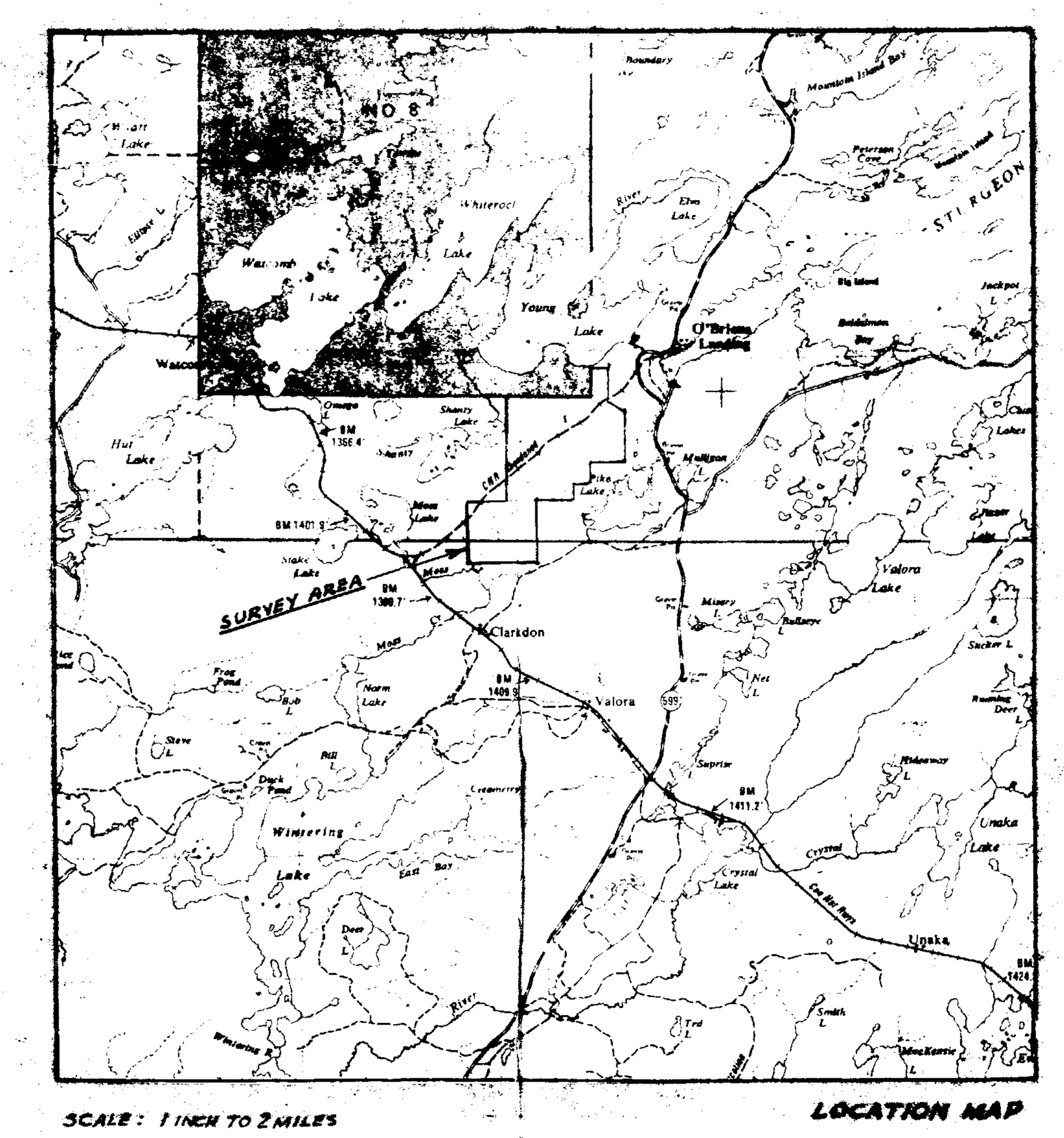
NORTH GRID, BLOCKS C-D
BRIARCOURT OPTION
STURGEON LAKE, ONTARIO

FOR LOCATION MAP - SEE MAP 72-451
FOR CLAIM MAP - SEE MAP 72-452

JULY, 1972

SCALE: 1 INCH TO 200 FT.

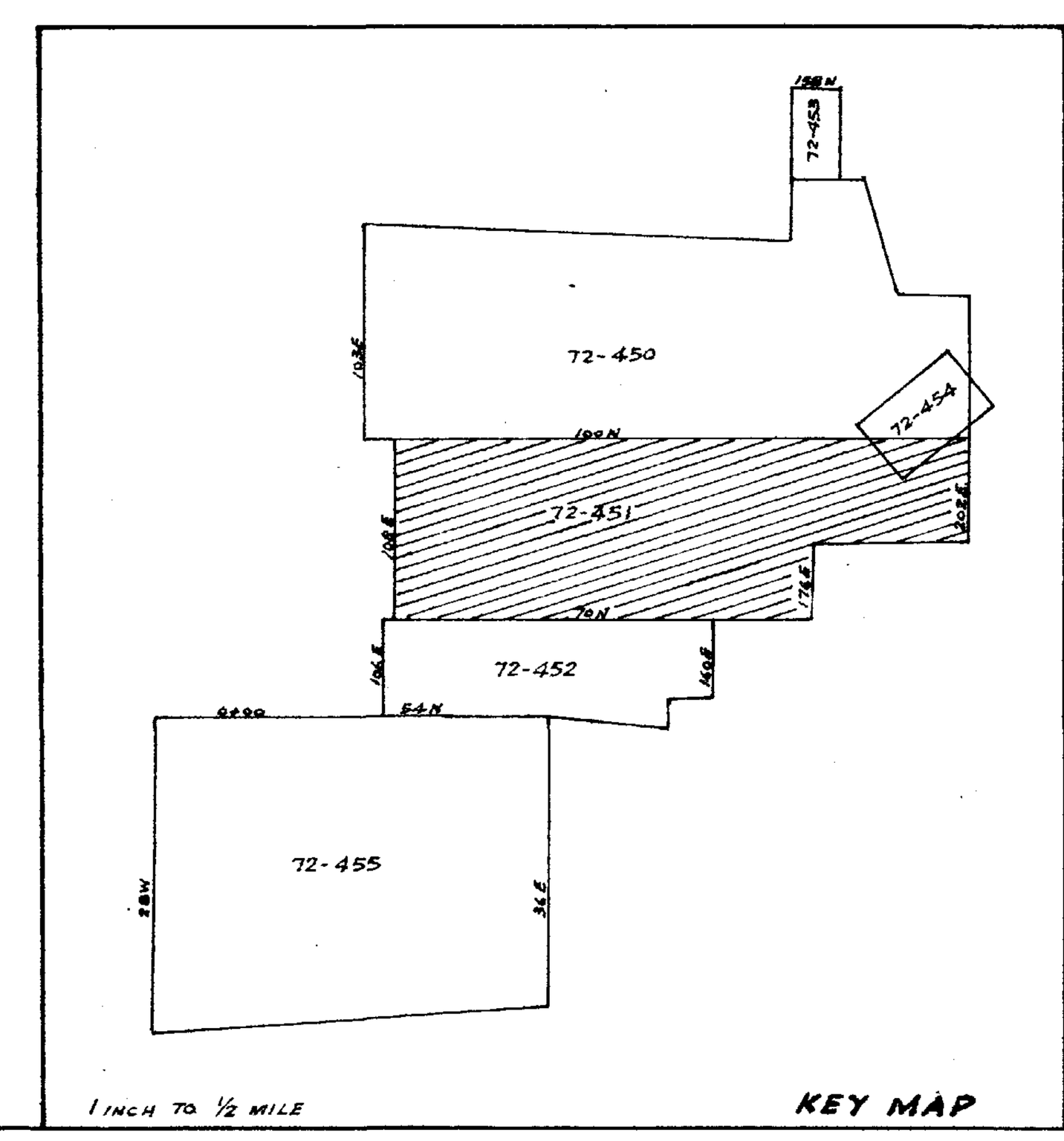
72-450



SCALE: 1 INCH TO 2 MILES

LOCATION MAP

FOR CLAIM MAP - SEE MAP 72-452



1 INCH TO ½ MILE

KEY MAP

LEGEND

- RATIO. 660 C.P.S.
- PHASE. 660 C.P.S.
- RATIO. 220 C.P.S.
- PHASE. 220 C.P.S.

VERTICAL SCALE

RATIO 1.10 — PHASE +5°

1.00 — 0°

RATIO 0.90 — PHASE -5°

OR

RATIO 1.10 — PHASE +5°

1.00 — 0°

RATIO 0.90 — PHASE -5°

LOOPS

E108E	152E	105N	120N
F152E	202E	105N	120N
G108E	140E	85N	105N
H140E	176E	85N	105N
I132E	148E	90N	100N

CONDUCTOR

STRONG

↓

WEAK

INDEFINITE

ONT. DEPT. OF MINES
RECEIVED
DEC 11 1972
Resident Geologist, Kenora, Ont.

52G/14SW-0023 #4

TURAM SURVEY

BY

GEOSEARCH CONSULTANTS LTD.

FOR

SCURRY-RAINBOW

OIL LIMITED

NORTH GRID, BLOCKS G-H

BRIARCOURT OPTION

STURGEON LAKE, ONTARIO

JULY, 1972

SCALE: 1 INCH TO 200 FT.

75-451

230

JOINS MAP 72-451

JOINS MAP 72-455

45982 45983 221020 221019 46105

248411 45984 46103 46104 47102

LINE 106E LINE 110E LINE 114E LINE 118E LINE 122E LINE 126E LINE 130E LINE 134E LINE 138E LINE 140E LINE 144E LINE 148E LINE 156E LINE 160E

60 N 70 N SOURCE

72-450 72-451 72-452 72-453 72-455

46100 46101 46102 X7360 46366 46365 47108
45970 46099 46110 46111 47103 47104 47107
45971 46098 46109 46108 46107 47101 47105
45972 46097 221017 221018 46106 47100 47106
45982 45983 221020 221019 46105 47099
248411 45984 46103 46104 46102
218942 218941 218940 218939 218938
218937 218936 218935 218934 218933
218932 218931 218930 218929 218928
218927 218926 218925 218924 218923
221022 221021

SCALE : 1 INCH TO ½ MILE

CLAIM MAP

158N 163N 136N 72-450 72-454 72-451 78N 72-452 72-455 28W 52S

1 INCH TO ½ MILE

KEY MAP

FOR LOCATION MAP – SEE MAP 72-451

LEGEND

RATIO. 660 C.P.S.
PHASE. 660 C.P.S.
RATIO. 220 C.P.S.
PHASE. 220 C.P.S.

VERTICAL SCALE

RATIO 1.10 — PHASE +5°
1.00 — 0°
RATIO 0.90 — PHASE -5°

OR

PHASE +5° | 0° | PHASE -5°
RATIO 1.10 | 1.00 | RATIO 0.90

LOOPS

J106E 134E 72N 87N
K134E 160E 72N 87N

CONDUCTOR

STRONG
WEAK
INDEFINITE

52G/14SW-0023 #5

ONT. DEPT. OF MINES
RECEIVED
DEC 11 1972
Resident Geologist, Kenora, Ont.

TURAM SURVEY
BY
GEOSEARCH CONSULTANTS LTD.
FOR
SCURRY-RAINBOW OIL LIMITED
SOUTH GRID, BLOCKS G-H
BRIARCOURT OPTION
STURGEON LAKE, ONTARIO

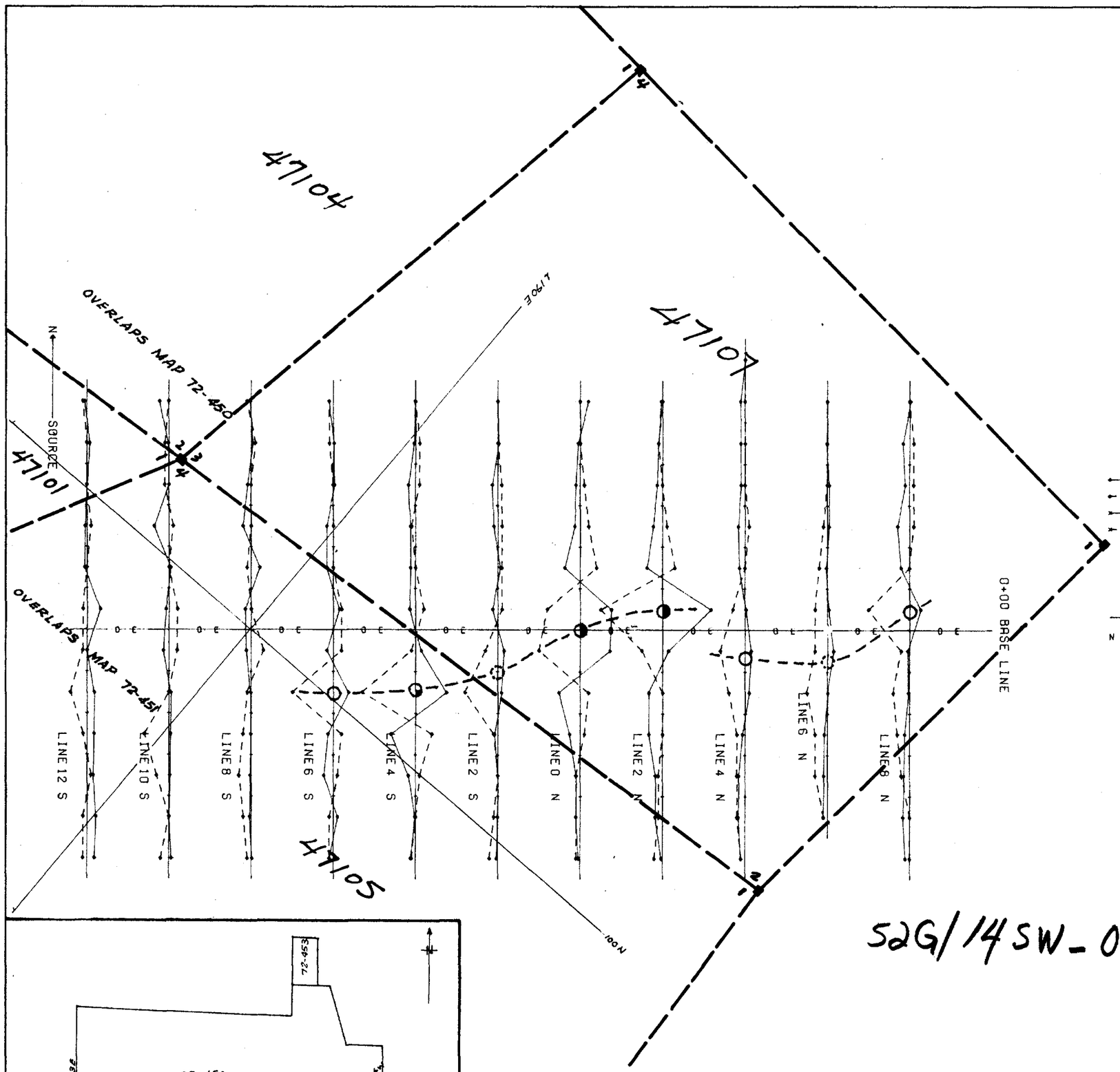
JULY, 1972

SCALE: 1 INCH TO 200 FT.

72-452

52G14SW9163 52G14SW0023 PRESS LAKE

240



LEGEND

- RATIO. 660 C.P.S.
- PHASE. 660 C.P.S.
- RATIO. 220 C.P.S.
- PHASE. 220 C.P.S.

VERTICAL SCALE

RATIO 1.10 — PHASE +5°

1.00 — 0°

RATIO 0.90 — PHASE -5°

OR

RATIO 0.90 — PHASE -5° | 1.00 — 0° | RATIO 1.10 — PHASE +5°

LOOPS

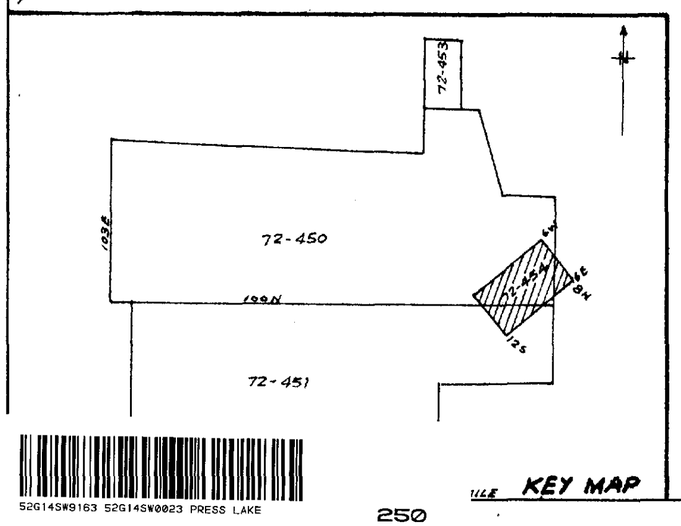
N 12S 8N 10W 25W

CONDUCTOR

STRONG

WEAK

INDEFINITE



TITLE KEY MAP

FOR LOCATION MAP - SEE MAP 72-451
FOR CLAIM MAP - SEE MAP 72-452

52G/14SW-0023 #6

TURAM SURVEY

BY

GEOSEARCH CONSULTANTS LTD.

FOR

SCURRY RAINBOW OIL LIMITED

DETAIL GRID, BLOCKS D-H
BRIARCOURT OPTION
STURGEON LAKE, ONTARIO

JULY, 1972

SCALE: 1 INCH TO 200 FT.

72-454

JOINS MAP 72-452
0+00 BASE LINE
LINE 28 W
LINE 24 W
LINE 20 W
LINE 16 W
LINE 12 W
LINE 8 W
LINE 4 W
LINE 0 E
LINE 4 E
LINE 8 E
LINE 12 E
LINE 16 E
LINE 20 E
LINE 24 E
LINE 28 E
LINE 32 E
LINE 36 E
SOURCE
218942
218941
218940
218939
218938
218937
218936
218935
218934
218933
218932
218931
218930
218929
218928
218927
218926
218925
218924
218923
POND
ROAD
TIE LINE
CREEK
KEY MAP
72-450
72-451
72-452
72-455
1 INCH TO 1/2 MILE
LEGEND
RATIO, 660 C.P.S.
PHASE, 660 C.P.S.
RATIO, 220 C.P.S.
PHASE, 220 C.P.S.
VERTICAL SCALE
RATIO 1.10
1.00
RATIO 0.90
PHASE +5°
0°
PHASE -5°
OR
LOOPS
O 28W 4E 0N 20N
P 4E 37E 0N 20N
Q 28W 4E 20S 0N
R 4E 36E 20S 0N
S 28W 4E 40S 20S
T 4E 36E 40S 20S
U 36E 4E 20S 40S
V 4E 28W 20S 40S
CONDUCTOR
STRONG
WEAK
INDEFINITE
ONT. DEPT. OF MINES
DEC 11 1972
Resident Geologist, Kenora, Ont.
52G/14 SW-0023 #7
TURAM SURVEY
BY
GEOSEARCH CONSULTANTS LTD.
FOR
SCURRY-RAINBOW
OIL LIMITED
WEST GRID, BLOCKS G-L
BRIARCOURT OPTION
STURGEON LAKE, ONTARIO
FOR LOCATION MAP - SEE MAP 72-451
FOR CLAIM MAP - SEE MAP 72-452
JULY, 1972
SCALE: 1 INCH TO 200 FT.
72-455
260