42H08NE0024 2.9238 BLAKELOCK

Ø1Ø

GEOPHYSICAL REPORT

on the

Blakelock Township Property

for

DEERFOOT RESOURCES INC.

by

R. J. Meikle

Robert S. Middleton Exploration Services Inc.
P.O. Box 1637 Timmins, Ontario P4N 7W8

June 25, 1986

R J Meikle

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LIST OF FIGURES

MAPS IN BACK POCKET

INTRODUCTION

A program of Linecutting, Magnetometer Survey, and Horizontal Loop Electromagnetic survey was carried out on the Blakelock Township property for Deerfoot Resources Inc. The work was done by R. S. Middleton Exploration Services Inc., between May 1 to 8, 1986.

The purpose of the survey was to delineate known conductive and magnetic horizons which were suspected of underlying the claim group.

This report decribes the surveys and the results. Final interpretation of the results will be done when the geological and Induced Polarization surveys are completed.

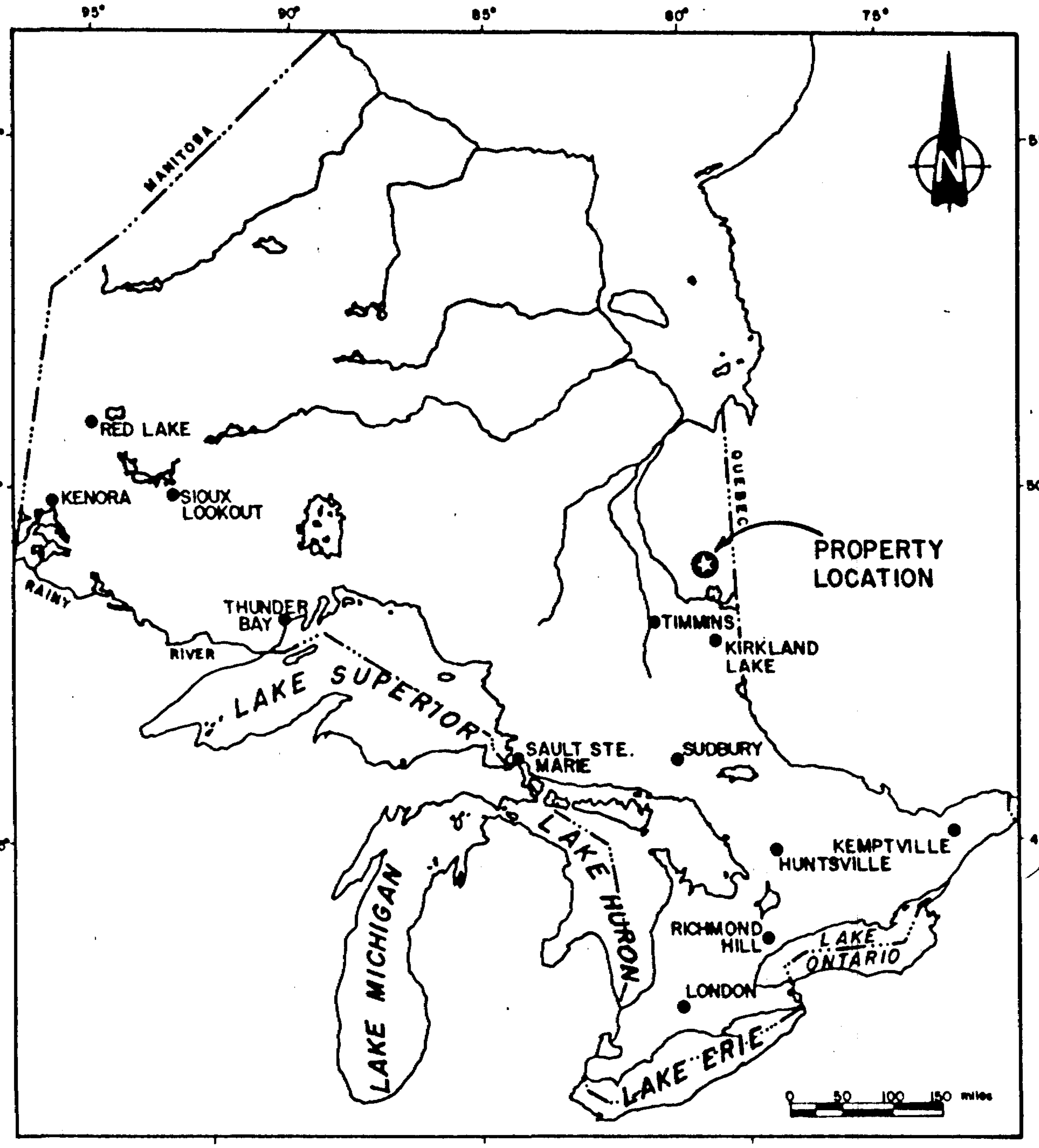
Location, Access and Facilities

The property is located in southern Blakelock township, 48 air miles northeast of Cochrane, Ontario (see Figures 1, 2). Access to the property is via fixed wing float plane from Cochrane. In addition, the new Detour Mine road passes within 5 miles to the northwest of the property.

Claim Status

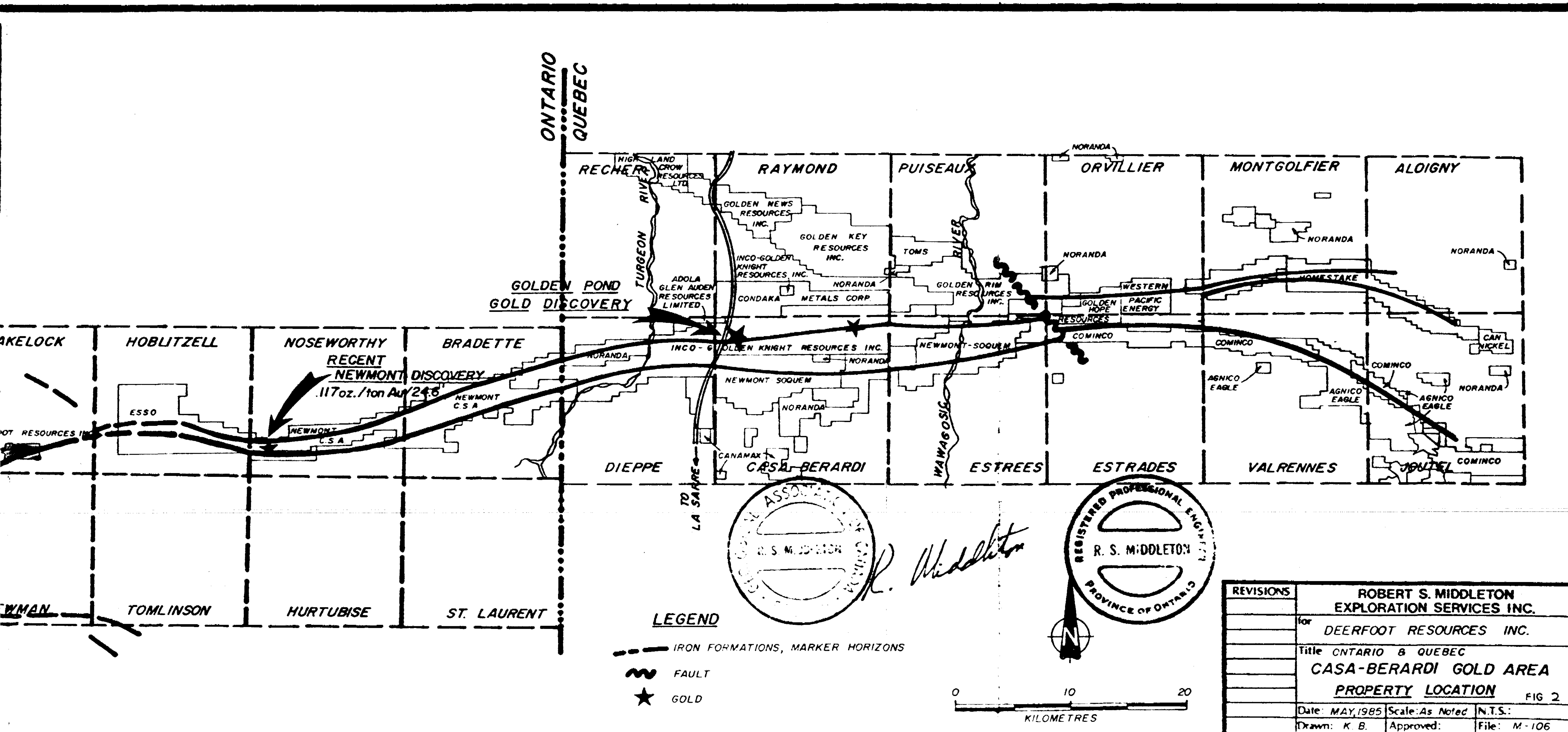
The property consists of 25 unpatented mining claims as shown in Figure 3. The numbers are as follows:

Claim Number	No.	Recording Date
848384-848398	15	April 19, 1985
755543-755552	10	May 17, 1985
	25	

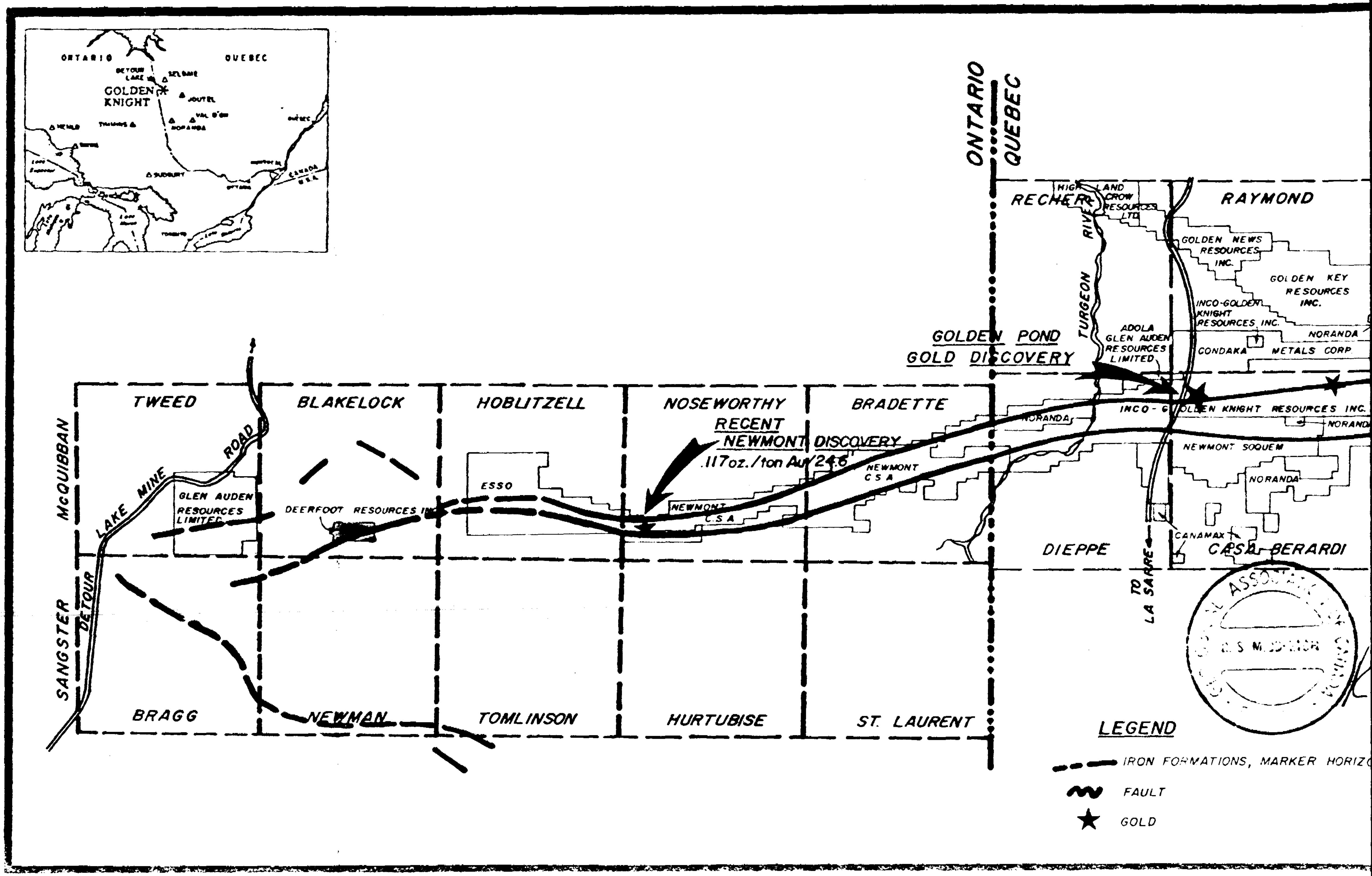


PROVINCE OF ONTARIO

REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for Deerfoot Resources Inc.		
	Title Blakelock Twp, District of Cochrane		
	PROPERTY LOCATION		
	Larder Lake Mining Division, Ontario Fig 1		
	Date MAY, 1985	Scale: 1" = 160mi	N.T.S.:
	Drawn: K.B.	Approved:	File: M-106



ONTARIO
QUEBEC
RECHER
RAYMOND
PUISEAUX
ORVILLIER
MONTGOLFIER
ALOIGNY
HOBLITZELL
NOSEWORTHY
BRADETTE
DIEPPE
CASA-BERARDI
ESTREES
ESTRADES
VALRENNES
JOUTEL
TOMLINSON
HURTUBISE
ST. LAURENT
GOLDEN POND
GOLD DISCOVERY
RECENT
NEWMONT DISCOVERY
.117oz./ton Au/24.6'
TURGEON RIVER
WAWAGOSIC RIVER
TO LA SARRE
HIGHLAND CROW RESOURCES LTD.
GOLDEN NEWS RESOURCES INC.
GOLDEN KEY RESOURCES INC.
INCO-GOLDEN KNIGHT RESOURCES INC.
ADOLA GLEN AUDEN RESOURCES LIMITED
CONDAKA
NORANDA METALS CORP.
TOMS
GOLDEN RIM RESOURCES INC.
NORANDA
WESTERN
HOMESTAKE
GOLDEN HOPE RESOURCES
PACIFIC ENERGY
COMINCO
CAN NICKEL
AGNICO EAGLE
NEWMONT-SOQUEM
NEWMONT SOQUEM
NEWMONT C.S.A.
ESSO
CANAMAX
LEGEND
IRON FORMATIONS, MARKER HORIZONS
FAULT
GOLD
0
10
20
KILOMETRES
N
R. S. MIDDLETON
REGISTERED PROFESSIONAL ENGINEER
PROVINCE OF ONTARIO
R. Middleton
REVISIONS
ROBERT S. MIDDLETON
EXPLORATION SERVICES INC.
for DEERFOOT RESOURCES INC.
Title ONTARIO & QUEBEC
CASA-BERARDI GOLD AREA
PROPERTY LOCATION
FIG 2
Date: MAY, 1985
Scale: As Noted
N.T.S.:
Drawn: K. B.
Approved:
File: M-106



ONTARIO
QUEBEC
GOLDEN KNIGHT
DETOUR LAKE
SELBAIE
JOUTEL
VAL D'OR
NORANDA
TIMMINS
SUDBURY
ONTARIO
QUEBEC
RECHER
RAYMOND
HIGHLAND CROW RESOURCES LTD.
GOLDEN NEWS RESOURCES INC.
GOLDEN KEY RESOURCES INC.
TURGEON RIVER
INCO-GOLDEN KNIGHT RESOURCES INC.
NORANDA
ADOLA GLEN AUDEN RESOURCES LIMITED
CONDAKA
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GOLDEN POND GOLD DISCOVERY
TWEED
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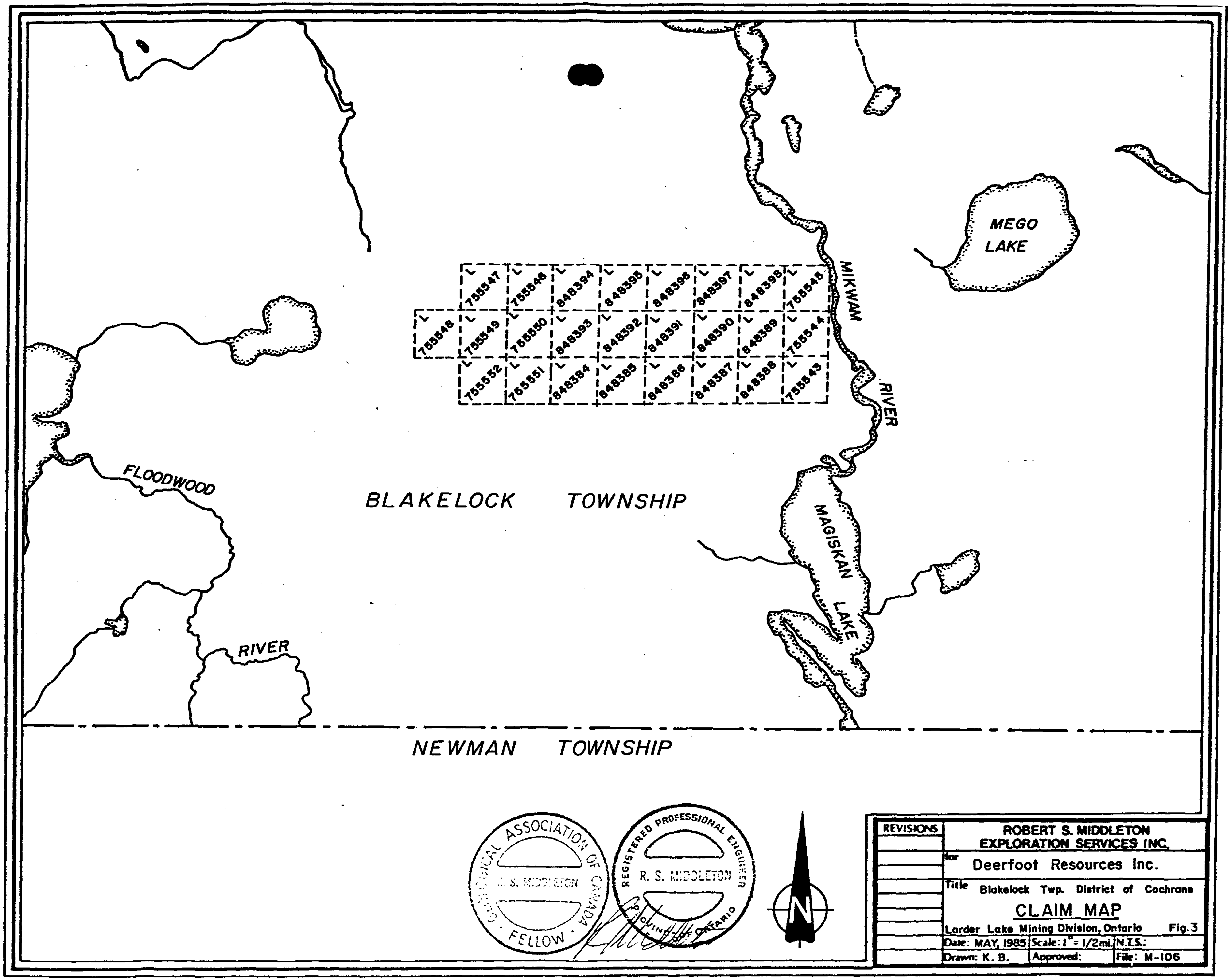
HOBLITZELL
NOSEWORTHY
BRADETTE
RECENT NEWMONT DISCOVERY
.117oz./ton Au/24.6'
INCO - GOLDEN KNIGHT RESOURCES INC.
NORANDA
NEWMONT SOQUEM
NEWMONT CSA
NORANDA
McQUIBBAN
LAKE MINE ROAD
GLEN AUDEN RESOURCES LIMITED
DEERFOOT RESOURCES INC.
ESSO
NEWMONT C.S.A
CANAMAX
DIEPPE
CASA BERARDI
SANGSTER
DETOUR
TO LA SARRE
BRAGG
NEWMAN
TOMLINSON
HURTUBISE
ST. LAURENT
LEGEND
IRON FORMATIONS, MARKER HORIZ
FAULT
GOLD


MEGO LAKE
MIKWAM RIVER
755547
755546
848394
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848397
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755545
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755544
755552
755551
848384
848385
848386
848387
848388
755543
FLOODWOOD
RIVER
BLAKELOCK TOWNSHIP
MAGISKAN LAKE
NEWMAN TOWNSHIP
ASSOCIATION OF CANADA
FELLOW
REGISTERED PROFESSIONAL ENGINEER
R. S. MIDDLETON
ONTARIO
N
REVISIONS
ROBERT S. MIDDLETON EXPLORATION SERVICES INC.
for Deerfoot Resources Inc.
Title Blakelock Twp. District of Cochrane
CLAIM MAP
Larder Lake Mining Division, Ontario
Fig. 3
Date: MAY, 1985
Scale: 1" = 1/2mi.
N.T.S.:
Drawn: K. B.
Approved:
File: M-106

Claims 848384-848398 are under extension of time until July 21, 1986 due to an early break-up preventing completion of the surveys.

The claims are presently held by Maurex Resources Ltd. in trust for Deerfoot Resources Inc.

Personnel

The following personnel were involved with the project between May 1 to 8, 1986:

R. J. Meikle	Timmins, Ontario
Steve Anderson	Crystal Falls, Ontario
Lanny Anderson	Crystal Falls, Ontario
Fern Duquette	Crystal Falls, Ontario
Francois Bonhomme	Toronto, Ontario

Previous Work

The following is taken from Mr. R. S. Middleton's report on the property, May 17, 1985.

The first work done in the area was by the Conwest Exploration Company (Toronto File 63.1028) who carried out electromagnetic surveys in 1960 and drilled 2 short holes near the northern boundary of the property and 2 short holes near the southern boundary of the property (see Figure 7). Several zones of porphyritic rhyolite with disseminated sulphides were indicated but the core was not assayed. The object of the Conwest program and subsequent work by others described below was base metals.

In 1976 further limited ground EM surveys and drilling were carried out by Geophysical Engineering Limited and two holes CC-6 and CC-7 were drilled which intersected stratabound pyrite-chert (iron formation) mineralization hosted in intermediate to felsic tuffs. The host rocks were sericitized. Also in 1976 Hudson Bay Mining and Smelting outlined a series of conductors on the southwest portion of the property area, near the Floodwood River (H.B.M.S. Grid G) but there is no record of drilling on file (Toronto File 2.2395). Noranda Exploration Company Limited did a ground EM and magnetic survey in a small area 1 mile east of the property (Toronto File 2.1658) and one hole was drilled roughly 2000 feet west of the Mikwam River (hole BK 75-2). Gold values of .03 oz Au over 3 feet at a depth of 106 - 109 feet were contained in a disseminated pyrite zone in porphyry in this hole.

In 1982 - 1985 Newmont Exploration have been carrying out an extensive overburden drilling, geophysical and diamond drill program 10 miles east of the property and have recently announced an important drill intersection of 4 gm/7.5m N. Miner, April 18, 1985. This hole is on the same iron formation trend that extends west through the Blakelock and Tweed Township area (see Figure 6). Extensive staking has taken place west of the Newmont property by Esso Resources, coming within 3 miles of the Deerfoot property.

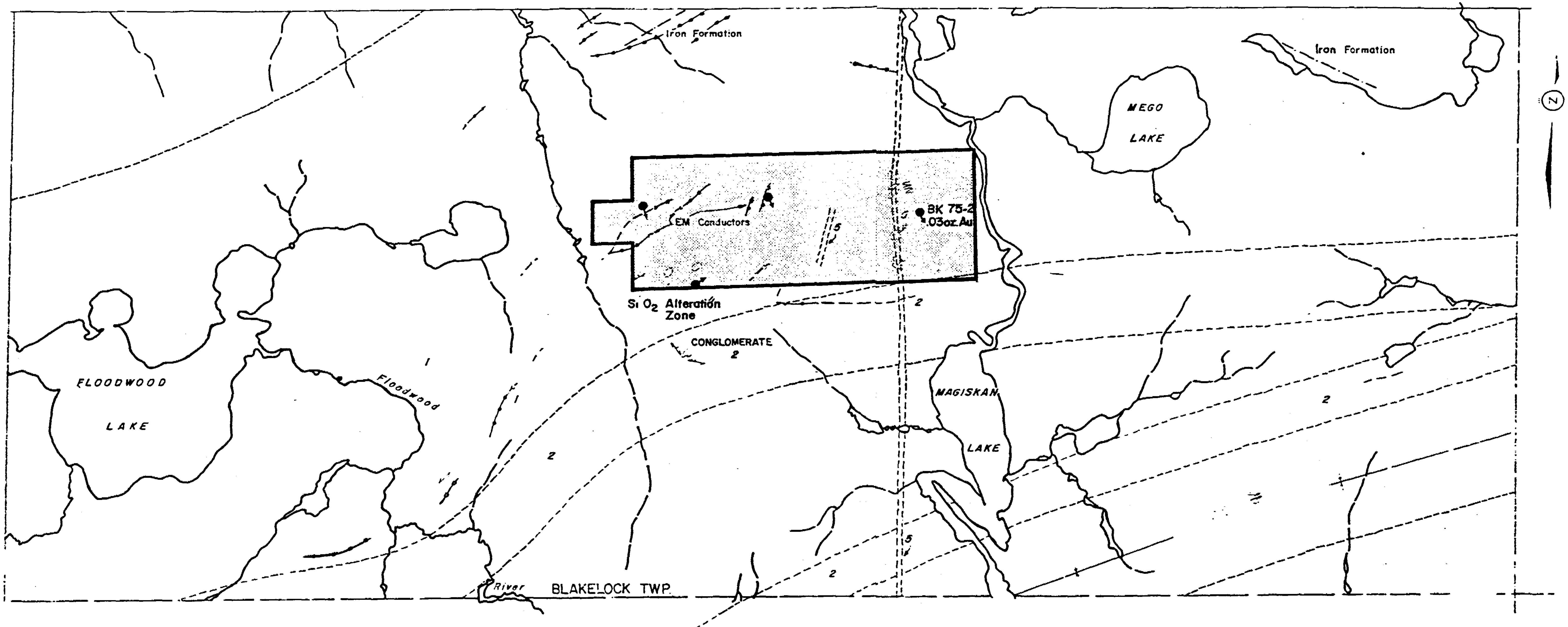
GEOLOGY

Geology and Mineralization

Geological mapping of the property will be completed in June-July, 1986. At this time a geological report will be written and possibly some explanation of the ground geophysics will be attempted. The following is a description of the regional geology taken from Mr. Robert S. Middleton, P.Eng. qualifying report on the property dated May 17, 1985 (see Figure 4).

Regional Geology

A series of iron formations hosted in sediments, felsic-mafic volcanics extend from the Casa Berardi area of Quebec into the Burntbush greenstone belt area in Ontario. The geology is illustrated on Ontario Department of Mines Map 2161. These iron formations are closely related to the gold mineralization as shown by the new Casa Berardi discovery by Inco, see Northern Miner (1984a, b), but upon detailed examination gold occurs within several rock types including oxide and sulphide iron formation, argillites, greywackes, conglomerate and felsic tuffs. Carbonate and silica alteration - veining with pyritization is directly associated with the gold values within the various rock types at the Inco discovery. Bedded stratabound pyrite zones within the oxide iron formation also contain important gold values. Recent assays released by Inco give gold



LEGEND

5 Mafic Intrusive Rocks

2 Metasediments

1 Mafic Metavolcanics

GEOLOGICAL ASSOCIATION OF CANADA
R. S. MIDDLETON
FELLOW

REGISTERED PROFESSIONAL ENGINEER
R. S. MIDDLETON
PROVINCE OF ONTARIO

N

REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.
	for Deerfoot Resources Inc.
	Title Blakelock Twp. District of Cochrane
	GEOLOGY
	Larder Lake Mining Division, Ontario Fig. 4
	Date MAY, 1985 Scale 1"=1/2mi.
	Drawn K. B. Approved File M-106

grades and widths in widely spaced holes of .13/6.7 ft., .26/24.9 ft., .73/15.7 ft., .23/81.5 ft., Northern Miner (1984b).

The aeromagnetic data as shown on Figure 6 can be utilized to trace the iron formation markers, and zones where the magnetic gradient becomes less indicate areas of change from oxide (high magnetic gradient) to sulphide and or carbonate facies. In Noseworthy township a gold showing is reported to occur near the Burntbush River (Cyril Knight showing) which is situated along the same magnetic horizon that links the iron formation markers in Quebec with the area containing the property. Overburden cover and general lack of outcrop in the region has prevented conventional gold prospecting and the principle exploration effort in the past 25 years has been base metal exploration using electromagnetic methods for outlining conductors. Gold analysis was not routinely done during these base metal programs, and as a result the gold potential for the area was not assessed nor was the geological setting appreciated until recent gold discoveries were made elsewhere along the belt.

Property Geology

The geology underlying the property consists of felsic, intermediate and mafic volcanic tuffs and flows which are intruded by local high level porphyry bodies. The south edge of the property is underlain by a sedimentary unit containing a conglomerate horizon that contains traces of gold, Thompson, R.(1936). Drilling done in the late 1960's to early 1970's was directed at a portion of a number of conductors within the bounds of the property with the purpose of base metal exploration. Examination of the drill logs and in some cases the drill core which is on file at the Resident Geologist office at Kirkland Lake has shown that a number of stratabound disseminated (non-conductive) sulphides occur within the volcanic section as well as massive sulphides. These sulphide zones are extensions of iron formation - exhalitive units in the area. This type of setting is similar to that of the Agnico Eagle mine in Quebec, portions of the Inco Casa Berardi discovery and Hemlo in Ontario. Siliceous and sericite alteration occurs in the host rocks (seen by the writer in both old drill core and outcrop) which act as guides to tracing out sulphide horizons that may contain concentrations of precious or base metals. In other words the areas with greatest alteration would likely occur near and adjacent to areas with metal concentrations.

Analysis of disseminated pyrite in a porphyritic unit in Noranda hole HK 75-2 which is situated 2000 feet west of the Mikwam River (claim L 848 389) on the Deerfoot property assayed .03 oz Au/3 feet showing that gold is present and is anomalous in this sulphide and porphyry (possibly porphyritic rhyolite) environment (logs on file at MNR, Kirkland Lake). Therefore further exploration for stratabound sulphide and porphyry gold deposits within this area is warrented.

Outcrops on the central part of the property contain intense silicification and brecciation indicating a center of hot spring activity within this section of volcanics. Nearby porphyry bodies may also indicate a volcanic centre area.

SURVEY PROCEDURES

MAX-MIN II

Theory

The Max-Min II is a frequency domain, horizontal loop electromagnetic (HLEM) system, based on measuring the response of conductors to a transmitted, time varying electromagnetic field.

The transmitted, or primary EM field is a sinusoidally varying field at any of five different frequencies. This field induces an electromotive force, (emf), or voltage, in any conductor through which the field passes. This is defined by:

$$\oint E.dl = \frac{-\partial \phi}{\partial t} \quad \text{(the Faraday Induction Principle)}$$

where E is the electric field strength in volts/metre (and so $\oint E.dl$ is the emf around a closed loop) and ϕ is the magnetic flux through the conductor loop. This emf causes a "secondary" current to flow in the conductor in turn generating a secondary electromagnetic field.

This changing secondary field induces an emf in the receiver coil (by the Faraday law) at the same frequency, but which differs from the primary field in magnitude and phase. The difference in phase (the phase angle) is a function of the conductance of the conductor(s), both the target and the overburden and host rock. The magnitude of the secondary is also dependant on the conductance, and also on the dimensions, depth, and geometry of the target, as well as on the interference from overburden and the host rock.

These two parameters (phase angle and magnitude) are measured by measuring the strength of the secondary field in two components: the real field or that part "in-phase" with the primary field; and the imaginary field, or that part in "quadrature" or 90° out of phase from the primary field.

The magnitude and phase angle of the response is also a function of the frequency of the primary field. A higher frequency field generates a stronger response to weaker conductors, but a lower frequency tends to pass through weak conductors and penetrate to a greater depth. The lower frequency also tends to energise the full thickness of a conductor, and gives a better measure of its true conductivity-thickness product (conductance).

For these reasons two or more frequencies are usually used; the lower for penetration and accurate measure of good conductors, and the higher frequency for strong response to weak conductors.

Distinction between conductive targets, overburden, and host rock responses are made by studying the shape of the secondary field, and the difference in the frequency responses.

The transmitted primary field also creates an emf in the receiver coil, which is much stronger than the secondary, and which must be corrected for by the receiver. This is done by electronically creating an emf in the receiver, whose magnitude is determined by the distance from receiver to transmitter as set on the receiver, and whose phase is derived from the receiver via an interconnecting wire.

Field Method

The Max-Min II survey was carried out in the "maximum coupled" mode (horizontal co-planar) using an Apex Max Min II Instrument. The transmitter and receiver are carried in-line down the survey line separated by a constant distance (in this case 150 m) with the receiver leading. Two transmitter frequencies were used: 444 Hz, and 1777 Hz. The transmitter and receiver are connected by a cable, for phase reference and operator communication.

MAGNETICS

Theory

The magnetic method is based on measuring alteration in the shape and magnitude of the earth's naturally ocurring magnetic field caused by changes in the magnetization of the rocks in the earth.

These changes in magnetization are due mainly to the presence of the magnetic minerals, of which the most common is magnetite, and to a lesser extent ilmenite, pyrrhotite, and some less common minerals.

Magnetic anomalies in the earth's field are caused by changes in two types of magnetization: induced and remanent (permanent). Induced magnetization is caused by the magnetic field being altered and enhanced by increases in the magnetic susceptibility of the rocks, which is a function of the concentration of the magnetic minerals.

Remanent magnetism is independant of the earth's magnetic field, and is the permanent magnetization of the magnetic particles (magnetite, etc.) in the rock. This is created when these particles orient themselves parallel to the ambient field when cooling. This magnetization may not be in the same direction as the present earth's field, due to changes in the orientation of the rock or the field.

The most common method of measuring the total magnetic field in ground exploration is with a proton precession magnetometer. This device measures the effect of the magnetic field on the magnetic dipole of hydrogen protons. This dipole is caused by the "spin" of the proton, and in a magnetometer these dipoles in a sample of hydrogen-rich fluid are oriented parallel to a magnetic field applied by an electric coil surrounding the sample. After this magnetic field is removed, the dipoles begin to precess (wobble) around their orientation under the influence of the ambient earth's magnetic field. The frequency of this precession is proportional to the earth's magnetic field intensity.

Field Method

The magnetics data were collected with an EDA OMNI IV proton precession magnetometer, which measures the absolute value of the total magnetic field of the earth to an accuracy of $\pm$ 1 n Tesla. The magnetometer is carried down the survey line by a single operator, with the sensor mounted on a short pole to remove it from the surface geologic noise. Readings are normally taken at 25 m intervals, and at 12.5 m intervals where the operator observes a high gradient (anomaly).

The readings are corrected for changes in the earth's total field (diurnal drift) by repeating readings at base stations and "tie points" several times each day.

RESULTS

The results of the Mag and EM surveys appear to be quite complex. There are two main Max-Min anomalies, and numerous complex magnetic features. They are described as follows:

E.M. Anomaly #1

This anomaly is centered on L20W at 5+00S. It appears to be a short, 150m, conductor with a greater than 70 mho conductivity - thickness value. However, the anomaly shape indicates the possibility of parallel conductors which may be striking obliquely to the line. A second conductor 300 meters to the south strikes NE and could be part of the same feature. However, the main anomaly is much more conductive and has a direct magnetic correlation. The magnetic anomaly exhibits a strong dipole and is characteristic of pyrrhotite and or strong iron formation response. More work is required to better resolve this conductor or to strike and extent.

E.M. Anomaly #2

This anomaly extends westward off the property at about 6-7 south. It starts at L25W-4+75S and where it has a weak, quadrature only, response. The conductivity increases westward, where it is strongest on L23W. Lines 34W and 35W were not read because of a beaver pond which disrupted a continuous profile of readings. This conductor also has a coincident magnetic response with up to 2600 nanoteslas above background. Anomaly #2 is on strike with and a possible extension of Anomaly #1.

E.M. Anomaly #3

This is a short, 150 m, conductor centered at 6+50S on L3W and L4W. It is a very weak, ill-defined conductor. The absence of a quadrature response suggest a chaining problem except that the response is obtained on two adjacent lines.

CONCLUSIONS AND RECOMMENDATIONS

The geophysical surveys outlined three conductors of interest. Anomalies #1 and #2 have direct magnetic correlation while anomaly #3 has no direct magnetic correlation. There does not appear to be any other significant magnetic anomalies.

Anomaly #1 requires further detailed EM and Magnetometer work to resolve both the strike extent, direction, and possibility of parallel anomalies. A vertical loop instrument would best resolve this. A few short east-west pace and compass traverses with a magnetometer would help delineate the magnetic trend.

The entire grid should be geologically mapped and an Induced Polarization survey conducted on at least every second line making sure that the three anomalies are covered.

The following proposed work program would bring the property to the drilling stage:

WORK PROGRAM

Re-Cutting of Winter Lines	
48 km @ $186/km	$ 8,928.00
Geological Mapping & Rock Analysis	
45 km @ $310/km	13,950.00
Additional E.M. & Magnetometer (detail)	
4 days @ $600/day	2,400.00
Induced Polarization Survey	
20 days @ $1,400/day	28,000.00
3 days mobe & demobe @ $900/day	2,700.00
Transportation - Fixed Wing from Cochrane	5,000.00
Contingency	4,022.00
TOTAL	$65,000.00

Respectfully submitted,

J Meikle

R. J. Meikle

CERTIFICATE

I, Raymond Meikle of Timmins, Ontario hereby certify that:

1) I hold a three year Technologist Diploma from the Haileybury School of Mines, Haileybury, Ontario.

2) I have based conclusions and recommendations contained in this report on knowledge of the area, my previous experience, and on the results of the field work conducted on the property during May, 1986 which was carried out under my overall supervision.

3) I hold no interest, directly or indirectly in this property other than professional fees, nor do I expect to receive any interest in the property or in Deerfoot Resources Inc. or any of it's subsidiary companies.

DATED this 25th day of June, 1986
at Timmins, Ontario.

R J Meikle

R. J. Meikle

Ontario

Geochemical and Expenditures)

L.M W8608-194 194/86 The Min

42H08NE0024 2.9238 BLAKELOCK 900

Type of Survey(s)
Line Cutting - Horizontal Loop EM - Mag

Claim Holder
DAVID V JONES (DEERFOOT RESOURCES INC) M 21190

Address
1007 Grant Street, Timmins, Ont P4N 1A8
Blakelock Twp

Survey Company	Date of Survey (from & to)	Total Miles of line Cut
R.S. Middleton Exploration Services Inc	01 05 86 (Day, Mo., Yr.) 08 05 86 (Day, Mo., Yr.)	45.2 Km

Name and Address of Author (of Geo-Technical report)
6 Hodges P.O. Box 1637 Timmins Ont P4N 7W8

Credits Requested per Each Claim in Columns at right

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	40
	- Magnetometer	20
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
	Geological	
	Geochemical	

Man Days	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	- Electromagnetic	
	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	

RECEIVED
JUN 6 1986
MINING LANDS SECTION

Airborne Credits		Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

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 number of days credits per claim selected in columns at right.

Date	Recorded Holder or Agent (Signature)
May 16/86	

Mining Claims Traversed (List in numerical sequence)

Prefix	Number	Expend. Days Cr.
L		
	848384	
	848385	
	848386	
	848387	
	848388	
	848389	
	848390	
	848391	
	848392	
	848393	
	848394	
	848395	
	848396	
	848397	
	848398	
	755543	
	755544	
	755545	
	755546	
	755547	
	755548	
	755549	

Prefix	Number	Expend. Days Cr.
	755550	
	755551	
	755552	

RECEIVED
MAY 20 1986

PORCUPINE MINING DIVISION
RECEIVED
MAY 16 1986

Total number of mining claims covered by this report of work. 25

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
1500	MAY 20 1986	
	Date Approved as Recorded	Branch Director
	86/07/28	

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 Postal Address of Person Certifying
R. J. Meikle
P.O. Box 1637 Timmins Ont P4N 7W8

Date Certified	Certified by (Signature)
May 16/86	

1362 (81/9)

File ____________

Ministry of Natural Resources

Ontario

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(s) Linecutting, Magnetometer, H.E.M.

Township or Area Blakelock Twp.

Claim Holder(s) Maurex Resources Ltd. in trust for Deerfoot Resources Inc.

Survey Company R.S. Middleton Exploration Services Inc.

Author of Report R. J. Meikle

Address of Author PO Box 1637 Timmins Ont. P4N 7W8

Covering Dates of Survey May 1 – May 8, 1986
(linecutting to office)

Total Miles of Line Cut 45.2 Km.

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	40
–Magnetometer	20
–Radiometric	
–Other	
Geological	
Geochemical	

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

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

DATE: ____________ SIGNATURE: 2.3860
Author of Report or Agent

MINING CLAIMS TRAVERSED
List numerically

(prefix) (number)

see attached list on report of work

If space insufficient, attach list

TOTAL CLAIMS ______

OFFICE USE ONLY

Res. Geol. ____________ Qualifications ____________

Previous Surveys

File No.	Type	Date	Claim Holder

837 (5/79)

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations Mag - 1800 EM - 1800 Number of Readings Mag 1800 EM 1800

Station interval 25 m Line spacing 100 m

Profile scale 1cm = 10% - EM

Contour interval 250 nano teslas - Mag

MAGNETIC

Instrument EDA OMNI - IV

Accuracy – Scale constant +/- 10 nano teslas

Diurnal correction method Baseline base station looping

Base Station check-in interval (hours) every time BL crossed

Base Station location and value Intersection of BL & X-Lines

ELECTROMAGNETIC

Instrument Apex Max-Min II

Coil configuration Maximum Coupled Co-Planar

Coil separation 150 meters

Accuracy +/- 1%

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

Frequency 1777 Hz 444 Hz
(specify V.L.F. station)

Parameters measured In-phase (%) Out of Phase Quadrature (%)

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 ______

Values measured ______

Energy windows (levels) ______

Height of instrument ______ Background Count ______

Size of detector ______

Overburden ______

(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 ______________________________

____

____

____

____

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____

____

____

____

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 ______________________________

____

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____

Ontario

Aug 5/86

Ministry of
Northern Development
and Mines

July 18, 1986

Your File: 194/86
Our File: 2.9238

Mining Recorder
Ministry of Northern Development and Mines
4 Government Road East
Kirkland Lake, Ontario
P2N 1A2

Dear Madam:

Enclosed are two copies of a Notice of Intent with statements listing a reduced rate of assessment work credits to be allowed for a technical survey. Please forward one copy to the recorded holder of the claims and retain the other. In approximately fifteen days from the above date, a final letter of approval of these credits will be sent to you. On receipt of the approval letter, you may then change the work entries on the claim record sheets.

For further information, if required, please contact Mr. R.J. Pichette at (416) 965-4888.

Yours sincerely,

R. Pichette

J.C. Smith, Supervisor
Mining Lands Section

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

SH/mc
Encl.

cc: David V. Jones (Deerfoot Resources Inc)
1007 Jeant Street
Timmins, Ontario
P4N 1A8

G. Hodge
P.O. Box 1637
Timmins, Ontario
P4N 7W8

Mr. G.H. Ferguson
Mining & Lands Comm.
Timmins, Ontario

R.J. Meikle
P.O. Box 1637
Timmins, Ontario
P4N 7W8

Ontario

Ministry of
Northern Development
and Mines

Notice of Intent
for Technical Reports

July 18, 1986

2.9238/194/86

An examination of your survey report indicates that the requirements of The Ontario Mining Act have not been fully met to warrant maximum assessment work credits. This notice is merely a warning that you will not be allowed the number of assessment work days credits that you expected and also that in approximately 15 days from the above date, the mining recorder will be authorized to change the entries on the record sheets to agree with the enclosed statement. Please note that until such time as the recorder actually changes the entry on the record sheet, the status of the claim remains unchanged.

If you are of the opinion that these changes by the mining recorder will jeopardize your claims, you may during the next fifteen days apply to the Mining and Lands Commissioner for an extension of time. Abstracts should be sent with your application.

If the reduced rate of credits does not jeopardize the status of the claims then you need not seek relief from the Mining and Lands Commissioner and this Notice of Intent may be disregarded.

If your survey was submitted and assessed under the "Special Provision-Performance and Coverage" method and you are of the opinion that a re-appraisal under the "Man-days" method would result in the approval of a greater number of days credit per claim, you may, within the said fifteen day period, submit assessment work breakdowns listing the employees names, addresses and the dates and hours they worked. The new work breakdowns should be submitted directly to the Land Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.

Ministry of Northern Development and Mines
Ontario

Technical Assessment Work Credits

File
2.9238

Date	Mining Recorder's Report of Work No.
July 18, 1986	194/86

Recorded Holder	DAVID V. JONES (DEERFOOT RESOURCES INC)
Township or Area	BLAKELOCK TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	L 848384
Electromagnetic 40 days	848386 to 394 inclusive
Magnetometer ____ days	848396-97
Radiometric ____ days	755543 to 547 inclusive
Induced polarization ____ days	755549 to 551 inclusive
Other ____ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological ____ 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	20 DAYS
L 848395	L 848385-98
755548	755552

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; Geologocal - 40; Geochemical - 40; Section 77(19) - 60.

828 (85/12)

Ministry of Northern Development and Mines
Ontario

Technical Assessment Work Credits

File
2.9238

Date	Mining Recorder's Report of Work No.
July 18, 1986	194/86

Recorded Holder
DAVID V. JONES (DEERFOOT RESOURCES INC)

Township or Area
BLAKELOCK TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic ______ days	
Magnetometer 20 days	L 848384 to 398 inclusive 755543 to 552 inclusive
Radiometric ______ days	
Induced polarization ______ days	
Other ______ days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological ______ 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

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; Geologocal - 40; Geochemical - 40; Section 77(19) - 60.

828 (85/12)

July 10, 1986 Report of Work #194

David V. Jones
1007 Jeant Street
Timmins, Ontario
P4N 1A8

Dear Sir:

RE: Mining Claims L 848384, et al,
in the Township of Blakelock

We have not received the reports and maps (in duplicate) for Geophysical (Electromagnetic & Magnetometer) Surveys on the above-mentioned claims.

As the assessment "Report of Work" was recorded by the Mining Recorder on May 20, 1986 the 60 day period allowed by Section 77 of the Mining Act for the submission of the technical reports and maps to this office will expire on July 19, 1986.

If the material is not submitted to this office by July 19, 1986 we will have no alternative but to instruct the Mining Recorder to delete the work credits from the claim record sheets.

For further information, please contact Mr. Arthur Barr at (416)965-4888.

Yours sincerely,

J.C. Smith, Supervisor
Mining Lands Section

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

Telephone: (416) 965-4888

AB/mc

cc: R.S. Middleton Exploration Services Inc
P.O. Box 1637
Timmins, Ontario
P4N 7W8
Attention: G. Hodges

Mining Recorder
Kirkland Lake, Ontario

Encl.

July 28, 1986

Your File: 2.9238
Our File: 194/86

Mining Recorder
Ministry of Northern Development and Mines
4 Government Road East
Kirkland Lake, Ontario
P2N 1A2

Dear Madam:

RE: Notice of Intent dated July 18, 1986
Geophysical (Electromagnetic & Magnetometer)
Surveys on Mining Claims L 755543, et al,
in the Township of Blakelock

Please disregard the above-mentioned Notice of Intent. This submission has been reassessed and the credits as recorded on May 20, 1986 have been approved as of the above date.

Yours sincerely,

J.C. Smith, Supervisor
Mining Lands Section

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

Telephone: (416) 965-4888

DK/mc

cc: David V. Jones
1007 Jeant Street
Timmins, Ontario
P4N 1A8

R.S. Middleton Exploration Services Inc
P.O. Box 1637
Timmins, Ontario
P4N 7W8
Attention: G. Hodges

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

Mining Lands Section

File No 29238

Control Sheet

TYPE OF SURVEY ✓ GEOPHYSICAL

____ GEOLOGICAL

____ GEOCHEMICAL

____ EXPENDITURE

MINING LANDS COMMENTS:

J. Hurst

Signature of Assessor

July/14/86

Date

Lgd

8.

	m	EM		m	EM	2.9238
848384	✓	✓	755543	✓	✓	
85	✓	1/2	44	✓	✓	
86	✓	✓	45	✓	✓	
87	✓	✓	46	✓	✓	
88	✓	✓	47	✓	✓	
89	✓	✓	48	✓	1/4	
90	✓	✓	49	✓	✓	
91	✓	✓	50	✓	✓	
92	✓	✓	51	✓	✓	
93	✓	✓	52	✓	1/2.	
94	✓	✓				
95	✓	1/4				
96	✓	✓				
97	✓	✓				
98	✓	1/2.				

M.419

BLAKELOCK

LARDER LAKE MINING DIVISION

DISTRICT OF COCHRANE

Scale - 40 Chains - 1 Inch

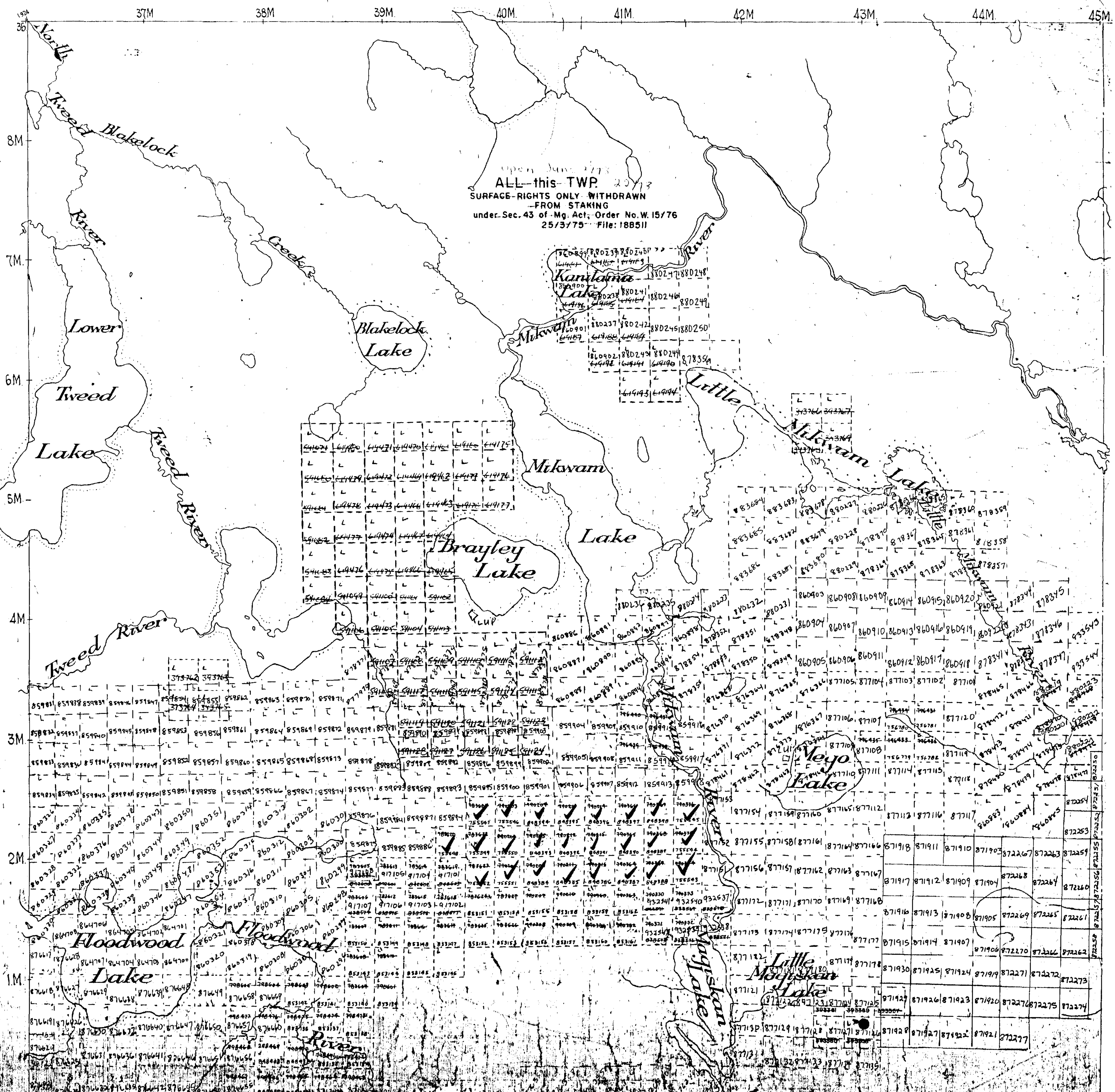
JUL 10 1986

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

#17

LEGEND

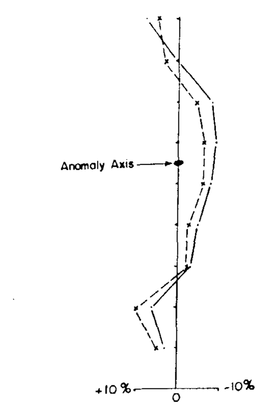
CANCELLED	C
PATENTED LAND	Ⓟ
CROWN LAND SALE	C.S.
LEASES	Ⓛ
LOCATED LAND	LOC.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.



42H08NE0024 2.9238 BLAKELOCK 200

■ claim post (located)
□ claim post (assumed)

2 9238



LEGEND

INSTRUMENT: MAX-MIN II
MODE: Maximum Coupled
COIL SEPERATION: 150m.
FREQUENCY: 444 Hz
PARAMETERS MEASURED: In phase , Out of phase
VERTICAL SCALE: 1cm = 10%

metres 0 25 50 100 200 metres

REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for DEERFOOT RESOURCES INC.		
	Title Blakelock Township		
	MAX - MIN II 444 Hz		
	Date: JUNE 1986	Scale: 1:2500	N.T.S.:
	Drawn: C.G.	Approved:	File: M-106

210

■ claim post (located)
□ claim post (assumed)

220

2.9238

LEGEND
INSTRUMENT: MAX-MIN II
MODE: Maximum Coupled
COIL SEPERATION: 150 m.
FREQUENCY: 1777 Hz
PARAMETERS MEASURED: In phase, Out of phase
VERTICAL SCALE: 1cm = 10%

REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for DEERFOOT RESOURCES INC.		
	Title *Blakelock Township* MAX-MIN II 1777 Hz		
	Date: JUNE 1986	Scale: 1:2500	N.T.S.:
	Drawn: C.G.	Approved:	File: M-106

■ claim post (located)

□ claim post (assumed)

230

LEGEND

INSTRUMENT: EDA OMNI IV
Proton Precession

PARAMETERS MEASURED: Total Magnetic Field

Diurnals Corrected by Base Station Looping

ACCURACY: +/- 10 nano - teslas

CONTOUR INTERVAL: 250 nano-teslas

REVISIONS	ROBERT S. MIDDLETON EXPLORATION SERVICES INC.		
	for DEERFOOT RESOURCES INC.		
	Title *Blakelock Township* CONTOURED PROTON MAGNETOMETER SURVEY BACKGROUND: 58,000		
	Date: JUNE 1986	Scale: 1:2500	N.T.S.:
	Drawn: C.G.	Approved:	File: M-106