FIN RESOURCES INC.

BANCROFT AREA URANIUM PROSPECT

ONTARIO

NOVEMBER 18, 1976

HARPER CONSULTING SERVICES INC.

FIN RESOURCES INC.

BANCROFT AREA URANIUM PROSPECT

ONTARIO

INTRODUCTION

Early in 1976 Fin Resources Inc. acquired for staking costs plus a continuing interest, a 7 claim uranium prospect located in the Bancroft area of Ontario.

This report summarizes the geological and geophysical work done on these claims and makes recommendations for their further exploration.

This report is based on the following sources of information.

1. A Report on Radioactive Mineral Occurrences in the Bancroft Area by J. Satterly, Ontario Ministry of Natural Resources, 1957.
2. A drill log by D. C. McKechnie, P.Eng., obtained from the Assessment Work Library, Ontario Ministry of Natural Resources.
3. I have made a personal examination of the known radioactive granite pegmatite dikes on this property and I mapped part of the claim group in the Fall of 1976.

.../2

PROPERTY, LOCATION, ACCESS & FACILITIES

The property consists of 7 mining claims numbered EO 463655 to EO 463661 inclusive, located on the common boundary of Monmouth, Glamorgan, and Anstruther Townships, Eastern Ontario Mining Division, Ontario.

Access is via backwoods roads from the village of Gooderham, on Highway 503. The unimproved bush tracks require a four-wheel drive vehicle in summer but are readily useable by skidoos in winter. There are no facilities of import on the property except the picket line grid system.

HISTORY

Near the end of the 1955 uranium boom the claims were part of a group owned by Scaddore Gold Mines Ltd. The assessment records of the Ontario Ministry of Natural Resources indicate that a 520 foot drill hole was sunk on the property and that it intersected 7 granite pegmatite dikes, varying from 3 feet to 34 feet in core length and that one of these was slightly radioactive. Extensive searching by the writer and E. M. Hall failed to locate this drill hole or the required access tractor road leading to the hole. Furthermore, according to the assessment records, the hole was drilled with the dip of the formations

.../3

and therefore is not of much exploration value. Finally, none of the Scaddore 1955 claim posts could be found anywhere on the property. It is the considered opinion of E. M. Hall and the writer that the drill hole reported in the assessment records was not drilled in the location stated. No evidence of diamond drilling or trenching was found on the claim group.

GENERAL GEOLOGY

The general geology of the area has not been mapped in detail. The best available is Map 1957B by J. S. Satterly. This map shows an infolded sequence of limestone, paragneiss, gabbro, syenite, and mepheline rocks squeezed between the Cheddar granite, the Anstruther granite gneiss and the Glamorgan granite gneiss. The formations strike northeasterly and dip southeasterly between 30 and 70 degrees.

EXPLORATION AND DEVELOPMENT

The claim group was explored by line cutting at 400 foot intervals followed by geological, radiometric and magnetic surveys. The field work was done by line cutters Claude Castonguay and Leon Gagnon of Kirkland Lake, E. M. Hall, geophysical operator

.../4

of Toronto, while most of the mapping and geology was done by the writer.

GEOLOGICAL SURVEY

TABLE OF FORMATIONS

Recent	-	sand, gravel, glacial till.
Precambrian	-	granite pegmatite dikes.
	-	granite gneiss.
	INTRUSIVE CONTACT	
Grenville Series	-	paragneisses.

The claim group is covered with a relatively light mantle of sandy, well drained soil that supports a good growth of maple and birch. Much of the low ground has been dammed by beavers and there are many ponds. Outcrops are small and sparse with the granitic rocks having the largest and best exposures.

The paragneisses are typical of the region and vary from relatively massive, coarsely crystalline horneblendite, to soft chloritic phases to mixtures of felspar and horneblende having a typical diorite appearance.

The granite gneisses are quite irregular and variable with some sections showing a lit-par-lit structure.

.../5

The granite pegmatites are coarse grained rocks of the same type that carry significant amounts of uranium on the Madawaska and Powerex properties. However, the intense brick red alteration that is typical of granite pegmatites rich in uranium is not present in these dikes. Instead, the red alteration is weak, not a flesh colour, but certainly not an intense brick red.

The granite pegmatites appear to be conformable with the enclosing paragneisses and therefore are probably sill-like bodies rather than dikes. The pegmatites occur as a swarm rather than as one body. They occur over a horizontal width up to 200 feet and over a known length of up to 2400 feet. The largest dike swarm passes off the property to the northeast and disappears under a heavier overburden to the southwest.

A number of strong strike linears are apparent on the air photographs and some of these show up on the ground as deep narrow valleys. These may be the surface expression of fault zones, or beds of lime rich paragneiss that have weathered out.

In the southwest part of the property lies the surface expression of what may be a normal cross fault. This structure is also apparent from the magnetic survey results.

MAGNETIC SURVEY

The magnetic survey was a total field survey with readings every 50 feet along the picket lines. On the whole, the results have not greatly aided in the evaluation of the property, but a

.../6

few generalities can be discerned.

The general area of the largest granite pegmatite dike swarm is one of relatively low magnetism.

The southeast area of the property shows considerably higher magnetism. The rocks here are paragneisses, and probably carrying slightly more magnetite than the normal paragneisses.

The suspected northwest trending cross fault is supported by inconclusive magnetic evidence. The magnetic trends appear to be slightly offset along the cross fault, but this may be due to overburden conditions.

RADIOMETRIC SURVEY

The Radiometric Survey was done at hip level on a broad band radiometric scan. Areas of obviously interesting material were tested at ground level with the spectrometer bands in order to distinguish emanations due to uranium and thorium.

Three areas of above normal radioactivity were located. The first area is in the north central section of the property and intermittent radioactivity with locally strong sections was detected over a strike length of 1800 feet and a maximum horizontal width of 400 feet. This area coincides with the largest of the known granite pegmatite dike swarms. For the most part, the radioactivity was detected on scattered outcrops and through light overburden. To the southwest the overburden becomes deeper and more continuous and the radioactivity is lost. However, along

.../7

strike an additional 3000 feet, one measurement of strong radioactivity was detected through overburden. A small pegmatite outcrop was observed nearby but this pegmatite was not particularly radioactive.

A granite pegmatite dike is poorly and intermittently exposed for a length of over 400 feet at the south edge of the beaver pond and claim EO 463657. The hanging wall of the dike is paragneiss. The dike itself is poorly exposed for widths of 2 to 3 feet, then it abruptly falls off into low ground and there are no further exposures. The width of the dike is unknown - one suspects that it is much wider than the measureable 2 to 3 feet. A grab sample returned 1.40 lbs. U_3O_8 and 3.40 lbs. ThO_2 per ton.

A spectrometer was used to check uranium to thorium ratios. Spectrometer readings where the grab sample was taken indicated a ratio of 1 uranium to 2 thorium, which approximates the assay results. However, spectrometer readings on the main dike form indicate a uranium to thorium ratio of about one to one.

CONCLUSIONS AND RECOMMENDATIONS

1. The results of the drill hole put down by Scaddore Gold Mines Ltd. in 1955 should be discounted. Neither the drill site nor its access road can be located and if the hole was drilled as indicated then it was drilled

.../8

with the dip. None of the Scaddore claim posts were found.

2. The magnetic survey has been of little exploration value.

3. The scintillometer survey located two areas of granite pegmatite dikes. The dikes are of the type which contain significant amounts of uranium at the Madawaska mine and other properties in the area. Where exposed, the dikes carry insufficient uranium to make ore except in local patches. However, it would be consistent with the geological pattern of the general area if the uranium content of the dikes improved significantly along strike.

4. The geological mapping shows narrow valleys of low and swampy ground paralleling the zones of granite pegmatite dikes. These areas may also contain granite pegmatite dikes associated with faults (a common geological relationship in the area) and can only be explored by cross-sectional drilling.

5. Cross-sectional diamond drilling in areas of poor granite pegmatite exposure is recommended. The drilling should accomplish two things. First, it should search the low drift covered valleys adjacent to the known granite pegmatites for additional dikes and second, it should cut

.../9

the known granite pegmatites so that they can be sampled continuously and thus fully evaluated. VLF surveying in advance of drilling might assist materially in locating drill holes to maximum advantage.

This report is respectfully submitted.

H. G. Harper.

HARPER CONSULTING SERVICES INC.
H. G. Harper, P.Eng.
President.

Willowdale, Ontario
November 18, 1976.

Ontario

Ministry of Nat

GEOPHYSICAL – GEOLO(
TECHNICAL DA'

900

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(s) Geological, Magnetic, Radiometric
Township or Area Monmouth, Glamorgan, Anstruther
Claim Holder(s) Fin Resources Inc. (T730)
1014 - 111 Richmond St W. Toronto M5H 2G4
Survey Company Harper Consulting Services Inc.
Author of Report W. G. Harper, P.Eng.
Address of Author 314 Hendon Ave. Willowdale
Covering Dates of Survey Sept 10 – Nov 18/76
(linecutting to office)
Total Miles of Line Cut 8 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	40
–Radiometric	20
–Other	
Geological	20 hw
Geochemical	

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

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

DATE: Nov 18/76 SIGNATURE: W. G. Harper
Author of Report or Agent

L. D.

Res. Geol. _____ Qualifications 63.1058

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically Mag & Radiometric

(prefix)	(number)
EO	463655 ✓
EO	463656 ✓
EO	463657 1/3
EO	463658 ✓
EO	463659 ✓
EO	463660 ✓
EO	463661 1/3

If space insufficient, attach list

TOTAL CLAIMS 7

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS – If more than one survey, specify data for each type of survey

Number of Stations 600 Number of Readings 600

Station interval 50 feet Line spacing 400 feet

Profile scale n/a.

Contour interval Variable

MAGNETIC

Instrument Geonics Proton Magnetometer Model G816

Accuracy – Scale constant ± 1 gamma

Diurnal correction method base & control stations along baseline

Base Station check-in interval (hours) ½ to 1 hour checks

Base Station location and value Baseline line 0+00 -57742 gammas

ELECTROMAGNETIC

Instrument

Coil configuration

Coil separation

Accuracy

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

Frequency
(specify V.L.F. station)

Parameters measured

GRAVITY

Instrument

Scale constant

Corrections made

Base station value and location

Elevation accuracy

INDUCED POLARIZATION
RESISTIVITY

Instrument

Method ☐ Time Domain ☐ Frequency Domain

Parameters – On time Frequency

– Off time Range

– Delay time

– Integration time

Power

Electrode array

Electrode spacing

Type of electrode

SELF POTENTIAL

Instrument _____ Range _____

Survey Method _____

_____

Corrections made _____

_____

RADIOMETRIC

Instrument McPhar T.V. 5 Scintillometer

Values measured In areas of high radioactivity - T2 (1.6 mev) & T3 (2.5 mev) above ground level

Energy windows (levels) 0.2 mev - Total scan

Height of instrument hip level Background Count 800 cps.

Size of detector 1 3/4" x 2" sodium iodide crystal

Overburden Variable from 0 to several tens of feet

(type, depth – include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey _____

Instrument _____

Accuracy _____

Parameters measured _____

_____

Additional information (for understanding results) _____

_____

_____

AIRBORNE SURVEYS

Type of survey(s) _____

Instrument(s) _____

(specify for each type of survey)

Accuracy _____

(specify for each type of survey)

Aircraft used _____

Sensor altitude _____

Navigation and flight path recovery method _____

_____

Aircraft altitude _____ Line Spacing _____

Miles flown over total area _____ Over claims only _____

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken _____

_____

_____

Total Number of Samples _____

Type of Sample _____
(Nature of Material)

Average Sample Weight _____

Method of Collection _____

_____

Soil Horizon Sampled _____

Horizon Development _____

Sample Depth _____

Terrain _____

_____

Drainage Development _____

Estimated Range of Overburden Thickness _____

_____

_____

SAMPLE PREPARATION
(Includes drying, screening, crushing, ashing)

Mesh size of fraction used for analysis _____

_____

_____

_____

General _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

ANALYTICAL METHODS

Values expressed in: per cent ☐
p. p. m. ☐
p. p. b. ☐

Cu, Pb, Zn, Ni, Co, Ag, Mo, As,-(circle)

Others _____

Field Analysis (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Field Laboratory Analysis

No. (_____ tests)

Extraction Method _____

Analytical Method _____

Reagents Used _____

Commercial Laboratory (_____ tests)

Name of Laboratory _____

Extraction Method _____

Analytical Method _____

Reagents Used _____

General _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Dudley Twp. M.84

Glamorgan Twp. M.95

Cardiff Twp. M.69

Anstruther Twp. M.45

THE TOWNSHIP OF 2.2267

MONMOUTH

COUNTY OF HALIBURTON

EASTERN ONTARIO MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

LEGEND

PATENTED LAND	(P)
CROWN LAND SALE	C.S.
LEASES	(L)
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KINGS HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	

NOTES

This Map Is Not To Be Used —FOR SURVEY PURPOSES—

400' Surface rights reservation along the shores of all lakes and rivers.

Original shoreline shown thus:

F.R.I. shoreline shown thus:

Patents Map shoreline shown thus:

For status of summer resort locations shown thus

Please contact Ministry of Natural Resources.

DATE OF ISSUE
DEC - 9 1976
SURVEYS AND MAPPING BRANCH

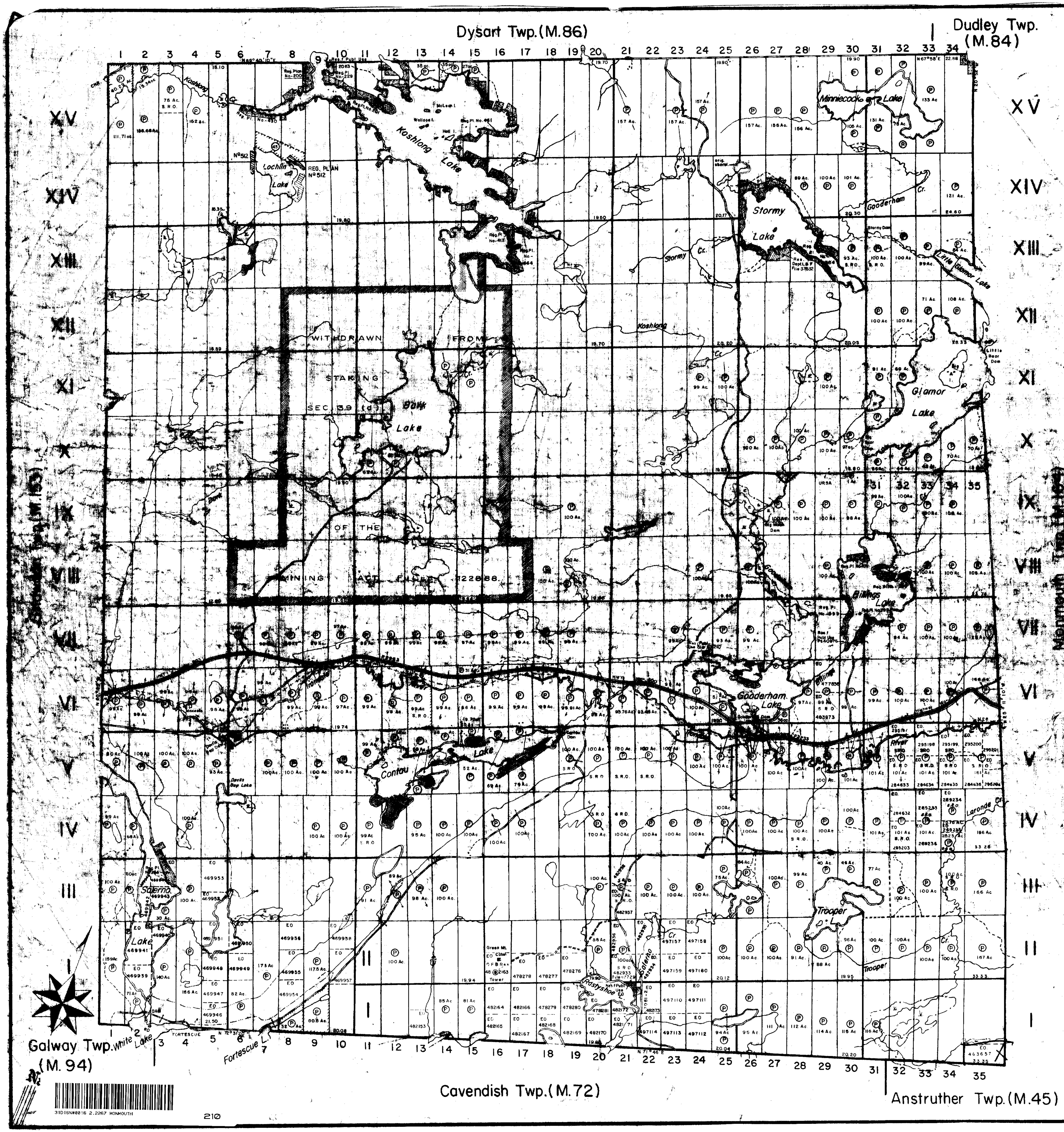
PLAN NO.-M.164

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

31D16NW0016 2.2267 MONMOUTH

200

J.P. von K.



THE TOWNSHIP OF 2.2267

GLAMORGAN

COUNTY OF HALIBURTON

EASTERN ONTARIO MINING DIVISION

SCALE: 1-INCH=40 CHAINS

LEGEND

PATENTED LAND
CROWN LAND SALE
LEASES
LOCATED LAND
LICENSE OF OCCUPATION
MINING RIGHTS ONLY
SURFACE RIGHTS ONLY
ROADS
IMPROVED ROADS
KINGS HIGHWAYS
RAILWAYS
POWER LINES
MARSH OR MUSKEG
MINES
CANCELLED
TRAILS

NOTES

This Map is Not To Be Used FOR SURVEY PURPOSES

Please Contact Dept. Of Lands & Forests

Areas withdrawn from staking under Section 43 of the Mining Act.

File Date Disposition

DATE OF ISSUE
DEC-9 1976
SURVEYS AND MAPPING BRANCH

PLAN NO.-M.95

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

Glamorgan Twp.M.95

Monmouth Twp. M.164

Cardiff Twp.M.69

Cavendish Twp. M.72

Chandos Twp. M.73

Burleigh Twp. M.62

Chandos Twp. M.73

THE TOWNSHIP
OF 2.2267

ANSTRUTHER

COUNTY OF
PETERBOROUGH

EASTERN ONTARIO
MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

LEGEND

PATENTED LAND	(P)
CROWN LAND SALE	C.S.
LEASES	(L)
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KINGS HIGHWAYS	28
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	

NOTES

This Map Is Not To Be Used
—FOR SURVEY PURPOSES—

400' Surface Rights Reservation along the shores all lakes & rivers.

For status of summer resort locations shown thus:

Please contact Dept. of Lands & Forests.

Original shoreline shown thus:

F.R.I shoreline shown thus:

MINING CLAIMS ACCEPTED - SUBJECT TO Sec.118 OF THE MINING ACT. (R.S.O.70)

AREA SHOWN THUS //////// RESERVED FOR PROPOSED PROVINCIAL PARK - WITHDRAWN FROM STAKING SECT. 34(d) OF THE MINING ACT (R.S.O.1960) File: 160780

AREA SHOWN THUS SURFACE RIGHTS ONLY RESERVED FOR PUBLIC USE File: 160708

AREA SHOWN THUS IS RETRACEMENT OF PART OF TOWNS..P LOTS 26-39, CON XV-XVIII

DATE OF ISSUE
DEC - 9 1976
SURVEYS AND MAPPING BRANCH

PLAN NO.- M. 45

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

31D16NW0016 2.2267 MONMOUTH

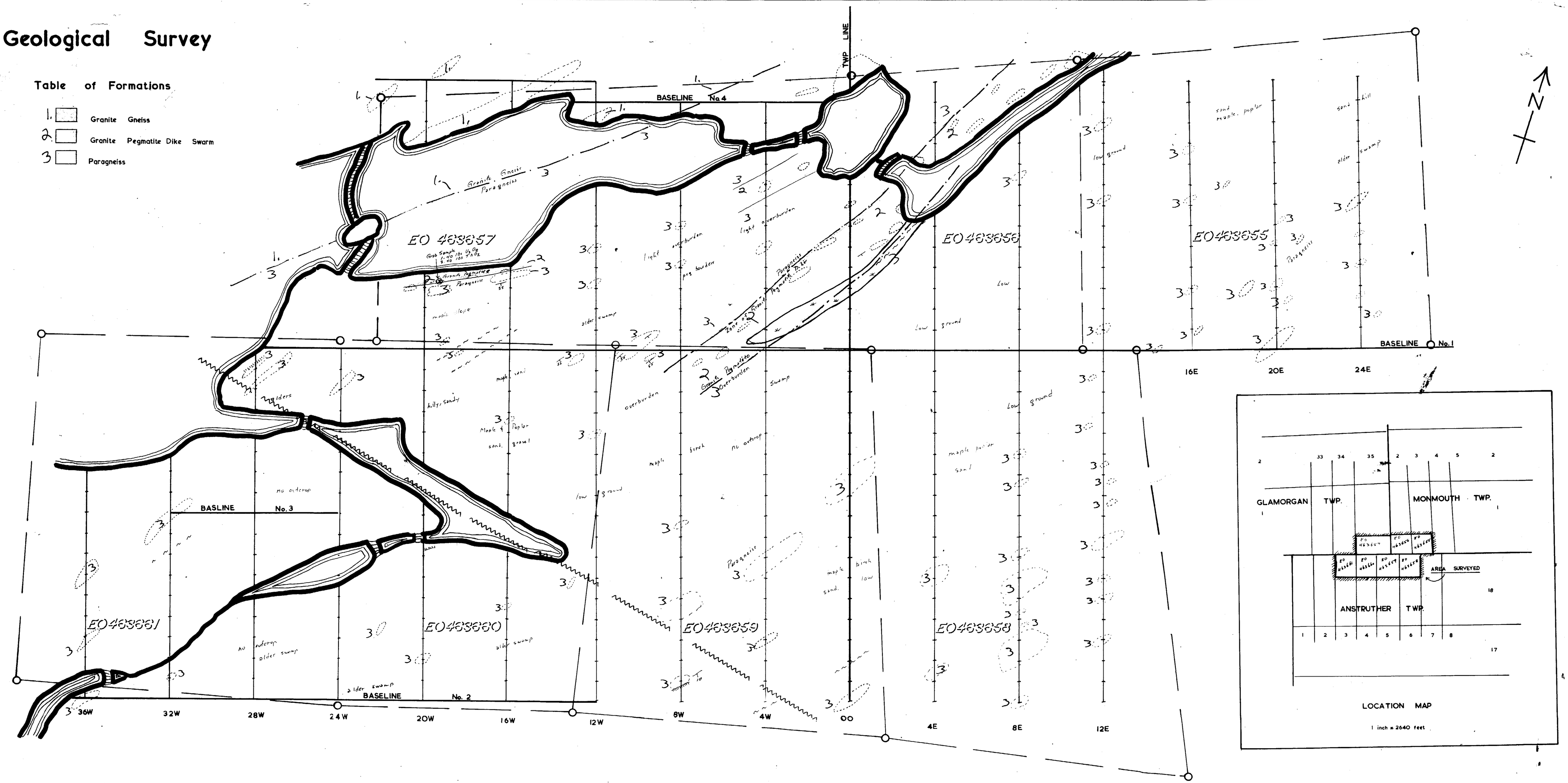
220

J.P. von K.

Geological Survey

Table of Formations

1. Granite Gneiss
2. Granite Pegmatite Dike Swarm
3. Paragneiss



FIN RESOURCES INC.

BANCROFT AREA PROPERTY

0 200 400 600 800 FEET

NOV 5 '76

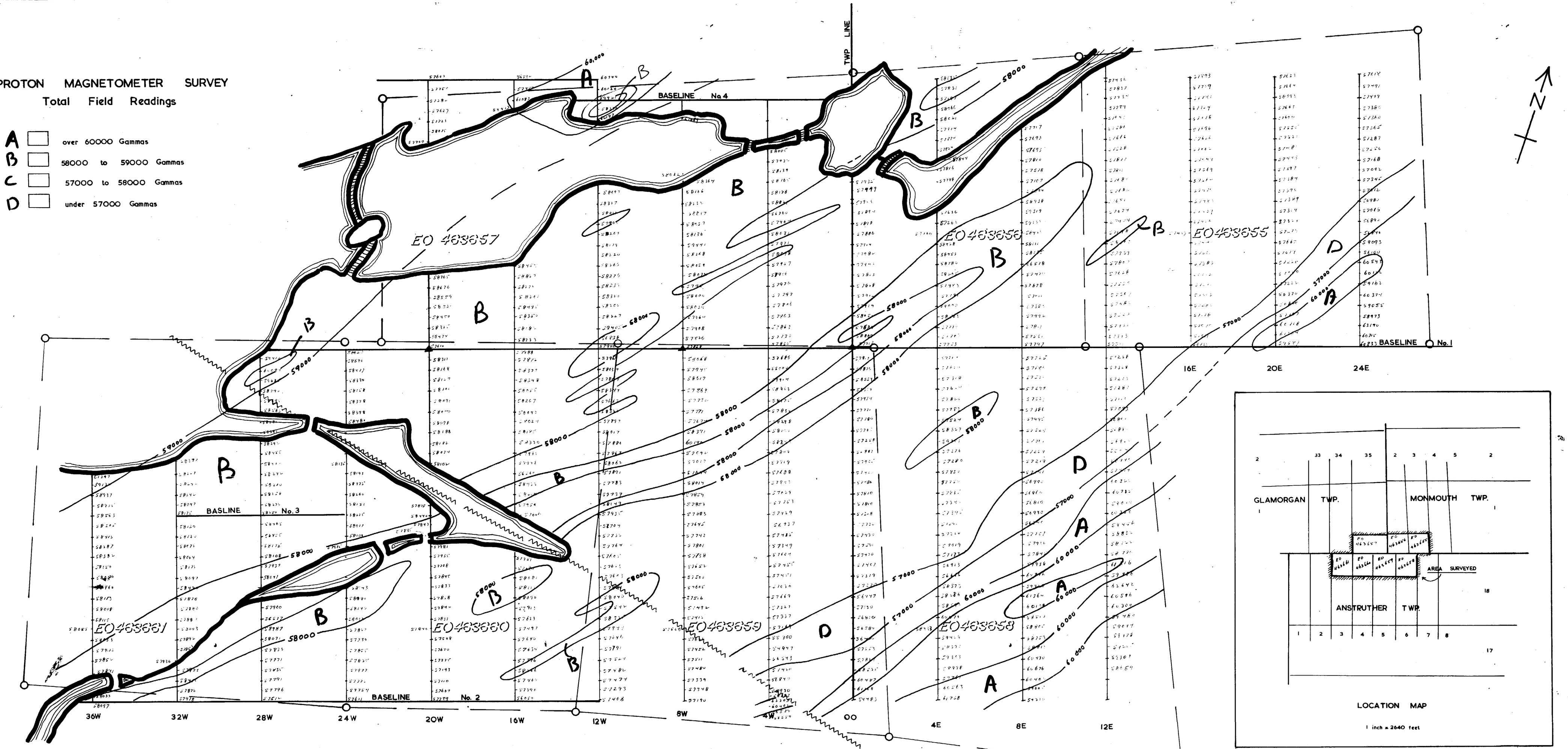
H.G. Harper

230

PROTON MAGNETOMETER SURVEY

Total Field Readings

A		over 60000 Gammas
B		58000 to 59000 Gammas
C		57000 to 58000 Gammas
D		under 57000 Gammas



FIN RESOURCES INC.

BANCROFT AREA PROPERTY

NOV 5 '78

H. G. HARPER

0 200 400 600 800 FEET

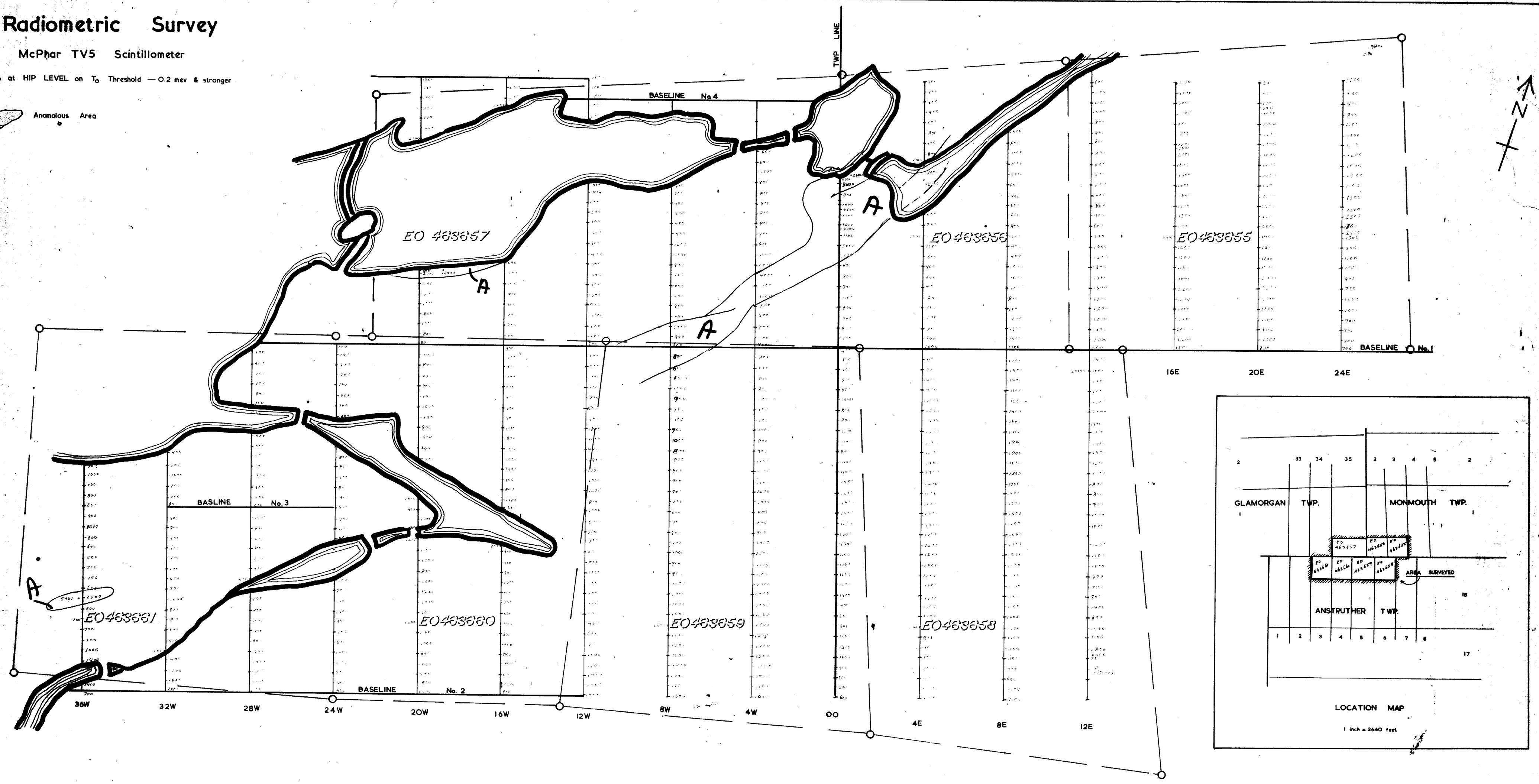
240

Radiometric Survey

McPhar TV5 Scintillometer

All Readings at HIP LEVEL on T_0 Threshold — 0.2 mev & stronger

A Anomalous Area



FIN RESOURCES INC.

BANCROFT AREA PROPERTY

0 200 400 600 800
FEET

250

H. C. HARPER
MINING
REGISTERED PROFESSIONAL ENGINEER
ONTARIO
NOV 5 '76

H.C. Harper