TECK EXPLORATIONS LIMITED

NORTH BAY, ONTARIO

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2.13284

ASSESSMENT REPORT ON THE GEOPHYSICAL SURVEYS ON BLOCK I CUNNINGHAM TOWNSHIP CLAIMS

by

K. Thorsen

Qual 2.2012

Report No. 1113NB

N.T.S. 41 O/10

04-26-90

INTRODUCTION

The Cunningham Township blocks are located approximately 15 km northeast of the town of Sultan. Block I is the northern group of four separate claim blocks. The block consists of nineteen contiguous mining claims as shown on Fig. 2.

During June and September, 1989 lines were cut and were surveyed magnetically and electromagnetically.

LOCATION AND ACCESS

The claims are located 15 km northeast of Sultan, a small town on the C.P.R. rail line. Chapleau is approximately 45 km west-northwest of the block.

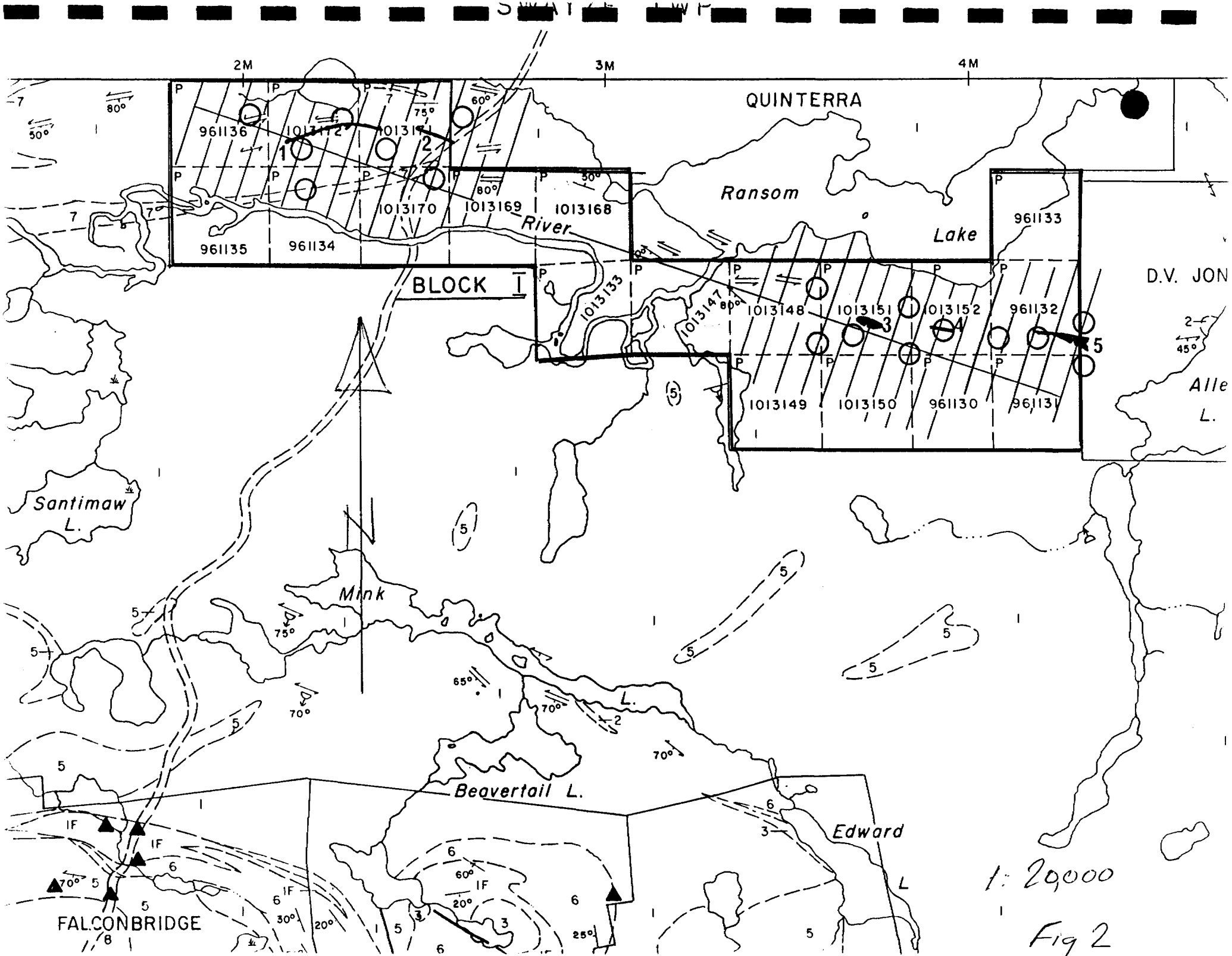
Access is via float or ski plane to Ransom Lake or via an old winter road that previously accessed the Kenty Mine north of Ransom Lake.

TOPOGRAPHY AND VEGETATION

The topography is gently rolling - typical of Precambrian Shield terrain. The block is covered by mature spruce, pine, birch and poplar with alders and cedar in the low lying areas.

WORK DONE

A grids was established using a base line and cross lines at 100-metre


2M
3M
4M
QUINTERRA
Ransom
Lake
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BLOCK I
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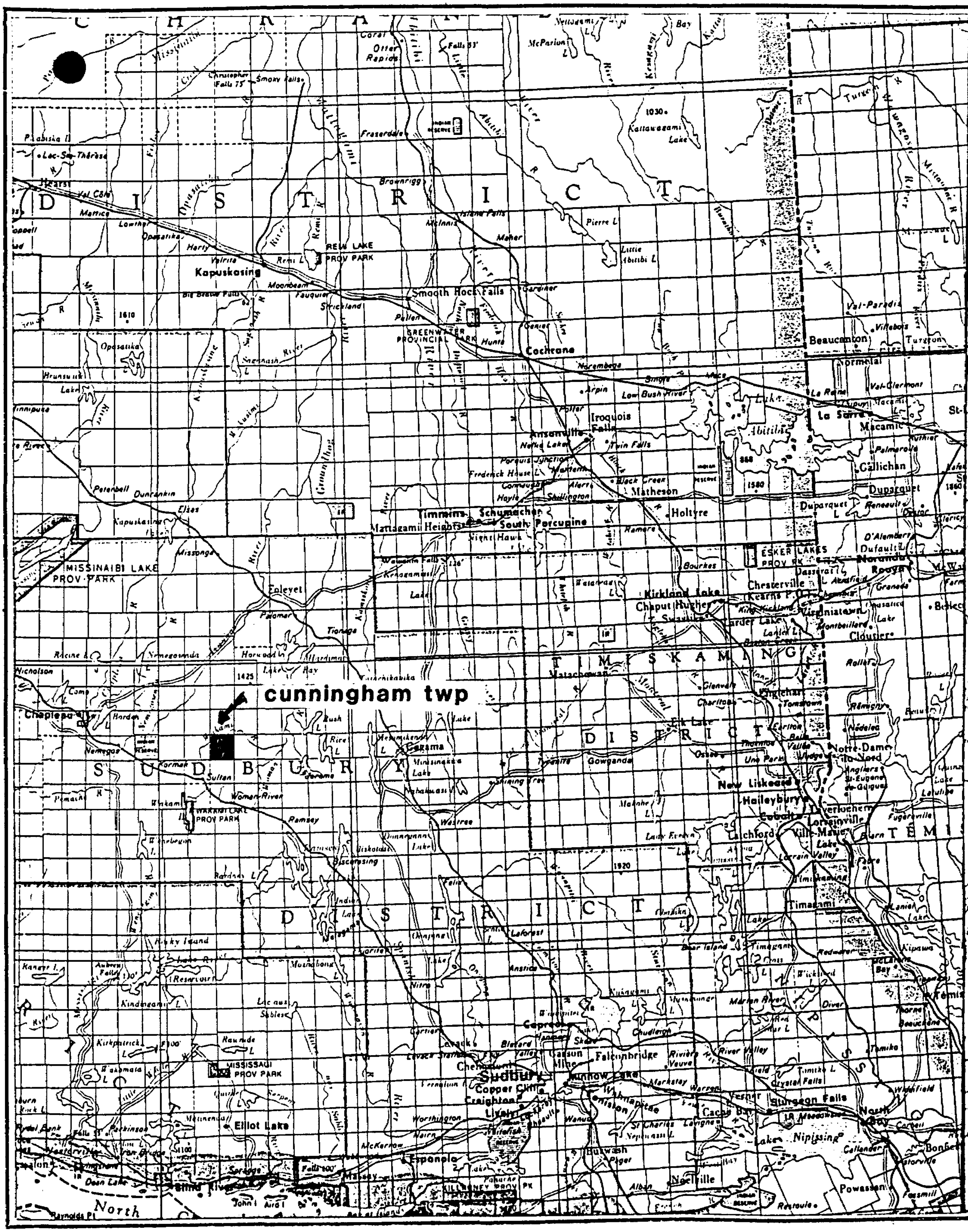
1: 20,000
Fig 2



LOCATION MAP

1 inch equals approximately 32 miles

Miles 20 0 20 40 60 80 100 Miles

Figure. 1

intervals to cover airborne E.M. anomalies. Stations were established at 25-metre intervals along cross lines.

The lines were surveyed electromagnetically using a MaxMin II horizontal loop instrument. Readings were taken at 25-metre intervals using the 444 Hz, 1777 Hz and 3555 Hz frequencies.

A McPhar Fluxgate magnetometer was used to survey the grids magnetically. Readings were taken at 25-metre intervals and were corrected for diurnal variation by comparing the readings to those taken at established base stations along the base lines.

The data from the geophysical surveys was plotted at a scale of 1:2500 and is shown on Dwgs. 6523a, b, c and d.

RESULTS

MaxMin II

A total of five conductors resulted from the MaxMin II survey. Conductor #1 is relatively strong on one line and weakens on the other three lines. Conductors #2, #3 and #4 are short and relatively weak. Conductor #5 is strong and strikes off the property to the east.

Magnetometer

Conductors #1 and #2 are associated with a very strong magnetic anomaly

and probably represent the same stratigraphic horizon. Conductors #3 and #4 are in a magnetic low and may represent the same conductive zone. Conductor #5 is in a low at the west end and broadens into a moderate high at the east end. The conductor may possibly split at the east end and flank the high on either side.

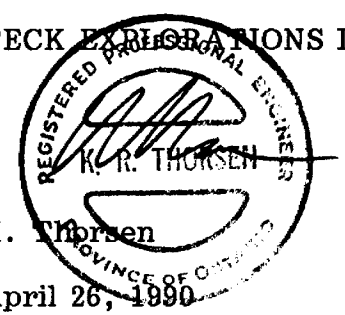
The magnetics are generally fairly spiky indicating shallow overburden depths.

RECOMMENDATIONS

Conductors #1, #3 and #5 should be drill tested. Conductors #2 and #4 may be tested pending the results on the first three holes.

Respectfully submitted,

TECK EXPLORATIONS LIMITED



K. Thorsen

April 26, 1990

REP-0040/sm

CRONE GEOPHYSICS LIMITED

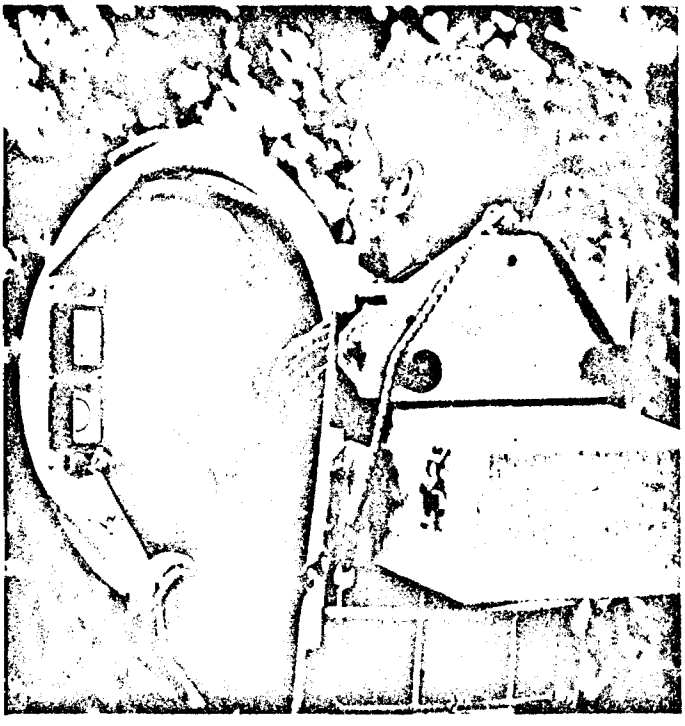
3607 WOLFEDALE ROAD,
MISSISSAUGA, ONTARIO,
CANADA.

Phone: 270-0096

C E M

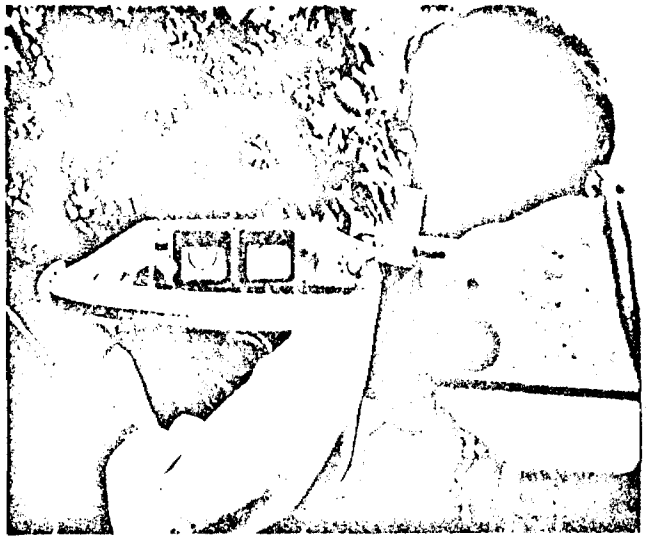
THE CRONE ELECTROMAGNETIC INSTRUMENT DESIGNED TO BE USED WITH THE NEW HORIZONTAL SHOOTBACK EM METHOD AS WELL AS VERTICAL LOOP AND HORIZONTAL LOOP METHODS.

The equipment consists of two identical transmitter-receiver coils capable of measuring the DIP ANGLE and FIELD STRENGTH of the EM field. Coil separations up to 600'. See the report "Deep Electromagnetic Exploration with the Horizontal Shootback Method" by D. Crone for analysis of this new method.



HORIZONTAL SHOOTBACK EM

TRANSMITTING ↓ RECEIVING →



- Deep penetration.
- Accurate surveys in mountainous terrain.
- Line cutting not required.
- Precise interpretation as to dip, conductivity and depth.
- Simple to operate.
- Rugged equipment.

SPECIFICATION OF THE CEM INSTRUMENT

This unit is composed of two identical coils both capable of receiving and transmitting at 3 fixed frequencies. All circuiting is housed within the coils. The batteries are mounted in an insulated box on a magnesium packboard.

- coil diameter 22", weight per coil 8.3 lbs.
- standard frequencies 390, 1830, 5010 Hz (others available).
- inclinometer range 200°, accuracy ± ½°.
- receiver gain control — 10 turns, linear calibrated pot.
- dip angle determined by visual minimum on Field Strength meter.
- Field Strength read directly on a meter and controlled by gain control pot.
- packboard and battery box weight each 7.0 lbs.
- battery — 6 volt lantern type — Eveready 731, Burgess TW-1.
- weight per battery 3.0 lbs.
- 1 to 3 batteries may be used connected in series.
- range for 100% Field Strength and ± 1° null all frequencies, 6 volts — 400', 12 volts — 500', 18 volts — 600'.
- shipped in two wooden boxes weight 50 lbs. each.

McPHAR

M700 Flux Gate Magnetometer

Rugged, reliable instrument for hand-held field operation

Self Levelling sensing head

Five scale ranges: 1,000 to 100,000 gammas

Low temperature drift

Latitude adjustment up to ± 100,000 gammas

Reverse measurement polarity by turn of switch

Long battery life

M700 Flux Gate Magnetometer is a simple and efficient instrument for measuring changes in the earth's magnetic field. The two operating controls are mounted on the face of the instrument with the latitude adjustment and accessory socket concealed behind a panel on the side.

For measuring the vertical component of the earth's magnetic field, the instrument is set to zero at a chosen base station.
At each station on the survey the M700 is held roughly level, and a measurement of the increase or decrease in the magnetic field is read off the meter directly in gammas.

Measurement Ranges	Sensitivity
1,000 gammas	20 gammas/div.
3,000 gammas	50 gammas/div.
10,000 gammas	200 gammas/div.
30,000 gammas	500 gammas/div.
100,000 gammas	2,000 gammas/div.

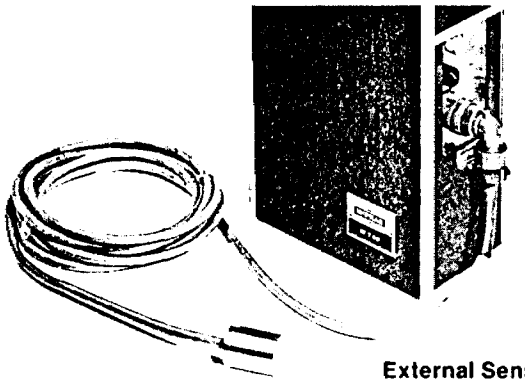
Operating temperatures -35° C. to 55° C. Temperature drift less than 50 gammas over entire operating range

Dimensions 4 x 7 x 10½ in. (10 x 18 x 27 cm.)

Weight
6½ pounds (3 kg.), less batteries and carrying case
8 pounds (3.8 kg.) with batteries

Batteries
Two internally mounted 9V batteries provide up to two months operation under normal conditions.

Accessories increase flexibility of the M700



External Sensing Head

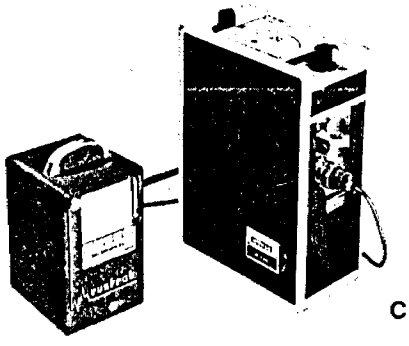
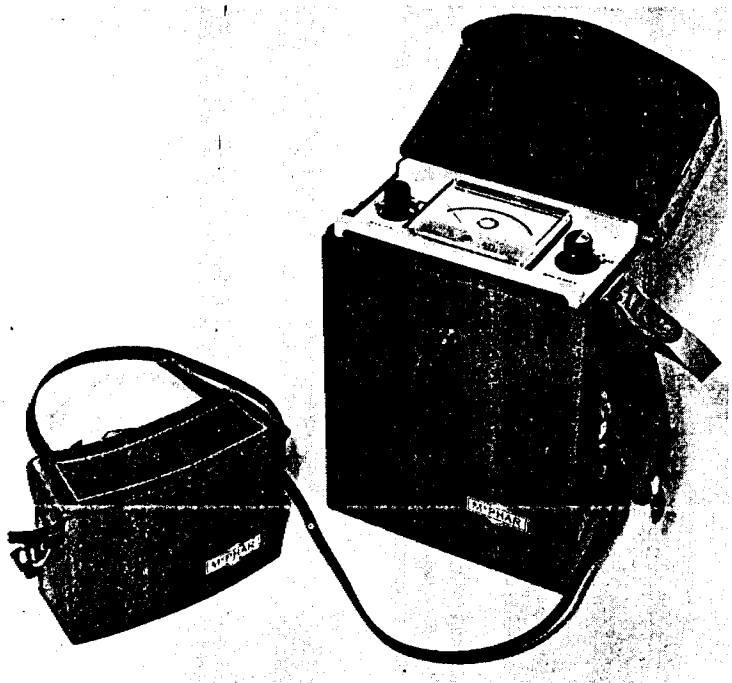


Chart Recorder



External Battery Pack

Side accessory socket allows use of:

external battery pack

chart recorder

external sensing head

horizontal sensing head

Accessory socket is located in the side panel of the M700 along with the latitude adjustment control and accessory switch. It allows the use of various pieces of equipment that extend the range of this instrument.

External Battery Pack For below freezing operation the internal batteries are removed and the external battery pack used. It is carried under the operator's clothing to prevent battery freezing. An alternate external battery pack is available consisting of 12 "C" size flashlight batteries.

Chart Recorder For long term base station monitoring an external heavy duty battery pack and chart recorder can be attached to the M700. Any current type recorder with a sensitivity of one milliampere for full scale deflection or any potential type recorder with a sensitivity of one volt for full scale deflection can be used with the magnetometer.

External Sensing Head An external sensing head can be used on the M700 without modification to the instrument. The sensing head plugs into the accessory socket.

McPhar Geophysics Instrument Sales Offices

Canada
McPhar Geophysics Ltd.
139 Bond Street, Don Mills, Ontario
Tel.: (416) 449-5551

811 — 837 W. Hastings Street, Vancouver, B.C.
Tel.: (604) 685-3613

Singapore
McPhar (Asia) Pte. Ltd.
51 Kallang Place, Singapore 12
Tel.: 530311

Australia
McPhar Geophysics Pty. Ltd.
50 Mary Street, Unley 506, S. Australia
Tel.: 72-2133

28 Nicholson Road, Subiaco, W.A. 6008
Tel.: 841-4955

63 Alexander Street, Manly 2095, N.S.W.
Tel.: 977-4192

United States
McPhar Geophysics Inc.
818 W. Miracle Mile, Tucson, Arizona 85705
Tel.: (602) 624-2588

Philippines
McPhar Geoservices (Philippines) Inc.
P.O. Box 3279, Manila
Tel.: 50-53-06

TECK EXPLORATIONS LIMITED

NORTH BAY, ONTARIO

020

ASSESSMENT REPORT
ON THE
GEOLOGY AND GEOPHYSICAL SURVEYS
ON BLOCK II
CUNNINGHAM TOWNSHIP CLAIMS

2.13284

by

K. Thorsen

Report No. 1109NB

N.T.S. 41 O/10

04-23-90

INTRODUCTION

The Cunningham Township blocks are located approximately 15 km northeast of the town of Sultan. Block II is the south central group of four separate claim blocks. The block consists of eight contiguous mining claims as shown on Fig. 2.

During June and September, 1989 lines were cut, surveyed magnetically and electromagnetically and geologically mapped.

LOCATION AND ACCESS

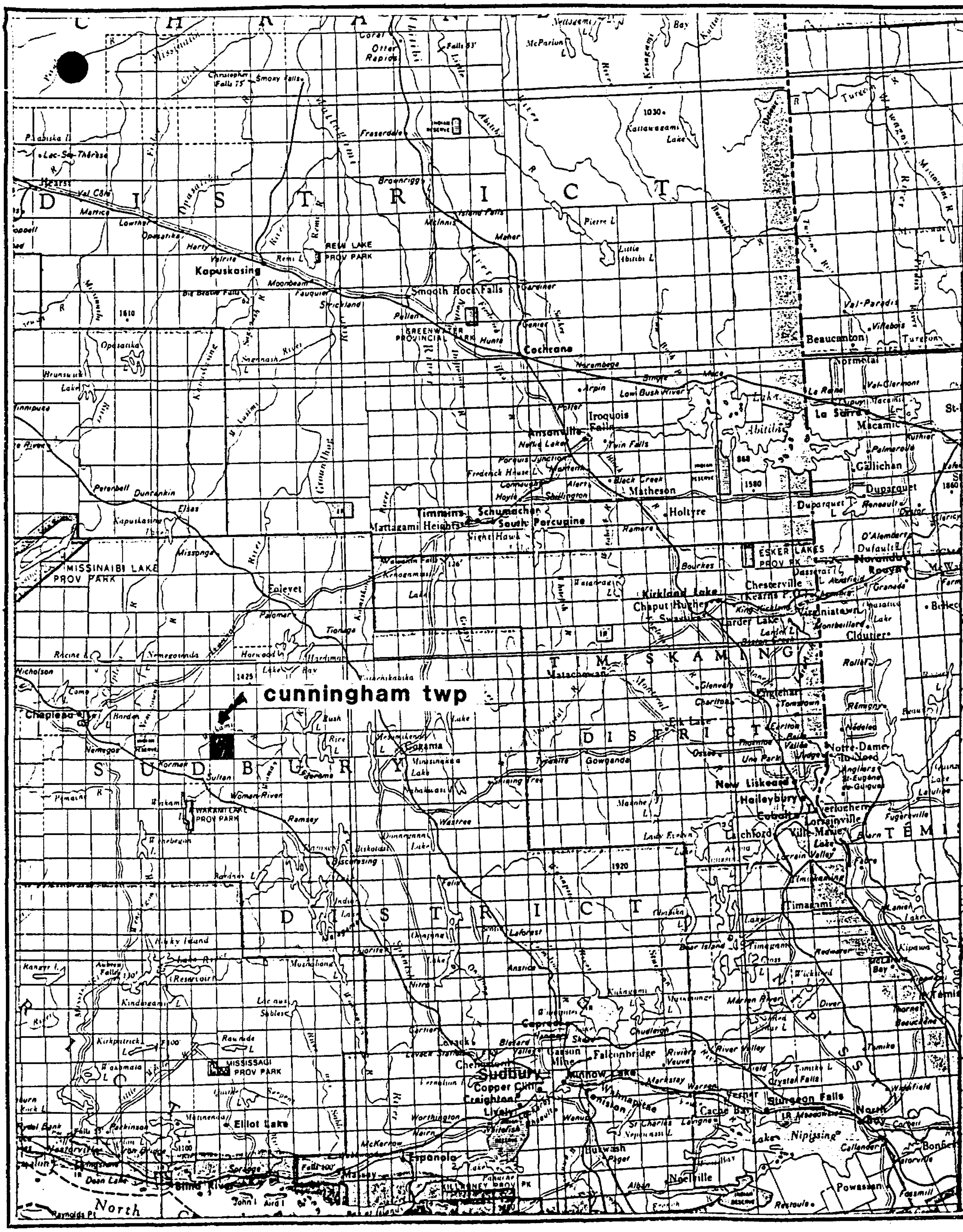
The claims are located 15 km northeast of Sultan, a small town on the C.P.R. rail line. Chapleau is approximately 45 km west-northwest of the block.

Access is attained through several lumber roads constructed during the last few years. Both grids on Block II are traversed by gravel logging roads.

TOPOGRAPHY AND VEGETATION

Approximately three-quarters of the southeast grid and one-half of the northwest grid have been cut over very recently. The remainder of the grids are covered with mature poplar, spruce, birch, balsam and pine as noted on Dwg. 6524c.

The topography is gently rolling - typical of Precambrian Shield terrain.

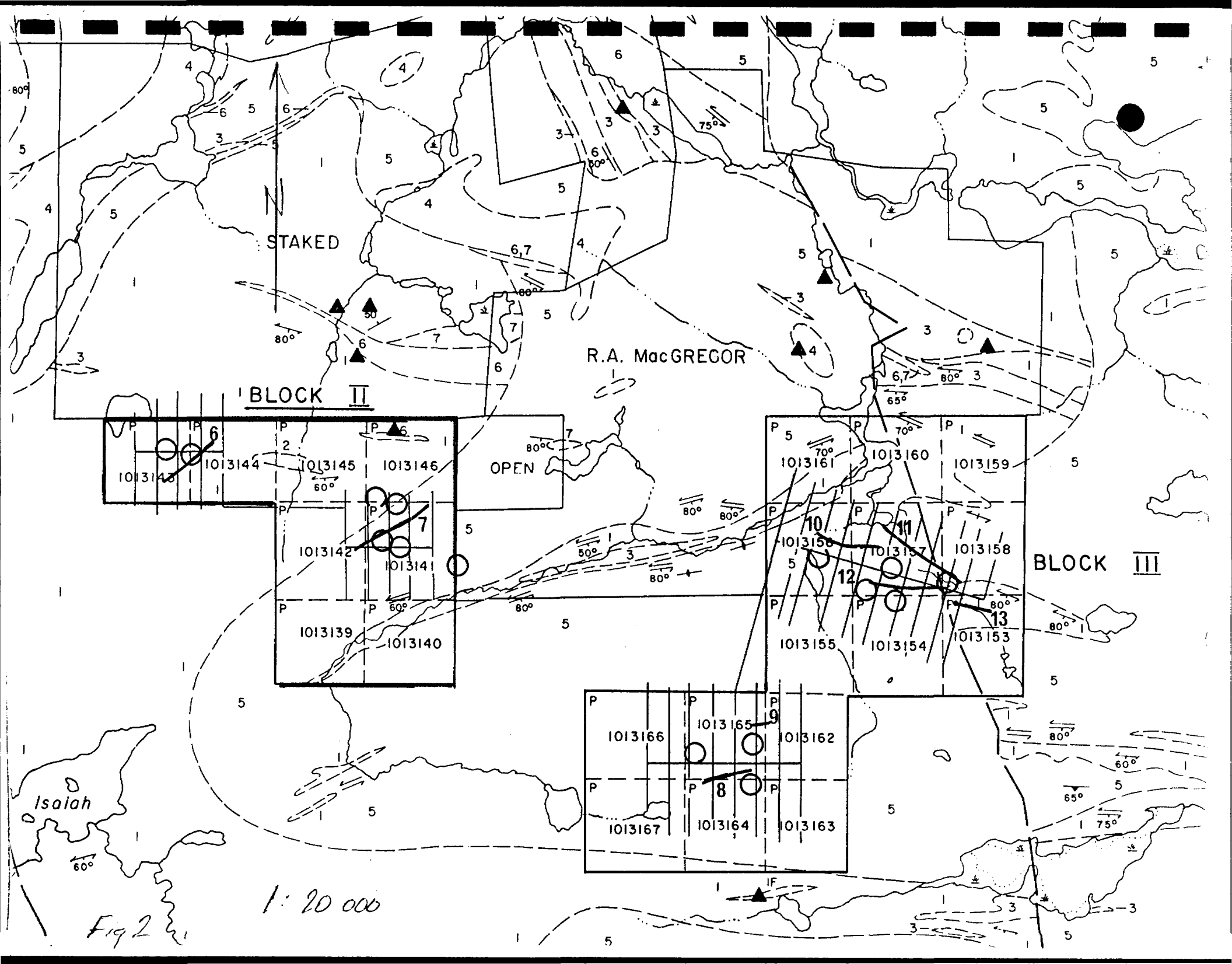


LOCATION MAP

1 inch equals approximately 32 miles

Miles 20 0 20 40 60 80 100 Miles

Figure. 1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R.A. MacGREGOR
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BLOCK III
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Fig 2

WORK DONE

Grids were established using two base lines and cross lines at 100-metre intervals to cover airborne E.M. anomalies. Stations were established at 25-metre intervals along cross lines.

The lines were surveyed electromagnetically using a Crone CEM shootback instrument in the horizontal mode. Readings were taken at 25-metre intervals using the 390 Hz frequency.

A McPhar Fluxgate magnetometer was used to survey the grids magnetically. Readings were taken at 25-metre intervals and were corrected for diurnal variation by comparing the readings to those taken at established base stations along the base lines.

The lines were walked by a geologist and notes were taken on topography, vegetation, outcrop locations and rock types. Scouting between lines reduced the chances of missing any outcrop.

The data from the geophysical surveys and geological mapping was plotted at a scale of 1:2500 and is shown on Dwgs. 6524a, 6524b and 6524c.

RESULTS

Crone CEM

Conductor #6 on the northwest grid is moderately weak and strikes obliquely

to the grid at approximately 045°. Conductor 7 on the southeast grid is moderately strong in its central portion and strikes at 060°. Both conductors appear to be under shallow overburden as seen from the spiky nature of the shootback results.

Magnetometer

Both conductors are associated with magnetic highs ranging from 400 to 1100 gammas above background. The spiky nature of the data also indicates a shallow depth to source.

Geology

Only five outcrops were noted on the northwest grid. The four located in the southeast part are dark green, massive, mafic flows and the northwest outcrop is a fine-grained intermediate tuff. A gossan noted in the centre of the grid near the conductor axis may be a boulder but is probably close to source. The sample taken from this outcrop was not anomalous in gold, silver, copper and zinc.

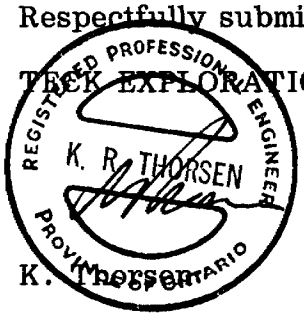
Outcrops on the southeast grid consist primarily of intermediate to felsic tuffs with minor mafic tuffs and several gossanous boulders and outcrops. The gossans are generally well banded and highly friable and may represent sulphide-rich sedimentary units. Samples are generally not anomalous in gold, silver, copper and zinc although one sample (F6036) returned a value of 105 ppb Au and another (F6037) contained 885 ppm zinc.

RECOMMENDATIONS

Both conductors, although associated with only weakly anomalous metals, should be drill tested. The axes of the conductors are not directly related to the gossans and may represent economic sulphide deposits.

Respectfully submitted,

TREK EXPLORATIONS LIMITED



K. Thorsen

April 23, 1990

REP-0036/sm

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3607 WOLFEDALE ROAD,
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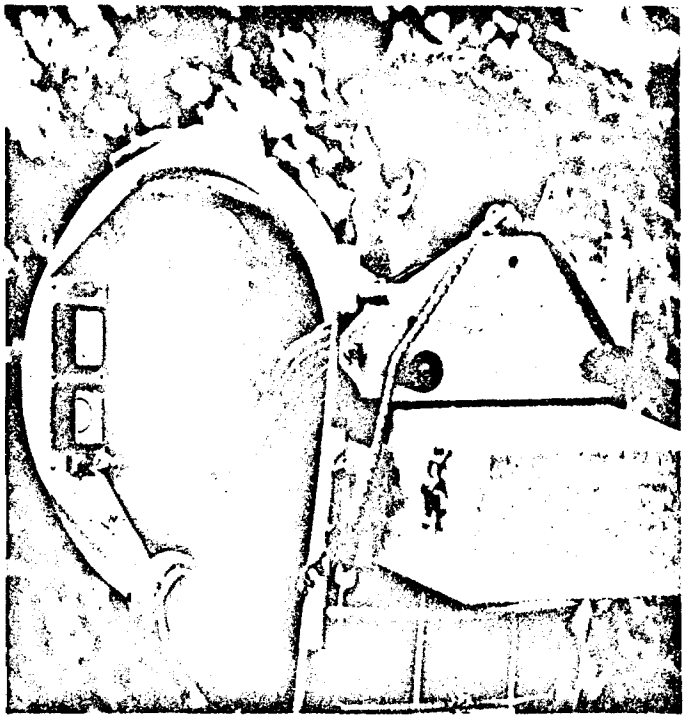
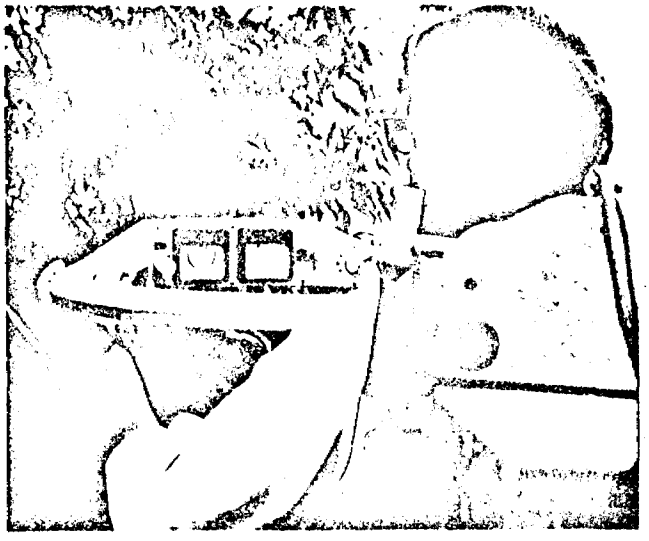


HORIZONTAL SHOOTBACK EM

TRANSMITTING ↓ RECEIVING →



- Deep penetration.
- Accurate surveys in mountainous terrain.
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- Precise Interpretation as to dip, conductivity and depth.
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- Field Strength read directly on a meter and controlled by gain control pot.
- packboard and battery box weight each 7.0 lbs.
- battery — 6 volt lantern type — Eveready 731, Burgess TW-1.
- weight per battery 3.0 lbs.
- 1 to 3 batteries may be used connected in series.
- range for 100% Field Strength and ± 1° null all frequencies, 6 volts — 400', 12 volts — 500', 18 volts — 600'.
- shipped in two wooden boxes weight 50 lbs. each.

McPHAR

M700 Flux Gate Magnetometer

Rugged, reliable instrument for hand-held field operation

Self Levelling sensing head

Five scale ranges: 1,000 to 100,000 gammas

Low temperature drift

Latitude adjustment up to ± 100,000 gammas

Reverse measurement polarity by turn of switch

Long battery life

M700 Flux Gate Magnetometer is a simple and efficient instrument for measuring changes in the earth's magnetic field. The two operating controls are mounted on the face of the instrument with the latitude adjustment and accessory socket concealed behind a panel on the side.

For measuring the vertical component of the earth's magnetic field, the instrument is set to zero at a chosen base station.
At each station on the survey the M700 is held roughly level, and a measurement of the increase or decrease in the magnetic field is read off the meter directly in gammas.

Measurement Ranges	Sensitivity
1,000 gammas	20 gammas/div.
3,000 gammas	50 gammas/div.
10,000 gammas	200 gammas/div.
30,000 gammas	500 gammas/div.
100,000 gammas	2,000 gammas/div.

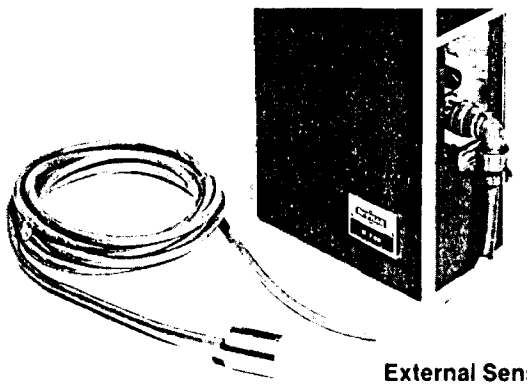
Operating temperatures -35° C. to 55° C.
Temperature drift less than 50 gammas over entire operating range

Dimensions 4 x 7 x 10½ in. (10 x 18 x 27 cm.)

Weight
6½ pounds (3 kg.), less batteries and carrying case
8 pounds (3.8 kg.) with batteries

Batteries
Two internally mounted 9V batteries provide up to two months operation under normal conditions.

Accessories increase flexibility of the M700



External Sensing Head

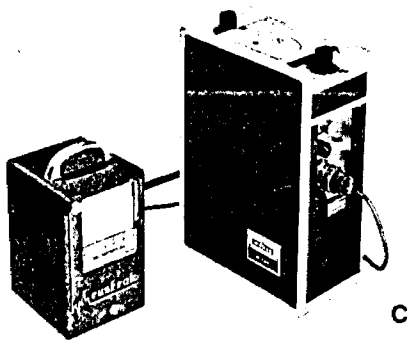
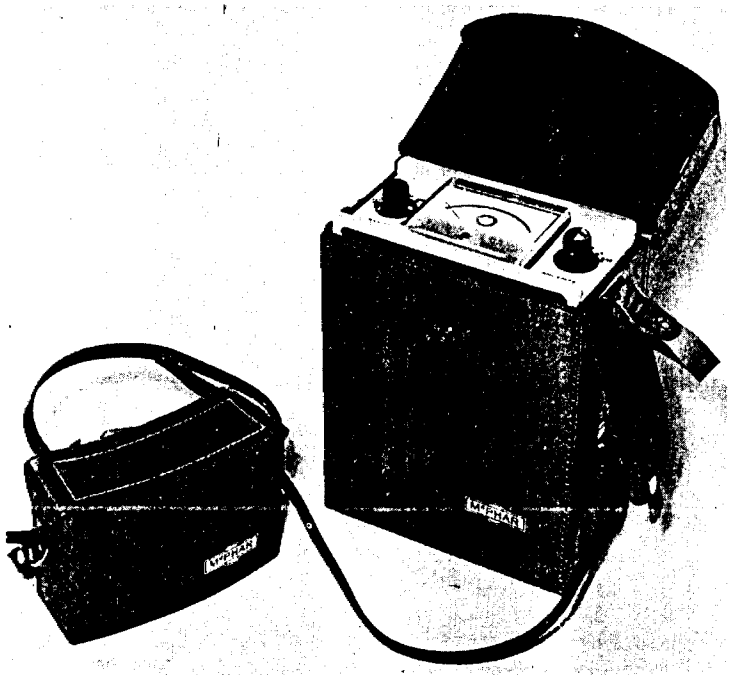


Chart Recorder



External Battery Pack

Side accessory socket allows use of:

external battery pack

chart recorder

external sensing head

horizontal sensing head

Accessory socket is located in the side panel of the M700 along with the latitude adjustment control and accessory switch. It allows the use of various pieces of equipment that extend the range of this instrument.

External Battery Pack For below freezing operation the internal batteries are removed and the external battery pack used. It is carried under the operator's clothing to prevent battery freezing. An alternate external battery pack is available consisting of 12 "C" size flashlight batteries.

Chart Recorder For long term base station monitoring an external heavy duty battery pack and chart recorder can be attached to the M700. Any current type recorder with a sensitivity of one milliampere for full scale deflection or any potential type recorder with a sensitivity of one volt for full scale deflection can be used with the magnetometer.

External Sensing Head An external sensing head can be used on the M700 without modification to the instrument. The sensing head plugs into the accessory socket.

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Tel.: (604) 685-3613

Singapore
McPhar (Asia) Pte. Ltd.
51 Kallang Place, Singapore 12
Tel.: 530311

Australia
McPhar Geophysics Pty. Ltd.
50 Mary Street, Unley 506, S. Australia
Tel.: 72-2133

28 Nicholson Road, Subiaco, W.A. 6008
Tel.: 841-4955

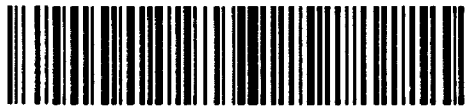
63 Alexander Street, Manly 2095, N.S.W.
Tel.: 977-4192

United States
McPhar Geophysics Inc.
818 W. Miracle Mile, Tucson, Arizona 85705
Tel.: (602) 624-2588

Philippines
McPhar Geoservices (Philippines) Inc.
P.O. Box 3279, Manila
Tel.: 50-53-06

TECK EXPLORATIONS LIMITED

NORTH BAY, ONTARIO



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ASSESSMENT REPORT
ON THE
GEOLOGY AND GEOPHYSICAL SURVEYS
ON BLOCK IIIA
CUNNINGHAM TOWNSHIP CLAIMS

2.13284

by

K. Thorsen

Report No. 1111NB

N.T.S. 41 O/10

04-26-90

INTRODUCTION

The Cunningham Township blocks are located approximately 15 km northeast of the town of Sultan. Block IIIA is the southeastern group of four separate claim blocks. The block consists of nine contiguous mining claims as shown on Fig. 2.

During May and September, 1989 lines were cut, surveyed magnetically and electromagnetically and geologically mapped.

LOCATION AND ACCESS

The claims are located 15 km northeast of Sultan, a small town on the C.P.R. rail line. Chapleau is approximately 45 km west-northwest of the block.

Access is attained through several lumber roads constructed during the last few years. The grid on Block IIIA is traversed by gravel logging roads.

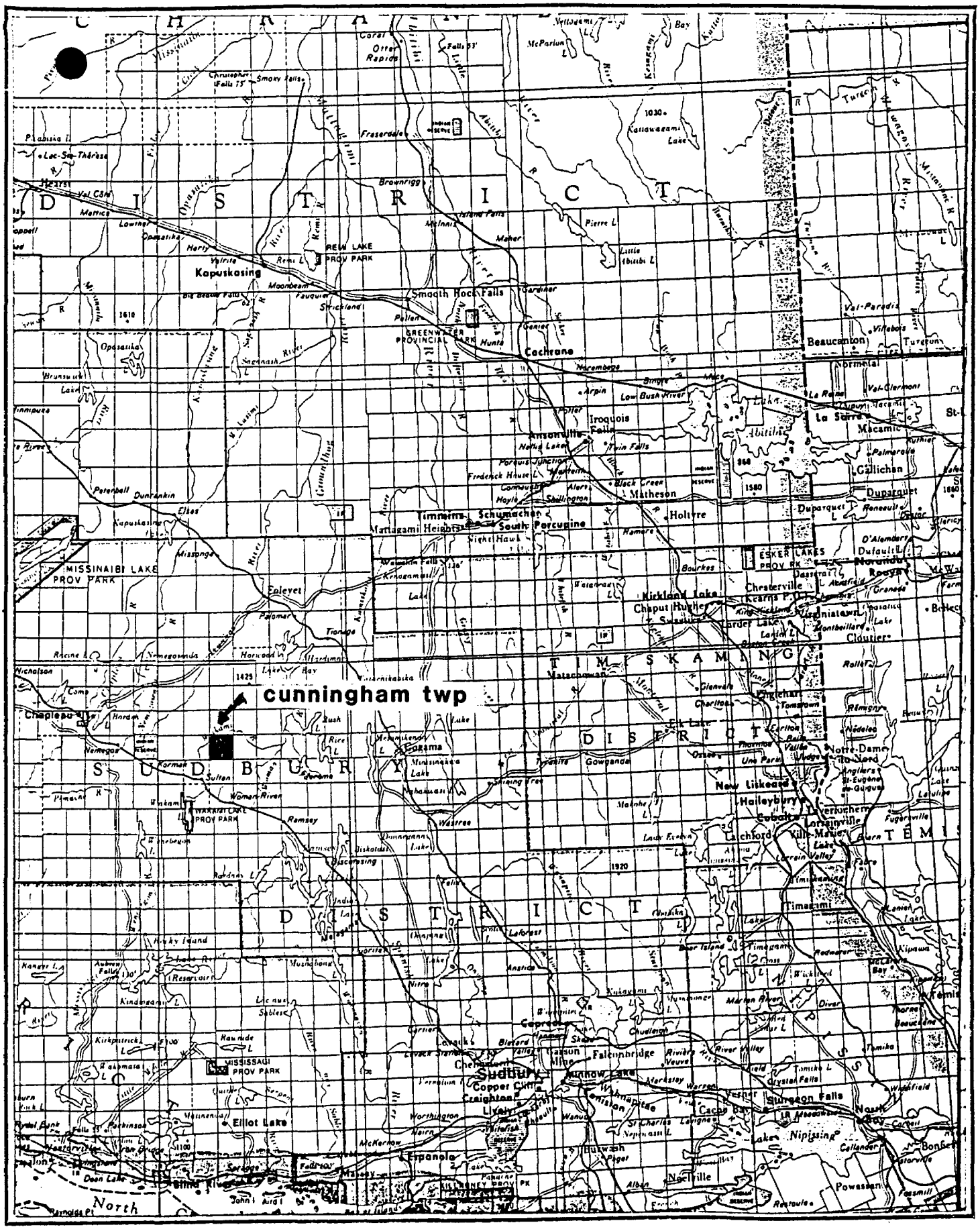
TOPOGRAPHY AND VEGETATION

All of Block IIIA has been cut over very recently. Alders and small spruce remain near the ponds and streams.

The topography is gently rolling - typical of Precambrian Shield terrain.

WORK DONE

The grid was established using a base line and cross lines at 100-metre intervals to cover airborne E.M. anomalies. Stations were established at 25-metre intervals along cross lines.

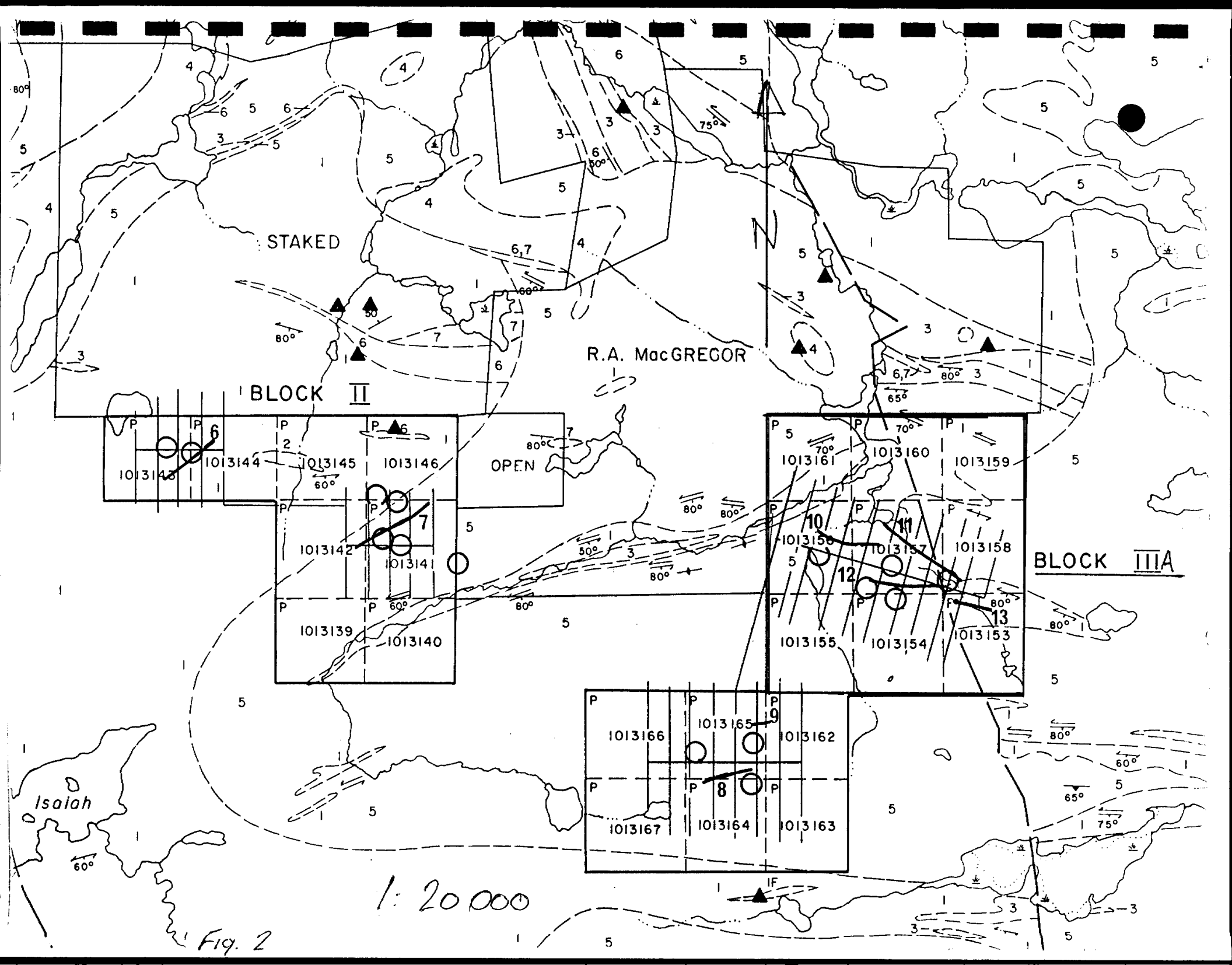


LOCATION MAP

1 inch equals approximately 32 miles

Miles 20 0 20 40 60 80 100 Miles

Figure. 1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R.A. MacGREGOR
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Fig. 2

The lines were surveyed electromagnetically using a Crone CEM shootback instrument in the horizontal mode. Readings were taken at 25-metre intervals using the 390 Hz frequency.

A McPhar Fluxgate magnetometer was used to survey the grids magnetically. Readings were taken at 25-metre intervals and were corrected for diurnal variation by comparing the readings to those taken at established base stations along the base lines.

The lines were walked by a geologist and notes were taken on topography, vegetation, outcrop locations and rock types. Scouting between lines reduced the chances of missing any outcrop.

The data from the geophysical surveys and geological mapping was plotted at a scale of 1:2500 and is shown on Dwgs. 6524a, 6524b and 6524c.

RESULTS

Crone CEM

Conductor #10 is relatively weak, 200 metres long and strikes approximately east-west. Conductor #11 is moderately weak, 300 metres long and strikes approximately southeast. Conductor #12 is very strong, 200 metres long and strikes at 105°. It may be the eastern extension of #13 which is of moderate strength, was located on two lines and strikes off the property at the east end.

Magnetics

The magnetics is quite erratic, and with exception of #13, the conductors are associated with high anomalies in some parts and low in others. The erratic spiky nature of the total picture reflects the shallow overburden covering most of the property.

Geology

The majority of the property is underlain by fine to medium-grained, massive mafic volcanics. A 200-metre-thick felsic tuff unit stretches southeast and transects the northeast corner of the claims. Trench 1 across conductors #11 and #12 indicate that those conductors are caused by graphitic argillite with up to 10% pyrite. Conductor #12 was trenched with a backhoe and a gossan was uncovered that appears to also be on a graphitic horizon. A sample taken from this trench is anomalous (1190 ppm) in zinc. Samples taken from other trenches are only slightly anomalous in base metals.

RECOMMENDATIONS

Although anomalies #11 and #12 were partially explained by trenching, one hole is recommended on line 1+00mE to intersect the stratigraphy that contains conductors 11, 12 and 13.

Respectfully submitted,
TECK EXPLORATIONS LIMITED

REGISTERED PROFESSIONAL ENGINEER
K. R. THORSEN
PROVINCE OF ONTARIO

K. Thorsen

REP-0038/sm

April 26, 1990

CRONE GEOPHYSICS LIMITED

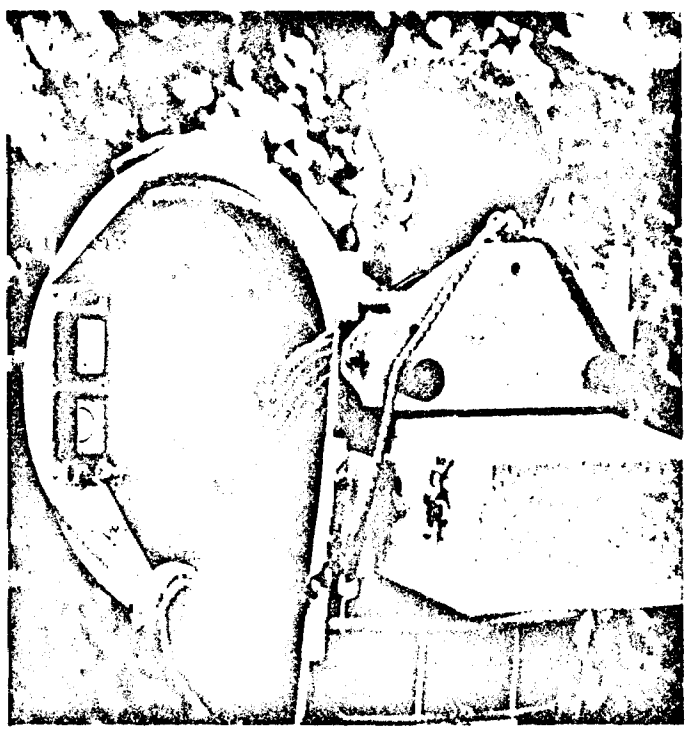
3607 WOLFEDALE ROAD,
MISSISSAUGA, ONTARIO,
CANADA.

Phone: 270-0096

C E M

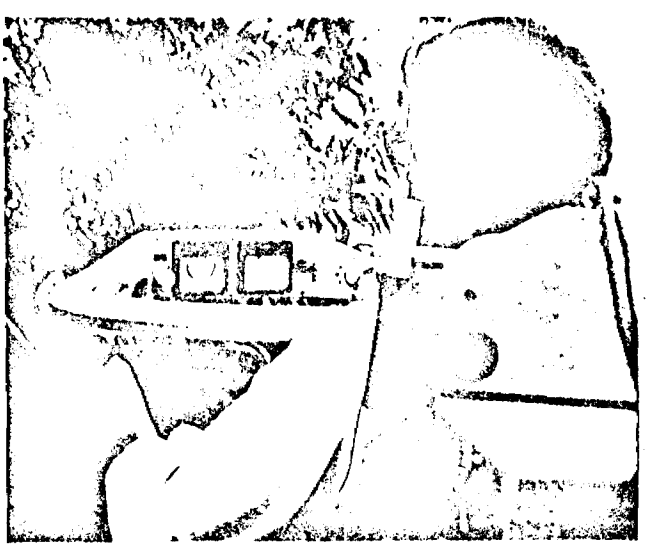
THE CRONE ELECTROMAGNETIC INSTRUMENT DESIGNED TO BE USED WITH THE NEW HORIZONTAL SHOOTBACK EM METHOD AS WELL AS VERTICAL LOOP AND HORIZONTAL LOOP METHODS.

The equipment consists of two identical transmitter-receiver coils capable of measuring the DIP ANGLE and FIELD STRENGTH of the EM field. Coil separations up to 600'. See the report "Deep Electromagnetic Exploration with the Horizontal Shootback Method" by D. Crone for analysis of this new method.



HORIZONTAL SHOOTBACK EM

TRANSMITTING ↓ RECEIVING →



- Deep penetration.
- Accurate surveys in mountainous terrain.
- Line cutting not required.
- Precise Interpretation as to dip, conductivity and depth.
- Simple to operate.
- Rugged equipment.

SPECIFICATION OF THE CEM INSTRUMENT

This unit is composed of two identical coils both capable of receiving and transmitting at 3 fixed frequencies. All circuiting is housed within the coils. The batteries are mounted in an insulated box on a magnesium packboard.

- coil diameter 22", weight per coil 8.3 lbs.
- standard frequencies 390, 1830, 5010 Hz (others available).
- inclinometer range 200°, accuracy ± ½°.
- receiver gain control — 10 turns, linear calibrated pot.
- dip angle determined by visual minimum on Field Strength meter.
- Field Strength read directly on a meter and controlled by gain control pot.
- packboard and battery box weight each 7.0 lbs.
- battery — 6 volt lantern type — Eveready 731, Burgess TW-1.
- weight per battery 3.0 lbs.
- 1 to 3 batteries may be used connected in series.
- range for 100% Field Strength and ± 1° null all frequencies, 6 volts — 400', 12 volts — 500', 18 volts — 600'.
- shipped in two wooden boxes weight 50 lbs. each.

M700 Flux Gate Magnetometer

Rugged, reliable instrument for hand-held field operation

Self Levelling sensing head

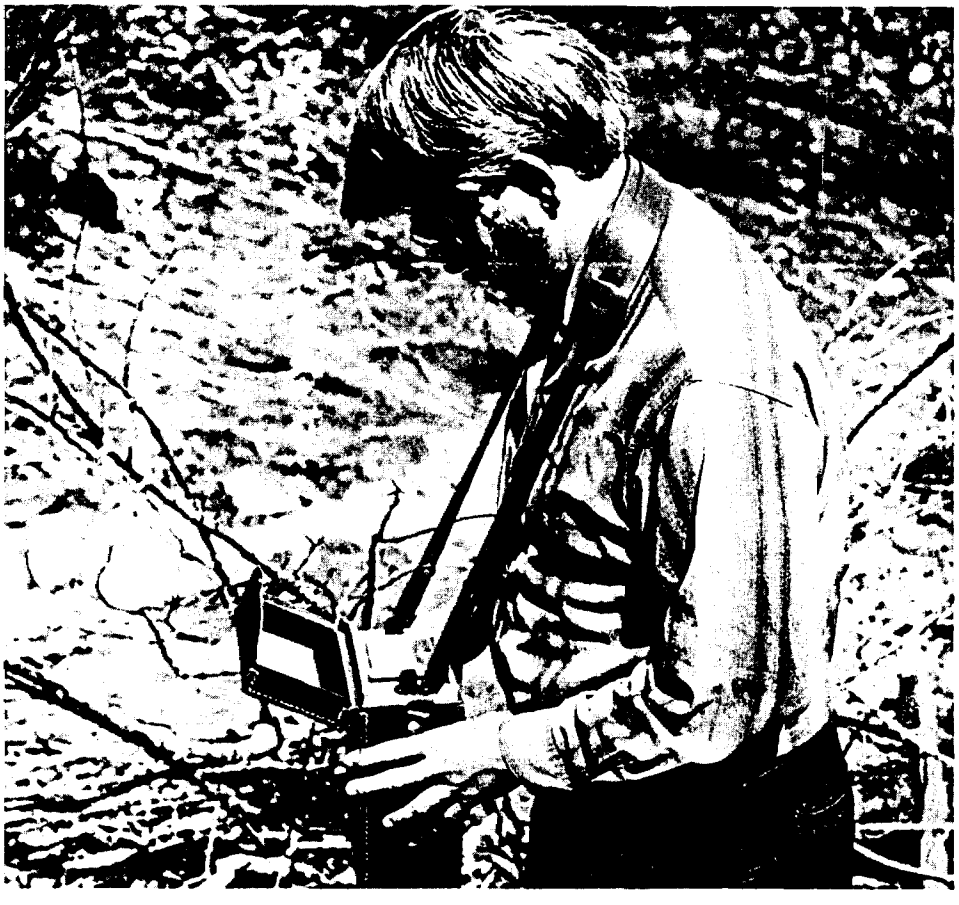
Five scale ranges: 1,000 to 100,000 gammas

Low temperature drift

Latitude adjustment up to ± 100,000 gammas

Reverse measurement polarity by turn of switch

Long battery life



M700 Flux Gate Magnetometer is a simple and efficient instrument for measuring changes in the earth's magnetic field. The two operating controls are mounted on the face of the instrument with the latitude adjustment and accessory socket concealed behind a panel on the side.

For measuring the vertical component of the earth's magnetic field, the instrument is set to zero at a chosen base station.
At each station on the survey the M700 is held roughly level, and a measurement of the increase or decrease in the magnetic field is read off the meter directly in gammas.

Measurement Ranges	Sensitivity
1,000 gammas	20 gammas/div.
3,000 gammas	50 gammas/div.
10,000 gammas	200 gammas/div.
30,000 gammas	500 gammas/div.
100,000 gammas	2,000 gammas/div.

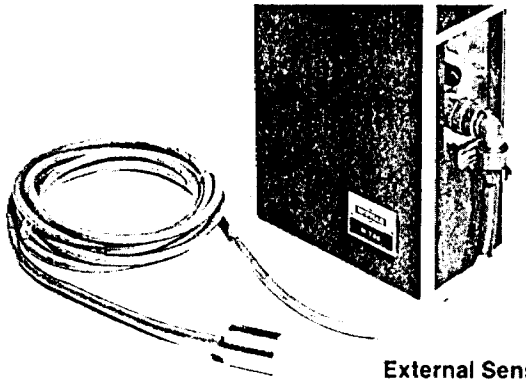
Operating temperatures -35° C. to 55° C. Temperature drift less than 50 gammas over entire operating range

Dimensions 4 x 7 x 10½ in. (10 x 18 x 27 cm.)

Weight
6½ pounds (3 kg.), less batteries and carrying case
8 pounds (3.8 kg.) with batteries

Batteries
Two internally mounted 9V batteries provide up to two months operation under normal conditions.

Accessories increase flexibility of the M700



External Sensing Head

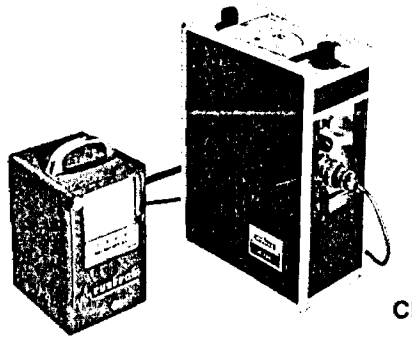
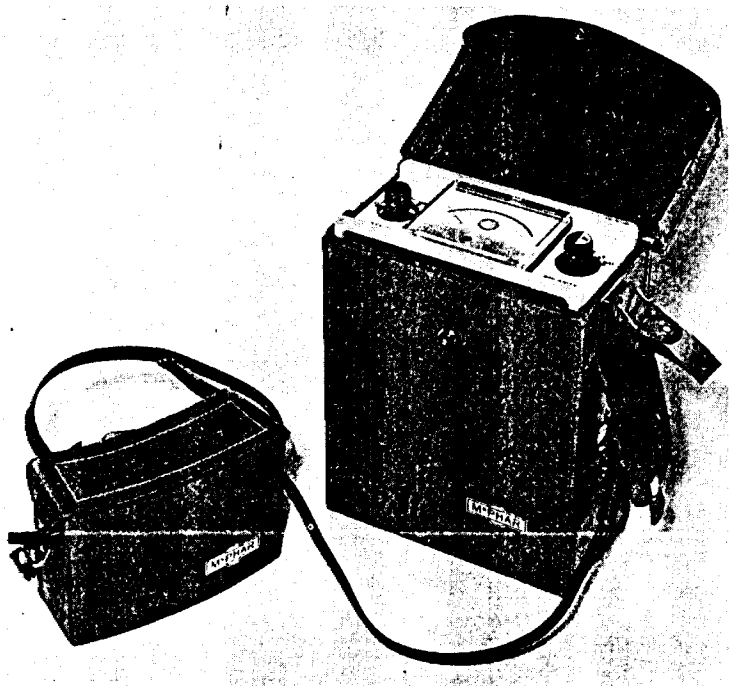


Chart Recorder



External Battery Pack

Side accessory socket allows use of:

external battery pack

chart recorder

external sensing head

horizontal sensing head

Accessory socket is located in the side panel of the M700 along with the latitude adjustment control and accessory switch. It allows the use of various pieces of equipment that extend the range of this instrument.

External Battery Pack For below freezing operation the internal batteries are removed and the external battery pack used. It is carried under the operator's clothing to prevent battery freezing. An alternate external battery pack is available consisting of 12 "C" size flashlight batteries.

Chart Recorder For long term base station monitoring an external heavy duty battery pack and chart recorder can be attached to the M700. Any current type recorder with a sensitivity of one milliampere for full scale deflection or any potential type recorder with a sensitivity of one volt for full scale deflection can be used with the magnetometer.

External Sensing Head An external sensing head can be used on the M700 without modification to the instrument. The sensing head plugs into the accessory socket.

McPhar Geophysics Instrument Sales Offices

Canada
McPhar Geophysics Ltd.
139 Bond Street, Don Mills, Ontario
Tel.: (416) 449-5551

811 — 837 W. Hastings Street, Vancouver, B.C.
Tel.: (604) 685-3613

Singapore
McPhar (Asia) Pte. Ltd.
51 Kallang Place, Singapore 12
Tel.: 530311

Australia
McPhar Geophysics Pty. Ltd.
50 Mary Street, Unley 506, S. Australia
Tel.: 72-2133

28 Nicholson Road, Subiaco, W.A. 6008
Tel.: 841-4955

63 Alexander Street, Manly 2095, N.S.W.
Tel.: 977-4192

United States
McPhar Geophysics Inc.
818 W. Miracle Mile, Tucson, Arizona 85705
Tel.: (602) 624-2588

Philippines
McPhar Geoservices (Philippines) Inc.
P.O. Box 3279, Manila
Tel.: 50-53-06

TECK EXPLORATIONS LIMITED

NORTH BAY, ONTARIO

040

ASSESSMENT REPORT ON THE GEOLOGY AND GEOPHYSICAL SURVEYS ON BLOCK IIIB CUNNINGHAM TOWNSHIP CLAIMS

2.13284

by

K. Thorsen

Report No. 1112NB

N.T.S. 41 O/10

04-26-90

INTRODUCTION

The Cunningham Township blocks are located approximately 15 km northeast of the town of Sultan. Block III-B is the southeastern group of four separate claim blocks. The block consists of six contiguous mining claims as shown on Fig. 2.

During June and September, 1989 lines were cut, surveyed magnetically and electromagnetically and geologically mapped.

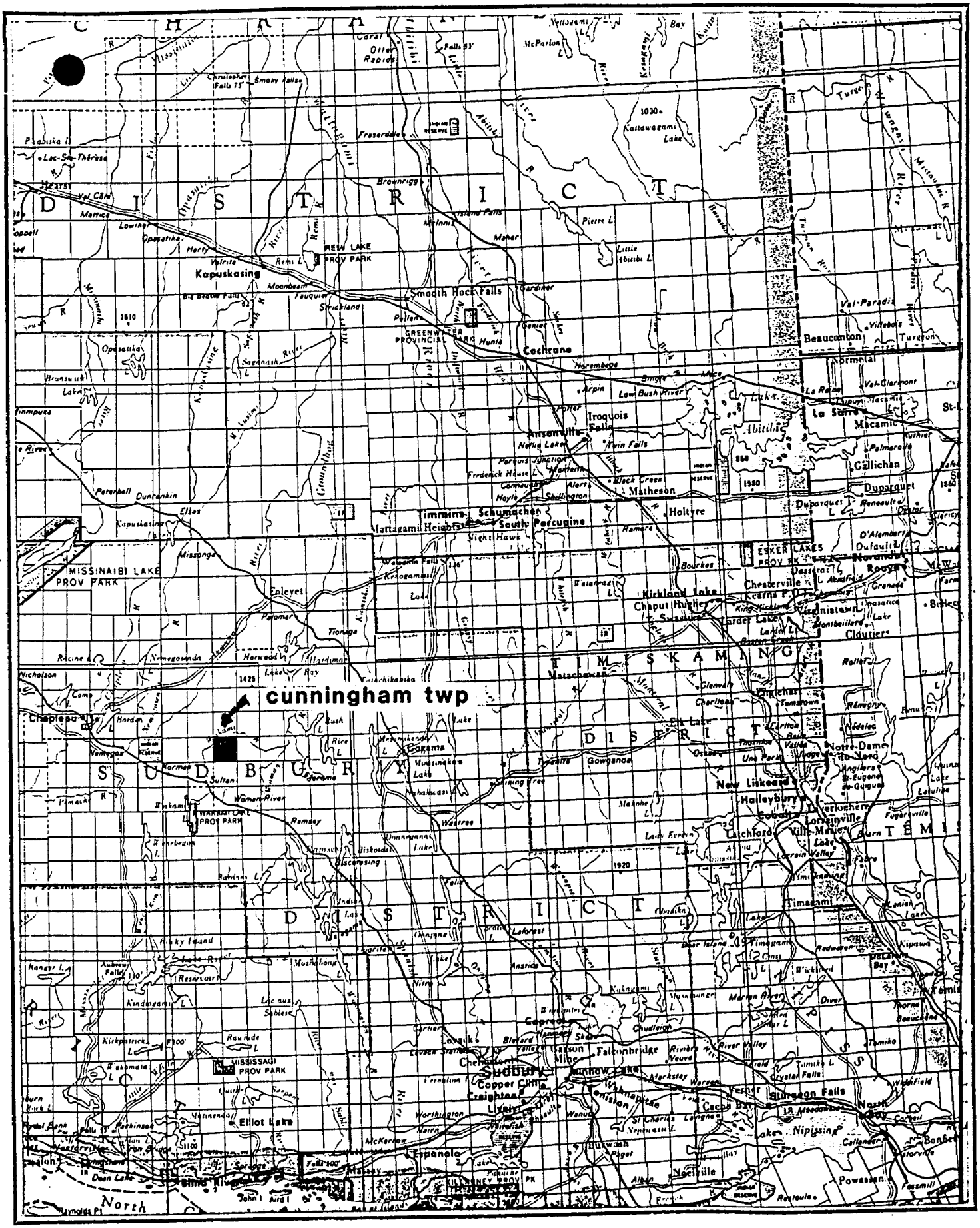
LOCATION AND ACCESS

The claims are located 15 km northeast of Sultan, a small town on the C.P.R. rail line. Chapleau is approximately 45 km west-northwest of the block.

Access is attained through several lumber roads constructed during the last few years. The northwest corner of Block IIIB is traversed by gravel logging roads.

TOPOGRAPHY AND VEGETATION

The topography is gently rolling - typical of Precambrian Shield terrain. Stands of spruce and pine have been cut recently leaving groves of poplar and birch. The swampy areas on the grid are generally foliated with small cedar trees.



LOCATION MAP

1 inch equals approximately 32 miles

Figure. 1

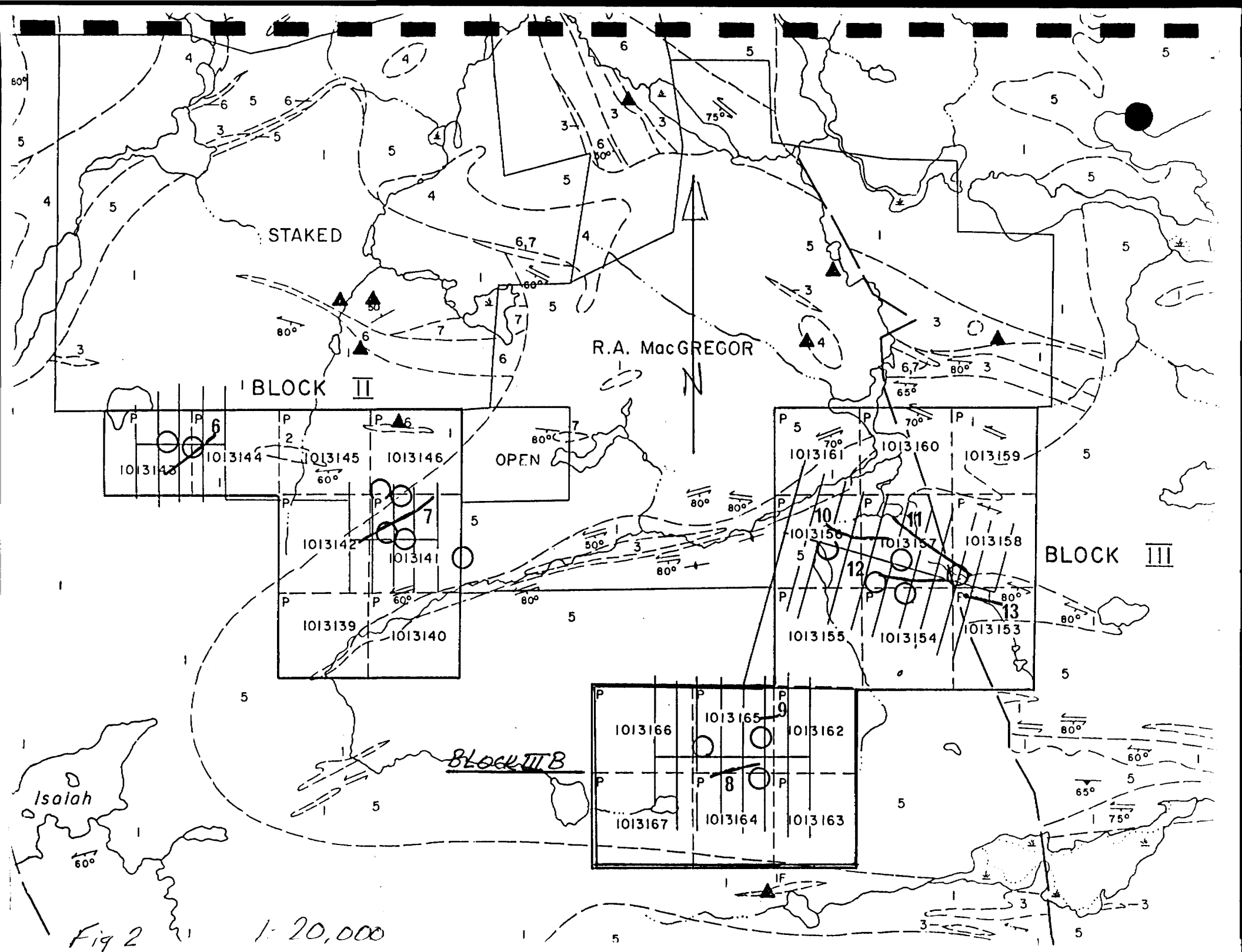

STAKED
R.A. MacGREGOR
N
BLOCK II
OPEN
BLOCK III
BLOCK III B
1013144
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Fig 2 1:20,000

WORK DONE

A grid was established using a base line and cross lines at 100-metre intervals to cover airborne E.M. anomalies. Stations were established at 25-metre intervals along cross lines.

The lines were surveyed electromagnetically using a Crone CEM shootback instrument in the horizontal mode. Readings were taken at 25-metre intervals using the 390 Hz frequency.

A McPhar Fluxgate magnetometer was used to survey the grid magnetically. Readings were taken at 25-metre intervals and were corrected for diurnal variation by comparing the readings to those taken at an established base station along the base line.

The lines were walked by a geologist and notes were taken on topography, vegetation, outcrop locations and rock types. Scouting between lines reduced the chances of missing any outcrop.

The data from the geophysical surveys and geological mapping was plotted at a scale of 1:2500 and is shown on Dwgs. 6525a, 6525b and 6525c.

RESULTS

Crone CEM

Conductor #8 is relatively strong, 100 metres long and strikes 060°.

Conductor #9 is weak, questionable, 100 metres long and parallels the strike of #8. The CEM survey is relatively noisy indicating shallow overburden depths.

Magnetometer

Both conductors flank the ends of relatively strong magnetic highs. The data is spiky - also an indication of shallow overburden.

Geology

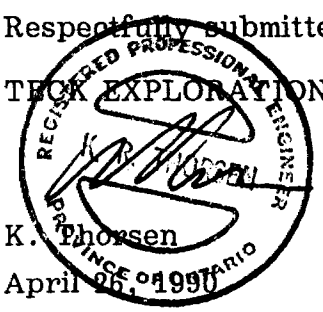
The grid is primarily underlain by massive, medium-grained mafic lavas. An intermediate tuff unit occupies the northwest corner of the grid. Trenching of conductor #8 revealed a thin, pyritic, graphitic argillite to be the conductive source.

RECOMMENDATIONS

Conductor #8 has been explained as barren graphitic argillite and conductor #9 may not be caused by a real conductive source. No further work is recommended at this time, although the claims should be retained pending the results on Block IIIA.

Respectfully submitted,

TECK EXPLORATIONS LIMITED



K. Thorsen

REP-0039/sm

April 26, 1990

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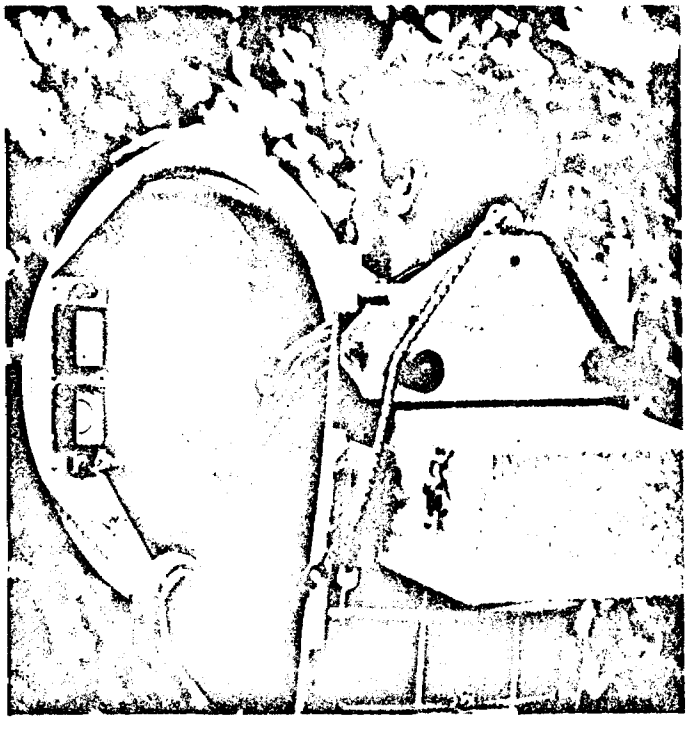
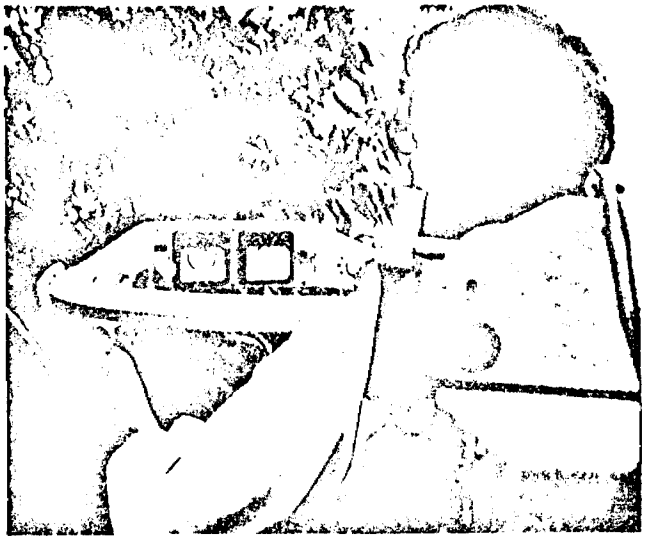


HORIZONTAL SHOOTBACK EM

TRANSMITTING ↓ RECEIVING →



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McPHAR

M700 Flux Gate Magnetometer

Rugged, reliable instrument for hand-held field operation

Self Levelling sensing head

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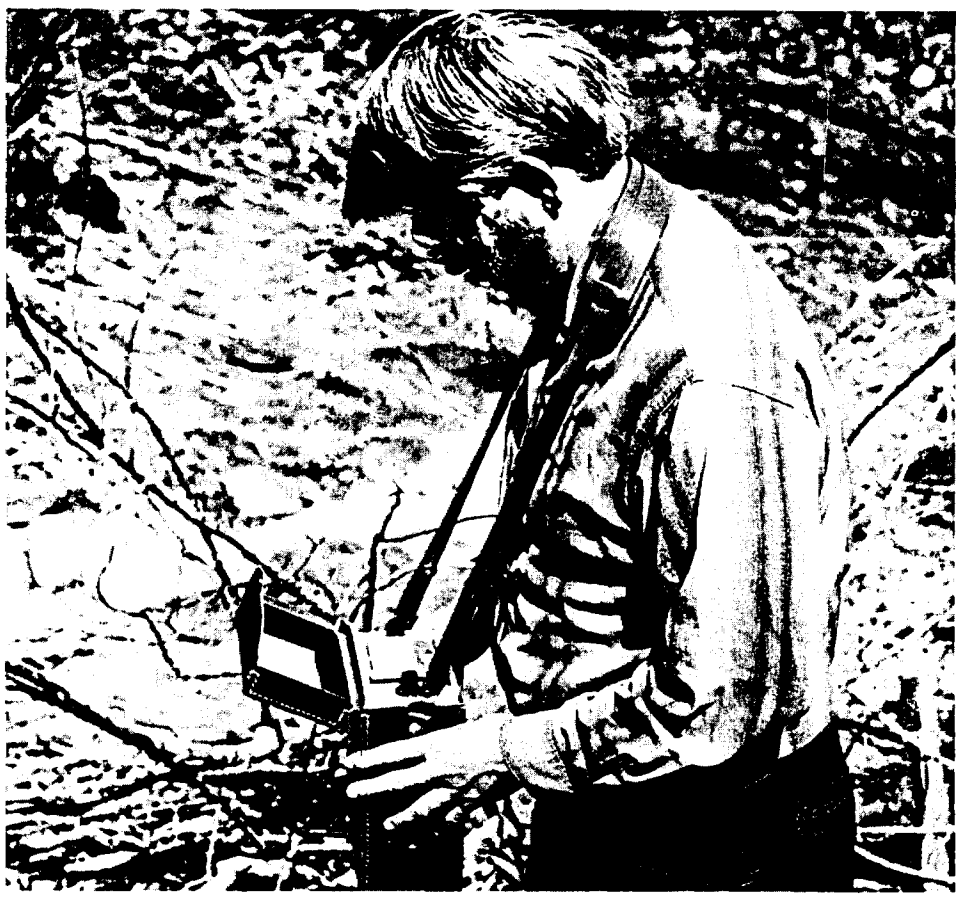
Low temperature drift

Latitude adjustment up to ± 100,000 gammas

Reverse measurement polarity by turn of switch

Long battery life



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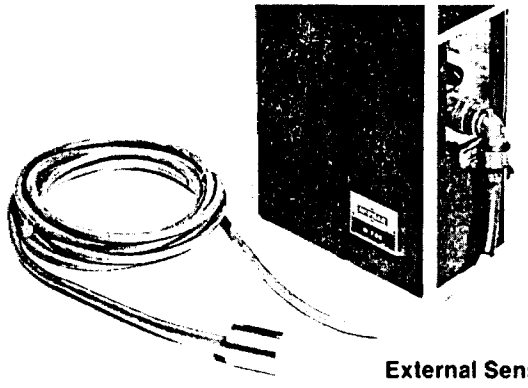

External Sensing Head

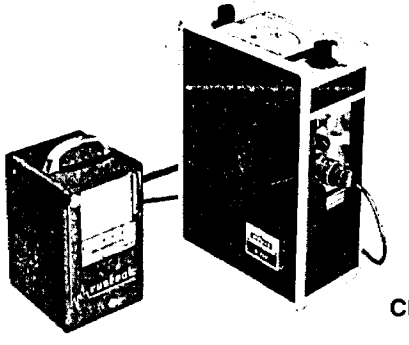

Chart Recorder

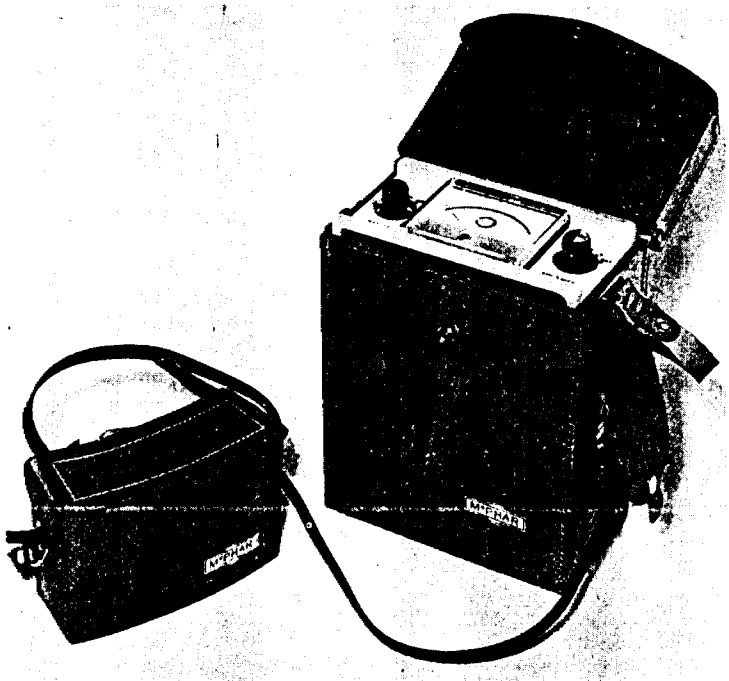

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chart recorder

external sensing head

horizontal sensing head

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Tel.: 977-4192

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McPhar Geophysics Inc.
818 W. Miracle Mile, Tucson, Arizona 85705
Tel.: (602) 624-2588

Philippines

McPhar Geoservices (Philippines) Inc.
P.O. Box 3279, Manila
Tel.: 50-53-06

Ministry of Northern Development and Mines
Ontario

DOCUMENT No. W 9006.60291

Instructions

April 9

Block I

Mining Act — Report of Work
(Geophysical, Geological and Geochemical Si

41015SE0120 2.13284 CUNNINGHAM

900

Type of Survey(s): Geophysical (EM & Magnetics)	Mining L... Porcupine	Cunningham Twp

Recorded Holder(s): Teck Explorations Limited — 2.13284

Prospector's Licence No.: A32498

Address: P.O. Box 170, Suite 7000, 1 First Canadian Place, Toronto, M5X 1G9

Telephone No.: 416-862-7102

Survey Company: Teck Explorations Limited, 2189 Algonquin Avenue, North Bay, P1B 4Z3

Name and Address of Author (of Geo-Technical Report): K. Thorsen, 2189 Algonquin Avenue, North Bay, P1B 4Z3

Date of Survey (from & to): 04 07 89 (Day | Mo | Yr.) — 05 10 89 (Day | Mo | Yr)

Credits Requested per Each Claim in Columns at right

		Days per Claim
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)	Geophysical - Electromagnetic	
	Geophysical - Magnetometer	
	Geophysical - Other	
	Geological	
	Geochemical	
Man Days Complete reverse side and enter total(s) here	Geophysical - Electromagnetic	16.9
	Geophysical - Magnetometer	7.7
	Geophysical - Other	2.6
	Geological	
	Geochemical	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Other	

Total miles flown over claim(s).

Date: Mar 6/90

Recorded Holder or Agent (Signature)

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Mining Claim Prefix	Mining Claim Number	Mining Claim Prefix	Mining Claim Number
P	961130	P	1013171		
P	961131	P	1013172		
P	961132				
P	961133				
P	961134				
P	961135				
P	961136				
P	1013133				
P	1013147				
P	1013148				
P	1013149				
P	1013150				
P	1013151				
P	1013152				
P	1013168				
P	1013169				
P	1013170				

RECEIVED
APR 27 1990
MINING LANDS SECTION

RECORDED
MAR - 9 1990

Total number of mining claims covered by this report of work: 19

Certification Verifying Report of Work

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

Name and Address of Person Certifying: K. Thorsen, 2189 Algonquin Avenue, North Bay, Ontario, P1B 4Z3

Telephone No.: 705-474-5500

Date: Mar 6/90

Certified By (Signature)

Received at PORCUPINE MINING DIVISION
RECEIVED
MAR 9 1990

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
516.80	MAR. 9/90	Mining Recorder
	Date Approved as Recorded	Provincial Manager, Mining Lands
	Approved work statement	

1362 (84/06)

Assessment Work Breakdown

Man Days are based on eight (8) hour Technical or Line-cutting days. Technical days include work performed by consultants, draftsmen, etc..

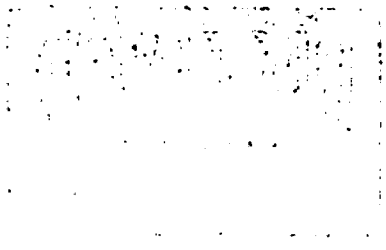
Type of Survey	Technical Days			Technical Days Credits		Line-cutting Days	Total Credits		No. of Claims		Days per Claim
Geophysical - MaxMin II Horizontal Loop	42	X	7	294	+	27	321	÷	19	=	16.9
Geophysical - Magnetics	21	X	7	147	+		147	÷	19	=	7.7
Drafting	7	X	7	49	+		49	÷	19	=	2.6
		X	7		+			÷		=	

Linecutting - Fred Blake - July 4 to July 12, 1989
- E. Cote - July 4 to July 12, 1989
- B. Wabi - July 4 to July 12, 1989

MaxMin II - Fred Blake - July 13 to August 2, 1989
- E. Cote - July 13 to August 2, 1989

Magnetics - B. Wabi - July 13 to August 2, 1989

Drafting - B. Hopkins - October 2 to October 5, 1989
- C. Knapp - October 2 to October 4, 1989



Copy sent

DOCUMENT No. W 9006.60290

Contacted April 9

Ministry of Northern Development and Mines

Ontario

Block II

Mining Act

Report of Work

(Geophysical, Geological and Geochemical Surveys)

Instructions
- Please type or print.
- Refer to Section 77, the Mining Act for assessment work requirements and maximum credits allowed per survey type.
- If number of mining claims traversed exceeds space on this form, attach a list.
- Technical Reports and maps in duplicate should be submitted to Mining Lands Section, Mineral Development and Lands Branch.

Type of Survey(s)	Mining Division	Township or Area
Geophysical (EM & Magnetometer), Geology	Porcupine	Cunningham Twp

Recorded Holder(s)	Prospector's Licence No.
Teck Explorations Limited 2.13284	A32498
Address	**Telephone No.**
P.O. Box 170, Suite 7000, 1 First Canadian Place, Toronto, M5X 1G9	416-862-7102
Survey Company	
Teck Explorations Limited, 2189 Algonquin Avenue, North Bay, P1B 4Z3	
Name and Address of Author (of Geo-Technical Report)	**Date of Survey (from & to)** Day / Mo. / Yr. — Day / Mo / Yr
K. Thorsen, 2189 Algonquin Avenue, North Bay, P1B 4Z3	04 07 89 — 05 10 89

Credits Requested per Each Claim in Columns at right

Special Provisions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical	
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	- Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	- Other	
	Geological	
	Geochemical	
Man Days Complete reverse side and enter total(s) here	Geophysical	Days per Claim
	- Electromagnetic	9.5
	- Magnetometer	4.4
	- Other	3.5
	Geological	4.4
	Geochemical	
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	Electromagnetic	
	Magnetometer	
	Other	

Total miles flown over claim(s).

Date	Recorded Holder or Agent (Signature)
Mar 6/90	

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Mining Claim Prefix	Mining Claim Number	Mining Claim Prefix	Mining Claim Number
P	1013139				
P	1013140				
P	1013141				
P	1013142				
P	1013143				
P	1013144				
P	1013145				
P	1013146				

RECEIVED
APR 27 1990
MINING LANDS SECTION

Total number of mining claims covered by this report of work: 8

Certification Verifying Report of Work

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

Name and Address of Person Certifying			
K. Thorsen, 2189 Algonquin Avenue, North Bay, Ontario, P1B 4Z3			
	Telephone No.	**Date**	**Certified By (Signature)**
	705-474-5500	Mar 6/90	

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
174.40	MAR. 9/90	S. White Mining Recorder
	Date Approved as Recorded	**Provincial Manager, Mining Lands**
	June 14/90	

Received Stamp: PORCUPINE MINING DIVISION RECEIVED MAR 9 1990

1362 (89/06)

Assessment Work Breakdown

Man Days are based on eight (8) hour Technical or Line-cutting days. Technical days include work performed by consultants, draftsmen, etc..

Type of Survey
Geophysical - CEM

Technical Days		Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
10	X 7 =	70	+	6	=	76	÷	8	=	9.5

Type of Survey
Geophysical - Magnetometer

Technical Days		Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
5	X 7 =	35	+		=	35	÷	8	=	4.4

Type of Survey
Geological Mapping

Technical Days		Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
5	X 7 =	35	+		=	35	÷	8	=	4.4

Type of Survey
Drafting

Technical Days		Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
4	X 7 =	28	+		=	28	÷	8	=	3.5

Line Cutting - F. Blake - June 10 to June 11, 1989
E. Cote - June 10 to June 11, 1989
B. Wabi - June 10 to June 11, 1989

CEM - F. Blake - June 12 to June 16, 1989
- E. Cote - June 12 to June 16, 1989
Mag - B. Wabi - June 12 to June 16, 1989

Geology - A. Christopher - Sept. 10 to Sept. 12, 1989 (2½ days)
- D. Owens - Sept. 10 to Sept. 12, 1989 (2½ days)

Drafting - B. Hopkins - Oct. 12 to Oct. 13, 1989
- C. Knapp - Oct. 12 to Oct. 13, 1989

Ministry of Northern Development and Mines

Ontario

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DOCUMENT No. W 9006.60289

Contacted April 9

Block III

Mining Act

Report of Work

(Geophysical, Geological and Geochemical Surveys)

Instructions
- Please type or print.
- Refer to Section 77, the Mining Act for assessment work requirements and maximum credits allowed per survey type.
- If number of mining claims traversed exceeds space on this form, attach a list.
- Technical Reports and maps in duplicate should be submitted to Mining Lands Section, Mineral Development and Lands Branch:

May 8

Type of Survey(s)	Mining Division	Township or Area
Geophysical (EM & Magnetics)	Porcupine	Cunningham Twp

Recorded Holder(s): Teck Explorations Limited — 2.13284

Prospector's Licence No.: A32498

Address: P.O. Box 170, Suite 7000, 1 First Canadian Place, Toronto, M5X 1G9

Telephone No.: 416-862-7102

Survey Company: Teck Explorations Limited, 2189 Algonquin Avenue, North Bay, P1B 4Z3

Name and Address of Author (of Geo-Technical Report): K. Thorsen, 2189 Algonquin Avenue, North Bay, P1B 4Z3

Date of Survey (from & to): 04 Day 07 Mo. 89 Yr. | 05 Day 10 Mo. 89 Yr.

Credits Requested per Each Claim in Columns at right

		Days per Claim
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)	Geophysical	
	- Electromagnetic	
	- Magnetometer	
	- Other	
	Geological	
	Geochemical	
Man Days Complete reverse side and enter total(s) here	Geophysical	Days per Claim
	- Electromagnetic	8.9
	- Magnetometer	3.9
	- Other	3.9
	Geological	3.9
	Geochemical	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.		Days per Claim
	Electromagnetic	
	Magnetometer	
	Other	

Total miles flown over claim(s).

Date: Mar 6/90 — Recorded Holder or Agent (Signature)

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Mining Claim Prefix	Mining Claim Number	Mining Claim Prefix	Mining Claim Number
P	1013153				
P	1013154				
P	1013155				
P	1013156				
P	1013157				
P	1013158				
P	1013159				
P	1013160				
P	1013161				

RECEIVED
APR 27 1990
MINING LANDS SECTION

RECORDED
MAR 9 1990

Total number of mining claims covered by this report of work: 9

Certification Verifying Report of Work

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

Name and Address of Person Certifying: K. Thorsen, 2189 Algonquin Avenue, North Bay, Ontario, P1B 4Z3

Telephone No.: 705-474-5500

Date: Mar 6/90

Certified By (Signature)

Received Stamp: PORCUPINE MINING DIVISION RECEIVED MAR 9 1990

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
185.4	MAR. 9/90	Mining Recorder
	Date Approved as Recorded: June 14/90	Provincial Manager, Mining Lands

1362 (89/06)

Assessment Work Breakdown

Man Days are based on eight (8) hour Technical or Line-cutting days. Technical days include work performed by consultants, draftsmen, etc..

Type of Survey
Geophysical - CEM

Technical Days			Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
10	X	7	70	+	10	=	80	÷	9	=	8.9

Type of Survey
Geophysical - Magnetics

Technical Days			Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
5	X	7	35	+		=	35	÷	9	=	3.9

Type of Survey
Geological

Technical Days			Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
5	X	7	35	+		=	35	÷	9	=	3.9

Type of Survey
Drafting

Technical Days			Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
5	X	7	35	+		=	35	÷	9	=	3.9

Linecutting - Fred Blake - May 25 to May 28, 1989
- E. Cote - May 25 to May 27, 1989
- B. Wabi - May 25 to May 27, 1989

CEM Survey - Fred Blake - May 29 to June 2, 1989
- E. Cote - May 29 to June 2, 1989

Magnetics - B. Wabi - May 29 to June 2, 1989

Drafting - B. Hopkins - Oct. 6 to Oct. 7, 1989
- C. Knapp - Oct. 5 to Oct. 7, 1989

Geological - A. Christopher - Sept. 5 to Sept. 7, 1989 (2½ days)
- D. Owens - Sept. 5 to Sept. 7, 1989 (2½ days)

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DOCUMENT No. IN 9006 • 60288

Contacted

Ap

Ministry of Northern Development and Mines

Ontario

Mining Act

Report of Work

(Geophysical, Geological and Geochemical Surveys)

Block III B

Instructions
- Please type or print.
- Refer to Section 77, the Mining Act for assess and maximum credits allowed per survey.
- If number of mining claims traversed [illegible] attach a list.
- Technical Reports and maps in duplicate Mining Lands Section, Mineral Developme

Type of Survey(s)	Mining Division	Township or Area
Geophysical (EM & Magnetics)	Porcupine	Cunningham Twp

Recorded Holder(s): Teck Explorations Limited — 2.13284 — Prospector's Licence: A32498

Address: P.O. Box 170, Suite 7000, 1 First Canadian Place, Toronto, M5X 1G9 — Telephone No.: 416-862-7102

Survey Company: Teck Explorations Limited, 2189 Algonquin Avenue, North Bay, P1B 4Z3

Name and Address of Author (of Geo-Technical Report): K. Thorsen, 2189 Algonquin Avenue, North Bay, P1B 4Z3

Date of Survey (from & to): 04 07 89 (Day | Mo. | Yr.) — 05 10 89 (Day | Mo. | Yr.)

Credits Requested per Each Claim in Columns at right

		Days per Claim
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)	Geophysical	
	- Electromagnetic	
	- Magnetometer	
	- Other	
	Geological	
	Geochemical	
Man Days Complete reverse side and enter total(s) here	Geophysical	Days per Claim
	- Electromagnetic	10.7
	- Magnetometer	4.7
	- Other	4.7
	Geological	4.7
	Geochemical	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.		Days per Claim
	Electromagnetic	
	Magnetometer	
	Other	

Total miles flown over claim(s).

Date: Mar 6/90 — Recorded Holder or Agent (Signature): [signature]

Mining Claims Traversed (List in numerical sequence)

Mining Claim Prefix	Mining Claim Number	Mining Claim Prefix	Mining Claim Number	Mining Claim Prefix	Mining Claim Number
P	1013162				
P	1013163				
P	1013164				
P	1013165				
P	1013166				
P	1013167				

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APR 27 1990
MINING LANDS SECTION

ONTARIO GEOLOGICAL SURVEY ASSESSMENT FILES OFFICE
JUL 26 1990
RECEIVED

RECORDED
MAR - 9 1990

Total number of mining claims covered by this report of work: 6

Certification Verifying Report of Work

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

Name and Address of Person Certifying: K. Thorsen, 2189 Algonquin Avenue, North Bay, Ontario, P1B 4Z3

Telephone No.	Date	Certified By (Signature)
705-474-5500	Mar 6/90	[signature]

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder	Received Stamp
148.80	MAR. 9/90	[signature] Mining Recorder	PORCUPINE MINING DIVISION RECEIVED MAR 9 1990 10:00 am
	Date Approved as Recorded: June 14/90	Provincial Manager, Mining Lands	

1362 (89/06)

Assessment Work Breakdown

Man Days are based on eight (8) hour Technical or Line-cutting days. Technical days include work performed by consultants, draftsmen, etc..

Type of Survey
Geophysical - CEM

Technical Days		Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
8	X 7 =	56	+	8	=	64	÷	6	=	10.7

Type of Survey
Geophysical - Magnetics

Technical Days		Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
4	X 7 =	28	+		=	28	÷	6	=	4.7

Type of Survey
Geological

Technical Days		Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
4	X 7 =	28	+		=	28	÷	6	=	4.7

Type of Survey
Drafting

Technical Days		Technical Days Credits		Line-cutting Days		Total Credits		No. of Claims		Days per Claim
4	X 7 =	28	+		=	28	÷	6	=	4.7

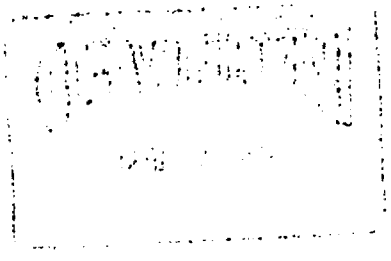
Linecutting - Fred Blake - June 3 to June 4, 1989
- E. Cote - June 3 to June 5, 1989
- B. Wabi - June 3 to June 5, 1989

CEM Survey - Fred Blake - June 6 to June 9, 1989
- E. Cote - June 6 to June 9, 1989

Magnetics - B. Wabi - June 6 to June 9, 1989

Geological - A. Christopher - Sept. 8 to Sept. 9, 1989
- D. Owens - Sept. 8 to Sept. 9, 1989

Drafting - B. Hopkins - Oct. 8 to Oct. 11, 1989



Ministry of Northern Development and Mines

Ontario

Geophysical-Geological-Geochemical Technical Data Statement

Block I

File _____

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) Geophysical (EM & Mag)

Township or Area Cunningham Township

Claim Holder(s) Teck Explorations Limited

Survey Company Teck Explorations Limited

Author of Report K. Thorsen

Address of Author 2189 Algonquin Ave, North Bay, Ont,P1B4Z3

Covering Dates of Survey April 7/89 to May 10/89 (linecutting to office)

Total Miles of Line Cut 22.6 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	16.9
–Magnetometer	7.7
–Radiometric	2.6
–Other	
Geological	
Geochemical	

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

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

DATE: April 26/90 SIGNATURE: _____ Author of Report or Agent

Res. Geol. _____ Qualifications 2.2012

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
P	961130
P	961131
P	961132
P	961133
P	961134
P	961135
P	961136
P	1013133
P	1013147
P	1013148
P	1013149
P	1013150
P	1013151
P	1013152
P	1013168
P	1013169
P	1013170
P	1013171
P	1013172

TOTAL CLAIMS 19

If space insufficient, attach list

ICP 2 ON

837 (85/12)

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations MaxMin II 645 Mag 770 Number of Readings MaxMin II 3,870 Mag 770

Station interval 25 m Line spacing 100 m

Profile scale 1 cm = 10%

Contour interval 100 gm to 1000 gm, 1500 gammas

MAGNETIC

Instrument McPhar Fluxgate

Accuracy – Scale constant ±5 gammas

Diurnal correction method Base stations

Base Station check-in interval (hours) Hourly or less

Base Station location and value BL at 13W (510 g), BL at 1W (500 g)
BL at 26+50W (580 g), BL at 39+50W (630 g)

ELECTROMAGNETIC

Instrument MaxMin II

Coil configuration Horizontal

Coil separation 100 m

Accuracy ±1%

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

Frequency 444 Hz, 1777 Hz, 3555 Hz
(specify V.L.F. station)

Parameters measured In phase & quadrature parameters of primary field

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 _____

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 _____

Ontario

Ministry of Northern Development and Mines

Geophysical-Geological-Geochemical Technical Data Statement

Block II

File _____

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) Geophysical (EM & Mag), Geological

Township or Area Cunningham Township

Claim Holder(s) Teck Explorations Limited

Survey Company Teck Explorations Limited

Author of Report K. Thorsen

Address of Author 2189 Algonquin Ave, North Bay, Ont,P1B4Z3

Covering Dates of Survey June 4/90 to October 5/90 (linecutting to office)

Total Miles of Line Cut 5.7 km

SPECIAL PROVISIONS CREDITS REQUESTED		DAYS per claim
ENTER 40 days (includes line cutting) for first survey.	Geophysical	
	--Electromagnetic	9.5
	--Magnetometer	4.4
	--Radiometric	3.5
ENTER 20 days for each additional survey using same grid.	--Other	4.4
	Geological	
	Geochemical	

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

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

DATE: April 23, 1990 SIGNATURE: _____
Author of Report or Agent

Res. Geol. _____ Qualifications 2.2012

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
P	1013139
P	1013140
P	1013141
P	1013142
P	1013143
P	1013144
P	1013145
P	1013146

TOTAL CLAIMS 8

If space insufficient, attach list

837 (85/12)

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations CEM 165 Mag 217 Number of Readings CEM 330 Mag 217

Station interval 25 m Line spacing 100 m

Profile scale 1 cm ≡ 10%

Contour interval 100 g to 500 g, 500 g over 500 gammas

MAGNETIC

Instrument McPhar Fluxgate

Accuracy – Scale constant ±5 g

Diurnal correction method Base stations

Base Station check-in interval (hours) Hourly or less

Base Station location and value NW grid - line 4E, 0+00 (200 g)

SE grid - line 0, 0+00 (300 g)

ELECTROMAGNETIC

Instrument Crone CEM

Coil configuration Horizontal

Coil separation 100 m

Accuracy ±1°

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

Frequency 390 Hz
(specify V.L.F. station)

Parameters measured Parameters of primary field

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_____

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_____

Ministry of Northern Development and Mines

Ontario

Geophysical-Geological-Geochemical Technical Data Statement

Block IIIA

File _____

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) Geophysical (EM & Mag), Geology

Township or Area Cunningham Township

Claim Holder(s) Teck Explorations Limited

Survey Company Teck Explorations Limited

Author of Report K. Thorsen

Address of Author 2189 Algonquin Ave, North Bay, Ont.P1B4Z3

Covering Dates of Survey May 25/89 to October 7/89
(linecutting to office)

Total Miles of Line Cut 16.825 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	8.9
--Magnetometer	3.9
--Radiometric	3.9
--Other	3.9
Geological	
Geochemical	

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

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

DATE: April 26/90 SIGNATURE: _____
Author of Report or Agent

Res. Geol. _____ Qualifications 2.2012

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
P	1013153
P	1013154
P	1013155
P	1013156
P	1013157
P	1013158
P	1013159
P	1013160
P	1013161

If space insufficient, attach list

TOTAL CLAIMS 9

837 (85/12)

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations CEM 240 Mag 284 Number of Readings CEM 480 Mag 284

Station interval 25 m Line spacing 100 m

Profile scale 1 cm = 10%

Contour interval 100 gammas to 1000 gammas

MAGNETIC

Instrument McPhar Fluxgate

Accuracy – Scale constant ±5 gammas

Diurnal correction method Base stations

Base Station check-in interval (hours) Hourly or less

Base Station location and value L2+00mE, 0+00, 520 g

ELECTROMAGNETIC

Instrument Crone CEM

Coil configuration Horizontal

Coil separation 100 m

Accuracy ±1%

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

Frequency 390 Hz (specify V.L.F. station)

Parameters measured Parameters of primary field

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 _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

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 _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Ministry of Northern Development and Mines

Ontario

Geophysical-Geological-Geochemical Technical Data Statement

Block IIIB

File _____

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) Geophysical (EM & Mag), Geological

Township or Area Cunningham Township

Claim Holder(s) Teck Explorations Limited

Survey Company Teck Explorations Limited

Author of Report K. Thorsen

Address of Author 2189 Algonquin Ave, North Bay, Ont,P1B4Z3

Covering Dates of Survey June 5 to October 11, 1989 (linecutting to office)

Total Miles of Line Cut 6.150 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	10.7
--Magnetometer	4.7
--Radiometric	4.7
--Other	4.7
Geological	
Geochemical	

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

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

DATE: April 26/90 SIGNATURE: _____
Author of Report or Agent

Res. Geol. _____ Qualifications 2.2012.

Previous Surveys

File No.	Type	Date	Claim Holder

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
P	1013162
P	1013163
P	1013164
P	1013165
P	1013166
P	1013167

TOTAL CLAIMS 6

If space insufficient, attach list

837 (85/12)

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations CEM 195 Mag 226 Number of Readings CEM 390 Mag 226

Station interval 25 m Line spacing

Profile scale 1 cm = 10%

Contour interval 100 g to 1000 g, 1000 g above 1000 g

MAGNETIC

Instrument McPhar Fluxgate

Accuracy – Scale constant ±5 g

Diurnal correction method Base station

Base Station check-in interval (hours) Hourly or less

Base Station location and value L1+00mE, 0+00 - 580 g

ELECTROMAGNETIC

Instrument Crone CEM

Coil configuration Horizontal

Coil separation 100 m

Accuracy ±1%

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

Frequency 390 Hz
(specify V.L.F. station)

Parameters measured Parameters of primary field

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 _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

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

Ministry of Northern Development and Mines

Ministère du Développement du Nord et des Mines

Mining Lands Section
3rd Floor, 880 Bay Street
TORONTO, Ontario
M5S 1Z8

Telephone: (416) 965-4888

Your File: W9006-60291
Our File : 2.13284

July 12, 1990

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

Dear Sir:

RE: Notice of Intent dated June 11, 1990 for Geophysical (Electromagnetic, Magnetometer & other) Survey submitted on Mining Claim P 961130 et al in Cunningham 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

W. R. Cowan
Provincial Manager, Mining Lands
Mines and Minerals Division

DM/dvl
Enclosure

cc: Mr. W. D. Tieman
Mining and Lands Commissioner
Toronto, Ontario

Resident Geologist
Timmins, Ontario

Teck Explorations Limited
Toronto, Ontario

Teck Explorations Limited
North Bay, Ontario

Ministry of Northern Development and Mines

Ontario

Technical Assessment Work Credits

File: 2.13284

Date: June 12, 1990

Mining Recorder's Report of Work No.: W9006-60291

Recorded Holder: Teck Explorations Limited

Township or Area: Cunningham Twp.

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	P 961130 to 133 incl.
Electromagnetic 16.9 days	961134 to 136 incl.
Magnetometer 7.7 days	1013148 to 152 incl.
Radiometric ____ days	1013169 to 172 incl.
Induced polarization ____ days	
Other 2.6 days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological ____ days	
Geochemical ____ days	
Man days [X] 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

[X] not sufficiently covered by the survey [ ] insufficient technical data filed

P 1013133, 1013147, 1013168

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.

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
(R) CROWN RESERVE				

SWAYZE TWP.

2.13284

2.13284

2.13284

2.13284

GREENLAW TWP.

GARNET TWP.

BLAMEY TWP.

Peter Lake

Heather L.

Edward L.

Isaiah L.

WD 812

WD 813

MAGNETIC DECLINATION 9° WEST

— em & mag
— geol.

LEGEND

- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES
  - TOWNSHIPS, BASE LINES, ETC.
  - LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES
  - LOTS, ETC.
  - PARTY BOUNDARY
  - MINING CLAIMS, ETC.
- RAILWAY & 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.

500 Metres 0 1000 Metres
10 Chains 0 10 20 30 40 50 60 70 Chains
500 0 1000 2000 3000 4000 5000 Feet

SCALE 1:20 000

RECEIVED
NOV 7 1989
PORCUPINE MINING DIVISION

TOWNSHIP
CUNNINGHAM

M.N.R. ADMINISTRATIVE DISTRICT
CHAPLEAU
MINING DIVISION
PORCUPINE
LAND TITLES / REGISTRY DIVISION
SUDBURY Received Sept 15/86

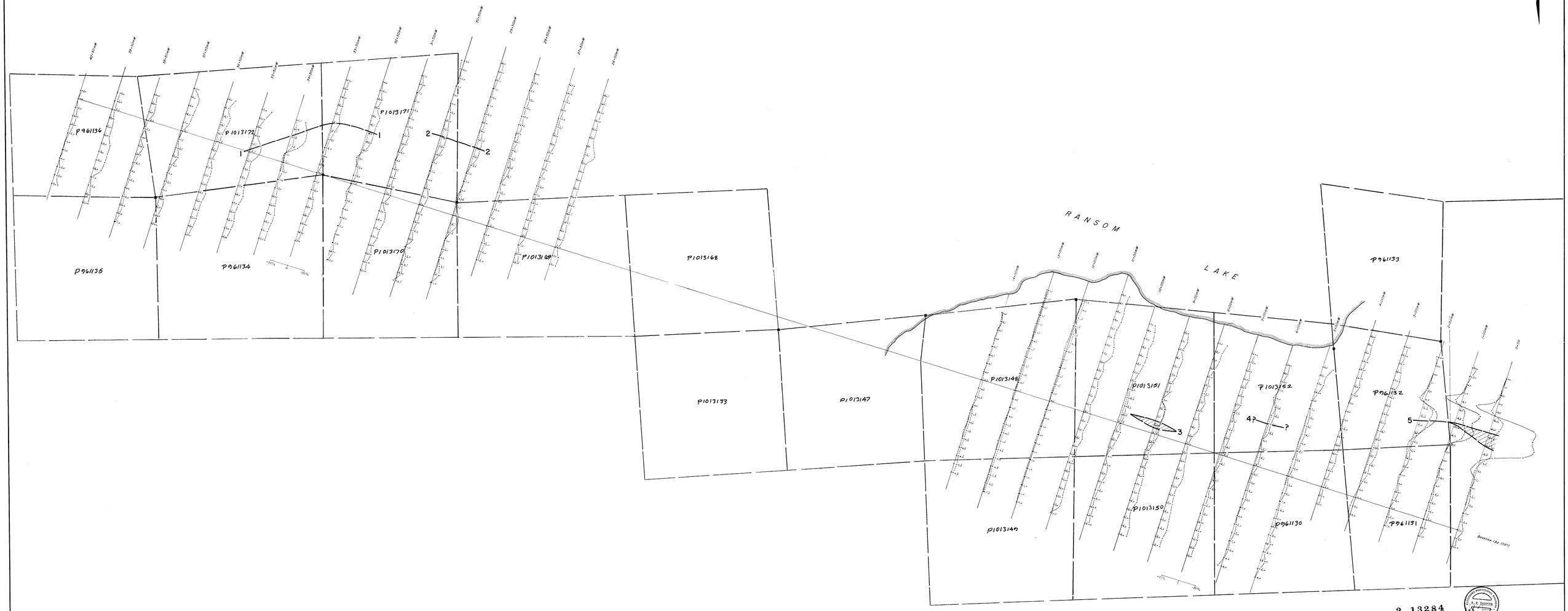
Ontario Ministry of Natural Resources
Ministry of Northern Development and Mines

Date AUGUST, 1986
Number G-1095

CK-Aug.; Sept 8/86

41015SE0128 2.13284 CUNNINGHAM

200



2.13284

(BLOCK 1).

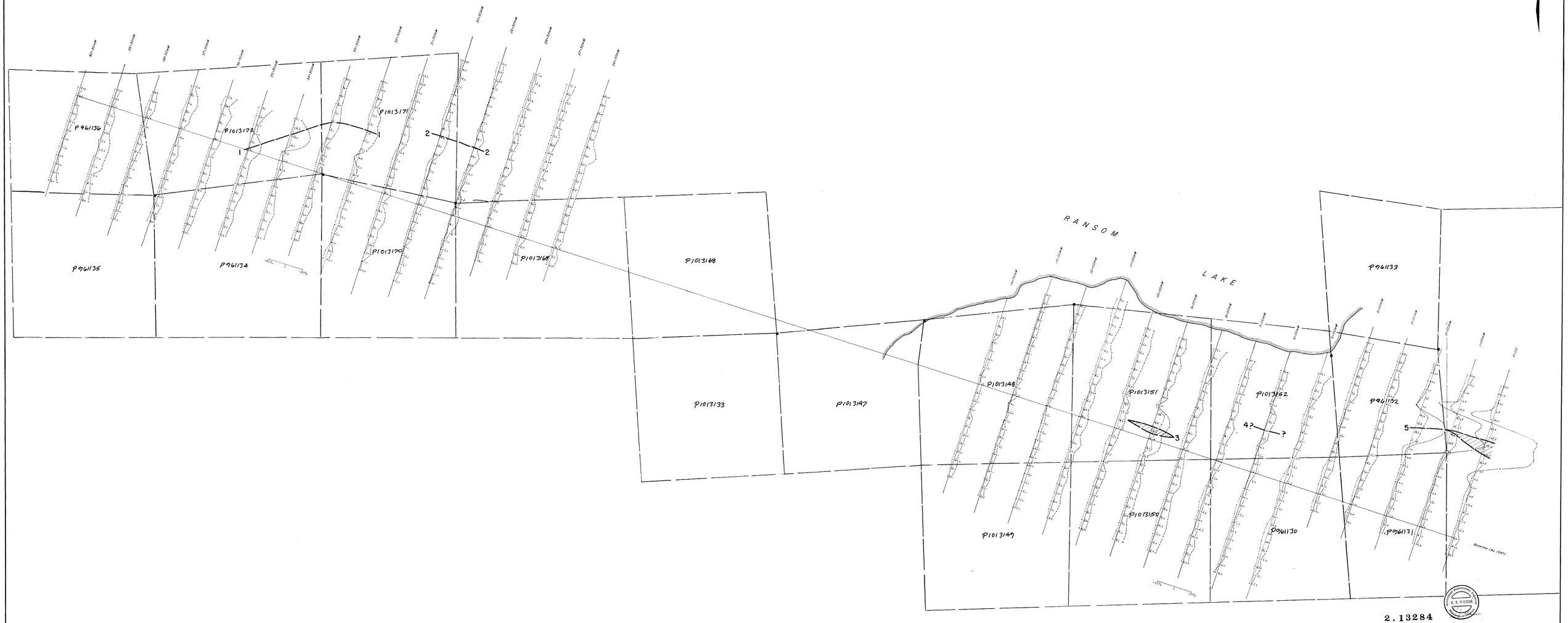
INSTRUMENT:	PARAMETRICS MaxMin II
OPERATOR:	F. BLAKE, E. COTE
TX. STATION:	
COIL SEPARATION:	100m
FREQUENCY: 444Hz.	In phase / Out of phase

Teck Explorations Limited

ELECTROMAGNETIC SURVEY

CUNNINGHAM TWP. PROPERTY
CUNNINGHAM TWP., ONTARIO

PROPERTY/AREA			
	DATE: OCT. 89	FOR: 1554	N.T.S.: 410/10
SCALE: 50 0 50 100 200 metres 1 : 2500			DWG. NO.: 6523a



2.13284

(BLOCK I)

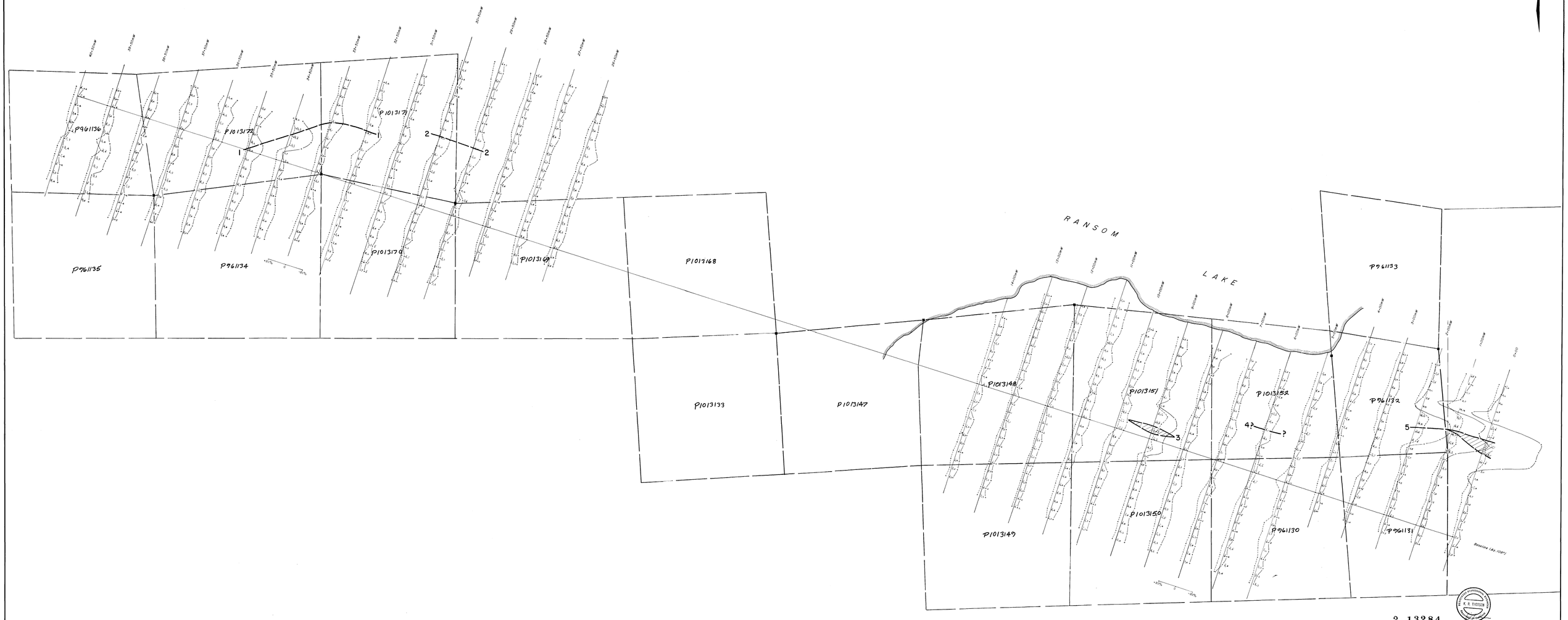
INSTRUMENT:	PARAMETRICS MaxMin II
OPERATOR:	F. BLAKE, E. COTE
Tx. STATION:	
COIL SEPARATION:	100m
FREQUENCY: 1777 Hz.	In phase / Out of phase

Teck Explorations Limited

ELECTROMAGNETIC SURVEY

CUNNINGHAM TWP. PROPERTY
CUNNINGHAM TWP., ONTARIO

PROPERTY/AREA			
	DATE: OCT. 89	JOB: 1554	410/10
SCALE: 1 : 2500			DWG. NO. 6523b



2.13284

(BLOCK I)

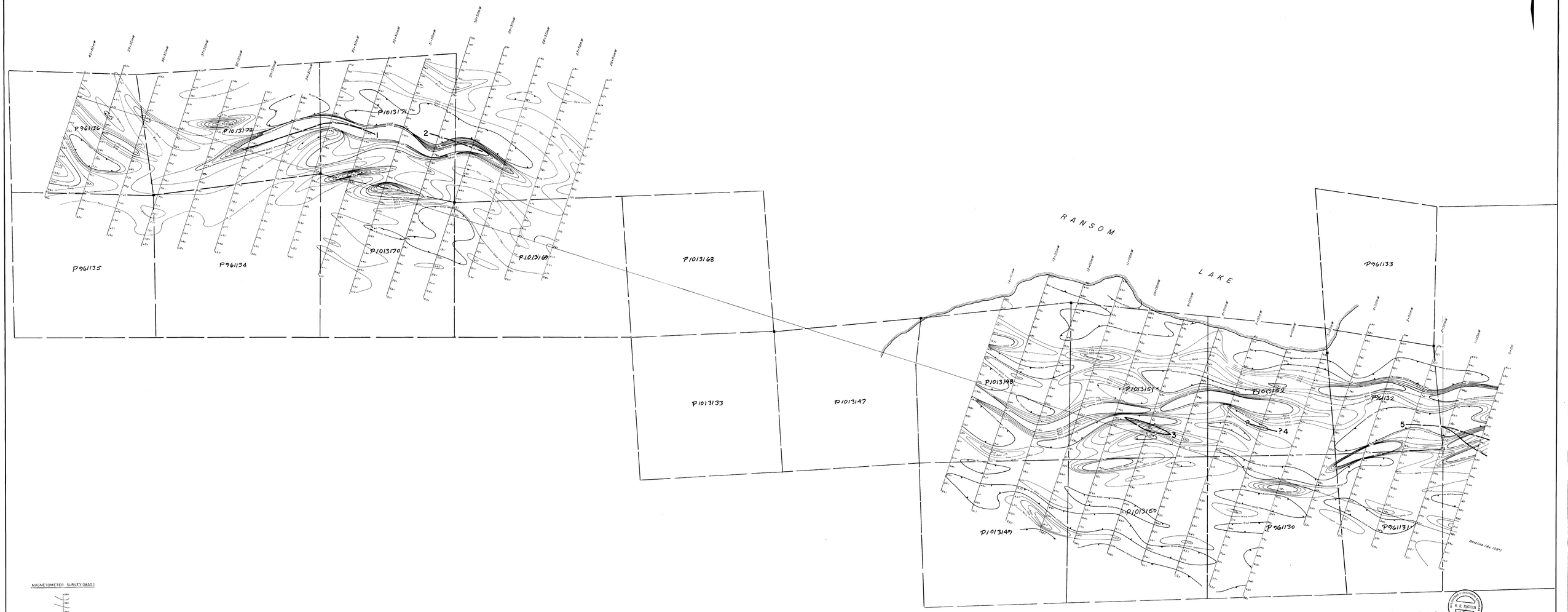
INSTRUMENT:	PARAMETRICS MaxMin II
OPERATOR:	F. BLAKE, E. COTE
TX STATION:	
COIL SEPARATION:	100m
FREQUENCY: 3555 Hz	In phase / Out of phase

Teck Explorations Limited

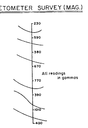
ELECTROMAGNETIC SURVEY

CUNNINGHAM TWP. PROPERTY
CUNNINGHAM TWP., ONTARIO

PROPERTY/AREA			
DATE	OCT. 89	JOB	1554
N.T.S.	41O/10		
SCALE	1 : 2500	DWG. NO.	6523c



MAGNETOMETER SURVEY (MAG)



INSTRUMENT:	McPHAR MAGNETOMETER UNIT
OPERATOR:	F. BLAKE
% STATION:	
COIL SEPARATION:	
FREQUENCY:	

240

2.13234

(BLOCK I)

Teck Explorations Limited

MAGNETOMETER SURVEY

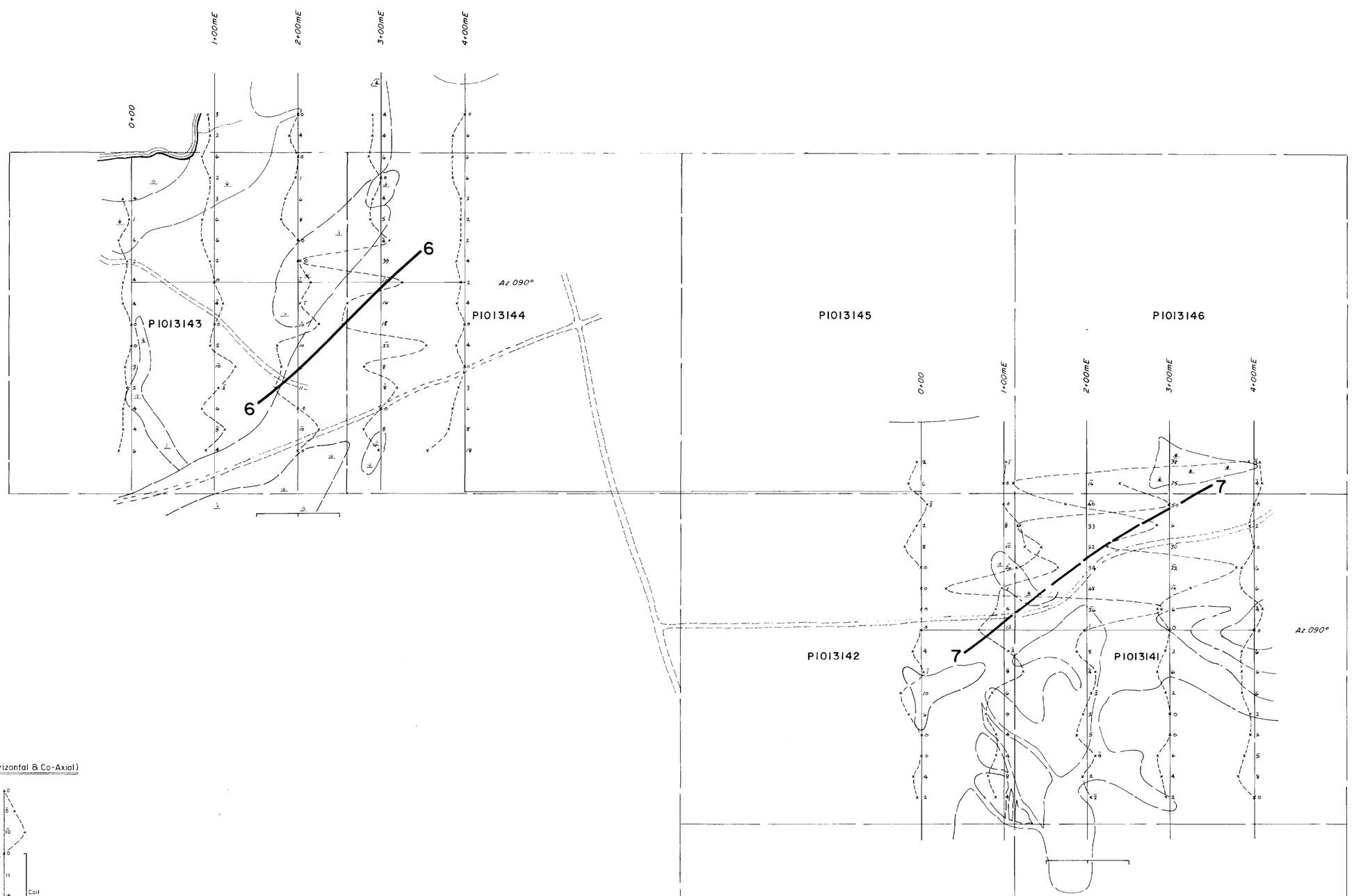
CUNNINGHAM TWP. PROPERTY
CUNNINGHAM TWP., ONTARIO

PROPERTY/AREA

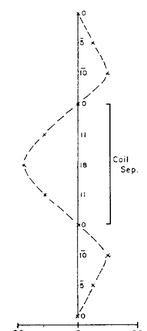
DATE	JOB	N.T.S.
OCT. 89	1554	41O/1O

SCALE 1 : 2500 (80 0 50 100 200 metres)

DWG. NO. 6523d



SHOOTBACK (Horizontal & Co-Axial)



INSTRUMENT : CRONE C.E.M. UNIT
OPERATOR : F. BLAKE / E. COTE
Coil Sep. : 100 metres
FREQUENCY : 390 Hz.

410155E0128 2.13284 CUNNINGHAM

250

K. R. THORSEN
REGD. PROFESSIONAL ENGINEER
PROVINCE OF ONTARIO

2.13284

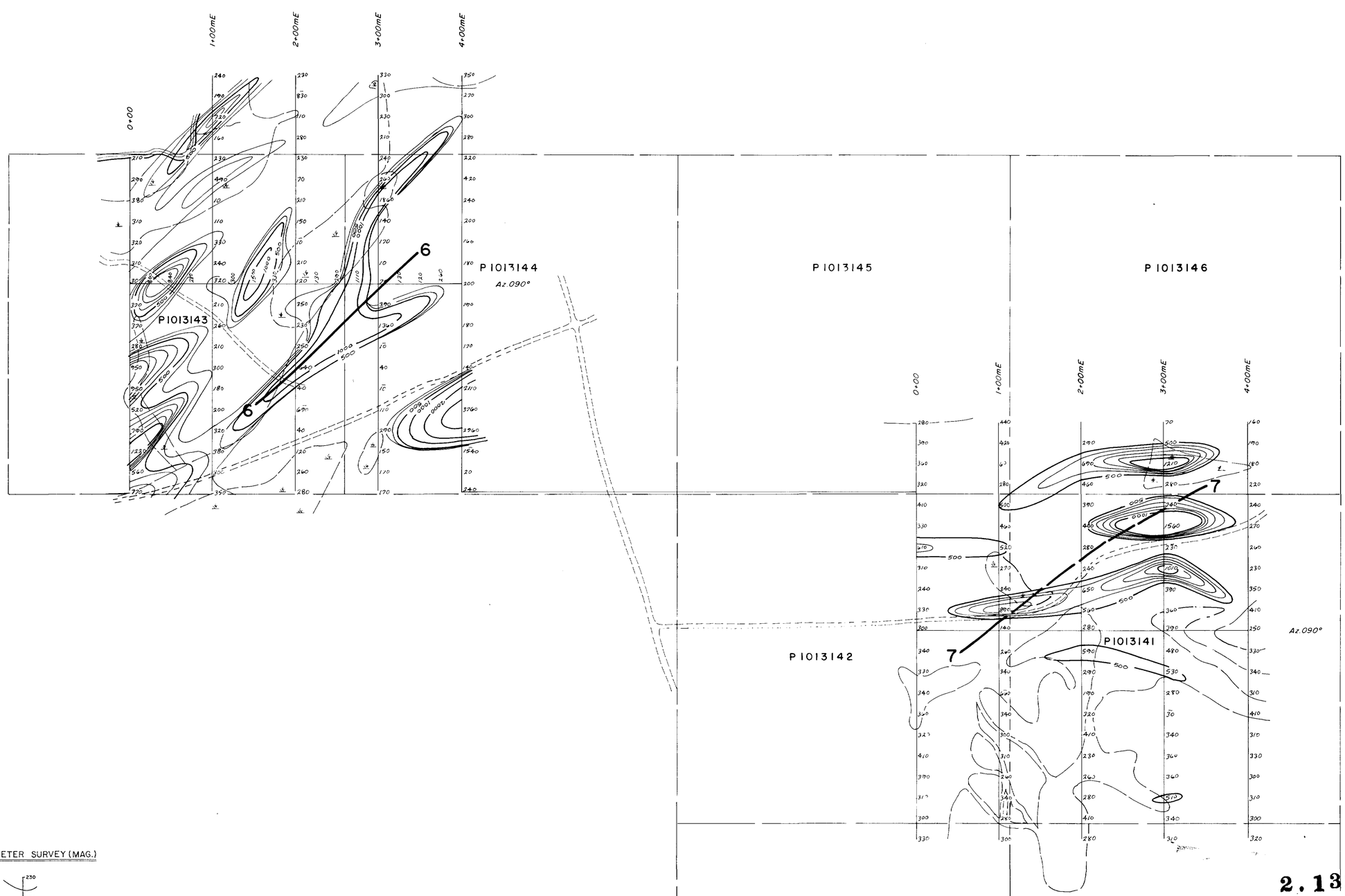
(BLOCK II)

Teck Explorations Limited

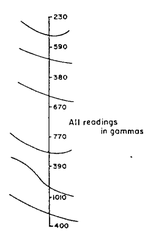
ELECTROMAGNETIC SURVEY

CUNNINGHAM TWP. PROPERTY
CUNNINGHAM TWP., ONTARIO

PROPERTY/AREA:			
	DATE: OCT. 89	JOB: 1554	N.T.S.: 410/10
SCALE: 50 0 1 : 2500 50 100 metres			DWG.NO.: 6524a



MAGNETOMETER SURVEY (MAG.)



INSTRUMENT : McPHAR MAGNETOMETER UNIT
OPERATOR : F. BLAKE

2.13284

2.13284

(BLOCK II)

Teck Explorations Limited

MAGNETOMETER SURVEY

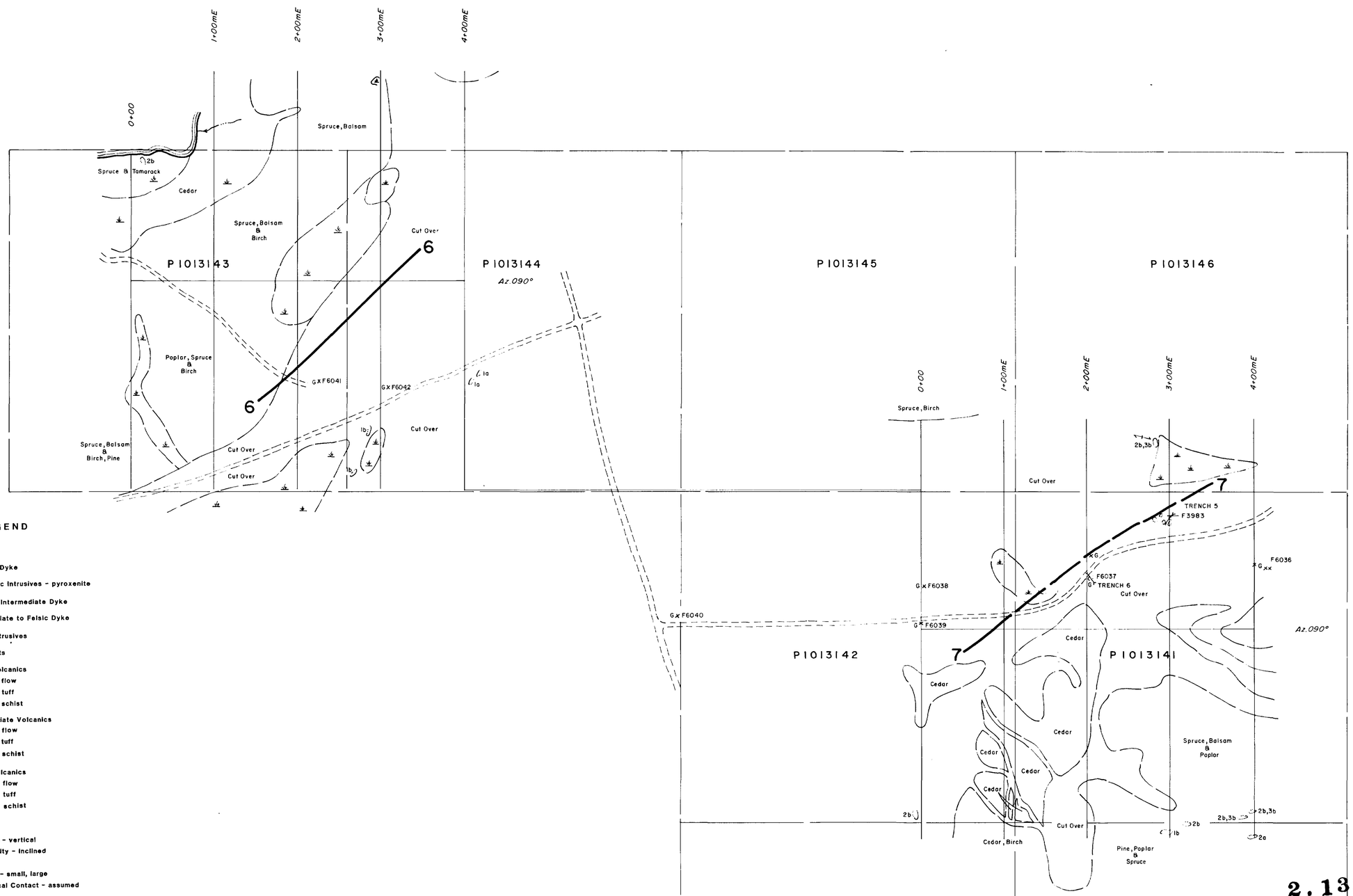
CUNNINGHAM TWP. PROPERTY
CUNNINGHAM TWP., ONTARIO

PROPERTY/AREA:

DATE: OCT. 89	JOB: 1554	N.T.S.: 410/10

SCALE: 50 0 50 100 metres 1 : 2500 DWG.NO.: 6524b

41015SE0120 2.13284 CUNNINGHAM



LEGEND

9	Diabase Dyke		
8	Ultramafic Intrusives - pyroxenite		
7	Mafic to Intermediate Dyke		
6	Intermediate to Felsic Dyke		
5	Felsic Intrusives		
4	Sediments		
3	Felsic Volcanics		
	(a) flow		
	(b) tuff		
	(c) schist		
2	Intermediate Volcanics		
	(a) flow		
	(b) tuff		
	(c) schist		
1	Mafic Volcanics		
	(a) flow		
	(b) tuff		
	(c) schist		

- Foliation - vertical
- Schistosity - inclined
- Outcrop - small, large
- Geological Contact - assumed
- Swamp
- Beaver Dam
- Hill
- Trench
- Intermittant Stream
- Sample Location
- E.M. Conductor - weak, strong

fg	fine grained	G	gossan
mg	medium grained	gf	graphite
cg	coarse grained		

Sample No.	Au ppb	Ag ppm	Cu ppm	Zn ppm
F3983	10	Nil	91	142
F6036	105	0.3	119	76
F6037	30	0.4	292	885
F6038	Nil	0.1	42	35
F6039	Nil	Nil	23	30
F6040	10	0.2	57	62
F6041	Nil	0.2	80	47
F6042	Nil	0.2	222	24

2.13284

(BLOCK II)

Teck Explorations Limited

GEOLOGY

CUNNINGHAM TWP. PROPERTY

CUNNINGHAM TWP., ONTARIO

PROPERTY/AREA:			
GEOLOGY: A.C.	DATE: OCT. 89	JOB: 1554	N.T.S.: 410/10
SCALE: 50 0 50 100 metres 1 : 2500			DWG.NO.: 6524c

P1013161 P1013160 P1013159

4+00mW 3+00mW 2+00mW 1+00mW 0+00 1+00mE 2+00mE 3+00mE 4+00mE 5+00mE 6+00mE

P1013156 P1013158 P1013157 P1013155 P1013154 P1013153

10? ? 11 12 13

Pond Pond

Az. 105° BEAVER POND

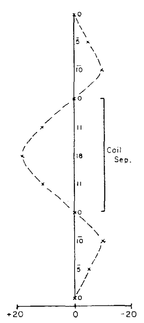
0+00 1+00mE 2+00mE 3+00mE 4+00mE 5+00mE 6+00mE 7+00mE ROAD

P1013165 P1013166 P1013162 P1013163 P1013164 P1013167

9? ? 8

ROAD Az. 090° TRAIL ROAD LAKE

SHOOTBACK (Horizontal & Co-Axial)



INSTRUMENT : CRONE C.E.M. UNIT
OPERATOR : F. BLAKE / E. COTE
Coil Sep.: 100 metres
FREQUENCY : 390 Hz.

2.13284 (BLOCK III)

Teck Explorations Limited

ELECTROMAGNETIC SURVEY

CUNNINGHAM TWP. PROPERTY
CUNNINGHAM TWP., ONTARIO

PROPERTY/AREA:

DATE:	JOB:	N.T.S.:
OCT. / 89	1554	41O/1O

SCALE: 50 0 50 100 200 metres 1 : 2500

DWG.NO.: 6525a

P1013161 P1013160 P1013159

P1013156 P1013157 P1013156 P1013155 P1013154 P1013153

10? 11 12 13

P1013165 P1013162 P1013166 P1013164 P1013163 P1013167

8 9

Pond Pond Pond LAKE TRIAL BEAVER POND

ROAD ROAD ROAD

Az. 105° Az. 090°

0+00 1+00mE 2+00mE 3+00mE 4+00mE 5+00mE 6+00mE 7+00mE

1+00NW 2+00NW 3+00NW 4+00NW

MAGNETOMETER SURVEY (MAG.)

All readings in gammas

INSTRUMENT : McPHAR MAGNETOMETER UNIT
OPERATOR : F. BLAKE

2.13284

(BLOCK III)

Teck Explorations Limited

MAGNETOMETER SURVEY

CUNNINGHAM TWP. PROPERTY
CUNNINGHAM TWP., ONTARIO

PROPERTY/AREA:

DATE:	JOB:	N.T.S.:
OCT./89	1554	410/10

SCALE: 1" = 2500 (50 0 50 100 200 metres)

DWG.NO.: 6525b

410SE0010 2.13284 CUNNINGHAM

290

LEGEND

- 9 Diabase Dyke
- 8 Ultramafic Intrusives - pyroxenite
- 7 Mafic to Intermediate Dyke
- 6 Intermediate to Felsic Dyke
- 5 Felsic Intrusives
- 4 Sediments
- 3 Felsic Volcanics
  - (a) flow
  - (b) tuff
  - (c) schist
- 2 Intermediate Volcanics
  - (a) flow
  - (b) tuff
  - (c) schist
- 1 Mafic Volcanics
  - (a) flow
  - (b) tuff
  - (c) schist

- Foliation - vertical
- Schistosity - inclined
- Outcrop - small, large
- Geological Contact - assumed
- Swamp
- Beaver Dam
- Hill
- Trench
- Intermittant Stream
- Sample Location
- E.M. Conductor - weak, strong

fg	fine grained	G	gossan
mg	medium grained	gf	graphite
cg	coarse grained		

Sample No.	Au ppb	As ppm	Cu ppm	Zn ppm
F3980	40	0.2	203	388
F3982	20	0.3	372	1290
F6294	N11	0.2	147	227
F6295	N11	N11	67	83
F6296	N11	N11	28	42
F6297	N11	0.3	22	35
F6298	N11	N11	120	94
F6299	N11	0.3	68	42
F6300	N11	0.2	54	212

2.13284

(BLOCK III)

Teck Explorations Limited

GEOLOGY

CUNNINGHAM TWP. PROPERTY
CUNNINGHAM TWP., ONTARIO

PROPERTY/AREA:			
GEOLOGY: A.C.	DATE: OCT. 89	JOB: 1554	N.T.S.: 410/10
SCALE: 50 0 50 100 200 metres, 1 : 2500			DWG.NO.: 6525c

300