Kian A. Jensen
Exploration and Consulting Service

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MAGNETIC and VLF-EM SURVEYS

for

UNITED KINGDOM ENERGY INCORPORATED

on the

TRIPLE LAKE CLAIM GROUP

in

McARTHUR TOWNSHIPS

PORCUPINE MINING DIVISION

DISTRICT OF TIMISKAMING

ONTARIO

by

Kian A. Jensen
Consulting Geologist/Geophysicist

September, 1986

Qual 2.3969

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INTRODUCTION

During, June and July, 1986, linecutting, a total field magnetic survey and a VLF-EM Survey were conducted on the 27 contiguous unpatented mining claims known as the Triple Lake Claim Group.

The project area is located approximately 19 miles south of Timmins, Ontario. The claims cover the central portion of Triple Lakes and the surrounding land located in the southwest quadrant of McArthur Township, Porcupine Mining Division, District of Timiskaming, Ontario.

The purpose of the geophysical survey were to identify the lithological units, location of the major structural features, and to identify favourable gold bearing mineralization. In this area, gold is associated with quartz-carbonate veins and sulphide mineralization associated with the feldspar porphyry dikes occupying fractures or shear zones.

LOCATION and ACCESS

The Triple Lake Claim Group is located approximately 19 miles south of Timmins, Ontario, covering 27 contiguous unpatented mining claims in the southwest quadrant of McArthur Township, Porcupine Mining Division, District of Timiskaming, Ontario (Figure 1).

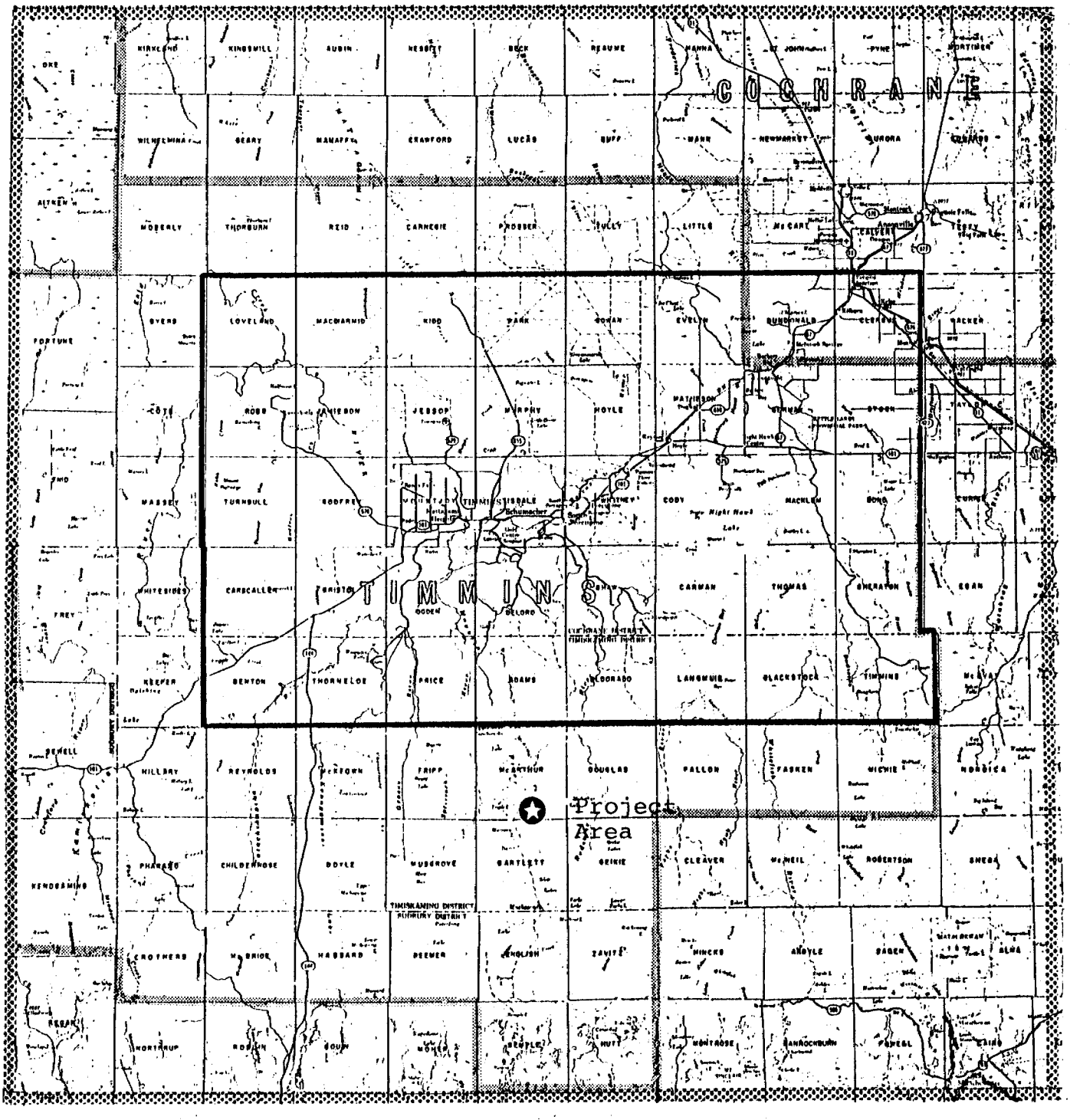


Figure 1: Location Map of the Triple Lakes Claim Group, McArthur Township, Porcupine Mining Division, District of Timiskaming, Ontario.

Access to the claim group is via Highway 101 to Pine Street in Timmins, then southwards on a gravel, all weather forestry access road. A primary road crosses the southwestern portion of the claim group and a secondary road crosses the east central portion of the claim group.

PROPERTY

The Triple Lakes Claim Group consists of 27 contiguous unpatented mining claims in McArthur Township, Porcupine Mining Division, District of Timiskaming, Ontario. The recording dates and claim numbers for the group are as follows:

P-832340 to P-832342 incl.	October 30, 1985
P-833271 to P-833273 incl.	October 12, 1984
P-849080 to P-849086 incl.	August 12, 1985
P-866602 to P-866604 incl.	July 19, 1985
P-867012 to P-867015 incl.	August 16, 1985
P-867257 to P-867262 incl.	August 12, 1985

The claim group is held 100% by United Kingdom Energy Incorporated. Figure 2 illustrates the location and shape of the claim group.

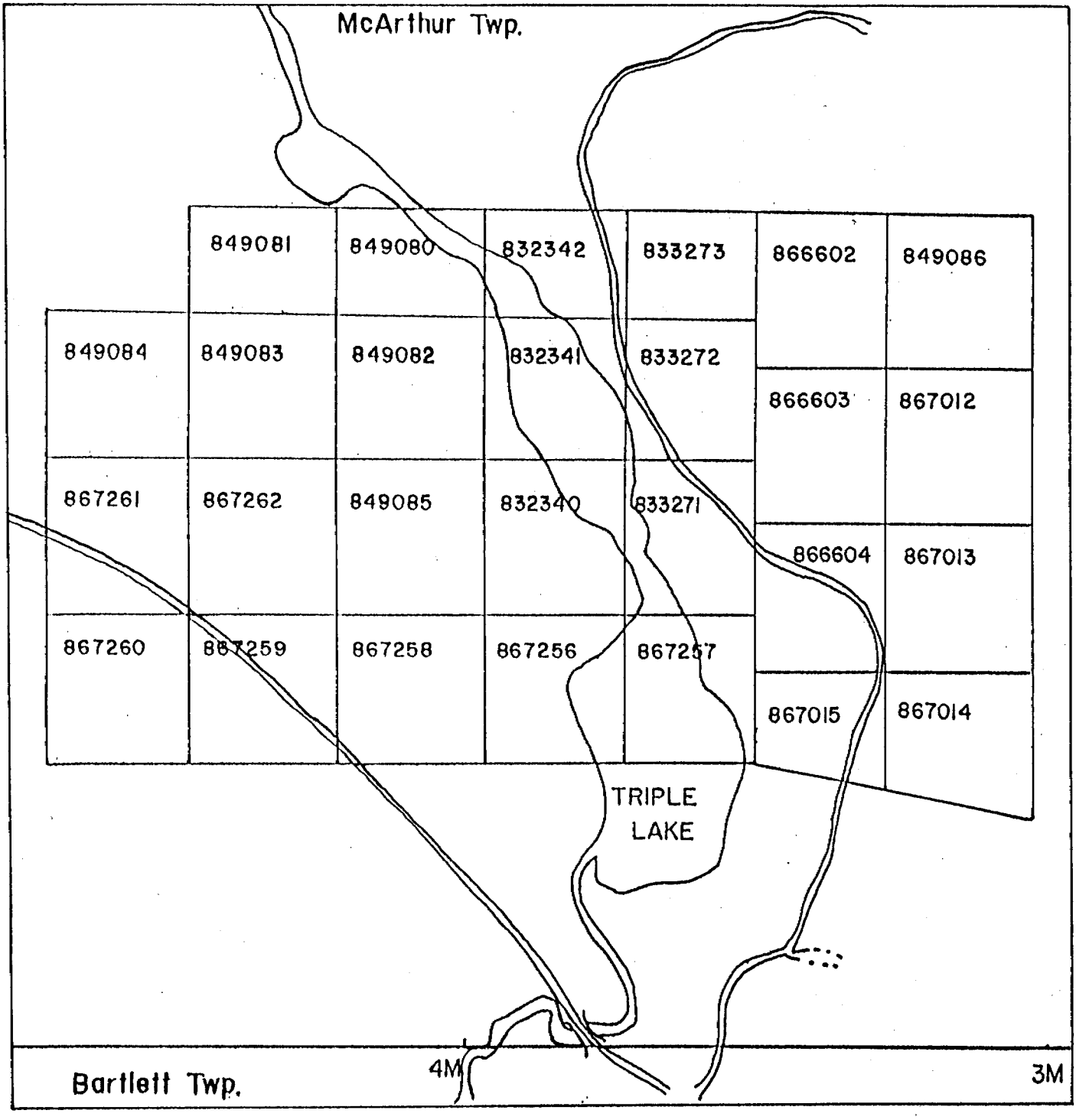


Figure 2: Claim Map of the Triple Lake Claim Group, McArthur Township, Porcupine Mining Division, Ontario. Scale: 1 inch to ¼ mile.

GENERAL GEOLOGY

The majority of the underlying rock units are Archean metavolcanics. The metavolcanics consist of pillow units (oldest) which appear to be overlain by intermediate to felsic metavolcanics and marks the end of the first cycle of volcanism. Intercalated iron formation is common in the central and upper parts of this unit. The initiation of the second cycle of volcanism is marked by the extrusion of ultramafic metavolcanics which is inturn overlain by pillowed mafic metavolcanics and then the intermediate to felsic metavolcanics.

A sill-like body of gabbro was emplaced along the mafic - intermediate to felsic metavolcanic contact of the lower volcanic cycle. Numerous gabbroic dikes traverse the overlying intermediate to felsic metavolcanics and may in part represent feeders to the upper volcanic cycle.

Epizonal, trondhjemitic intrusions of probable subvolcanic origin, form a number of small stocks near the contact of the two volcanic cycles. Two large stcks of late tectonic granodiorite are largely enclosed by the upper volcanic cycle units.

Diabase dikes of early, middle and late Precambrian age traverse the general area.

PREVIOUS EXPLORATION ACTIVITIES

Research of the assessment files at the Resident Geologist's office in Timmins, Ontario, indicated that prior to 1926, John Spence discovered a quartz vein on the east bank of Triple Lake. In 1932, Triple Lake Porcupine Gold Mines Limited sunk a 55 foot shaft on the vein. A total of 155 tons of material mined yielded a total value of $2738.00.

Two claims north of the south boundary of McArthur Township, originally known as the Lokner claims (1926) and the Hubert and Thomas claims (1959) is reported to have gold mineralization in several of the quartz veins. The northern portion of the above property is now part of the Triple Lakes Claim Group.

During 1979, Westfield Minerals Limited held 41 claims on the east and north sides of the Triple Lake property. A magnetic survey, VLF-EM survey and geological mapping were completed on their property.

In 1981, Lacana Mining Corporation held 6 claims which are now part of the present day claim group. During 1981, a magntic, VLF-EM and Max-Min II surveys, geological mapping, sampling and trenching were completed. During 1982, Lacana completed 1393 feet of diamond drilling.

Mattagami Lake Exploration Limited completed a magnetic and VLF-EM surveys over the northwestern portion of the present claim group in March and April, 1982.

GEOPHYSICAL SURVEY

INTRODUCTION:

The linecutting was conducted by Exsics Exploration Limited of Timmins, Ontario, during June, 1986. The baseline has a bearing of Northwest-Southeast, with northeast-southwest grid lines spaced 400 feet apart. Line 0 was established to intersect the shaft on the east bank of the lake. A total of 22.1 line miles of grid was established and picketed at 100 foot intervals.

On completion of the linecutting, Yvon Collins conducted a total field magnetic survey utilizing a Scintrex MP-2 proton procession magnetometer. The survey was done from June 21 to July 29, 1986. Data reduction and drafting was completed by the author from August 19 to 29, 1986.

In conjunction with the above survey, Wayne Pearson conducted a VLF-EM survey utilizing the Crone RADEM unit. The transmitter station used throughout the survey was Cutler, Maine. The survey was completed from June 21 to July 29, 1986. The data reductions, Fraser Filtering and the drafting was completed by Bill MacRae from August 4 to 18, 1986.

The interpretation and the report were done by the author from September 15 to 18, 1986.

MAGNETIC SURVEY:

The magnetic base station was established on the Baseline at 0+00 with an averaged value of 58,710 gammas. The baseline and tie lines were surveyed at intervals of 100 feet in a looping fashion to establish accurate control stations for each grid line. Upon completion of this phase of the survey, the grid lines were surveyed at 100 foot intervals.

The data was corrected for the daily drift and the tie-ins with the control stations. The data presented on the base map has a base level of 58,000 gammas removed from all the obsevered readings (Figure 3).

VLF-EM SURVEY:

The base station and calibration station for the survey was located on the Base Line at Line 16 East with a Horizontal Field Strength (HFS) value for Cutler, Maine of 250%. The base lines and tie lines were surveyed in a looping fashion. This data was corrected for the drift of the HFS to provide accurate tie in points for the survey of the grid lines. The data collected was corrected for daily fluctuations and half transmitting power of the HFS.

The VLF-EM data is presented in profile form for the dip values on the base map (Figure 4). The dip and the HFS values are plotted on the left and right side of the grid lines, respectively. The left side of the grid line is positive and the right side is negative for the plotting of the dip profile lines.

To assist in the interpretation of the VLF-EM data, a low pass filter was used on the dip values, known as Fraser Filtering. The results are shown on the contoured map (Figure 5).

INTERPRETATION:

The most striking magnetic features are the northwest to northerly trending iron formations which nearly parallels Tie Line 19+00 North and northeast of the same tie line.

The second strongest type of magnetic feature is attributed to a northerly trending diabase dike from 6+00 South on Line 48+00 East to 17+00 North on Line 4+00 East.

The anomaly at 35+00 South on Line 8+00 West is suspected to be related to a gabbroic body within the suspected mafic metavolcanics.

The interpretated contact between the intermediate to felsic metavolcanics and the mafic metavolcanics trends northwesterly from 37+00 South on Line 16+00 East to 25+00 South on Line 36+00 West.

Near the main south-southeast trending road, the ultramafic rocks appear to be carbonatized which results in a near background magnetic level. The contact between the ultramafics and the mafic metavolcanics appear to trend approximately northwest from Tie Line 40+00 South on Line 8+00 East to 45+00 South on Line 36+00 West.

Within the ultramafic metavolcanic unit, a small magnetic high on Line 12+00 West at 54+00 South may be attributed to a east-west trending diabase dike.

The remainder of the property is suspected to consist of intermediate to felsic metavolcanics.

Due to the small magnetic differences between the carbonated ultramafics, mafic, and the intermediate to felsic metavolcanics, the known structural features which parallels the stratigraphy, are next to impossible to identify using only the magnetic data.

The VLF-EM survey was extremely useful in the location of the structure features within the claim group. The anomalies have been lettered on the profile map, Figure 4, and are discussed as follows:

Anomaly A - This strong, 1 line anomaly is attriuted to the northeast contact of the upper Iron Formation.

Anomaly B - The 1200 foot, moderate anomaly is probably related to the southwest contact of the upper Iron Formation.

Anomaly C - The weak 400 foot anomaly is probably due to the contact of the north trending diabase dike.

Anomaly D - Anomaly D and D´ are more than likely related with an over all length of 1600 feet which is cut by the diabase dike. The probable cause is a flow contact within the felsic metavolcanics.

Anomaly E - This 800+ foot anomaly is associated with a magnetic low and is probably due to the southwest contact of the lower Iron Formation or a shear zone parallel to the stratigraphy.

Anomaly F - The weak to moderate 1200+ foot anomaly is possibly due to parallel fracture or shear zone parallel to the diabase dike.

Anomaly G - This east-west trending 1200+ foot, moderate anomaly is suspected to be caused by a fault zone. The eastern portion is displaced by the diabse dike.

Anomaly H - This 1000+ foot weak anomaly may be due to a parallel shear zone, however, there is some interference from the diabase dike and anomaly F.

Anomaly I - The 2800+ foot, weak to moderate, east-west trending anomaly is suspected to be related to a major fault zone.

Anomaly J - This is a 1 line weak anomaly probably due to the overburden effects.

Anomaly K - The weak, 1200+ foot anomaly is possibly due to a flow contact within the felsic metavolcanics.

Anomaly L - The 800 foot anomaly is weak and probably due to the overburden effects.

Anomaly M - This 400+ foot weak anomaly may be due to parallel shearing.

Anomaly N - A fault zone is suspected to be the cause of the moderate 1200 foot anomaly.

Anomaly O - The 400 foot anomaly may be related to "N" or possibly parallel shearing.

Anomaly P - This 1200+ foot anomaly is probably due to the lithological contact between the felsic to the northeast and the mafic metavolcanics to the southwest.

Anomaly Q - The weak 400 foot anomaly is probable due to the overburden effects.

Anomaly R - This strong 2400+ foot anomaly is suspected to be caused by the northwest trending fault zone within the ultramafic metavolcanics near the contact of the mafic metavolcanics to the northeast.

Anomaly S - This strong 1200+ foot anomaly is sub-parallel to "R" an may be due to a parallel shearing or sulphide mineralization.

Anomaly T - This moderate 400 foot anomaly is probably caused by the southwest contact of the ultramafic metavolcanics.

In correlating the magnetic and the electromagnetic survey results, there appears to be several easterly trending fault and/or shear zones on both sides of the lake. Until the lake portion is surveyed, direct correlation is impractical at this time. These fault zones have been identified on Figure 3.

CONCLUSIONS

Based upon the results of the surveys, the objectives were obtained by identifying the major lithological units and their contacts, and major structural features. The electromagnetic survey located 20 anomalies probable caused by flow contacts, lithological contacts, structural faulting and/or shearing, sulphide mineralization and the effects of the overburden.

The historical data indicates that gold bearing mineralization is associated with quartz-carbonate veins hosting sulphides and native gold in fault and/or shear zones, and feldspar porphyry dikes. Within the claim group, the main exploration targets should be directed to the structural featues.

RECOMMENDATIONS

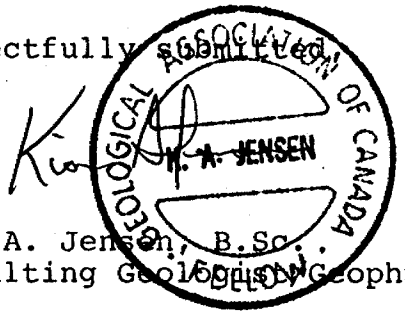
The author has not attempted to correlate the results of the present surveys with any previous exploration program. This compilation should be completed to identify and classify the known anomalies within the claim group.

During the winter months, it is recommended that the lake portion of the claim group be surveyed and "tied in" to the present survey results. Upon completion of these surveys, some re-interpretation may be required.

An overburden drilling program is recommended to test the suspected fault zones identified by both the magnetic and electromagnetic surveys for gold bearing geochemical dispersion trains.

Upon completion of the above recommendations, an initial limited diamond drilling program may be warranted to test the geophysical and geochemical anomalies.

Respectfully submitted,



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P.O. BOX 37, SOUTH PORCUPINE, ONTARIO, P0N 1H0
TELEPHONE: OFFICE (705) 268-0111, RESIDENCE (705) 235-2301

CERTIFICATE

With reference to my report on the Magnetic and Electromagnetic Surveys Report for United Kingdom Energy Incorporated, Dated September 18, 1986.....

I, Kian A. Jensen, of the City of Timmins, Ontario, do hereby certify the following to be true and accurate to the best of my knowledge:

1) That I received an Honour B.Sc. degree in Earth Science, Geology Major from the University of Waterloo in 1975,

2) That I have been employed as a geologist and/or geophysicist by various exploration companies and consulting companies since 1978,

3) That I have been and still am a member in good standing in the following associations:

a) Society of Exploration Geophysicist - Associate, 1981
b) Geological Association of Canada - Fellow, 1983

4) That I am the author of the corresponding report, and have been actively exploring and prospecting in the Timmins area since 1981,

5) That I have no interest direct or indirect in the mining claims comprising the property described in this report or in the shares of any company or companies in this joint venture on this property or the surrrounding properties, nor do I expect to receive any directly or indirectly.

Dated this 18th day of September, 1986
Timmins, Ontario.

GEOLOGICAL ASSOCIATION OF CANADA
K. A. JENSEN
FELLOW

Kian A. Jensen, B.Sc.
Consulting Geologist/Geophysicist

SCINTREX

earth science division

Proton Precession Magnetometer for Portable or Base Station Use

MP-2

Features

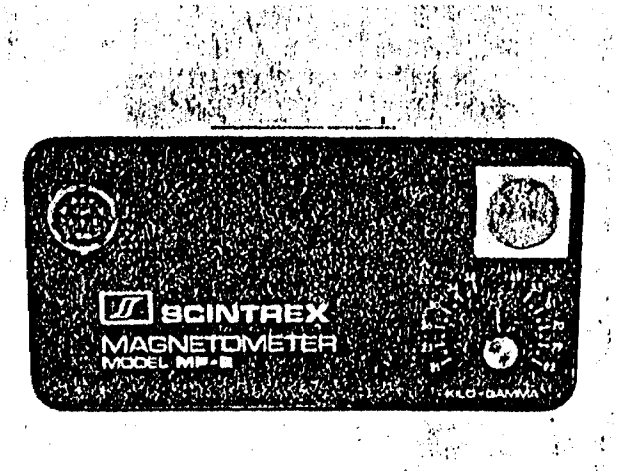
- *1 gamma sensitivity and accuracy over range of 20,000 to 100,000 gammas.*
- *Operates in very high gradients, to 5000 gammas per metre.*
- *Ultra small size and weight.*
- *Up to 25,000 readings from only 8 D cells.*
- *Battery pack isolated from electronics for corrosion protection.*
- *Battery pack easily extended for winter use.*
- *Light-emitting diode digital display, with complete test feature.*
- *Unique no-glare polarized reflector permits easy reading in bright sunlight.*
- *Indicator light warning of excessive gradient, ambient noise or electronic failure.*
- *Digital readout of battery voltage.*
- *Rugged all metal housing for rough field use at all temperatures.*
- *Automatic recycling or external trigger features permit ready conversion to base station use.*
- *Short reading time.*
- *Broad operating temperature range.*

The MP-2 is a portable one gamma proton precession magnetometer for field survey or base station use. The optimized design of sensor and circuitry using the latest CMOS components has resulted in a very light weight, low power consumption, rugged and reliable magnetometer.

Light emitting diodes coupled with an ingenious optically polarized reflector combine solid state reliability with easy reading even in bright sunlight.

A standard automatic recycling feature allows ready use of the MP-2, with suitable (optional) interfacing, as a base station recorder in analogue or ditigal form. Alternatively, a remote trigger can be used.

The noise-cancelling dual-coil sensor and electronics have been so designed as to effectively eliminate reading problems due to virtually all magnetic gradients which may be encountered in field survey conditions.



TECHNICAL DESCRIPTION OF MP-2 MAGNETOMETER

SCINTREX

RESOLUTION	1 Gamma.
TOTAL FIELD ACCURACY	± 1 Gamma over full operating range.
RANGE	20,000 to 100,000 gammas in 25 overlapping steps.
INTERNAL MEASURING PROGRAMME	Single reading — 3.7 seconds. Recycle feature permits automatic repetitive readings at 3.7 seconds intervals.
EXTERNAL TRIGGER	External trigger input permits use of sampling intervals longer than 3.7 seconds.
DISPLAY	5 digit LED (Light Emitting Diode) readout displaying total magnetic field in gammas or normalized battery voltage.
RECORDER OUTPUT (Optional)	Multiplied precession frequency and gate time outputs for interfacing with incremental tape recorders (eg. Increlogger) for digital recording. As an additional option a digital to analogue convertor is available for use with analogue recorders.
GRADIENT TOLERANCE	Up to 5000 gammas/metre.
POWER SOURCE	8 alkaline "D" cells provice up to 25,000 readings at 25° C under reasonable signal/noise conditions (less at lower temperatures). Premium carbon-zinc cells provide about 40% of this number.
SENSOR	Omnidirectional, shielded, noise-cancelling dual coil, optimized for high gradient tolerance.
HARNESS	Complete for operation with staff or back pack sensor.
OPERATING TEMPERATURE TANGE	−35°C to +60°C.
SIZE	Console, with batteries: 80 x 160 x 250mm. Sensor: 80 x 150mm. Staff: 30 x 1550mm. (extended) 30 x 600 mm. (collapsed)
WEIGHTS	Console, with batteries: 1.8kg. Sensor: 1.3kg. Staff: 0.6kg.

SCINTREX LIMITED
222 Snidercroft Road,
Concord, Ontario, Canada L4K 1B5
TELEPHONE (416) 669-2280, TELEX 06-964570

CRONE GEOPHYSICS LIMITED

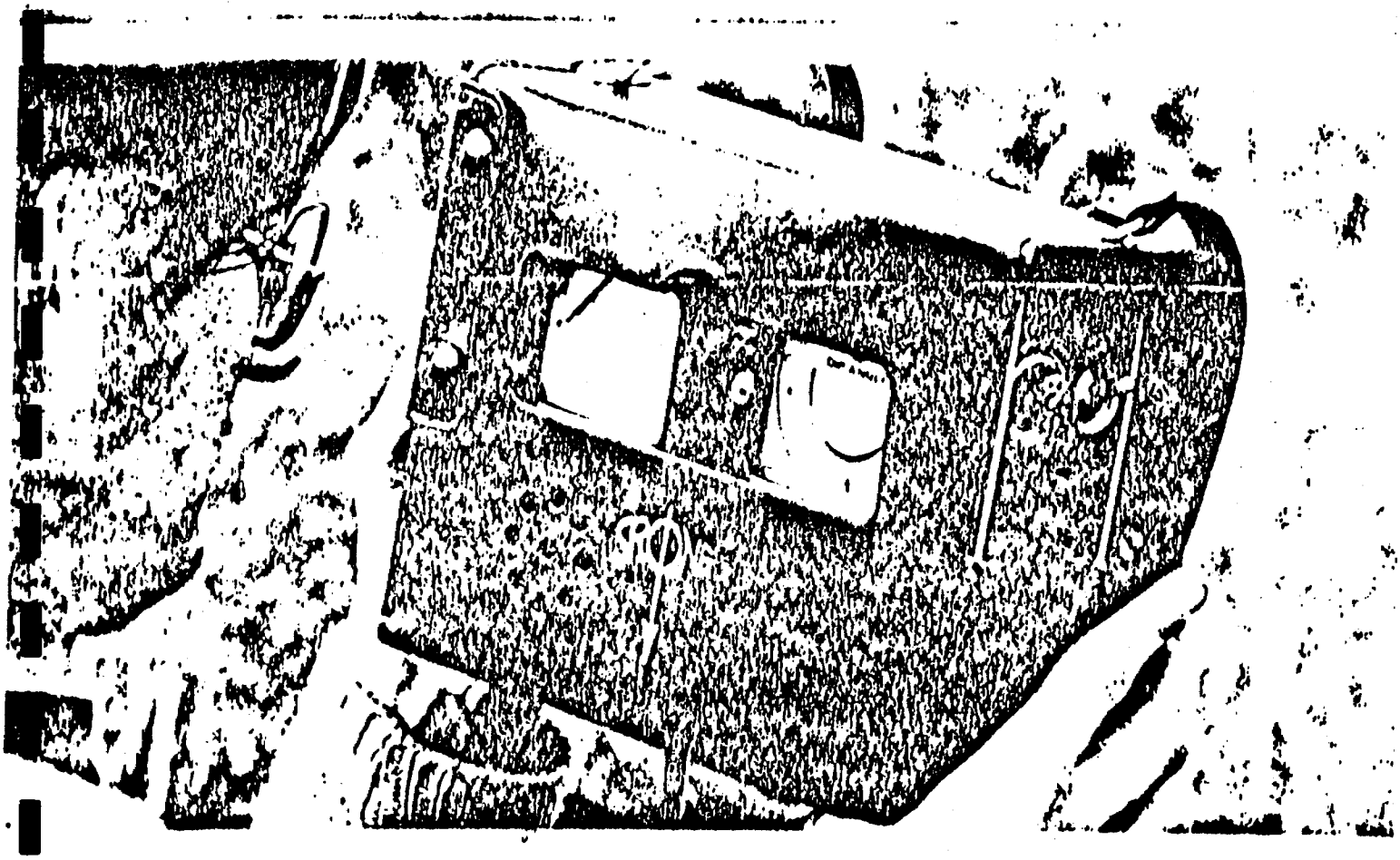
3607 WOLFEDALE ROAD,
MISSISSAUGA, ONTARIO,
CANADA,
L5C 1V8

Phone: (416) 270-0096

Cable: CRONGEO, TORONTO

RADEM

AN EM RECEIVER MEASURING THE FIELD STRENGTH, DIP ANGLE AND QUADRATURE COMPONENTS OF THE VLF COMMUNICATION STATIONS



This is a rugged, simple to operate, ONE MAN EM unit. It can be used without line cutting and is thus ideally suited for GROUND LOCATION OF AIRBORNE CONDUCTORS and the CHECKING OUT OF MINERAL SHOWINGS. This instrument utilizes higher than normal EM frequencies and is capable of detecting DISSEMINATED SULPHIDE DEPOSITS and SMALL SULPHIDE BODIES. It accurately isolates BANDED CONDUCTORS and operates through areas of HIGH HYDRO NOISE. The method is capable of deep penetration but due to the high frequency used its penetration is limited in areas of clay and conductive overburden.

The DIP ANGLE measurement detects a conductor from a considerable distance and is used primarily for locating conductors. The FIELD STRENGTH measurement is used to define the shape and

SPECIFICATIONS

SOURCE OF PRIMARY FIELD: VLF Communication Stations 12 to 24K hz

NUMBER OF STATIONS: 7 switch selectable

STATIONS AVAILABLE: The seven stations my be selected from:

Code	Station & Location	Frequency
CM	Cutler, Maine	24.0 KHz
SW	Seattle, Washington	24 5 KHz
AM.	Annapolis, Maryland	21.4 KHz
H	Lauiualei, Hawaii	23.4 KHz
BOF	Bordeaux, France	15.1 KHz
E	Rugby, England	16.0 KHz
MS	Gorki, Russia	17.1 KHz
OD	Odessa (Black Sea)	15.6 KHz
NC	Australia, N.W.C.	22.3 KHz
YJ	Yosamai, Japan	17.4 KHz
HN	Hegaland, Norway	17.6 KHz
TJ	Tokyo, Japan	20.0 KHz
BA	Buenos Aires	23.6 KHz

CHECK THAT STATION IS TRANSMITTING: Audible signal from speaker.

PARAMETERS MEASURED:

(1) DIP ANGLE in degrees of the magnetic field component, from the horizontal, of the major axis of the polarization ellipse. Detected by a minimum on the field strength meter and read from an inclinometer with a range of ± 90° and an accuracy of ± ½°.

(2) FIELD STRENGTH (total or horizontal) of the magnetic component of the VLF field, (amplitude of the major axis of the polarization ellipse). Measured as a percent of normal field strength established at a base station. Accuracy ± 2% dependent on signal. Meter has two ranges: 0 — 300% and 0 — 600%.

(3) OUT-OF-PHASE component of the magnetic field, perpendicular in direction to the resultant field, as a percent of normal field strnegth, (amplitude of the minor axis of the polarization ellipse). This is the minimum reading of the Field Strength meter obtained when measuring the dip angle. Accuracy ± 2%.

OPERATING TEMPERATURE RANGE: -30°C (-20°F) to 50°C (120°F)

DIMENSIONS AND WEIGHT: 9 x 19 x 27cm — 2.7Kg (6 lb)

SHIPPING: Instrument with foam lined wooden case, shipping wt. — 6.0Kg (13 lb)

BATTERIES: 2 of 9 volt — Eveready 216
Average life expectancy — 20 hours for continuous operation

UNITS AVAILABLE ON A RENTAL OR PURCHASE BASIS.
CONTRACT SERVICES AVAILABLE FOR FIELD SURVEYS.

William E. MacRae Geological Services

SUMMARY OF EXPLORATION ACTIVITIES

ON THE

TRIPLE LAKE PROPERTY

IN

MCARTHUR TOWNSHIP

PORCUPINE MINING DIVISION

OF THE

DISTRICT OF TIMISKAMING

FOR

UNITED KINGDOM ENERGY INC.

W. MacRAE

September 23, 1986

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INTRODUCTION

The triple Lake property was purchased in April of 1986 from John Grant and Ivon Collin of Timmins. The property consists of 27 unpatented mining claims located in the southern part of McArthur Township, approximately 20 miles south of the city of Timmins.

Previous work indicated the presence of gold mineralization on the shore of Triple Lake which was first explored in the late 1920's. Diamond drilling by Lacana in 1981 encountered low but anomalous gold values.

Line cutting, mag and VLF-EM, and geological surveys were completed over the summer. The geophysical surveys indicated 20 anomalies which require further testing. The geological survey indicated several areas that are environmentally favorable for gold mineralization.

A program of limited sampling and reverse circulation drilling is recommended to test the property further.

LOCATION AND ACCESS

The Triple Lake property is located near the southwest corner of McArthur Township, District of Timiskaming. The claims are approximately 19 miles south of the center of the city of Timmins.

Access is via gravel, all-weather, forestry access roads, south from Pine Street in Timmins. A primary road crosses the southwestern portion of the claim group and a secondary road crosses the east central portion of the property.

...2

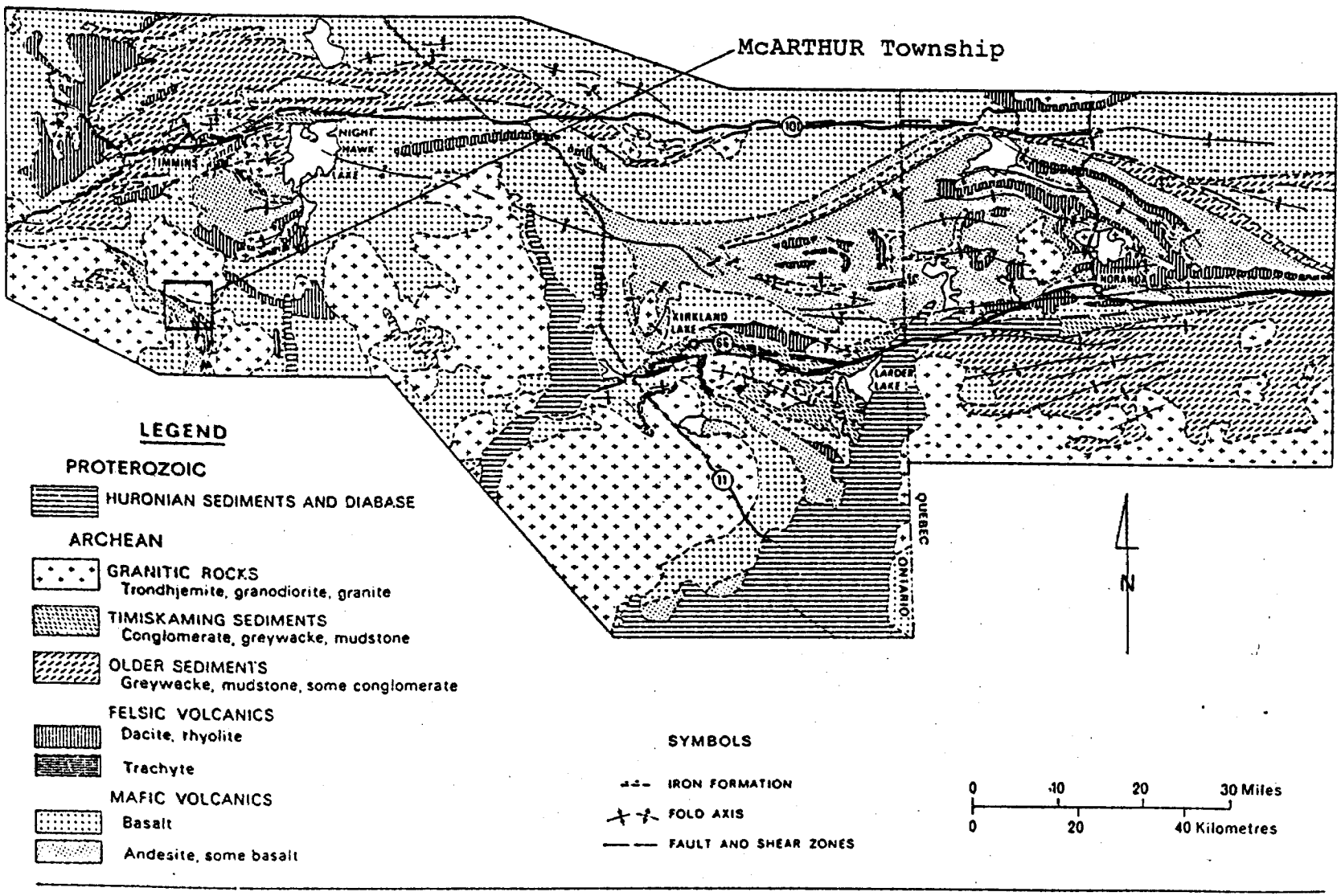


Figure 1. Location map, McArthur Township.

PROPERTY

The Triple Lake property consists of twenty-seven (27) unpatented mining claims located in southwestern McArthur Township, Porcupine Mining Division. The claims are owned 100% by United Kingdom Energy Inc. of Vancouver, B.C.. A tabulation of these claims is presented below:

Claim No.	Recording Date	Minimum Assess. Work Required	Assessment Due Date
P-832340	October 30, 1985	20	October 30, 1986
P-832341	October 30, 1985	20	October 30, 1986
P-832342	October 30, 1985	20	October 30, 1986
P-833271	October 12, 1984	40	October 12, 1986
P-833272	October 12, 1984	40	October 12, 1986
P-833273	October 12, 1984	40	October 12, 1986
P-849080	August 12, 1985	20	August 12, 1986
P-849081	August 12, 1985	20	August 12, 1986
P-849082	August 12, 1985	20	August 12, 1986
P-849083	August 12, 1985	20	August 12, 1986
P-849084	August 12, 1985	20	August 12, 1986
P-849085	August 12, 1985	20	August 12, 1986
P-849086	August 12, 1985	20	August 12, 1986
P-866602	July 19, 1985	20	July 19, 1986
P-866603	July 19, 1985	20	July 19, 1986
P-866604	July 19, 1985	20	July 19, 1986
P-867012	August 16, 1985	20	August 16, 1986
P-867013	August 16, 1985	20	August 16, 1986
P-867014	August 16, 1985	20	August 16, 1986
P-867015	August 16, 1985	20	August 16, 1986
P-867256	August 12, 1985	20	August 12, 1986
P-867257	August 12, 1985	20	August 12, 1986
P-867258	August 12, 1985	20	August 12, 1986
P-867259	August 12, 1985	20	August 12, 1986
P-867260	August 12, 1985	20	August 12, 1986
P-867261	August 12, 1985	20	August 12, 1986
P-867262	August 12, 1985	20	August 12, 1986

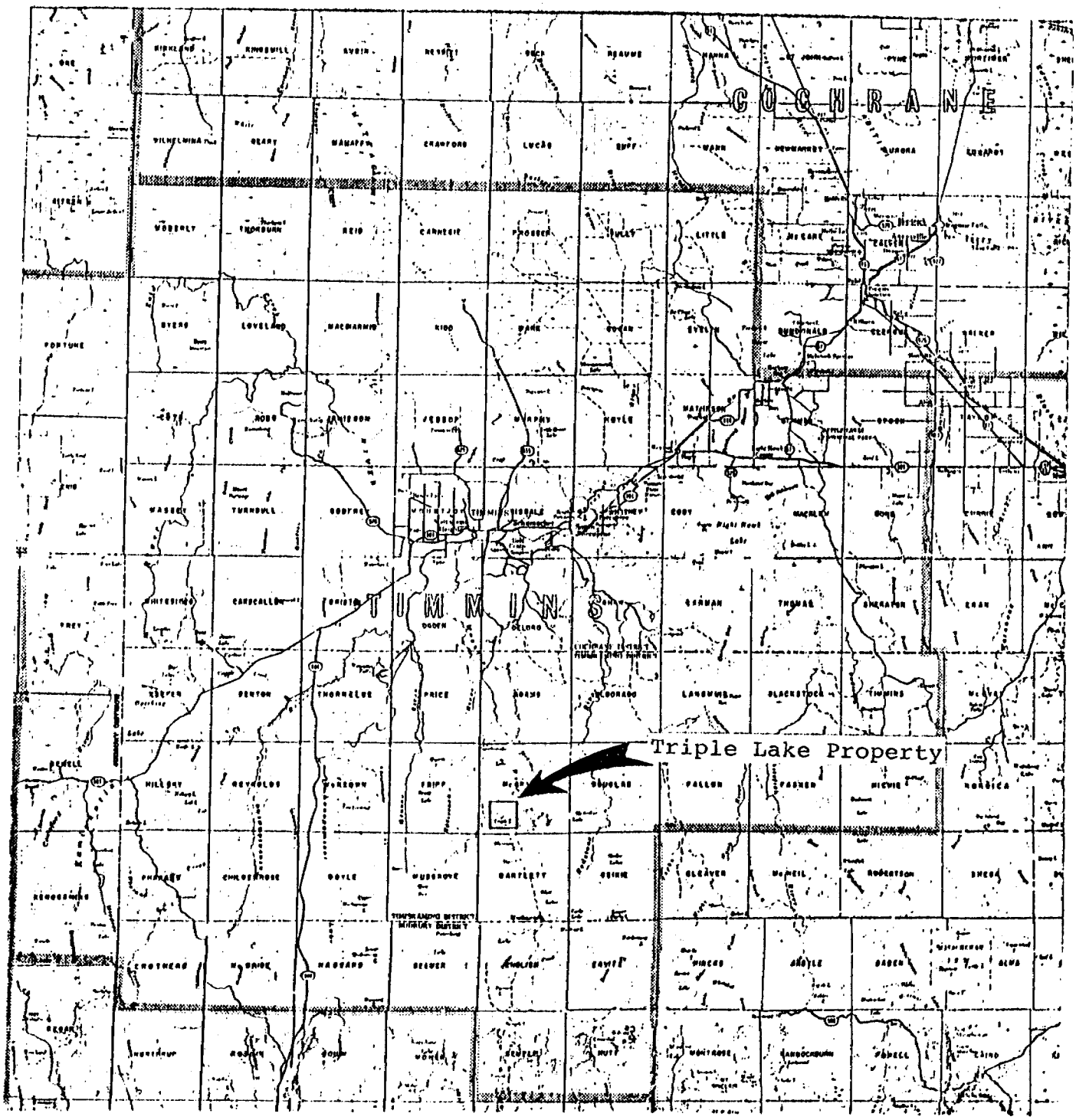


Figure 2. Property location map (1" = 10 miles).

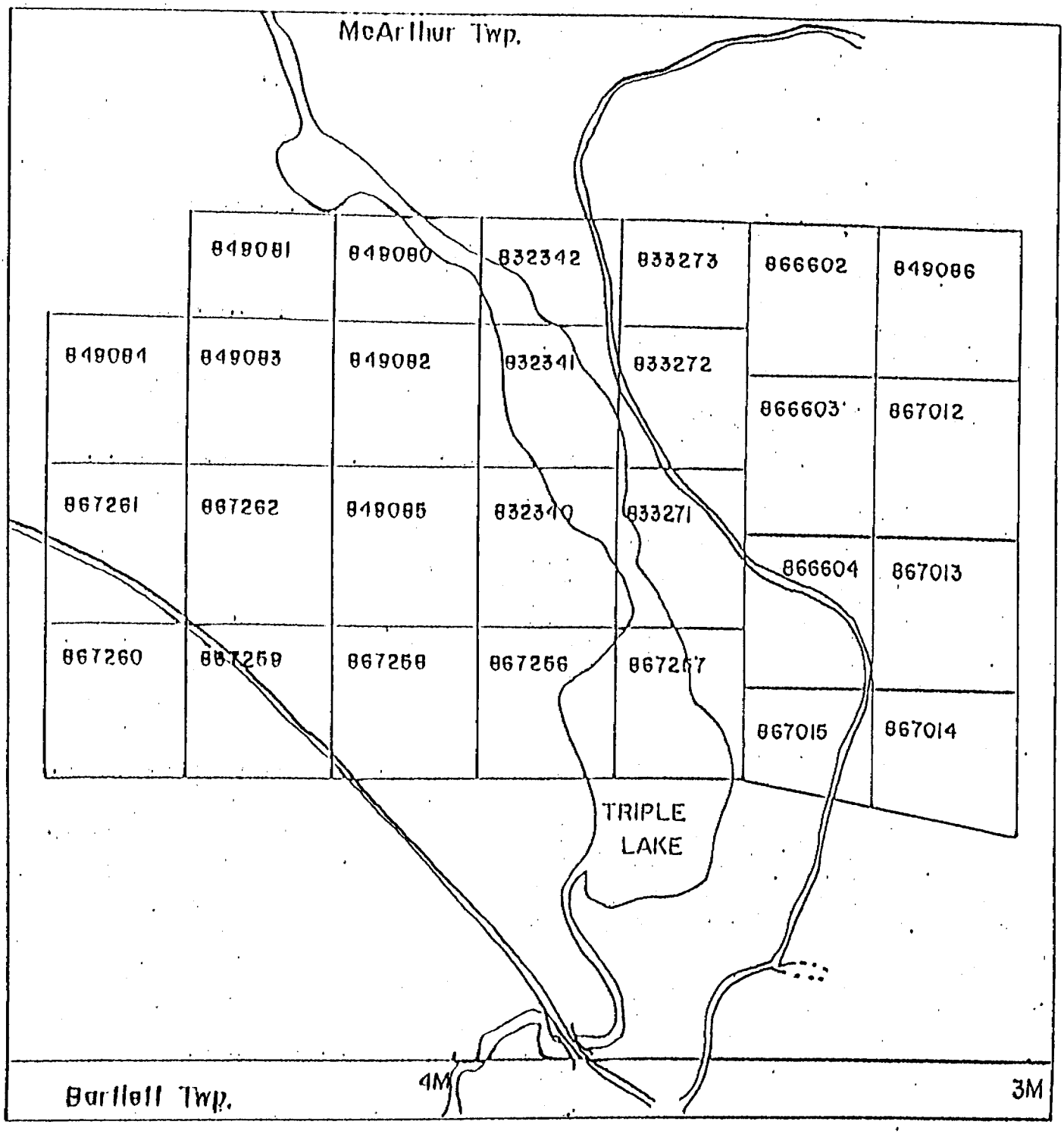


Figure 3. Claim location map (1" = 0.5 miles).

HISTORY

Prior to 1926, John Spence discovered a piece of quartz on the shore of Triple Lake. Mr. Spence dug into the bank uncovering a quartz vein. By 1926, a six foot pit had been sunk on the vein which strikes N50E and dips 60 degrees south. A 55 foot shaft was sunk on the vein by 1932, by Triple Lake Gold Mines Limited, with the vein reported passing out of the shaft at 20 feet vertical depth. The vein was also explored by two diamond drill holes. In 1932, Triple Lake Porcupine Gold Mines Limited shipped 155 tons of ore that returned them $2738.00. The Triple Lake Porcupine Gold Mines Limited property is almost completely within the present Triple Lake property (Figure 3).

In 1926, there were two claims just north of the southern boundary of McArthur Township called the Lokner claims. This same area was covered by nine claims held by A. Hubert and G. Thomas in 1959 (Figure 3). They reported several veins returning up to 2.06 oz./ton Au from spotty mineralization.

In 1979, Westfield Minerals Limited held 41 unpatented claims on the east and north sides of the Triple Lake property (Figure 3). Westfield completed magnetometer, VLF-EM and geological surveys on the property in August and September of 1979. One area was recommended for further exploration, but no further work is reported.

Lacana Mining Corporation, in 1981, held 6 claims within the present property (Figure 3). Sampling, geological mapping, trenching, magnetometer, VLF-EM, and MaxMin II surveys were completed during 1981. Sampling of the main quartz vein returned assays of up to 0.8 oz./ton Au over 3 feet and 1 oz./ton Ag. The old shaft was dewatered, but before sampling could be done the Ministry of Natural Resources filled the shaft with gravel. In 1982, Lacana drilled 5 diamond drill holes totalling 1393 feet. Hole MC-1-82, drilled below the shaft intersected mineralized material, but when assayed only returned 0.01 oz./ton Au over 3.5 feet. There was significant sub parallel fracturing in the hole indicating that the hole may have been drilled along a fault zone thus obscuring the mineralized zone. Holes MC-2, -3, -4, and -5-82 were drilled to test the western extension of the shaft zone. The following table lists the significant assays from the above drilling program:

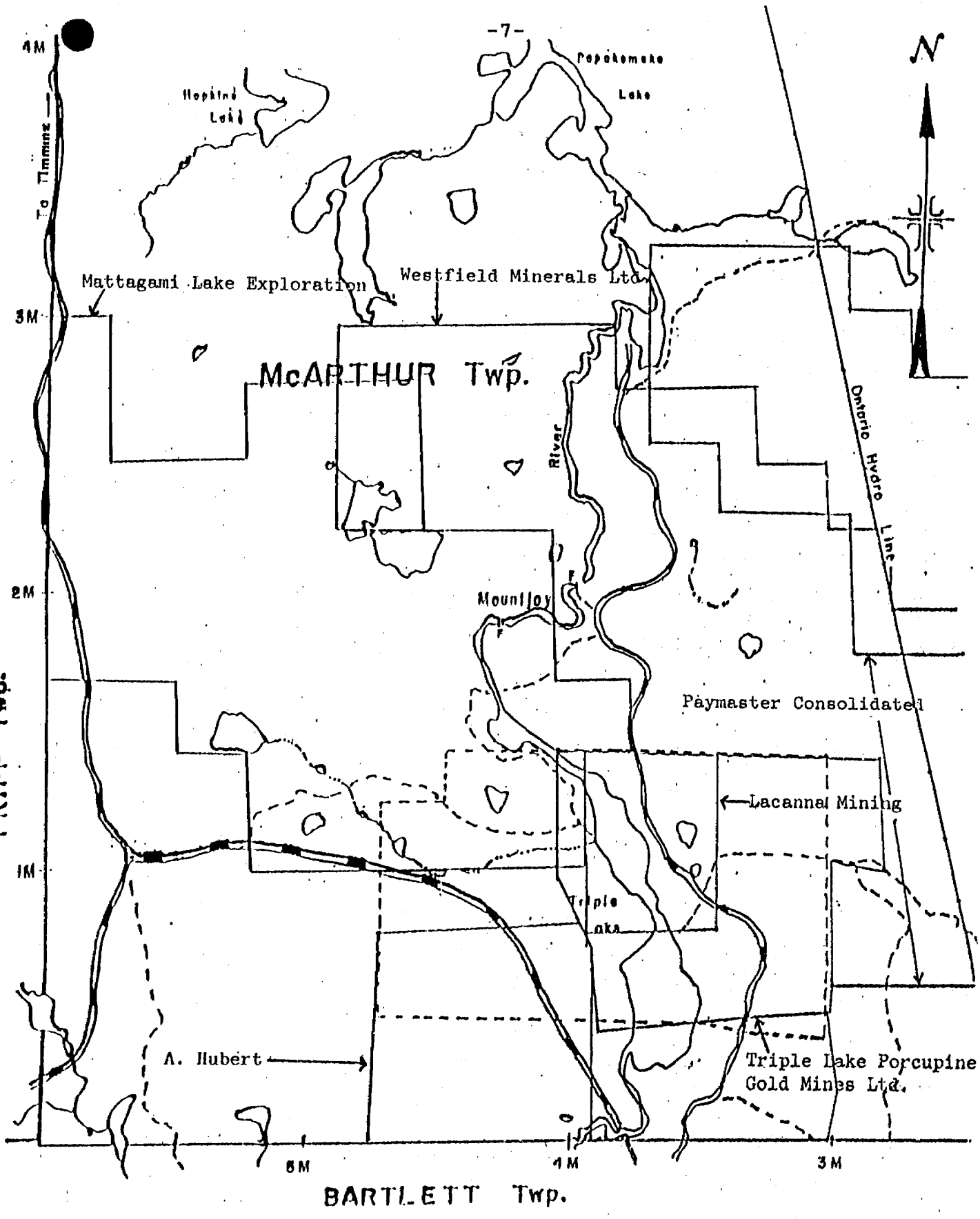


Figure 4. Previous reported work (1" = 0.5 miles).

TABLE 1. SUMMARY OF LACANA DRILLING RESULTS

Hole #	Footage	Length	Au oz./ton
MC-1-82	-	3.5'	0.01
MC-2-82	47' - 49'	2.0'	0.016
MC-3-82	78' - 88'	10.0'	0.02
	148' - 158'	10.0'	0.012
MC-4-82	103' - 108'	5.0'	0.02
	175' - 180'	5.0'	0.022
	185' - 190'	5.0'	0.04
	195' - 200'	5.0'	0.01

In March and April 1982, Mattagami Lake Exploration Limited cut grid and completed magnetometer and VLF-EM surveys over the northwestern portion of the present property. Numerous VLF-EM anomalies were indicated but no follow-up work reported.

The vendors of the property sampled the shaft area in July 1985, and obtained values of 0.127, 3.325, and 0.009 oz./ton Au from selected grab samples. The vendors also completed a VLF-EM survey over claims P-833271 to 73 inclusive on an east-west flagged grid.

AREA GEOLOGY

The area was first geologically mapped in 1912 by P. E. Hopkins for the Ontario Bureau of Mines. In 1927, E. L. Bruce mapped McArthur, Bartlett, Douglas, and Geikie Townships for the Ontario Department of Mines at a scale of 4 inches to 1 mile.

McArthur Township was also mapped at a scale of 1 inch to 1/4 mile in 1970 by D. R. Pyke. A final geological report was published in 1978, titled "Geology of the Redstone River Area" (GR161). Most of McArthur Township was also covered by Pyke in his "Peterlong Lake Area" Geological Report 171 published in 1978.

The bedrock in this area is all of Precambrian age with Pleistocene and Recent age deposits obscuring most of the area.

Pillowed mafic metavolcanics are the oldest rocks and a maximum thickness of about 5,500 feet is exposed in the area. Intermediate to felsic metavolcanics overlie the mafic metavolcanics, have a thickness of about 13,000 feet; and mark the termination of the lowermost volcanic cycle recognized in the area. Intercalated iron formation is common in the central and upper parts of this unit. The initiation of a second cycle of vulcanism in the area is marked by the extrusion of ultramafic metavolcanics with a maximum thickness of about 5,000 feet. Approximately 12,000 feet of pillowed mafic metavolcanics overlie the ultramafic metavolcanics, and in turn are superseded by about 3,000 feet of intermediate to felsic metavolcanics marking the top of the exposed section.

A sill-like body of gabbro was emplaced along the mafic-intermediate to felsic metavolcanic contact of the lower volcanic cycle. Numerous gabbroic dikes traverse the overlying intermediate to felsic metavolcanics, and may in part represent feeders to the upper volcanic cycle.

Epizonal, trondhjemitic intrusions, of probable subvolcanic origin, form a number of small stocks near the contact of the two volcanic cycles in the area. Two large stocks of late tectonic granodiorite are largely enclosed by the upper volcanic cycle rocks.

Diabase dykes of Early, Middle, and Late Precambrian age traverse the area.

Most of the rocks in the area are part of a steeply dipping, northeast facing homoclinal sequance, located on the south limb of a synclinal structure. The synclinal axis trends northwest across the northern part of the area.

Regional metamorphism of the Early Precambrian volcanic and sedimentary rocks took place under greenschist facies conditions.

TABLE 2

LITHOLOGIC UNITS FOR THE McARTHUR TOWNSHIP AREA

CENOZOIC
QUATERNARY
PLEISTOCENE AND RECENT
Clay, sand, gravel, and swamp and stream deposits

Unconformity

PRECAMBRIAN

LATE PRECAMBRIAN

MAFIC INTRUSIVE ROCKS

Olivine diabase

Intrusive Contact

MIDDLE PRECAMBRIAN

MAFIC INTRUSIVE ROCKS

Quartz diabase

Intrusive Contact

EARLY PRECAMBRIAN (ARCHEAN)

MAFIC INTRUSIVE ROCKS

Diabase

Intrusive Contact

FELSIC INTRUSIVE ROCKS

Pyroxene amphibolite, forming marginal phase of monzonite; porphyritic granodiorite, quartz diorite; quartz diorite, diorite, granodiorite; trondhjemitic quartz-feldspar porphyry, trondhjemite

Intrusive Contact

METAMORPHOSED MAFIC INTRUSIVE ROCKS

Gabbro, quartz gabbro, anorthositic gabbro, pyroxenite

Intrusive Contact

METAVOLCANICS AND METASEDIMENTS

METASEDIMENTS

Iron Formation, chert, siltstone

INTERMEDIATE TO FELSIC METAVOLCANICS

Massive, largely unstratified tuff; tuff and lapilli tuff, breccia; intercalated massive fine-grained tuff and flows

MAFIC METAVOLCANICS

Massive to well foliated flows, pillowed and variolitic flows, tuff and breccia, anphibolitized and layered or gneissic mafic metavolcanics

ULTRAMAFIC METAVOLCANICS

Massive, polysutered serpentinized flows, serpentinite sills (?), spinifex-textured flows, pyroclastics, carbonatized ultramafic rocks

...11

PROPERTY GEOLOGY

The oldest unit on the property is a mafic volcanic that may belong to the upper part of the Deloro Group. This unit is massive to foliated flows with some interflow sediments and intercalated ultramafic flows. These mafic flows occur in the western and southwestern area of the claim group.

The mafic volcanics weather a light green color and are a medium to light green on a fresh surface. They occur as massive flows with brecciated flow contacts and as pillowed flows. The flows are non-magnetic and contain only minor sulphides.

The interflow sediments are tuffs or tuff-wackes that show vague layering. Sulphide rich zones occur within the these units as well as some graphite and chert.

The ultramafic volcanics were mapped in two stratigraphic positions within the mafic volcanics. The lower ultramafic is carbonatized to a "green carbonate" and occurs adjacent to the quartz diorite of the Peterlong Lake complex. The upper ultramafic is more massive and is probably a basaltic komatiite.

Overlying the mafic volcanic sequance is a felsic pyroclastic sequance containing coarse to fine fragmentals and intercalated banded iron formations. The felsic unit is exposed in the area of the shaft and in the northeast corner of the property.

The coarse pyroclastics contains fragments up to one foot in diameter that weather a whiter color than the matrix. Tuffs and lapilli tuffs occur in the northeastern part of the claim block. The tuffs are poorly bedded and contain minor sulphides.

A banded iron formation lies within the felsic unit in the northeastern part of the property. The iron formation is magnetic and contains up to 15% sulphides.

The mafic and felsic volcanics are cut by several quartz diorite bodies. The eastern diorite occurs just south of the shaft approximately 100 feet. The western body, which may be separate, occurs in the western portion of the group

...12

near the south boundary, but is similar in appearance to the eastern diorite. In the northwestern corner of the property is a quartz diorite that belongs to the marginal phase of the Peterlong Lake Complex. Another small diorite body or dyke occurs in the northeast corner of the property. All of the quartz diorites are very similar with grain size from medium to coarse and generally equigranular. Occasional quartz veining was noted and trace amounts of sulphides.

A granodiorite intrudes the western diorite and possibly the mafic volcanic unit. The granodiorite is medium to fine grained, a light pink in color, and contains up to 20% mafic minerals.

Another felsic intrusive cuts the mafic volcanics on the southern boundary near the southwestern corner of the property. The dyke is a feldspar porphyry that weathers white, is very fine grained, contains 10% pyrite, and 20% quartz veining.

Diabase dykes cut all other rock types in the area. Diabase was observed cutting the eastern diorite and felsic pyroclastics.

CONCLUSIONS

The magnetometer survey was useful in outlining the magnetic iron formations and diabase dykes in the northeastern part of the property. The VLF-EM survey located 8 stratigraphic and 9 structural anomalies. The geological survey substantiated the presence of gold mineralization in the area of the shaft and located several areas on the western part of the property that are very interesting.

There is probably only 1% bedrock exposure on the property making reverse circulation drilling the next logical step for exploration of the property.

RECOMMENDATIONS

I would recommend the following work to be completed on the property:

1. washing and sampling of the veining at the shaft;

2. reverse circulation drilling to test 17 of the most favorable EM targets.

ESTIMATED COST OF RECOMMENDED PROGRAM

The estimated costs for the recommended program is:

Washing and sampling shaft vein	$2000.00
Overburden drilling	
Rig and consumables 8 days @ 2400/day	$19200.00
Supervision and assistant	$4700.00
Transportation	$600.00
Heavy mineral concentration and assaying	$1600.00
	$28100.00
Contingencies @ 10%	$2810.00
Report	$2000.00
Total of Phase II	$32910.00

A Phase III program will be developed from the results of the above program and should include diamond drilling.

Respectfully submitted

W. MacRAE

CERTIFICATE

With reference to my "Summary of Exploration" report for United Kingdom Energy Inc. dated September 23, 1986:

I, William E. MacRAE, of the city of Timmins, Ontario, do hereby certify and state that:

(1) I have graduated from Lakehead University with the degree of Bachelor of Science (Honours) in 1975 and have obtained the degree of Masters of Science from McMaster University in 1982;

(2) I have practiced my profession continuously for the past seven years;

(3) I am a fellow of the Geological Association of Canada, a member of the Canadian Institute of Mining and Metallurgy, and a member of the Prospectors and Developers Association of Canada (President of the Porcupine Branch);

(4) I have no interest, direct or indirect, in the mining claims comprising the properties described in this report nor do I expect to receive any; and

(5) this report is based on assessment file information and personal experience in the area.

Dated this 25th day of September, 1986
Timmins, Ontario.

W. MACRAE, M. Sc.
Consulting Geologist

Ministry of Northern Development and Mines

Report of Work

(Geophysical, Geological, Geochemical and Expenditures)

#295/86 M

42A03NW0003 2.9555 MCARTHUR

900

Type of Survey(s): Magnetometer, VLF-EM, Geology

Township or Area: McArthur

Claim Holder(s): United Kingdom Energy Inc

Prospector's Licence No.: T-1337

Address: Suite 808, 401 Granville St Vancouver BC

Survey Company: Exsis Exploration

Date of Survey (from & to): 21 06 86 (Day / Mo. / Yr.) 27 06 86 (Day / Mo. / Yr.)

Total Miles of line Cut: 22.2

Name and Address of Author (of Geo-Technical report): K. Jensen / W. MacRae

Credits Requested per Each Claim in Columns at right

Special Provisions

For first survey: Enter 40 days. (This includes line cutting)

For each additional survey: using the same grid: Enter 20 days (for each)

	Days per Claim
Geophysical	
- Electromagnetic	40
- Magnetometer	20
- Radiometric	
- Other	
Geological	20
Geochemical	

Man Days

Complete reverse side and enter total(s) here

	Days per Claim
Geophysical	
- Electromagnetic	
- Magnetometer	
- Radiometric	
- Other	
Geological	
Geochemical	

Airborne Credits

Note: Special provisions credits do not apply to Airborne Surveys.

	Days per Claim
Electromagnetic	
Magnetometer	
Radiometric	

Mining Claims Traversed (List in numerical sequence)

Prefix	Mining Claim Number	Expend. Days Cr.
P	833314	
	833341	
	833342	
	833271	
	833272	
	833273	
	849050	
	849051	
	849052	
	849053	
	849054	
	849055	
	849056	
	866602	
	866603	
	866604	
	867012	
	867013	
	867014	
	867015	
	867256	
	867257	
	867255	

Prefix	Mining Claim Number	Expend. Days Cr.
	867259	
	867260	
	867261	
	867262	

RECEIVED SEP 16 1986

Total number of mining claims covered by this report of work: 27

Expenditures (excludes power stripping)

Type of Work Performed: Geophysical

Performed on Claim(s): SEP 16 1986

Calculation of Expenditure Days Credits

Total Expenditures: $ ÷ 15 = Total Days Credits

Instructions: Total Days Credits may be apportioned at the claim holder's choice. Enter on reverse side the number of days credits per claim selected in columns at right.

Date: Recorded Holder or Agent (Signature)

For Office Use Only

Total Days Cr. Recorded:

Date Recorded:

Mining Recorder:

Date Approved as Recorded: DEC 31/86

Branch Director:

Certification Verifying Report of Work

I hereby certify that I have a personal and intimate knowledge of the facts set forth in the Report of Work annexed hereto, having performed the work or witnessed same during and/or after its completion and the annexed report is true.

Name and Address of Author (of Geo-Technical report): K. Jensen P.O. Box 417, Timmins Ont.

Date Certified: 16/09/86

Certified By (Signature):

December 31, 1986

Your File: 295/86
Our File: 2.9555

Mining Recorder
Ministry of Northern Development and Mines
60 Wilson Avenue
Timmins, Ontario
P4N 2S7

Dear Sir:

RE: Notice of Intent dated December 5, 1986
Geophysical (Electromagnetic, Magnetometer)
and Geological Surveys on Mining Claims
P 832340, et al, in McArthur Township

The assessment work credits, as listed with the above-mentioned Notice of Intent, have been approved as of the above date.

Please inform the recorded holder of these mining claims and so indicate on your records.

Yours sincerely,

J.C. Smith, Supervisor
Mining Lands Section

Whitney Block, 6th Floor
Queen's Park
Toronto, Ontario
M7A 1W3

Telephone: (416) 965-4888

SH/mc
cc: United Kingdom Energy Inc
Suite 808
409 Granville Street
Vancouver, B.C.
V6C 1T1

Resident Geologist
Timmins, Ontario

W. MacRae
P.O. Box 417
Timmins, Ontario
P4N 7E3

Mr. G.H. Ferguson
Mining & Lands Commissioner
Toronto, Ontario

Encl.

Ministry of Northern Development and Mines
Ontario

Technical Assessment Work Credits

File 2.9555

Date December 5, 1986

Mining Recorder's Report of Work No. 295/86

Recorded Holder
UNITED KINGDOM ENERGY INC

Township or Area
McARTHUR TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic 40 days	P 832340 833271 to 273 inclusive 849080 to 086 inclusive 866602 to 604 inclusive 867012 to 015 inclusive 867256-58-59-62
Magnetometer 20 days	
Radiometric ____ days	
Induced polarization ____ days	
Other ____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological 20 days	
Geochemical ____ days	
Man days ☐ Airborne ☐	
Special provision ☒ Ground ☒	
☐ Credits have been reduced because of partial coverage of claims.	
☐ Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 77 (16) for the following mining claims

30 DAYS ELECTROMAGNETER 15 DAYS MAGNETOMETER 15 DAYS GEOLOGICAL	20 DAYS ELECTROMAGNETIC 10 DAYS MAGNETOMETER 10 DAYS GEOLOGICAL	10 DAYS ELECTROMAGNETIC 5 DAYS MAGNETOMETER 5 DAYS GEOLOGICAL
P 832342	P 832341 867260-61	P 867257

No credits have been allowed for the following mining claims

☐ not sufficiently covered by the survey ☐ insufficient technical data filed

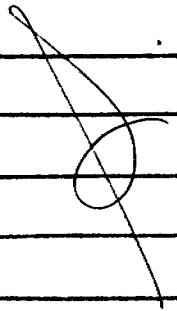
The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical - 80; Geological - 40; Geochemical - 40; Section 77(19) - 60.

828 (85/12)

	m	EM	GL
833240	✓	✓	✓
41	1/2	1/2	1/2
42	~~1/4~~	1/4	1/4
833271	✓	✓	✓
72	✓	✓	✓
73	✓	✓	✓
849080	✓	✓	✓
81	✓	✓	✓
82	✓	✓	✓
83	✓	✓	✓
84	✓	✓	✓
85	✓	✓	✓
86	✓	✓	✓
866602	✓	✓	✓
3	✓	✓	✓
4	✓	✓	✓
867012	✓	✓	✓
13	✓	✓	✓

	m	EM	GL
867014	✓	✓	✓
15	✓	✓	✓
867256	✓	✓	✓
57	3/4	3/4	3/4
58	✓	✓	✓
59	✓	✓	✓
60	1/2	1/2	1/2
61	~~1/2~~	1/2	1/2
62	✓	✓	✓

2.9553



REFERENCES

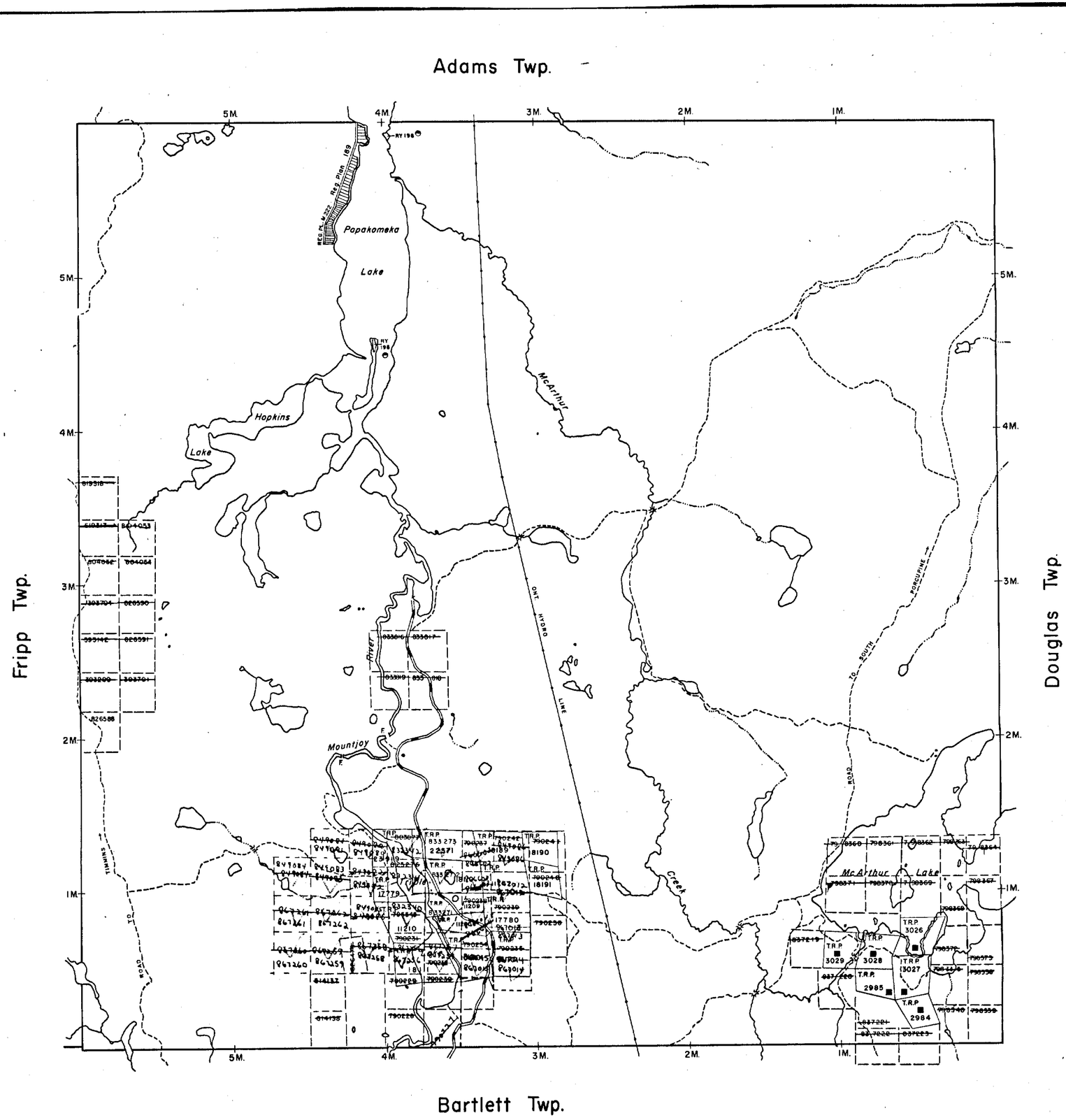
AREAS WITHDRAWN FROM DISPOSITION

M.R.O. – MINING RIGHTS ONLY

S.R.O. – SURFACE RIGHTS ONLY

M.+ S. – MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File



LEGEND

HIGHWAY AND ROUTE No.
OTHER ROADS
TRAILS
SURVEYED LINES:
TOWNSHIPS, BASE LINES, ETC.
LOTS, MINING CLAIMS, PARCELS, ETC.
UNSURVEYED LINES:
LOT LINES
PARCEL BOUNDARY
MINING CLAIMS ETC.
RAILWAY AND RIGHT OF WAY
UTILITY LINES
NON-PERENNIAL STREAM
FLOODING OR FLOODING RIGHTS
SUBDIVISION OR COMPOSITE PLAN
RESERVATIONS
ORIGINAL SHORELINE
MARSH OR MUSKEG
MINES
TRAVERSE MONUMENT

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" , SURFACE RIGHTS ONLY	◓
" , MINING RIGHTS ONLY	◒
LEASE, SURFACE & MINING RIGHTS	■
" , SURFACE RIGHTS ONLY	◨
" , MINING RIGHTS ONLY	◧
LICENCE OF OCCUPATION	▼
ORDER-IN-COUNCIL	OC
RESERVATION	R
CANCELLED	⊗
SAND & GRAVEL	S

NOTE: MINING RIGHTS IN PARCELS PATENTED PRIOR TO MAY 6, 1913, VESTED IN ORIGINAL PATENTEE BY THE PUBLIC LANDS ACT, R.S.O. 1970, CHAP. 380, SEC. 63, SUBSEC 1.

SCALE: 1 INCH = 40 CHAINS

FEET 0 1000 2000 4000 6000 8000

METRES 0 200 1000 (1 KM) 2000 (2 KM)

TOWNSHIP

McARTHUR

M.N.R. ADMINISTRATIVE DISTRICT

TIMMINS

MINING DIVISION

PORCUPINE

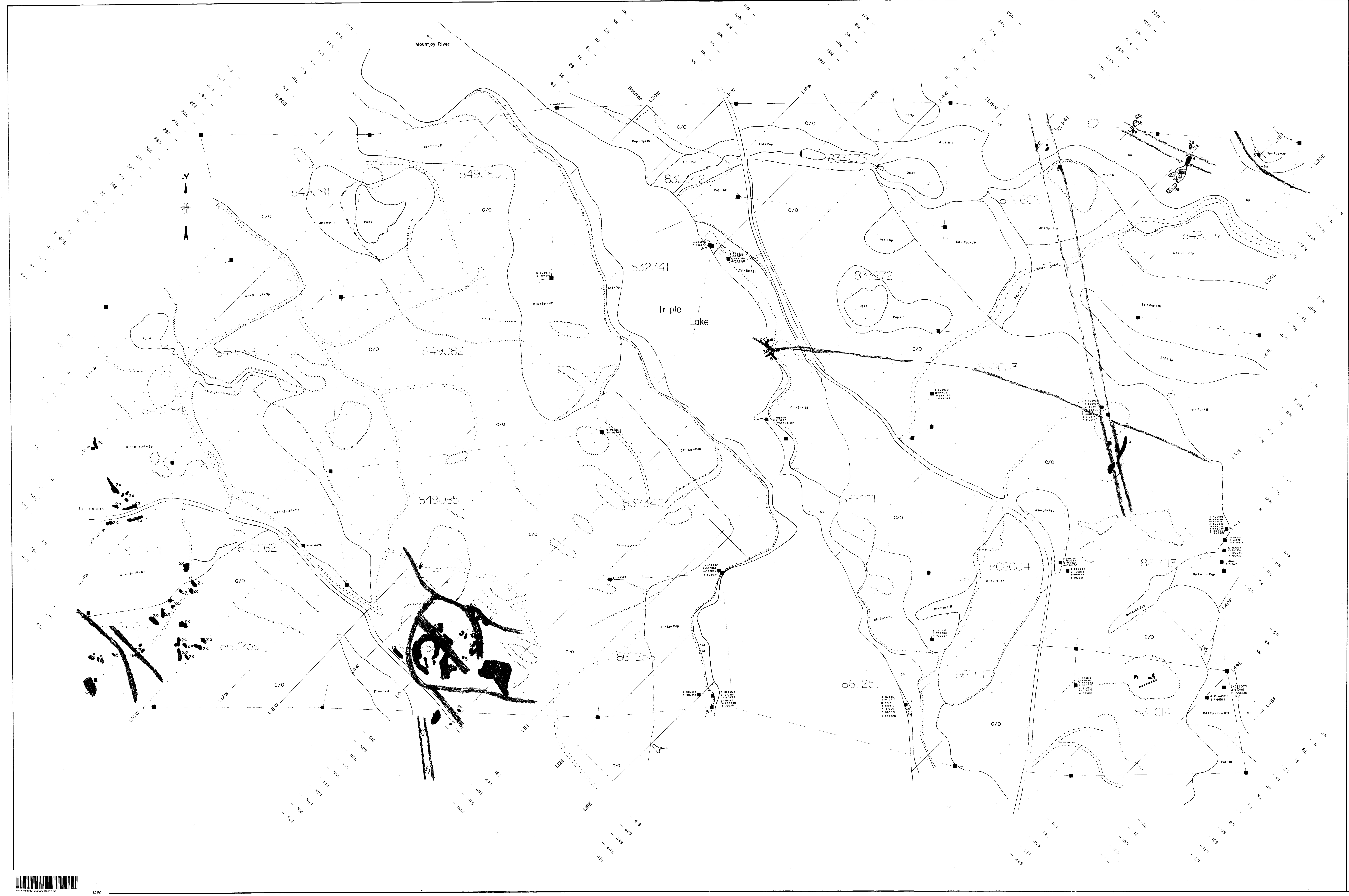
LAND TITLES / REGISTRY DIVISION

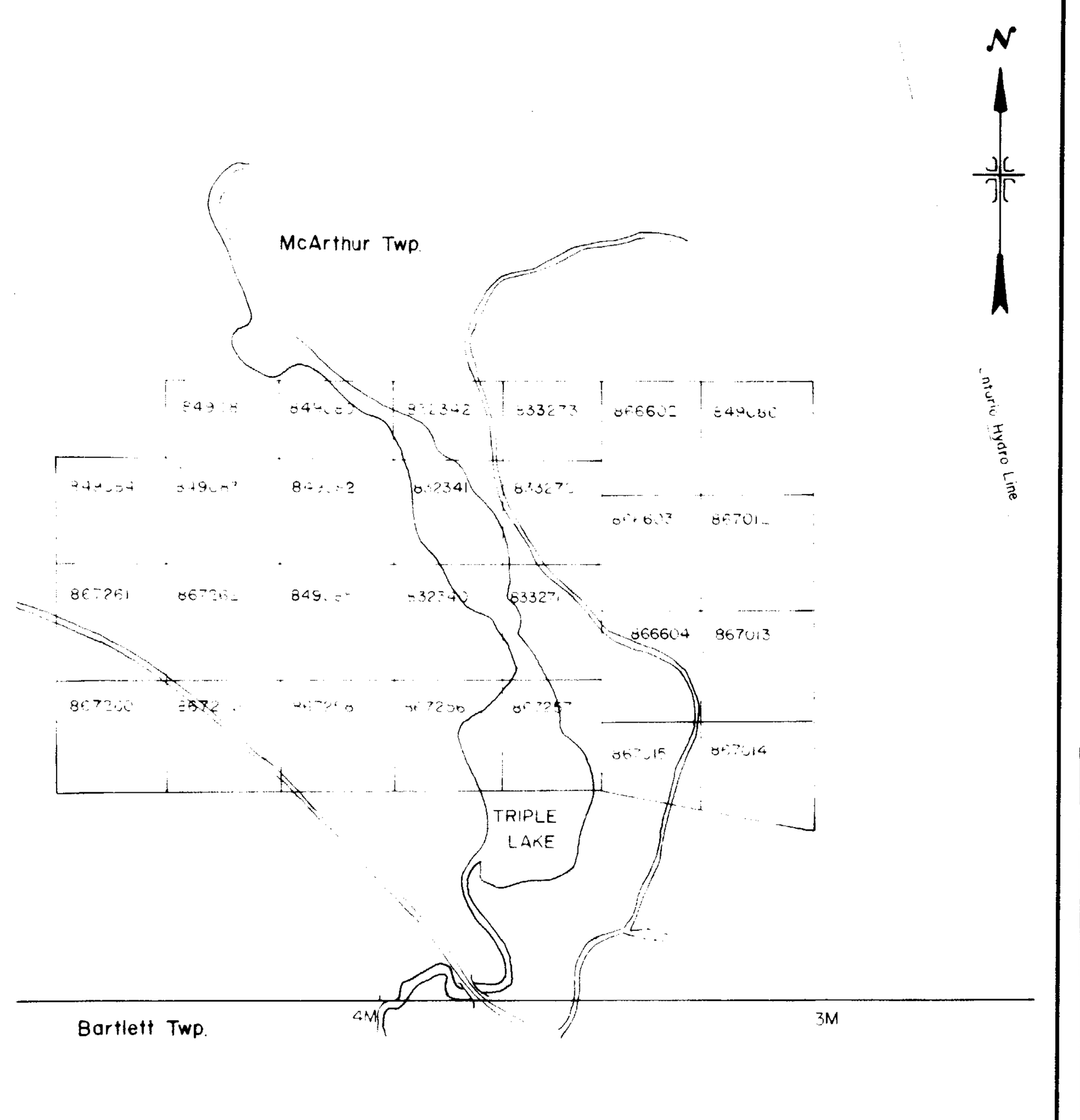
TIMISKAMING

Ontario Ministry of Natural Resources — Land Management Branch

Date FEBRUARY 1985

Number G-3227





LOCATION MAP

Scale 1" = 1/4 mile

LEGEND

Lumber access road

Claim posts Located ■

Assumed □

Mine Shaft (2 compartment)

Slope Change

Outcrop Boundary

Geological Boundary

Tree Type Boundary

TREE TYPES

WP White Pine
RP Red Pine
JP Jack Pine
Sp Spruce
Bl Sp Black Spruce
Bl Balsam
Bi Birch
Pop Poplar
Ald Alder
Cd Cedar
Wil Willow
C/O Cut Over Area

ROCK TYPES

1. Ultramafic Volcanics
   (a) massive
   (b) carbonatized
2. Mafic Volcanics
   (a) massive
   (b) pillowed
   (c) tuffaceous
3. Felsic Volcanics
   (a) tuffaceous
   (b) agglomerate/breccia
4. Sediments
   iron formation
5. Quartz Diorite
6. Granodiorite
7. Feldspar Porphyry
8. Diabase

UNITED KINGDOM ENERGY Inc.

GEOLOGY

Property: Triple Lake Claim Group

Mining Division: Porcupine

Twp.: McArthur

NTS: 42 A/3

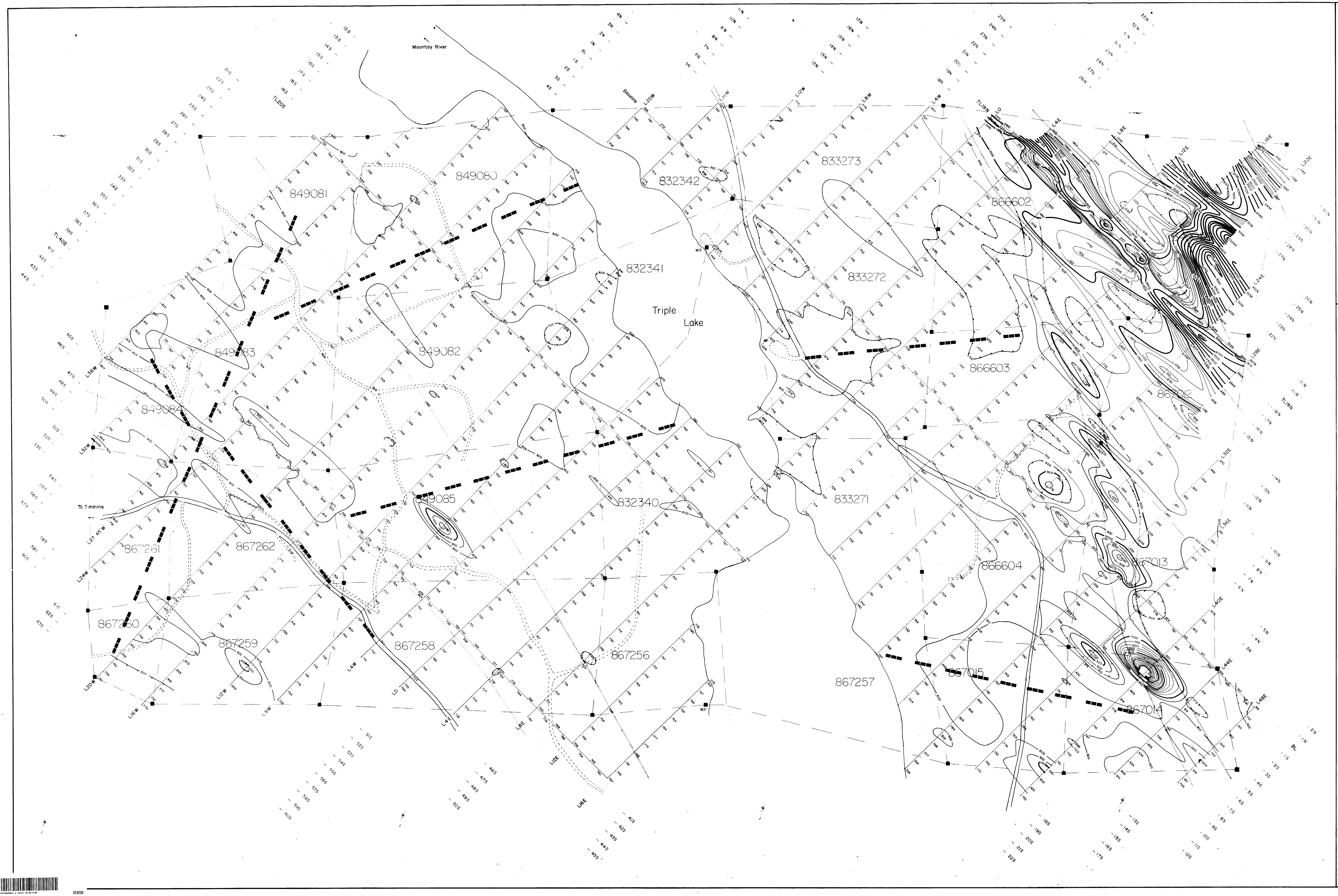
Drawn by: W. MACRAE

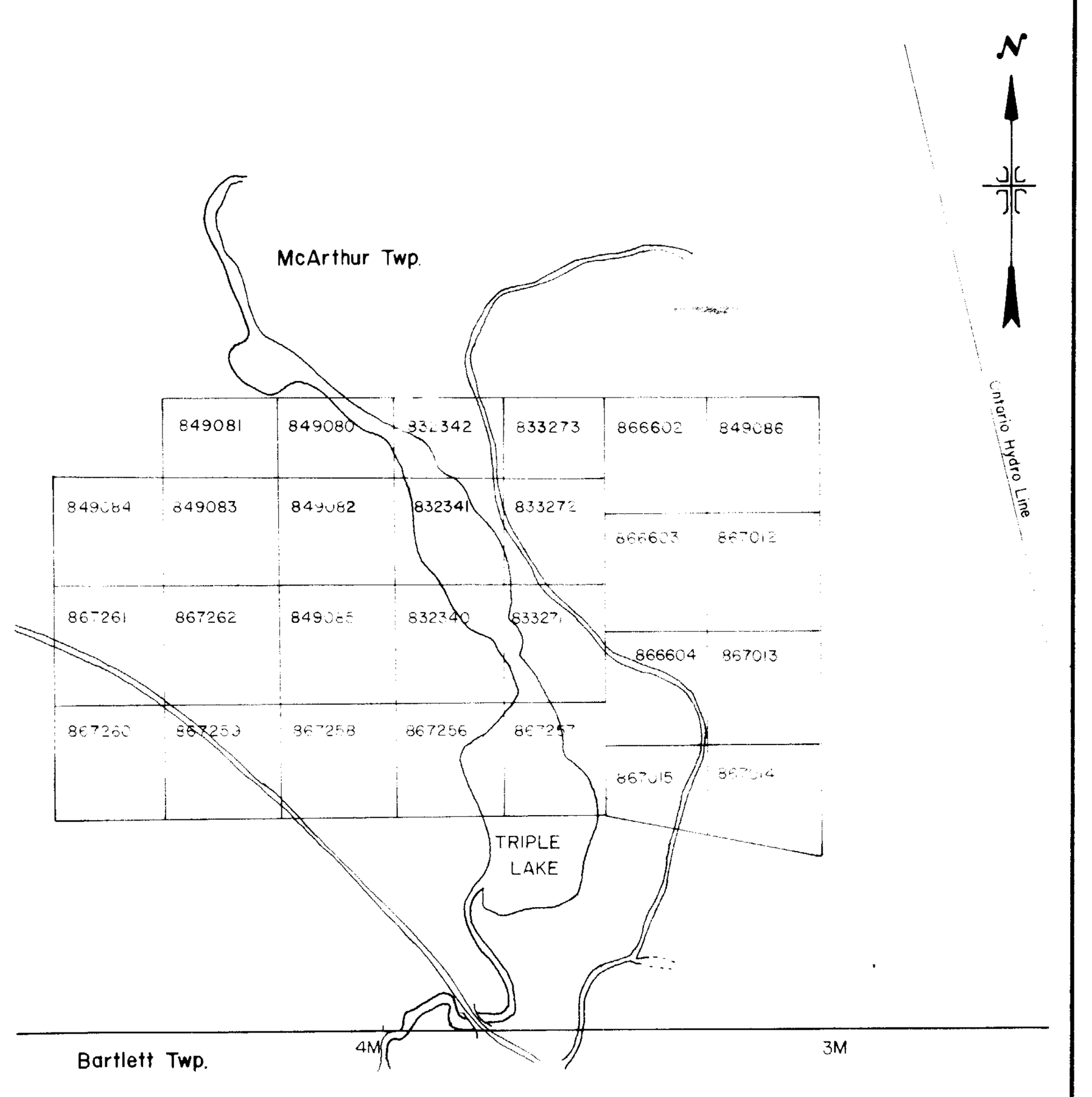
Date: 25/09/86

Scale: 1" = 200'

2.9555

210





LOCATION MAP

Scale: 1" = 1/4 mile

LEGEND

All-weather gravel road

Lumber access road

Claim posts: Located ■

Assumed □

Mine Shaft (2 compartment)

100 Gamma Contour
500 Gamma Contour
Fault or Shear Zone
Base Level 58000 Gammas

UNITED KINGDOM ENERGY
Inc.

MAGNETIC SURVEY

FIGURE 3

Property: Triple Lake Claim Group	
Mining Division: Porcupine	
Twp.: McArthur	NTS: 42 A/3
Drawn by: K.A. Jensen	Date: Sept. 1986
Scale: 1" = 200'	

220

UNITED KINGDOM ENERGY Inc.

VLF-EM SURVEY

FIGURE 4

Property: Triple Lake Claim Group

Mining Division: Porcupine

Twp.: McArthur | NTS: 42 A/3

Drawn by: W.E. MacRae | Date: Aug. 1986

Scale: 1" = 200'

200' 0' 200' 300' 400'

2.9533

LOCATION MAP

Scale: 1" = 1/4 mile

LEGEND

All-weather gravel road

Lumber access road

Claim posts Located ■

Assumed □

Mine Shaft (2 compartment)

DIP (°) -20 / 200 (%) HFS

-10 | 250

0 | 300 Anomaly

10 | 310

20 | 280

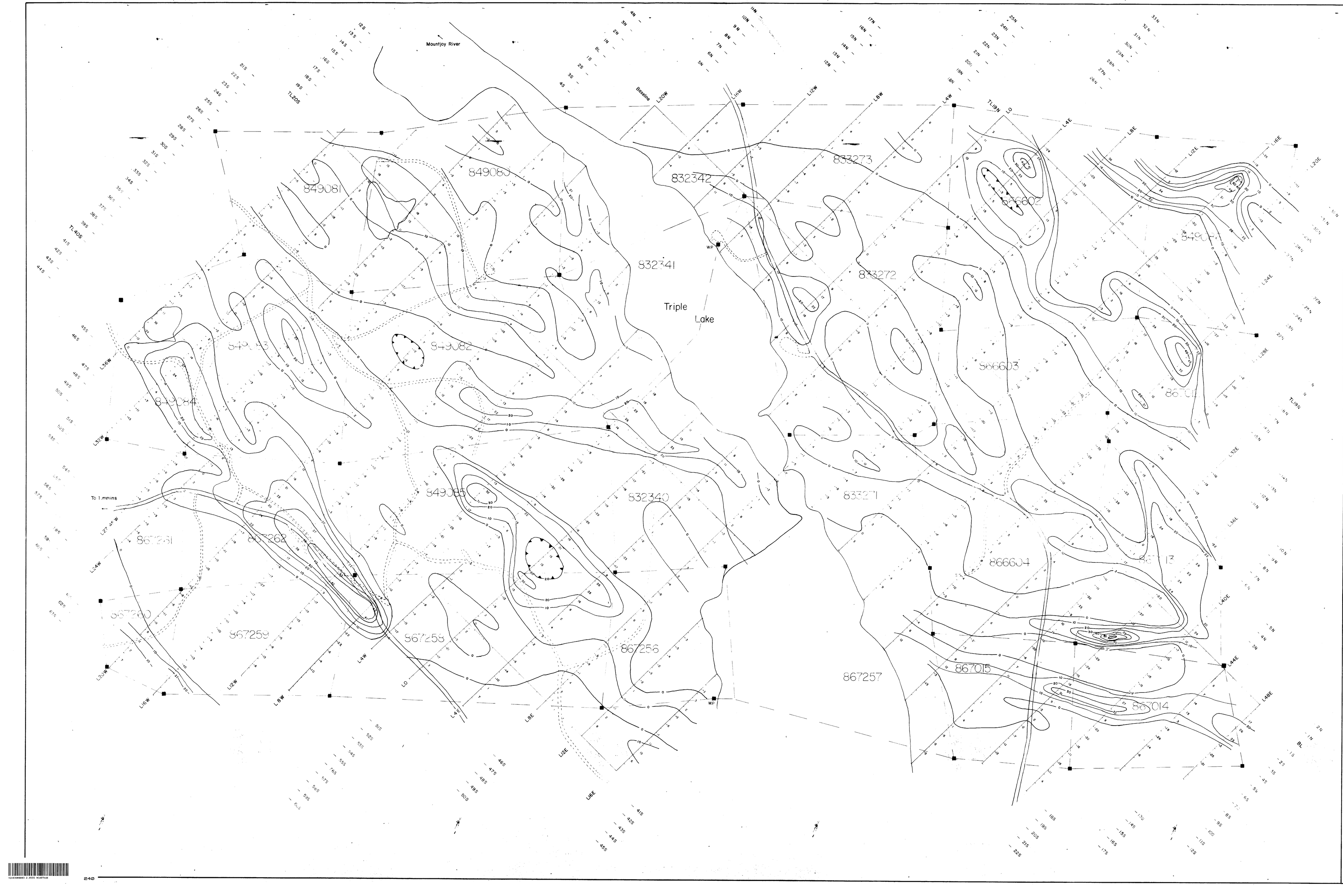
10 | 220

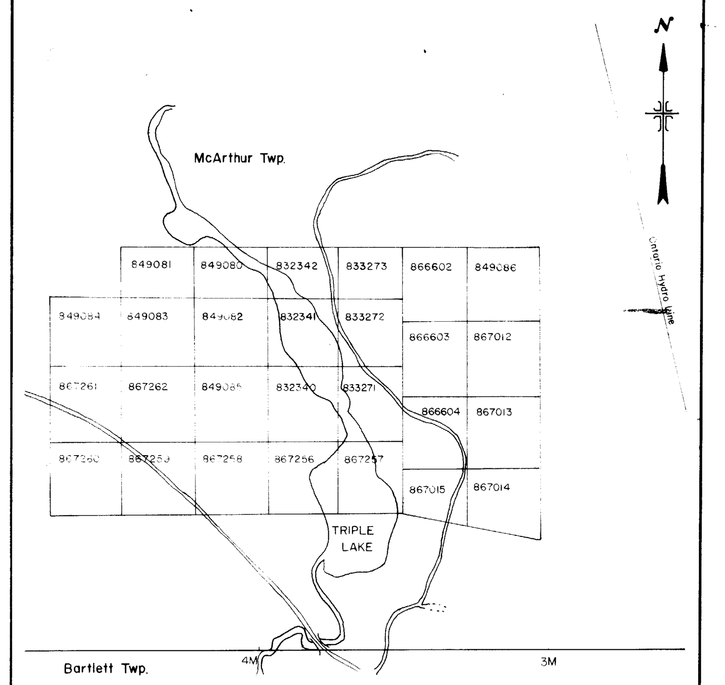
\+ −

Station: Cutler, Maine
Scale: 1 inch = 20° Dip

ASSOCIATION OF CANADA · ONTARIO · GEOLOGICAL · KM KENNY

230





LOCATION MAP Scale 1" = 1/4 mile

LEGEND

All-weather gravel road

Lumber access road

Claim posts Located ■

Assumed □

Mine Shaft (2 compartment)

ONTARIO ASSOCIATION OF PROFESSIONAL ENGINEERS
K. A. REEVES
PROFESSIONAL ENGINEER

UNITED KINGDOM ENERGY Inc.

FRASER FILTERING

FIGURE 5

Property: Triple Lake Claim Group	
Mining Division: Porcupine	
Twp.: McArthur	NTS: 42 A/3
Drawn by:	Date:
Scale: 1" = 200'	

200' 0 100' 200' 300' 400'

J.9550