SERVICES EXPLORATION SERVICES

765, BOUL. QUÉBEC
C.P. 428
ROUYN-NORANDA, P.Q.
J9X 5C4

Dess
Jalor
Cour
Levé
Levé

2.14084

PLACER DOME INC.

GEOPHYSICAL SURVEYS

CLAIM GROUP # 441

Belford And Montcalm Twps.

April 1991

TABLE OF CONTENTS

MAPS

I - INTRODUCTION:

At the request of PLACER DOME INC., geophysical surveys were undertaken, by exploration Services Reg'd, during the month of March, 1991, on the # 441 claim group which is located in the east-central part of Belford township with partial overlap in adjoining Montcalm township, northeastern Ontario.

The magnetometer survey was undertaken to be used as a guide to the geological and structural interpretation of this particular area. The electromagnetic survey was carried out to locate and evaluate the INPUT anomalies located on the claim group.

II - PROPERTY:

The # 441 claim group consists of 45 contiguous sixteen hectare claims, 40 of which are located in Belford township and 5 of which are located in adjoining Montcalm township. The claim numbers are as follows:

1160505 - 1160506 - 1160507 - 1160508 - 1160509
1160510 - 1160511 - 1160512 - 1160513 - 1160514
1160515 - 1160516 - 1160517 - 1160518 - 1160519
1160520 - 1160521 - 1160522 - 1160523 - 1160524
1160531 - 1160532 - 1160533 - 1160534 - 1160535

1160661 - 1160662 - 1160663 - 1160664 - 1160665

1160666 - 1160667 - 1160668 - 1160669 - 1160670

1160671 - 1160672 - 1160673 - 1160674 - 1160675

1160676 - 1160677 - 1160678 - 1160679 - 1160680

III - LOCATION & ACCESSIBILITY:

The claim group is accessible, from the city of Timmins, by driving westwards, then southwards for a distance of 6 Km; from this point, an access road leads westward along the boundaries of Godfrey and Bristol townships. This access road eventually reaches the central part of Strachan township, a travelling distance of 55 Km. the claim group may then be reached by helicopter, a distance of 12 Km to the northwest.

IV - GEOPHYSICAL SURVEYS:

The geophysical surveys were carried out along a previously cut grid whose 4.0 meter long base line trends east-west; cross lines spaced at every 100 meter intervals extend northwards to a maximum distance of 1 950 m and southwards to a maximum distance of 400 m. Thus a total of 73.6 line Km have been

surveyed.

Magnetometer Survey:

A - Instrumentation:

The magnetometer survey was carried out using an E.D.A. nuclear precession instrument with an accompanying base station for diurnal corrections.

Readings were taken at every 12.5 meter intervals and the data was plotted on a map at the scale of 1: 2 500.

B - Interpretation:

Numerous magnetic areas have been outlined by the survey; these are briefly discussed as follows:

Area "A":

Two east-west trending anomalous areas defined by the 600 gamma contour lines have been outlined on the geological interpretation map. One such area whose width varies from 200 to 150 meters occurs in the northwestern corner of the property from cross line 25 W to cross line 19 W, where it abuts against a local northwest trending diabase dyke.

This particular area also contains magnetic anomalies with values ranging up to 1 100 gammas. These magnetic anomalies appear to be associated with segmented conductor C-1 and C-2. A compilation map indicates that segment C-1 has been drilled.

Another area labelled "A" on the geological interpretation map is located in the southern part of the grid between cross line 25 W and cross line 3 E where it terminates its eastward extension against a local northwestern trending diabase dyke. This 150 meter wide band trends east-west from cross line 25 W to cross line 14 W, then trends northeast to cross line 3 E. This magnetic area defined by the 600 gamma contour line hosts conductors "G" and "H".

These 2 magnetic areas which have been identified by the letter "A" on the geological interpretation map indicate the presence of two stratigraphic horizons of intermediate volcanic rocks.

Area "B":

Magnetic area "B" has background values ranging from 400 gammas to 600 gammas and covers approximately 60% of the surveyed area. The range in readings may indicate changes in the depth of overburden

rather than changes in rock types.

The relatively low magnetic readings of this area suggests the presence of underlying felsic volcanic rocks.

Area "C":

Three such areas have been outlined by the 600 gamma contour lines in the western part of the grid between cross line 17 W and cross line 5 W, between 4+00 N and 11+00 N. These, more or less oval shaped anomalies, range between 600 and 1,000 gammas.

These anomalies are probably caused by mafic intrusives.

Area "D":

Three such areas have been outlined by the survey; these north, northwest trending linear features are caused by local diabase dykes.

Electromagnetic survey:

A - Instrumentation:

An Apex Parametrics Maxmin II horizontal loop unit was used for the survey with a coil seperation of 200 meters. Readings were taken at every 25 meter intervals on the 444 and 1777 frequencies.

The E.M. data were then plotted on a map at the scale of 1: 2 500.

B - Interpretations:

Because of the length of the reference cable used, the E.M. anomalies are generally not well defined; however all appear to be dipping more or less vertically and trend in an east-west, east-northeast direction.

The E.M. survey has outlined 13 conductors which have been labeled from "A" to "M"; these are briefly discussed as follows:

Conducter "A":

Located in the north-central part of the property, conductor "A" trends northeastwards from cross line

2 E, in the vicinity of 16 N. It intercepts line 3 E at 16+60 N - it may continue eastwards beyond the surveyed area.

This weak anomaly appears to be coincident with a fault zone as defined by the segmentation or displacement of the local diabase dyke against which it abuts.

Conductor "B":

Two segments of this conductor have been outlined by the survey in the northwestern part of the property. Segment 1 traverses cross lines 18 W to 14 W in the vicinity of 9+50 N. The strongest E.M. response along this segment has been observed on lines 15 W, 16 W and 17 W.

The second segment of this anomaly occurs between cross lines 11 W and 4 W. Its strongest response has been observed on line 10 W.

Conductor "C":

Conductor "C" is located in the western part of the grid - segment C-1 intercepts cross line 25 W and 24 W at 5+50 N; segment C-2 intercepts line 23 W at 6+25 N and line 22 W at 6+75 N. These conductors

are associated and/or coincident with a 100 meter wide magnetic anomaly within the intermediate volcanic stratigraphic horizon. Segment C-1 appears to have been drilled previously.

Conductor "D":

Located in the northwestern area of the propert , conductor "C" coincides with an apparent segmentation of the local diabase dyke - it may thus be caused by a fault . . similar to conductor "A". This anomaly intercepts cross line 10 E at 3+50 N and cross line 11 E at 4+00 N. - it is very weak.

Conductor "E":

This short anomaly trends northeast; it intercepts line 7 E at 2+00 N and line 8 E at 2+25 N and line 9 E at 2+50 N. Its best response occurs along line 8 E.

Conductor "F":

This conductor traverses lines 6 W, 5 W, 4 W and 3 W in the vicinity of 5+75 N and line 2 W at 6+00 N. This anomaly appears to coincide with a regional fault as indicated by the displacement of the local diabase dyke.

Conductor "G":

The longest conductor outlined by the survey is located in the southwestern area of the property and, because of limited E.M. coverage, has been only partly defined. It appears to extend from line 22 W to line 11 W. A 150 m wide diabase dyke segments this conductor between line 16 W and line 14 W. The optimum response observed is located on line 19 W - on this line the conductor axis is located at 0+65N. This conductor lies within the intermediate volcanic rocks of the area, as defined by the magnetometer survey.

Conductor "H":

This conductor also lies mostly within the band of intermediate volcanic rocks which crosses the area in an east-northeast direction - it could be an extension of conductor "G". This anomaly is weak, however its best response has been observed to be located on line 2 W. On this line the conductor axis is at 2+75 N.

Conductor "I":

Conductor "I" is the strongest of the outlined E.M. anomalies on this particular grid. It is located

in the southeastern corner of the claim group between cross line 9 E and cross line 13 E at which point it abuts against a local diabase dyke. Its strongest response occurs on line 11 E; on this line the conductor axis is at 0+60N.

According to the INPUT compilation map, this E.M. anomaly has been drilled.

Conductor "J":

A weak anomaly has been observed in the south-central part of the grid between line 4 W and line 0 in the vicinity of 1+00 S. Its best response is on line 1 W.

Conductor "K":

Segmented conductor "K" trends in a NE direction. It is located in the southern part of the grid between line 0 and line 6 E where it terminates against a diabase dyke. Because of limited E.M. coverage in that area, conductor 'K" has been only partly defined. Its optimum response lies along line 3 E; on this line the conductor axis is estimated to be at 3+00 S.

Conductors "L" & "M":

Two short and weak conductors have been outlined

north of the base line; conductor axis "L" crosses line 4 E at 3+50 N and conductor axis "M" crosses line 5 E at 2+75 N.

V - CONCLUSIONS & RECOMMENDATIONS:

The magnetometer survey has outlined two east-west trending narrow bands of intermediate volcanic rocks within a setting of felsic volcanic rocks. These in turn have been intruded by 3 small mafic intrusives in the northwestern part of the grid. North-northwest diabase dykes have also been outlined by the magnetometer survey.

The electromagnetic survey has outlined 13 anomalies two of which have been previously drilled and 2 of which appear to be caused by fault zones. All of the INPUT anomalies located on the property have been identified.

Although weak in nature, most of the E.M. conductors should be considered as genuine bedrock anomalies. It is recommended, however, that selected targets should be the object of I.P. surveys for further evaluation.

Respectfully submitted:

E. Chartré: _____ April 20, 1991

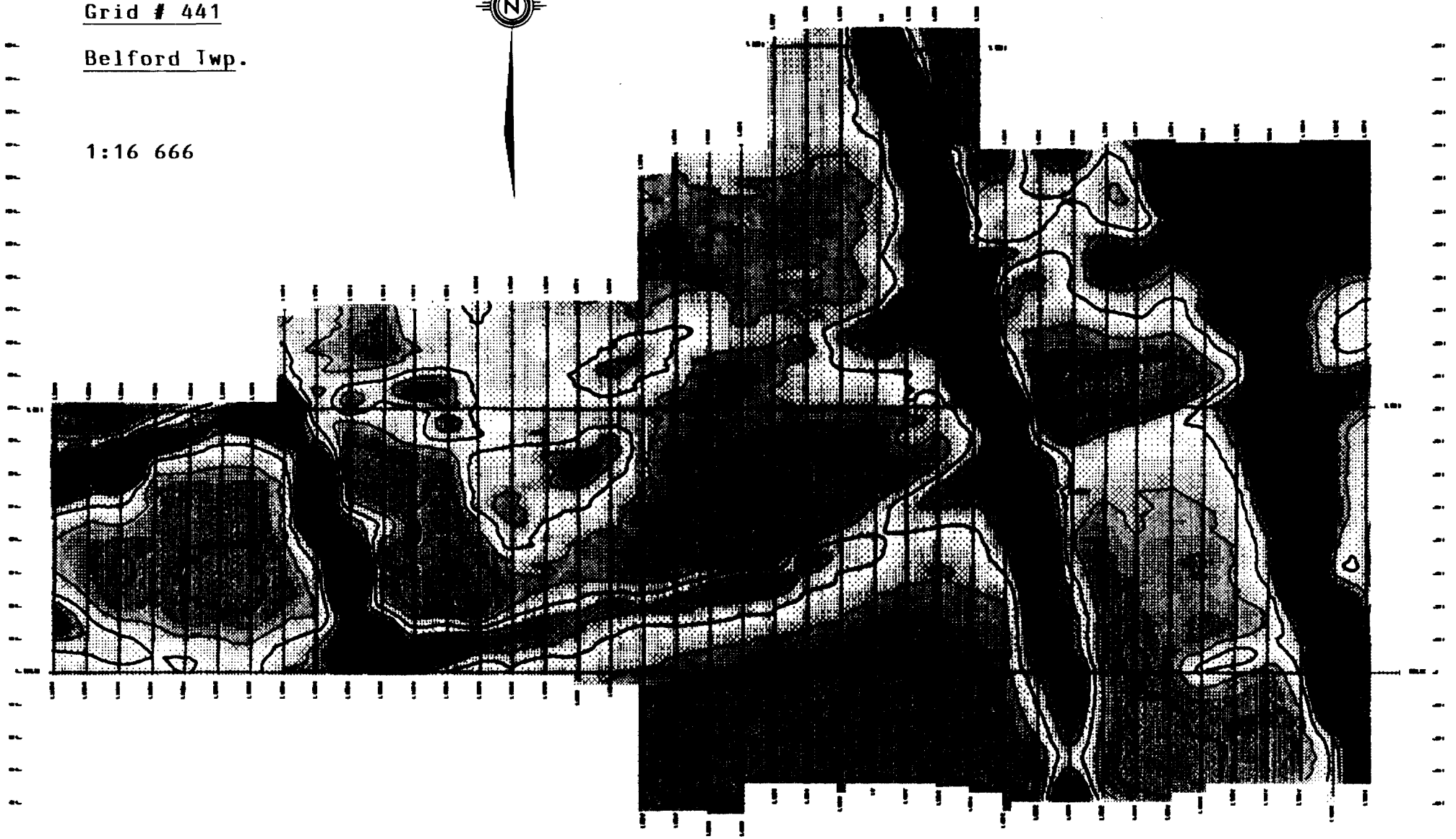
PLACER DOME INC.

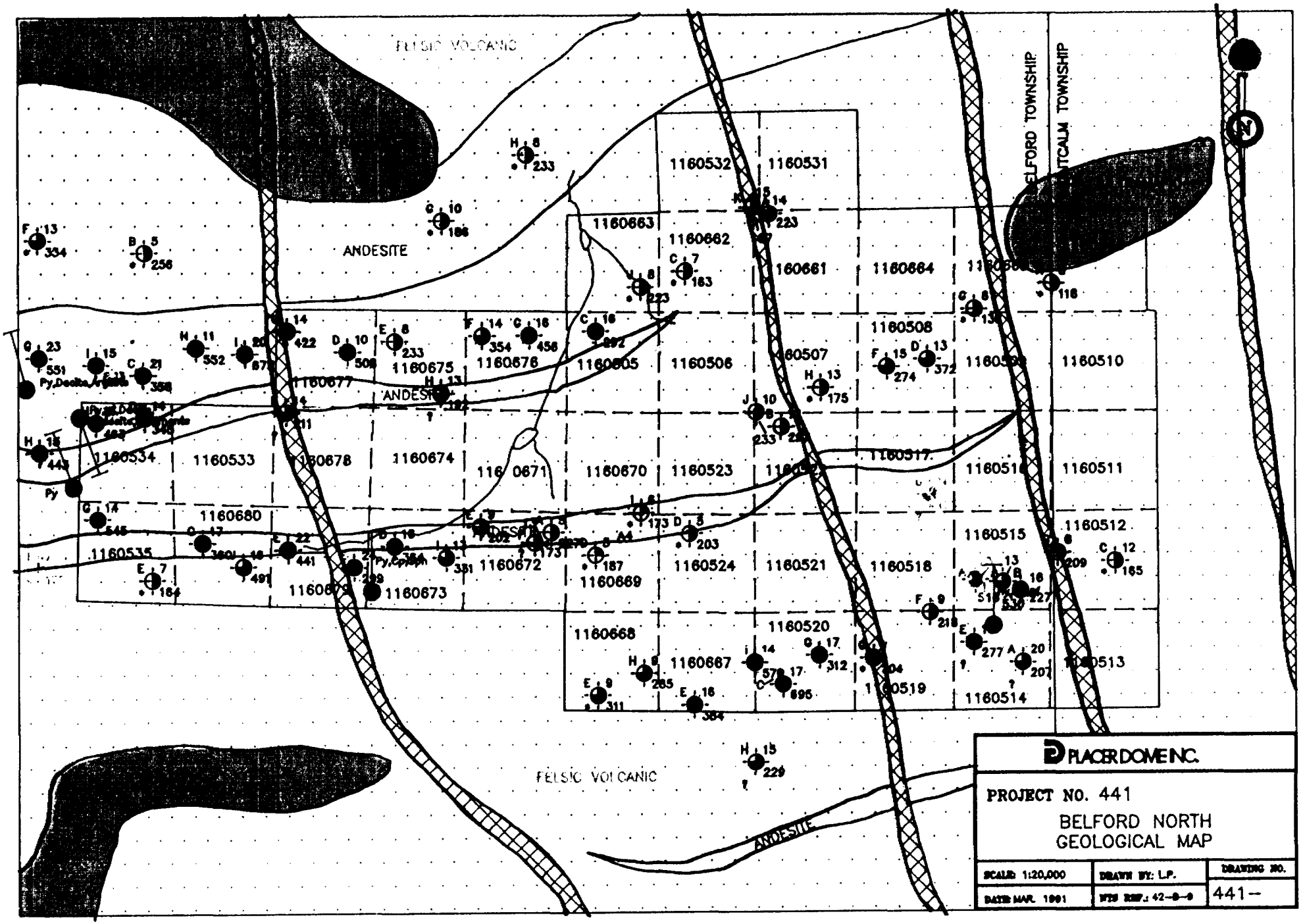
Magnetometer Survey

Grid # 441

Belford Twp.

1:16 666

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ANDESITE
BELFORD TOWNSHIP
MITCALM TOWNSHIP
1160532
1160531
1160663
1160662
1160661
1160664
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1160507
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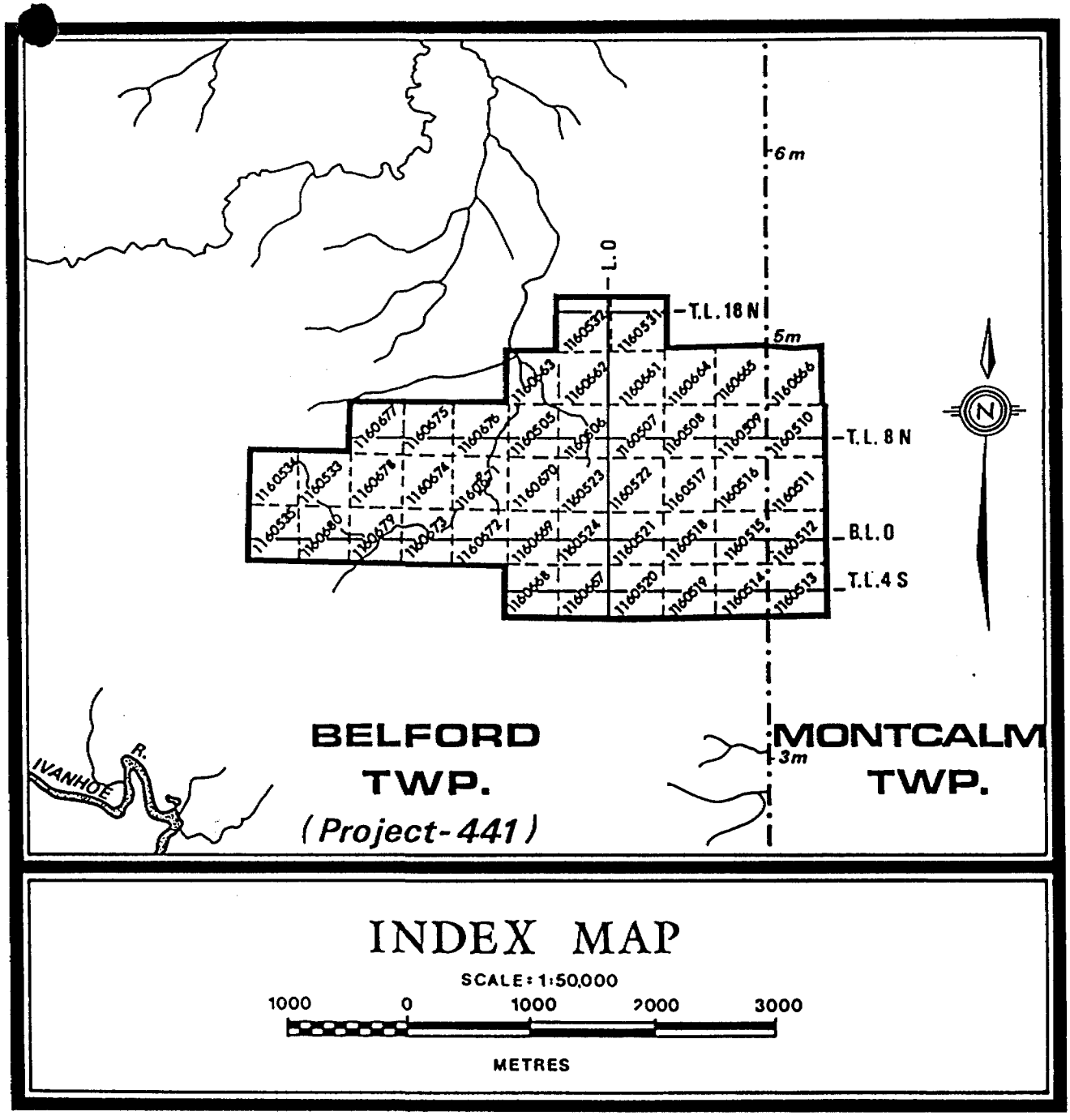
1160514
1160513
PLACER DOME INC.
PROJECT NO. 441
BELFORD NORTH
GEOLOGICAL MAP
SCALE: 1:20,000
DRAWN BY: L.P.
DRAWING NO.
DATE: MAR. 1991
441-

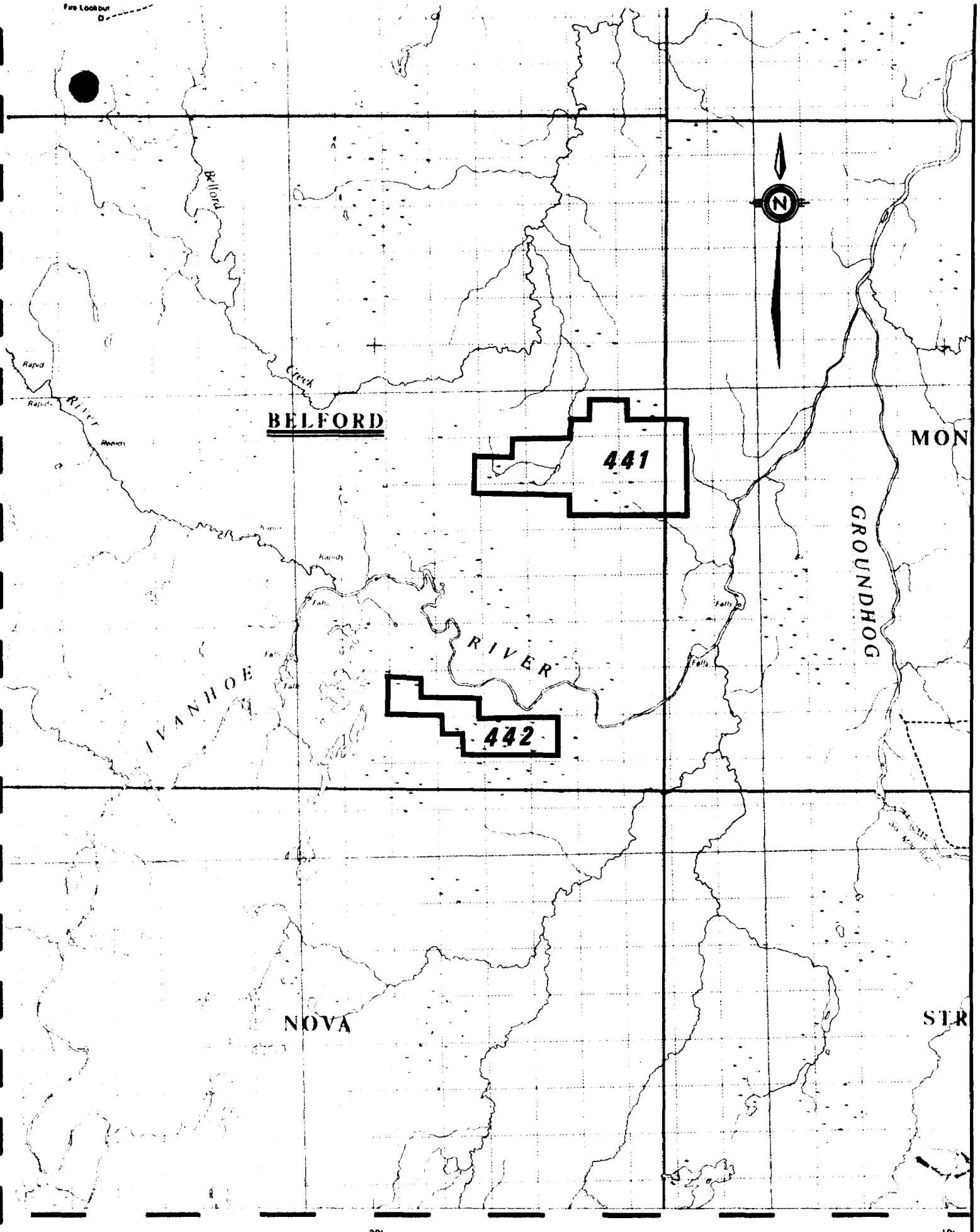


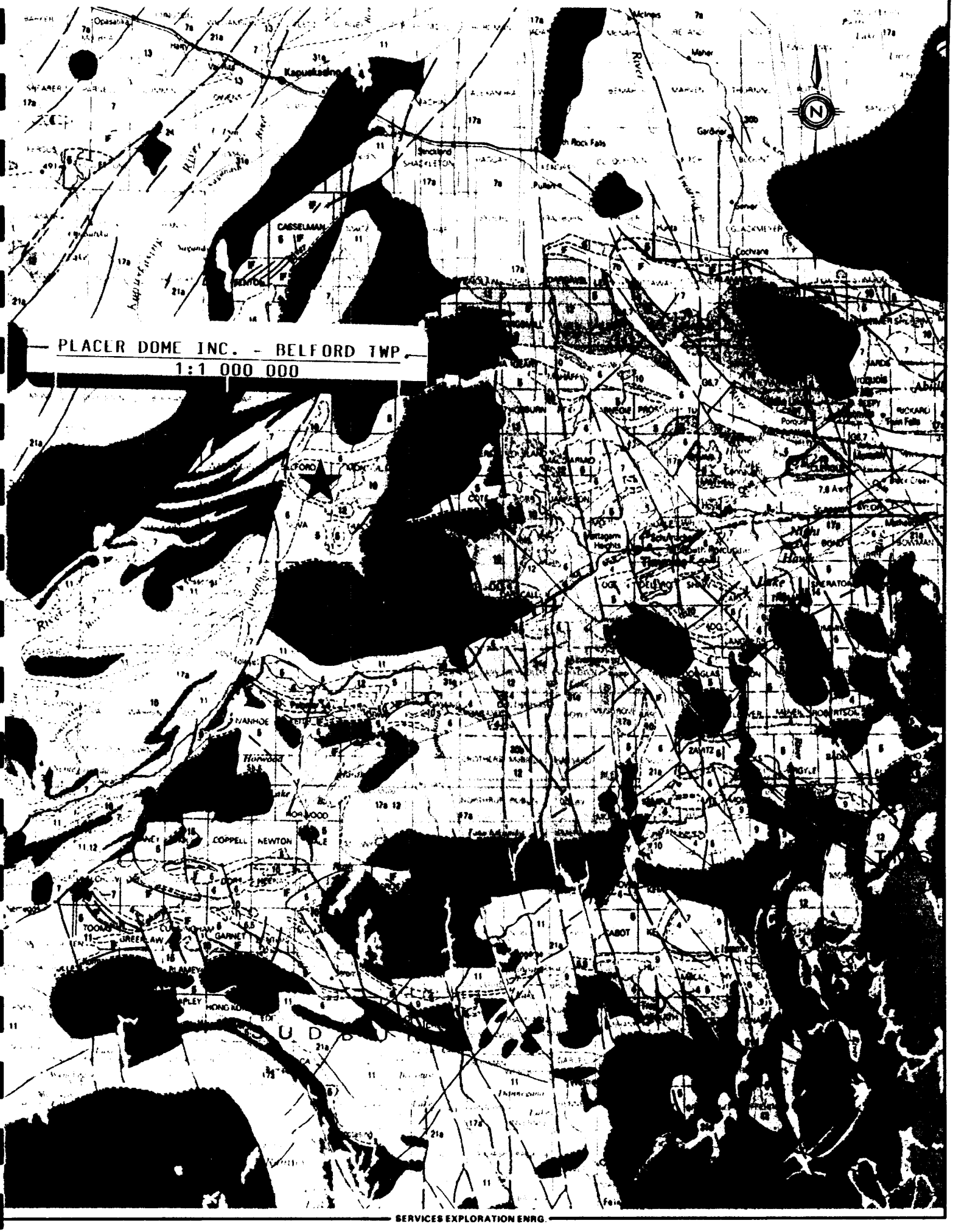
INDEX MAP

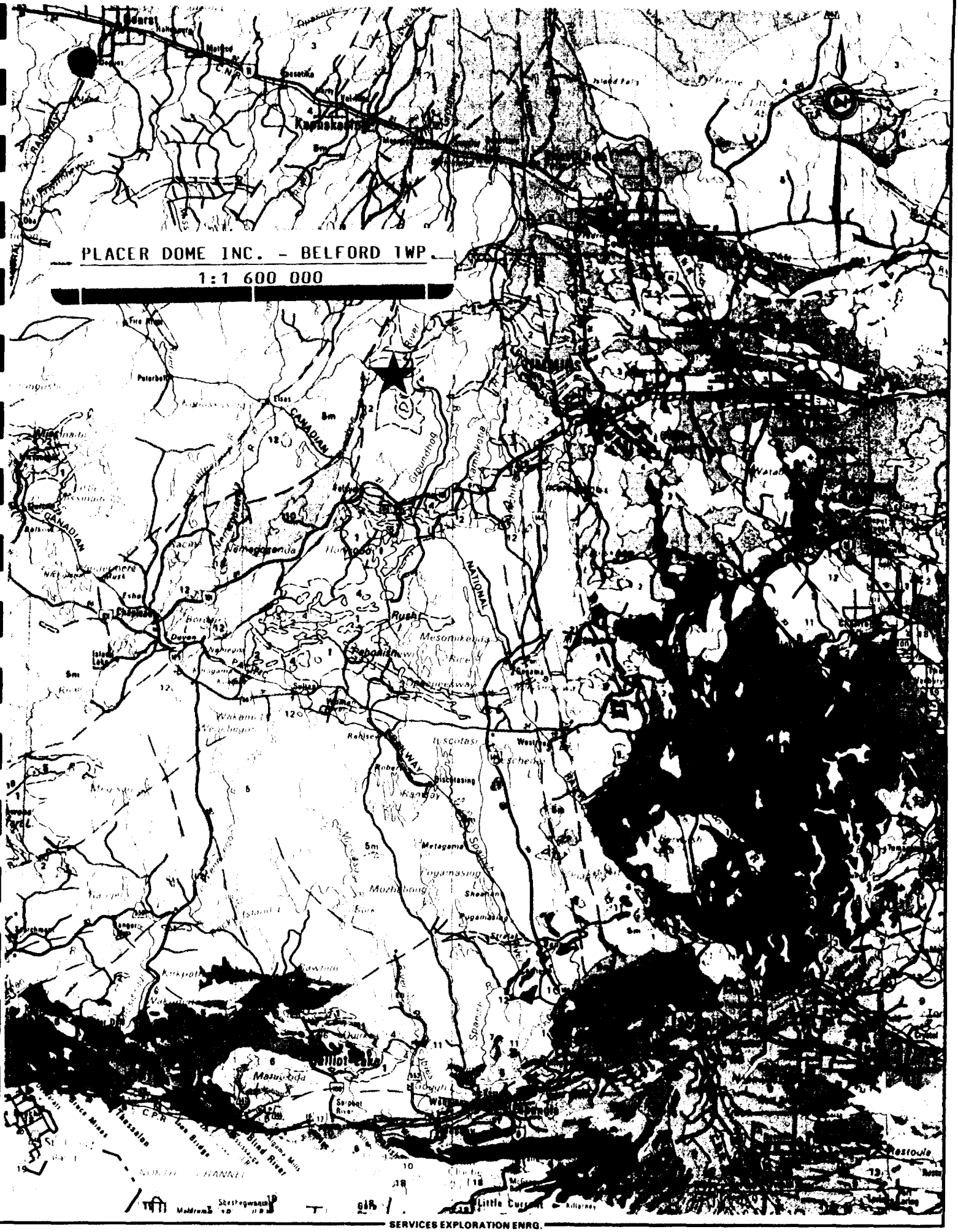
SCALE: 1:50,000

1000 0 1000 2000 3000

METRES


Fire Lookout
Belford
Creek
Rapid
River
BELFORD
441
MON
GROUNDHOG
RIVER
442
IVANHOE
NOVA
STR
N
20'
10'
400000mE
SCALE = 1 : 100 000


PLACER DOME INC. - BELFORD TWP.
1:1 000 000
SERVICES EXPLORATION ENRG.


PLACER DOME INC. - BELFORD TWP.
1:1 600 000
SERVICES EXPLORATION ENRG.

Ontario

Ministry of
Northern Development
and Mines

Geo
Tech

42B09NE0002 2.14084 MONTCALM

900

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

2.14084

Type of Survey(s) Magnetic & Electromagnetic

Township or Area Belford

Claim Holder(s) PLACER DOME INC.

Survey Company Exploration Services Reg'D

Author of Report E. Chartré

Address of Author 765 boul. Québec, Rouyn-noranda Qc

Covering Dates of Survey March 14 - 22 1991
(linecutting to office)

Total Miles of Line Cut 73.6 Km

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

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

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

DATE: Apr. 23, 1991 SIGNATURE: _____
Author of Report or Agent

Res. Geol. _____ Qualifications 2.1415

Previous Surveys

File No.	Type	Date	Claim Holder

OFFICE USE ONLY

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)	(prefix)	(number)
P	1160505	P	1160506
P	1160507	P	1160508
P	1160509	P	1160510
P	1160511	P	1160512
P	1160513	P	1160514
P	1160515	P	1160516
P	1160517	P	1160518
P	1160519	P	1160520
P	1160521	P	1160522
P	1160523	P	1160524
P	1160531	P	1160532
P	1160533	P	1160534
P	1160535	P	1160661
P	1160662	P	1160663
P	1160664	P	1160665
P	1160666	P	1160667
P	1160668	P	1160669
P	1160670	P	1160671
P	1160672	P	1160673
P	1160674	P	1160675
P	1160676	P	1160677
P	1160678	P	1160679
P	1160680		

TOTAL CLAIMS 45

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 Mag survey 5 888 E.M. 2 624 Number of Readings Mag 5 888 EM 10496

Station interval Mag 12.5 M E.M. 25 M Line spacing 100 M

Profile scale 1 cm = 20%

Contour interval 50 gammas

MAGNETIC

Instrument E.D.A. OMNI IV

Accuracy – Scale constant 1 gamma

Diurnal correction method base station

Base Station check-in interval (hours) 10 secs

Base Station location and value B.L. 0+00

ELECTROMAGNETIC

Instrument Maxmin II

Coil configuration Horizontal loop

Coil separation 200 M

Accuracy 1%

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

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

Parameters measured in phase and out of phase

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

DOCUMENT No. W 9160.00154

PROJECT 441

Report of Work

Mining Act

(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
Magnetic & Electromagnetic Surveys	Porcupine	Belford, Montcalm

Recorded Holder(s)	Prospector's Licence No.
Placer Dome Inc. 2.14084	T-837
Address	**Telephone No.**
P.O. Box 350, Suite 3500, IBM Tower, TD Centre, Toronto, Ont. M5K 1N3	416 868-6060
Survey Company	
Exploration Services Reg'd	
Name and Address of Author (of Geo-Technical Report)	**Date of Survey (from & to)**
E. Chartre, 765 Boul. Quebec, Rouyn-Noranda, Quebec	14 03 91 (Day / Mo. / Yr.) 22 03 91 (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	40
	Geophysical - Magnetometer	20
	Geophysical - Other	
	Geological	
	Geochemical	
Man Days Complete reverse side and enter total(s) here	Geophysical	Days per Claim
	- Electromagnetic	
	- Magnetometer	
	- Other	
	Geological	
	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	Recorded Holder or Agent (Signature)
April 26/91	

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
	See Schedule "A"				

RECEIVED
JUN 12 1991
MINING LANDS SECTION

RECORDED
MAY - 2 1991

Total number of mining claims covered by this report of work. 45 Claims

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	Telephone No.	Date	Certified By (Signature)
J. Gardiner, District Geologist P.O. Box 670 South Porcupine, Ontario P0N 1H0	705 235-8022	April 26/91	

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
2700	MAY 2/91	Robert Bailey
	Date Approved as Recorded	**Provincial Manager, Mining Lands**
	JUNE 13, 1991	Tom C Gashinski

Received Stamp

PORCUPINE MINING DIVISION
RECEIVED
MAIL
MAY 2 1991

1362 (89/06)

SCHEDULE "A"

CLAIM PREFIX	CLAIM NUMBER	DAYS WORK
P	1160505	60
P	1160506	60
P	1160507	60
P	1160508	60
P	1160509	60
P	1160510	60
P	1160511	60
P	1160512	60
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P	1160671	60
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P	1160674	60
P	1160675	60
P	1160676	60
P	1160677	60
P	1160678	60
P	1160679	60
P	1160680	60
*** Total ***		2700

NOTES

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

POULETT Tp. M.1063

BELFORD Tp. M. 657

FORTUNE Tp. M. 813

STRACHAN Tp. M. 1142

2.14084

Ivanhoe River

Groundhog River

Montcalm

Ell Lake

Heath L

FALLS

FALLS

THE INFORMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER. MINISTRY OF

42B09NE0002 2.14084 MONTCALM

LEGEND

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

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	▼
CROWN LAND SALE	C.S
ORDER-IN-COUNCIL	OC
RESERVATION	⊕
CANCELLED	C
SAND & GRAVEL	S

SCALE : 1 INCH 40 CHAINS

FEET 0 500 1000 2000 4000 6000 8000

METRES 0 100 200 400 600 800 1000 2KM

ACRES	HECTARES
40	16

Received Nov. 5/02.

TOWNSHIP

MONTCALM

DISTRICT

COCHRANE

MINING DIVISION

PORCUPINE

Ministry of Natural Resources
Ontario Surveys and Mapping Branch
Date 12 74
Whitney Block Queen's Park Toronto
Plan No. M.872

NOTES

1. Surface rights reservation along the shores of lakes and rivers.

SAND AND GRAVEL

WATSON Tp. M. 1178

WADSWORTH Tp. M. 1174

MONTCALM Tp. M. 872

NOVA Tp. M. 1030

Belford

Polypeeshet R.

Komoka R.

Ivonnoe

FALLS

2.14084

LEGEND

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

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	▼
CROWN LAND SALE	C.S.
ORDER-IN-COUNCIL	OC
RESERVATION	⊙
CANCELLED	⊗
SAND & GRAVEL	⊙

- L.U.P.
- ¢ REMOTE TOURIST CAMPS

Received Jan. 7/80

SCALE : 1 INCH = 40 CHAINS

FEET 0 500 1000 2000 4000 8000 12000

METRES 0 200 400 600 800 1 KM 2 KM

ACRES 40 HECTARES 16

TOWNSHIP

BELFORD

DISTRICT

COCHRANE

MINING DIVISION

PORCUPINE

Ministry of Natural Resources

Ontario : Surveys and Mapping Branch

Date 12 74

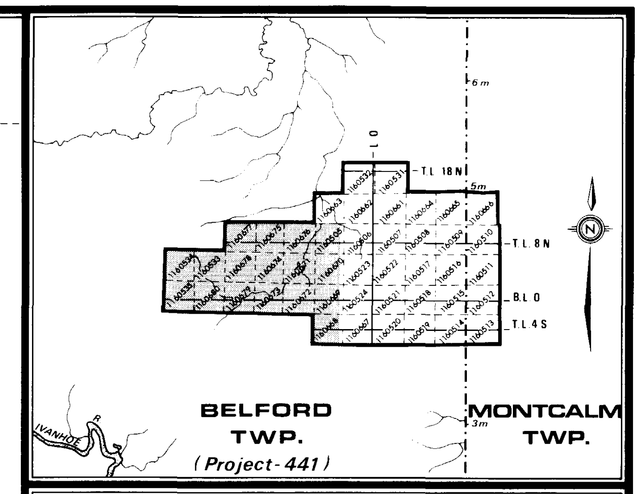
Whitney Block Queens Park, Toronto

Plan No. M. 657

42B09NE0002 2.14084 MONTCALM

210

- BELFORD TWP. -



INDEX MAP

SCALE 1:50000

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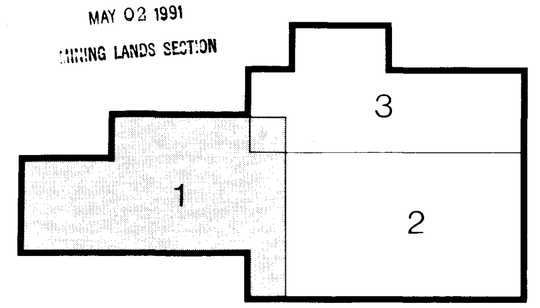
METRES

RECEIVED
MAY 02 1991
MINING LANDS SECTION



2.14984

■ Claim post located.

□ Claim post location assumed.

All readings in range of 58000 gammas.

MAGNETOMETER SURVEY

FOR

PLACER DOME INC.

PROJECT 441 - BELFORD & MONTCALM 1 of 3

Instrument EDA OMNI IV

SURVEYED BY L.Marois - A.Brousseau DATE MARCH 1991

DRAWN BY GEOSOFT S.Sigouin SCALE 1:2500

Twp BELFORD & MONTCALM

SERVICES EXPLORATION SERVICES ENRG. REGD


- BELFORD TWP. -
MONTCALM TWP.
BELFORD TWP. (Project-441)
MONTCALM TWP.
INDEX MAP
RECEIVED
MAY 02 1991
MINING LANDS SECTION
2.14084
Claim post located.
Claim post location assumed.
All readings in range of 59000 gammas.
MAGNETOMETER SURVEY
FOR
PLACER DOME INC.
PROJECT 441- BELFORD & MONTCALM 2of 3
Instrument EDA OMNI IV
SURVEYED BY P.Gervais, R.Guillemette DATE MARCH 1991
DRAWN BY GEOSOFT, S.Siguoin SCALE 1:2500
SERVICES EXPLORATION SERVICES ENRG REGD
Twp BELFORD & MONTCALM
F
H-1
H-2
H-3
I
J
K-1
K-2
K-3
1160670
1160523
1160522
1160517
1160516
1160511
1160669
1160524
1160521
1160518
1160515
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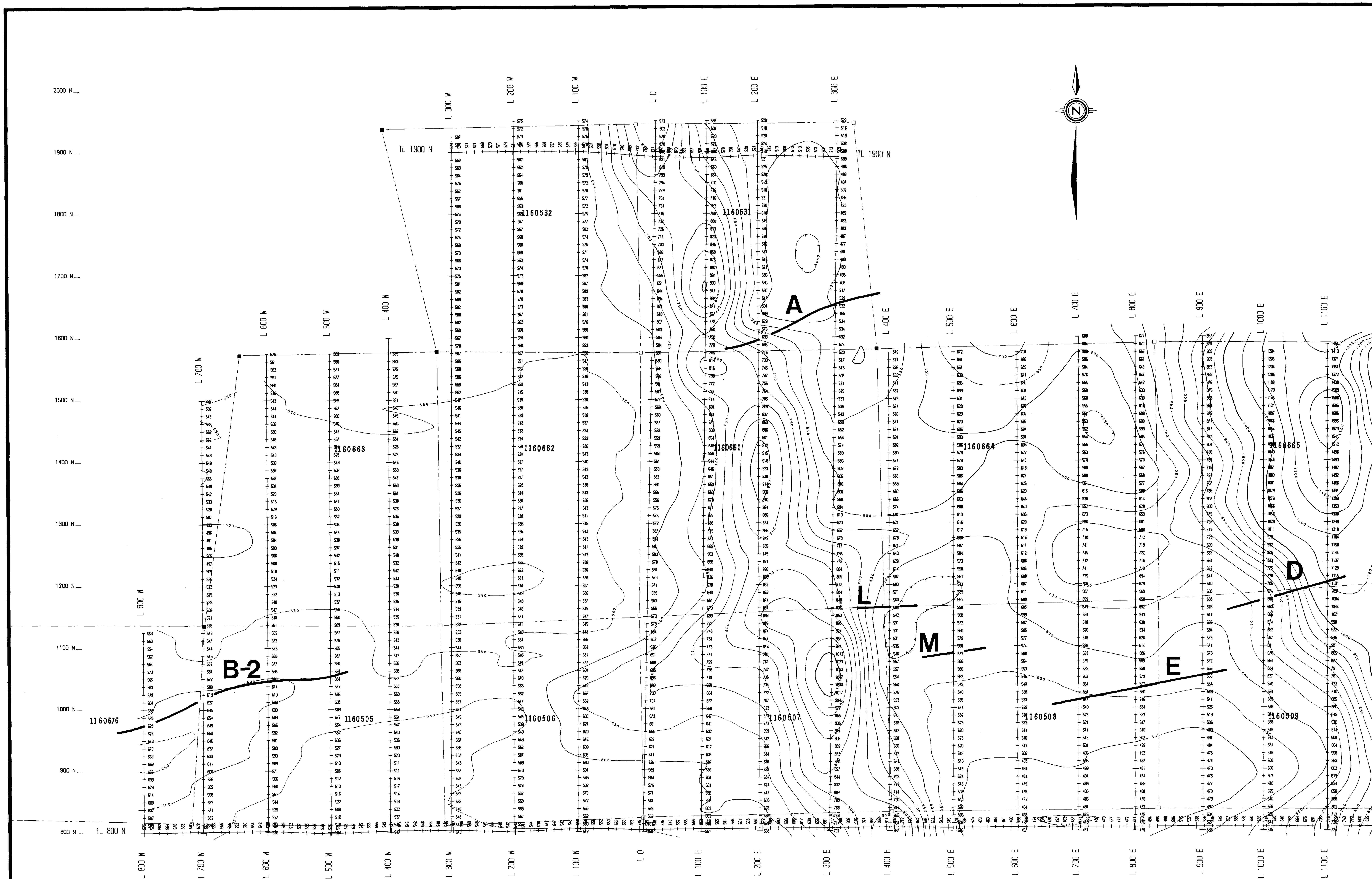
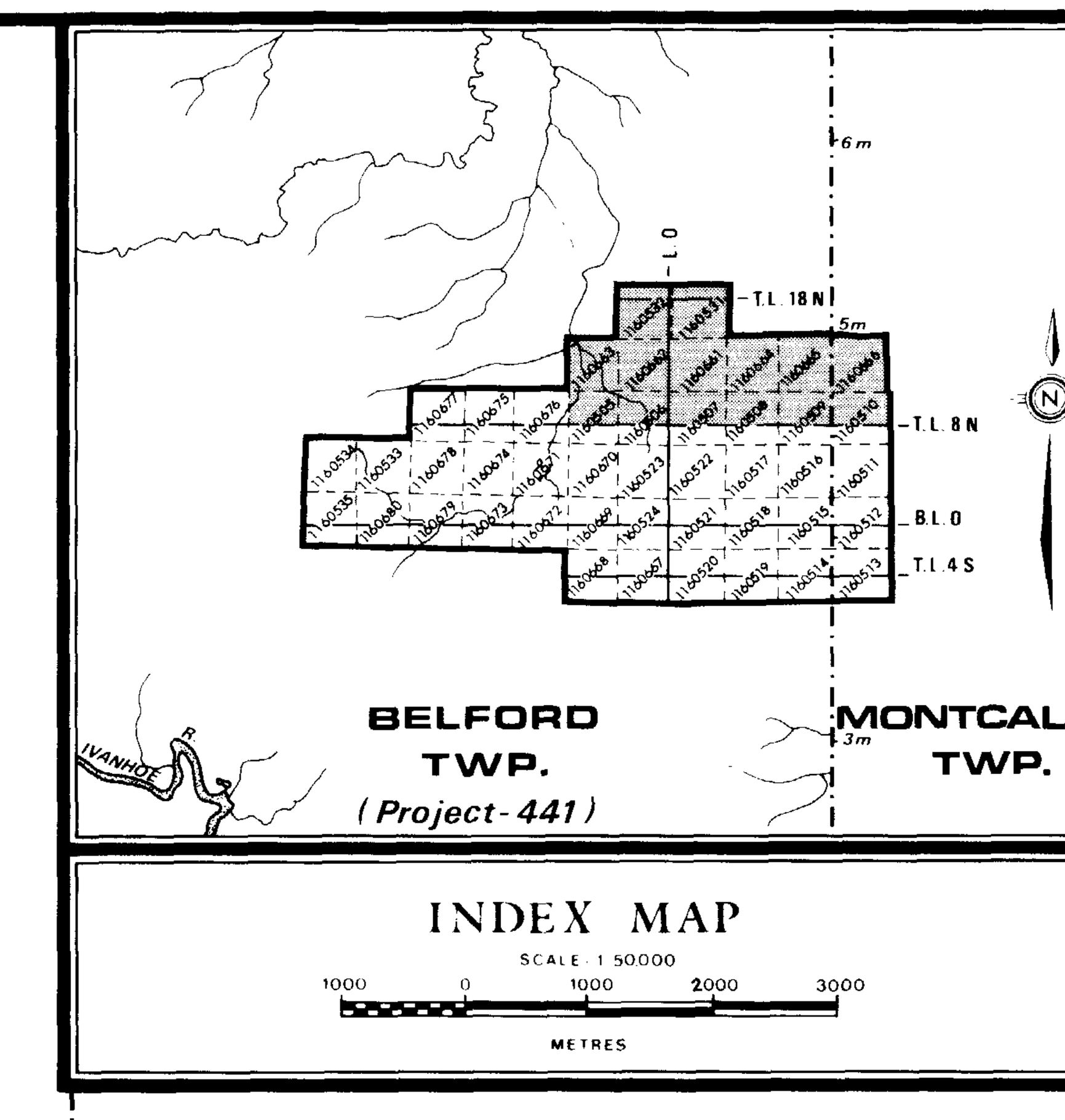
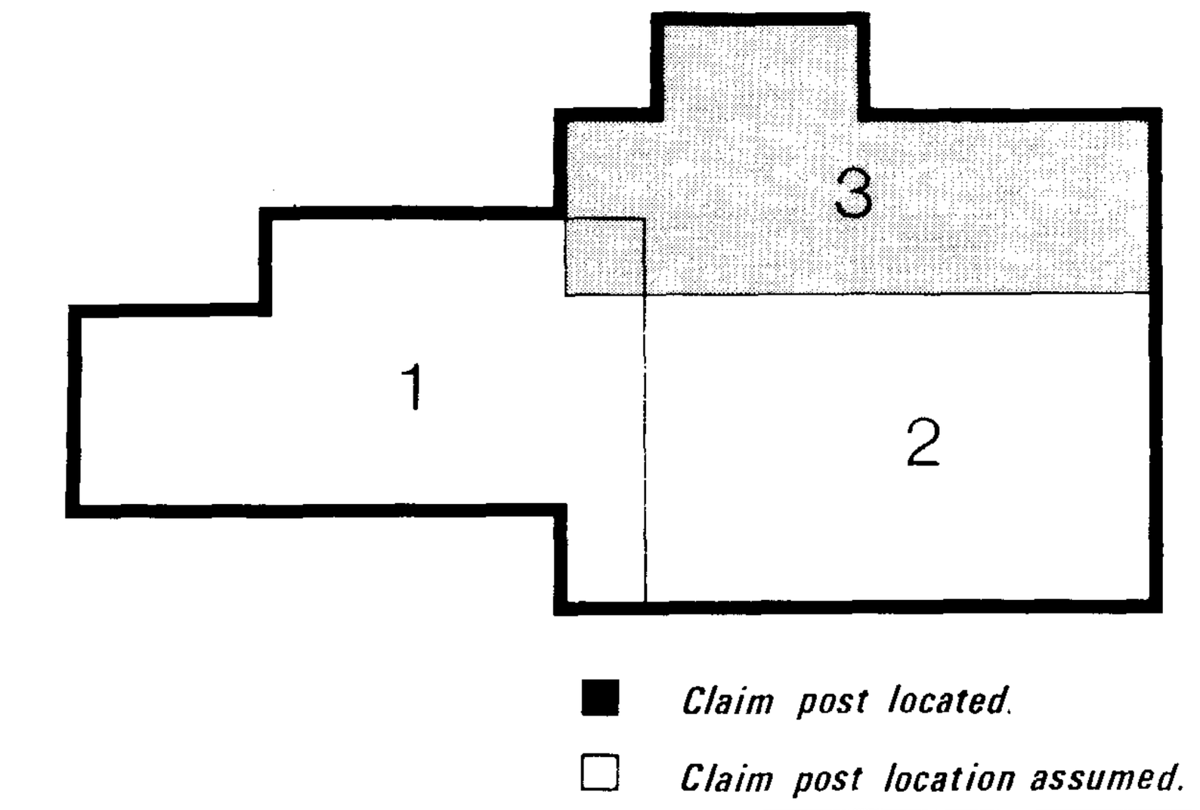
1160668
1160667
1160520
1160519
1160514
1160513
BASELINE
TL 800 N
230







RECEIVED

MAY 02 1991

MINING LANDS SECTION

2.14084

All readings in range of 58 000 gammas.

BELFORD
MONTCALM

MAGNETOMETER SURVEY

FOR

PLACER DOME INC.

PROJECT 441- BELFORD & MONTCALM 3 of 3

Instrument EDA OMNI IV

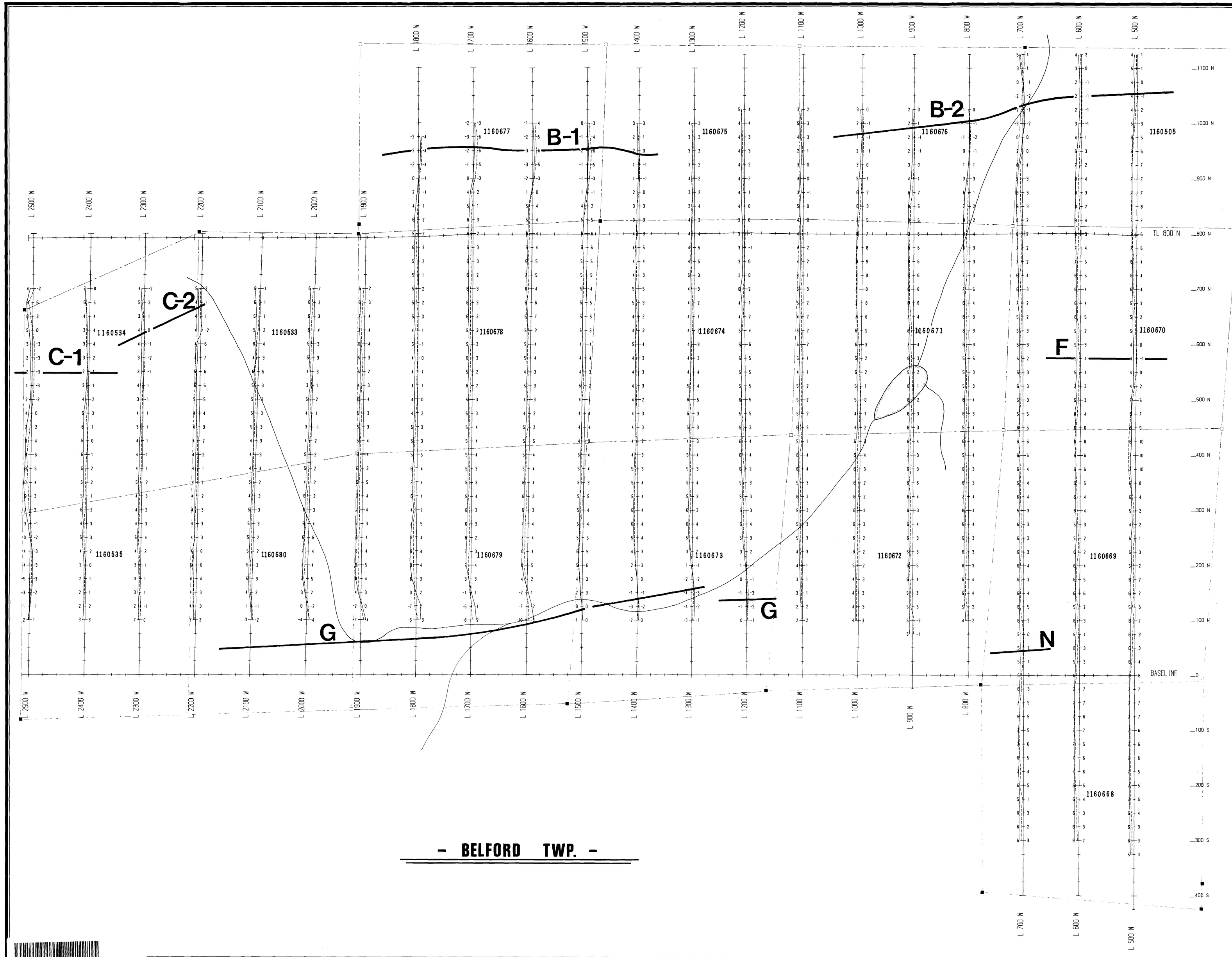
SURVEYED BY P. Gervais; L. Marois DATE MARCH 1991

DRAWN BY GEOSOFT S. Sigouin SCALE 1:2500

SERVICES EXPLORATION SERVICES ENRG REGD

Twp BELFORD & MONTCALM

240



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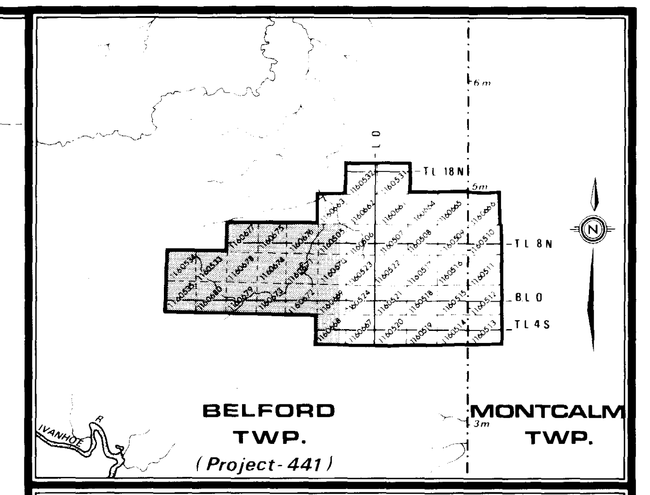

INDEX MAP

SCALE 1:50000

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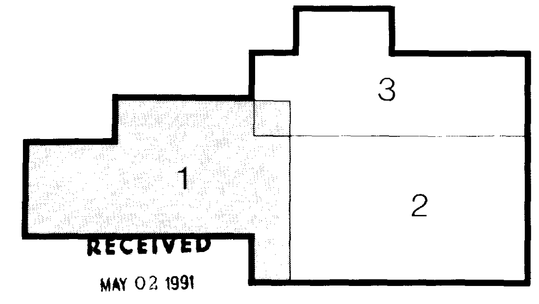
METRES



RECEIVED

MAY 02 1991

MINING LANDS SECTION

2.14084

■ Claim post located.

□ Claim post location assumed.

FREQUENCY 444 Hz
COIL SEPARATION 200 m
I on : 20 %
IN PHASE
QUADRATURE
+20% 0 -20%
I.P. Q.

ELECTROMAGNETIC SURVEY

FOR

PLACER DOME INC.

PROJECT 441 - BELFORD & MONTCALM 1 of 3

INSTRUMENT MAXMIN II

SURVEYED BY L.Marois - A.Brousseau DATE MARCH 1991

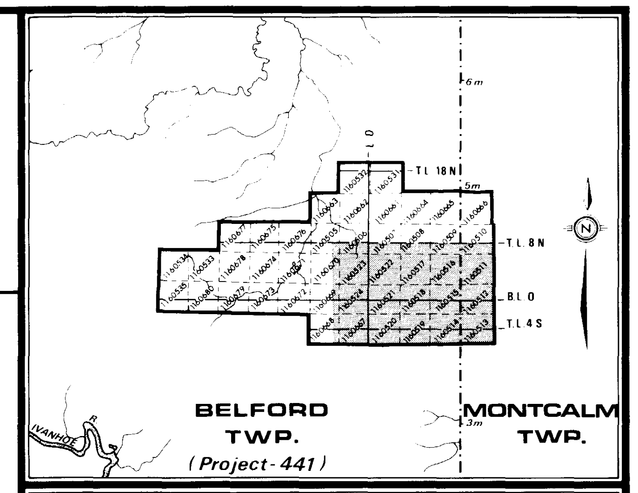
DRAWN BY GEOSOFT S.Sigouin SCALE 1:2500

BELFORD & MONTCALM Twp

SERVICES EXPLORATION SERVICES ENRG REGD

- BELFORD TWP. -

MONTCALM TWP.



INDEX MAP

SCALE 1:50000

1000 0 1000 2000 3000

METRES

L 500 W L 400 W L 300 W L 200 W L 100 W L 0 L 100 E L 200 E L 300 E L 400 E L 500 E L 600 E L 700 E L 800 E L 900 E L 1000 E L 1100 E L 1200 E L 1300 E L 1400 E L 1500 E

800 N TL 800 N

700 N

600 N

500 N

400 N

300 N

200 N

100 N

0 BASELINE

100 S

200 S

300 S

400 S

1160670 1160523 1160522 1160517 1160516 1160511

1160669 1160524 1160521 1160518 1160515 1160512

1160668 1160667 1160520 1160519 1160514 1160513

F

H-1

H-2

H-3

J

K-1

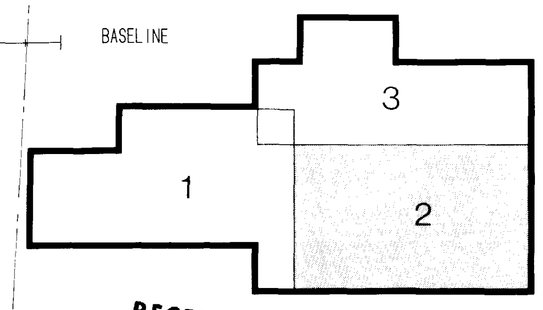
K-2

K-3

I

2.14084

BASELINE



RECEIVED
MAY 02 1991
MINING LANDS SECTION

■ Claim post located.

□ Claim post location assumed.

FREQUENCY 444 Hz
COIL SEPARATION 200m
1cm = 20 %
IN PHASE
QUADRATURE

-20% 0 20%
I.P. Ω

Instrument
MAXMIN II

TWP BELFORD & MONTCALM

ELECTROMAGNETIC SURVEY

FOR

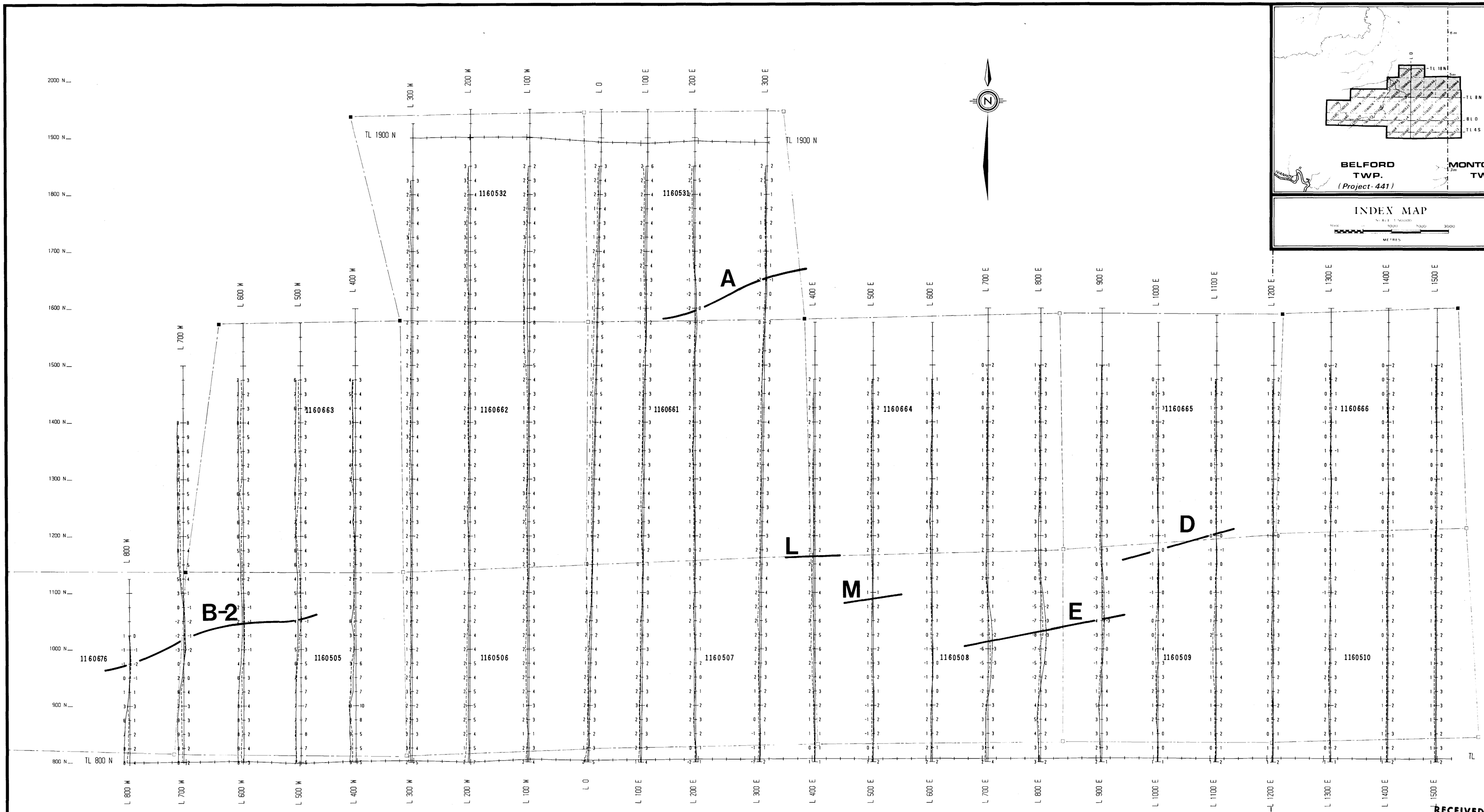
PLACER DOME INC.

PROJECT 441- BELFORD & MONTCALM 2of 3

SURVEYED BY P.Gervais;R.Guillemette DATE MARCH 1991

DRAWN BY GEOSOFT, S.Siguoin SCALE 1:2500

SERVICES EXPLORATION SERVICES ENRG REGD

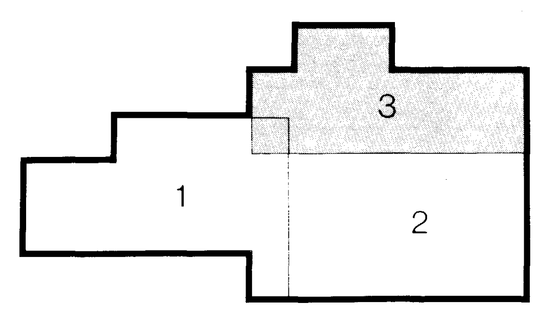


INDEX MAP

Scale 1 : 50000

1000 5000 7000 3000

METRES



■ *Claim post located*

□ *Claim post location assumed.*

RECEIVED

MAY 02 1991

2.14084

MINING LANDS SECTION

BELFORD MONTCALM

FREQUENCY 444 Hz
COIL SEPARATION 200m
1 cm = 20 %
IN PHASE
QUADRATURE
+20% 0 20%
I.P. Q.

ELECTROMAGNETIC SURVEY

FOR

PLACER DOME INC.

PROJECT 441- BELFORD & MONTCALM 3 of 3

Instrument MAXMIN II

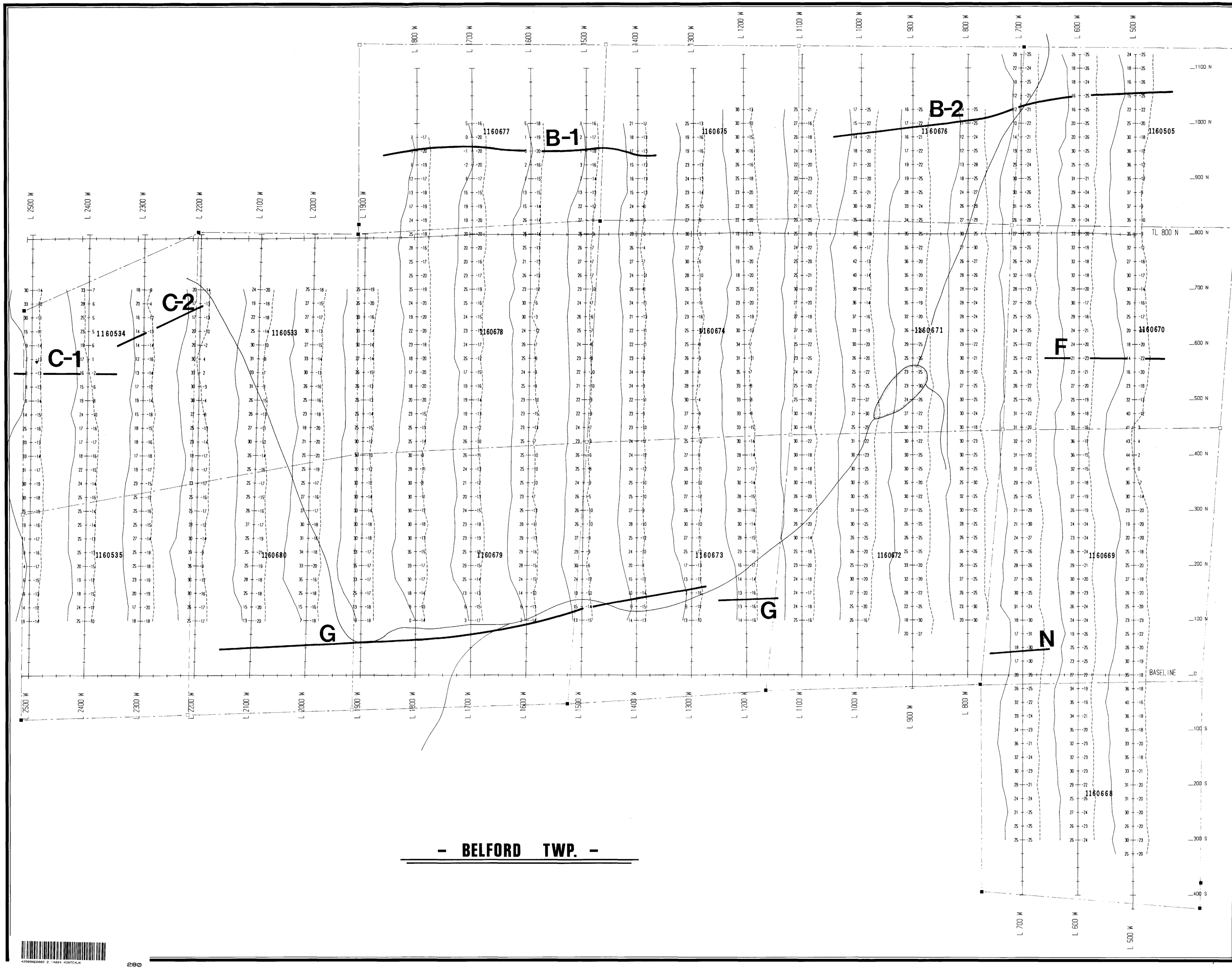
SURVEYED BY P. Gervais; L. Marois DATE MARCH 1991

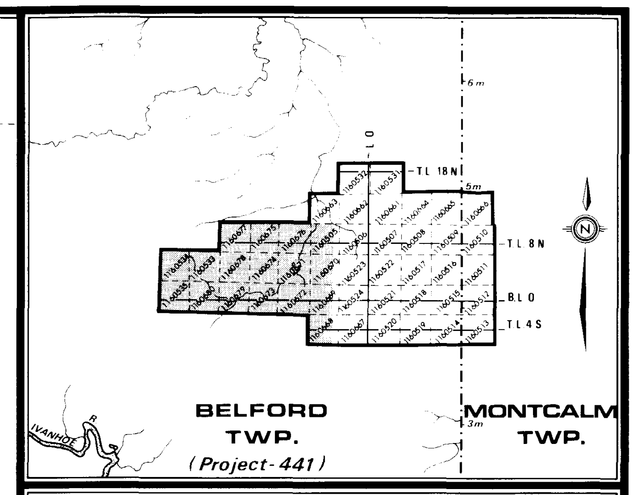
DRAWN BY GEOSOFT, S. Sigouin SCALE 1:2500

Twp. BELFORD & MONTCALM

SERVICES EXPLORATION SERVICES ENRG REGD

270





INDEX MAP

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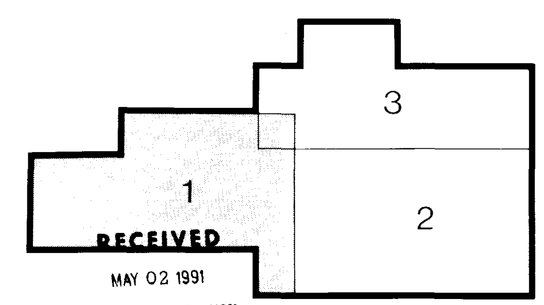
METRES



RECEIVED

MAY 02 1991

MINING LANDS SECTION

2.14084

■ Claim post located.

□ Claim post location assumed.

- BELFORD TWP. -

FREQUENCY 1777 Hz
COIL SEPARATION 200m
1 cm = 20 %
IN PHASE
QUADRATURE
+20% 0 -20%
I.P. Q.

ELECTROMAGNETIC SURVEY

FOR

PLACER DOME INC.

PROJECT 441- BELFORD & MONTCALM 1 of 3

Instrument MAXMIN II

SURVEYED BY L.Marois A.Rousseau DATE MARCH 1991

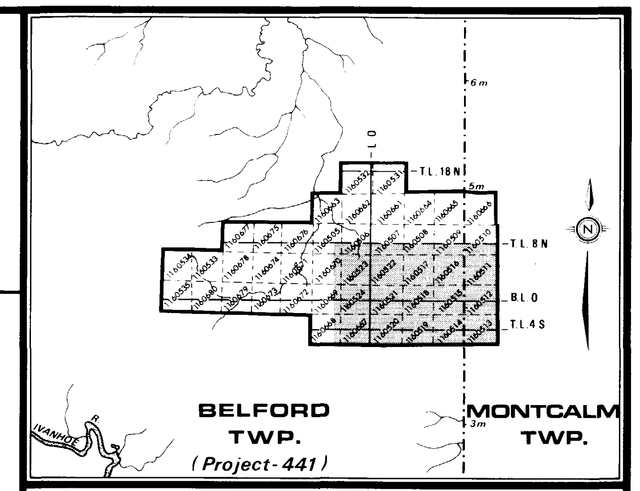
DRAWN BY GEOSOFT S.Sigouin SCALE 1:2500

Twp BELFORD & MONTCALM

SERVICES EXPLORATION SERVICES ENRG REGD

- BELFORD TWP. -

MONTCALM TWP.



INDEX MAP
SCALE 1:50000
1000 0 1000 2000 3000
METRES

L 500 W L 400 W L 300 W L 200 W L 100 W L 0 L 100 E L 200 E L 300 E L 400 E L 500 E L 600 E L 700 E L 800 E L 900 E L 1000 E L 1100 E L 1200 E L 1300 E L 1400 E L 1500 E

800 N
700 N
600 N
500 N
400 N
300 N
200 N
100 N
0 BASELINE
100 S
200 S
300 S
400 S

TL 800 N

1160670 1160523 1160522 1160517 1160516 1160511
1160669 1160524 1160521 1160518 1160515 1160512
1160668 1160667 1160520 1160519 1160514 1160513

F
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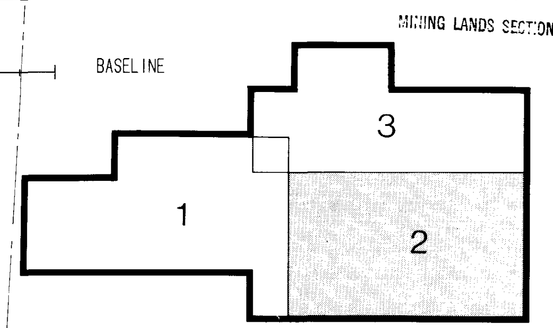
K-2
K-3

RECEIVED
MAY 02 1991
MINING LANDS SECTION



2.14084

■ Claim post located.
□ Claim post location assumed.

FREQUENCY 1777 Hz
COIL SEPARATION 200m
In cm @ 20 %
IN PHASE
QUADRATURE
+20% 0 -20%
I.P. Q

ELECTROMAGNETIC SURVEY

FOR

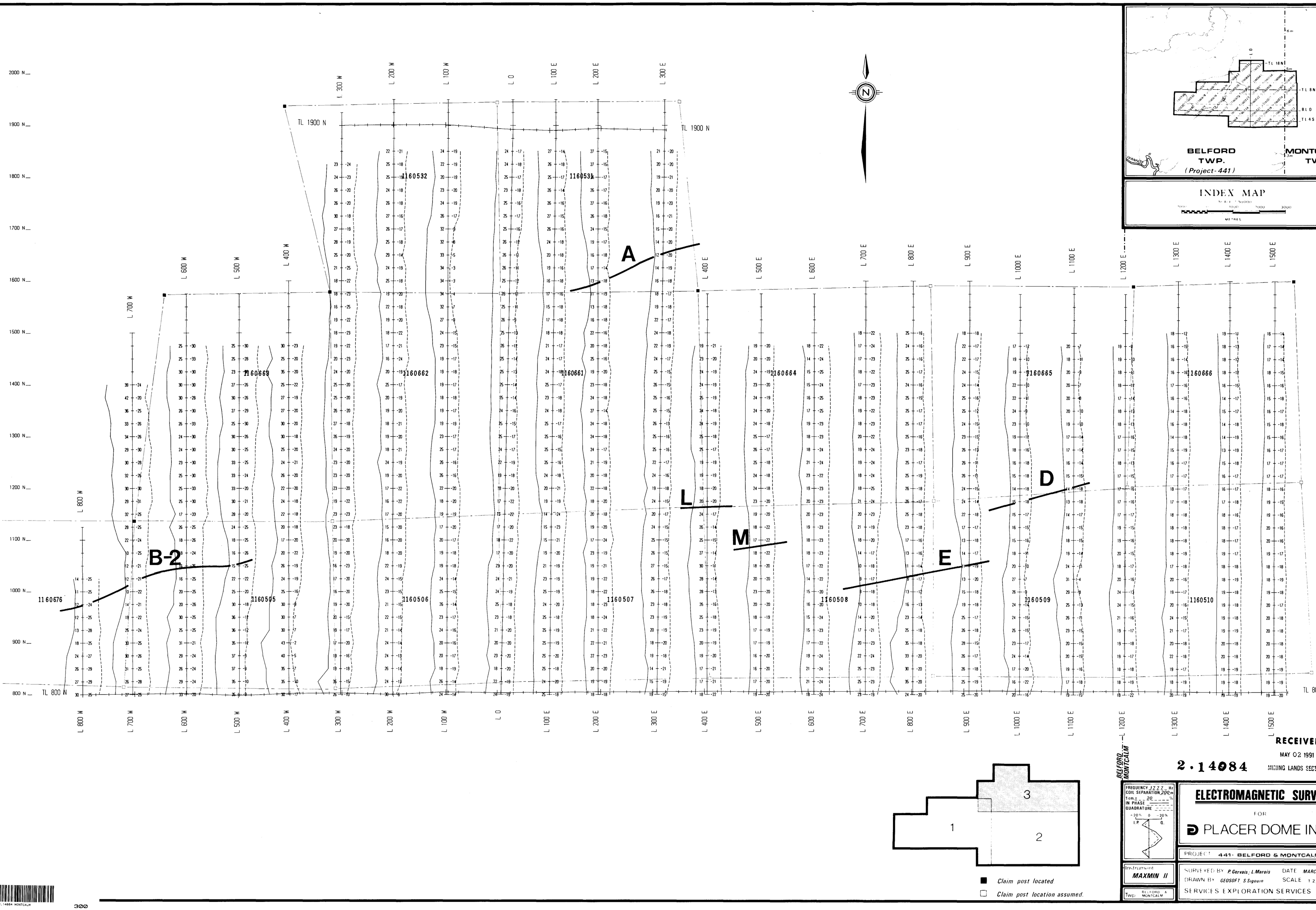
PLACER DOME INC.

PROJECT 441- BELFORD & MONTCALM 2of 3

Instrument MAXMIN II

Twp BELFORD & MONTCALM

SURVEYED BY P.Gervais;R.Guillemette DATE MARCH 1991
DRAWN BY GEOSOFT, S.Sigouin SCALE 1:2500
SERVICES EXPLORATION SERVICES ENRG REGD



INDEX MAP

Scale 1:50000

1000 0 1000 2000 3000

METRES

■ *Claim post located.*

□ *Claim post location assumed.*

RECEIVED

MAY 02 1991

MINING LANDS SECTION

2.14084

BELFORD MONTCALM

FREQUENCY 1777 Hz
COIL SEPARATION 200 m
1 cm = 20 %
IN PHASE
QUADRATURE
+20% 0 -20%
I.P. Q.

ELECTROMAGNETIC SURVEY

FOR

PLACER DOME INC.

PROJECT 441- BELFORD & MONTCALM 3 of 3

Instrument
MAXMIN II

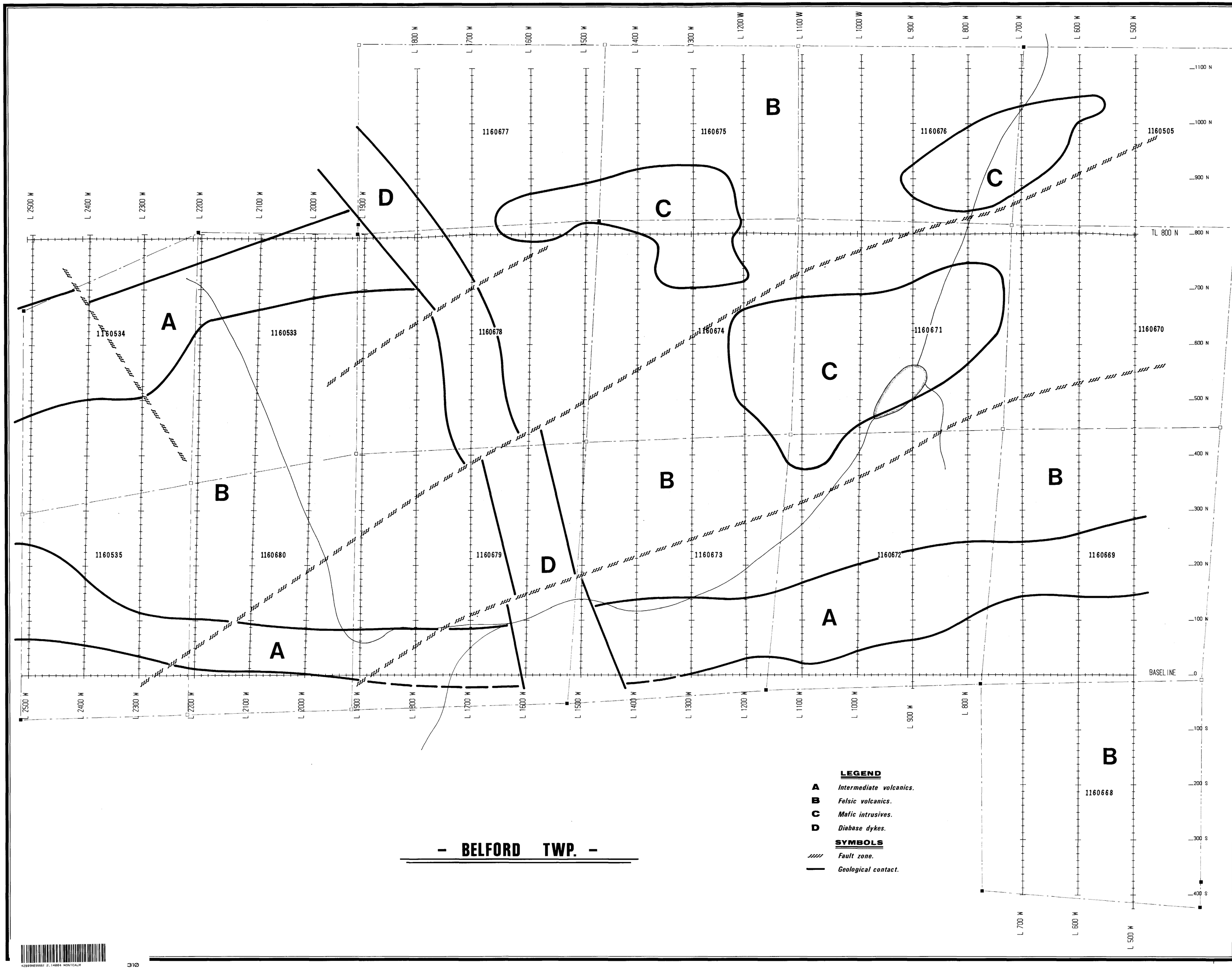
SURVEYED BY P. Gervais, L. Marois — DATE MARCH 1991

DRAWN BY GEOSOFT S. Sigouin — SCALE 1:2500

TWP. BELFORD & MONTCALM

SERVICES EXPLORATION SERVICES — ENRG REGD

300



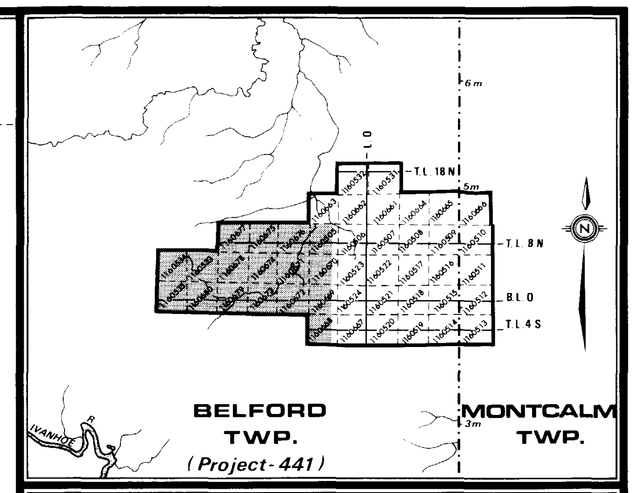
LEGEND

- **A** *Intermediate volcanics.*
- **B** *Felsic volcanics.*
- **C** *Mafic intrusives.*
- **D** *Diabase dykes.*

SYMBOLS

- *Fault zone.*
- *Geological contact.*

- BELFORD TWP. -



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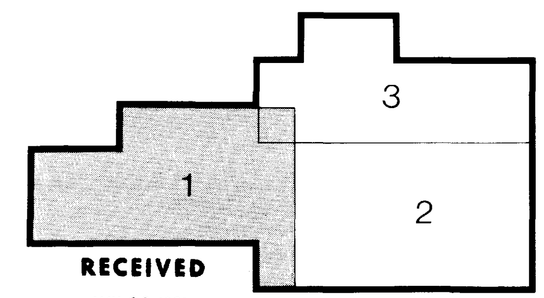
METRES



RECEIVED
MAY 02 1991
MINING LANDS SECTION

2.14984

- *Claim post located.*
- *Claim post location assumed.*

GEOLOGICAL INTERPRETATION

FOR

PLACER DOME INC.

PROJECT 441 - BELFORD & MONTCALM 1 of 3

Instrument

SURVEYED BY _____ DATE MARCH 1991

DRAWN BY GEOSOFT S Sigouin SCALE 1:2500

Twp BELFORD & MONTCALM

SERVICES EXPLORATION SERVICES ENRG REGD

42B09NE0002 2.14984 MONTCALM

310

- BELFORD TWP. -

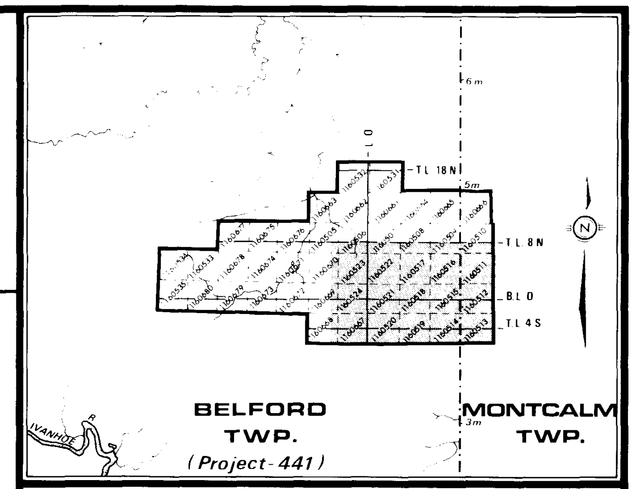
MONTCALM TWP.

LEGEND

- **A** *Intermediate volcanics.*
- **B** *Felsic volcanics.*
- **C** *Mafic intrusives.*
- **D** *Diabase dykes.*

SYMBOLS

- *Fault zone.*
- *Geological contact.*



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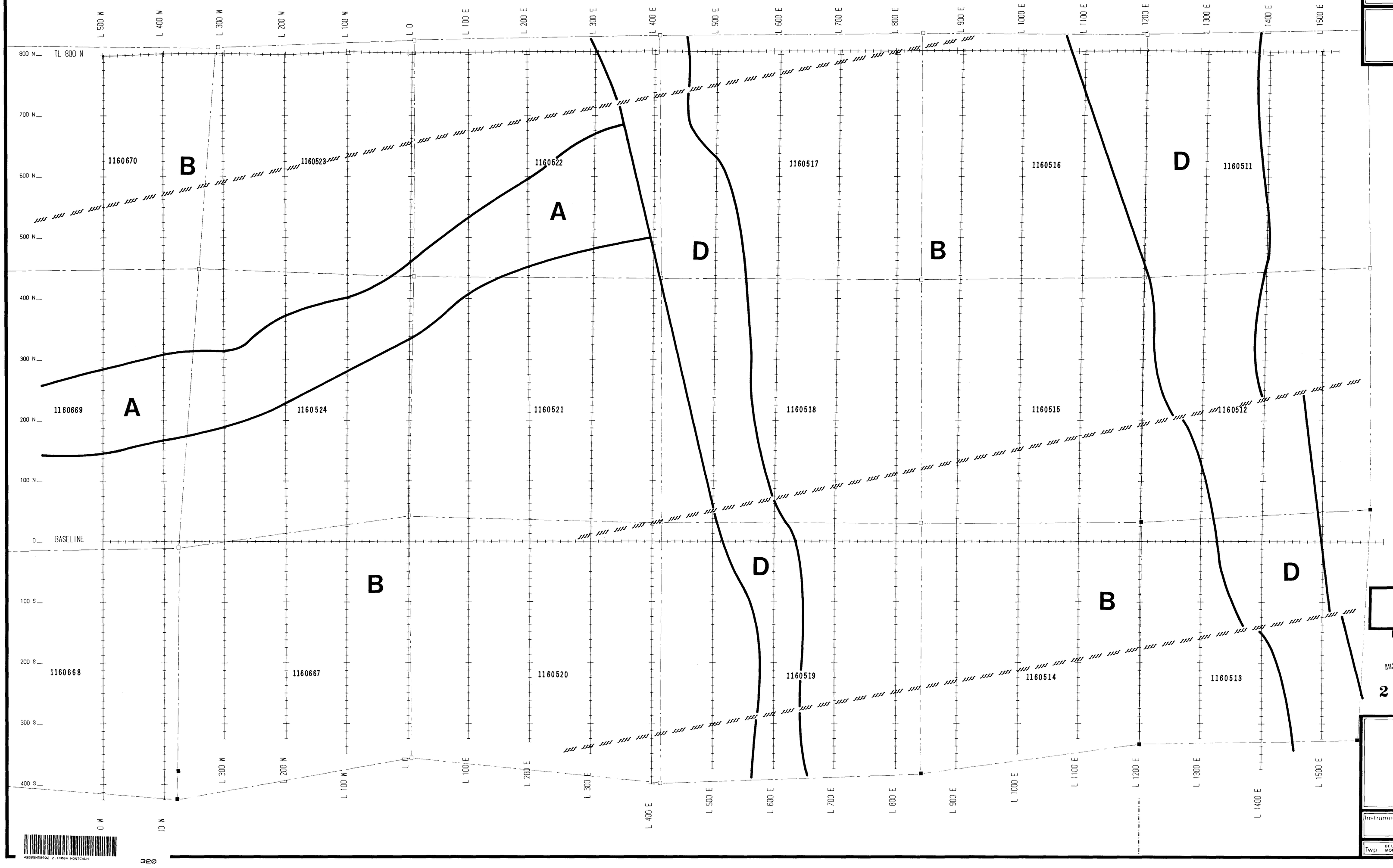

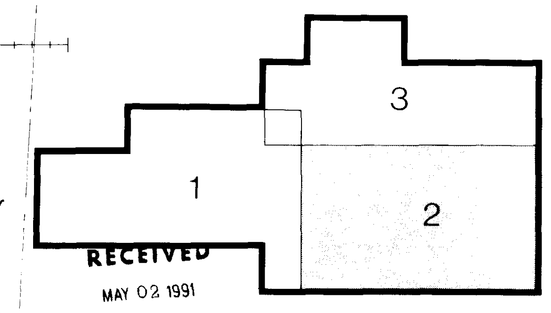

RECEIVED
MAY 02 1991
MINING LANDS SECTION

2.14084

- ■ *Claim post located.*
- □ *Claim post location assumed.*

GEOLOGICAL INTERPRETATION

FOR

PLACER DOME INC.

PROJECT 441- BELFORD & MONTCALM 2 of 3

Instrument

SURVEYED BY _____ DATE MARCH 1991

DRAWN BY GEOSOFT S Sigouin SCALE 1:2500

Twp BELFORD & MONTCALM

SERVICES EXPLORATION SERVICES ENRG REGD

LEGEND

- **A** *Intermediate volcanics.*
- **B** *Felsic volcanics.*
- **C** *Mafic intrusives.*
- **D** *Diabase dykes.*

SYMBOLS

- *Fault zone.*
- *Geological contact.*

TL 1900 N

TL 800 N

1160532 D 1160531

1160663 B 1160662 1160661 1160664 B 1160665 1160666 D

1160676 C 1160505 1160506 B D 1160507 1160508 1160509 1160510 B

L 700 W L 600 W L 500 W L 400 W L 300 W L 200 W L 100 W L 0 L 100 E L 200 E L 300 E L 400 E L 500 E L 600 E L 700 E L 800 E L 900 E L 1000 E L 1100 E L 1200 E L 1300 E L 1400 E L 1500 E

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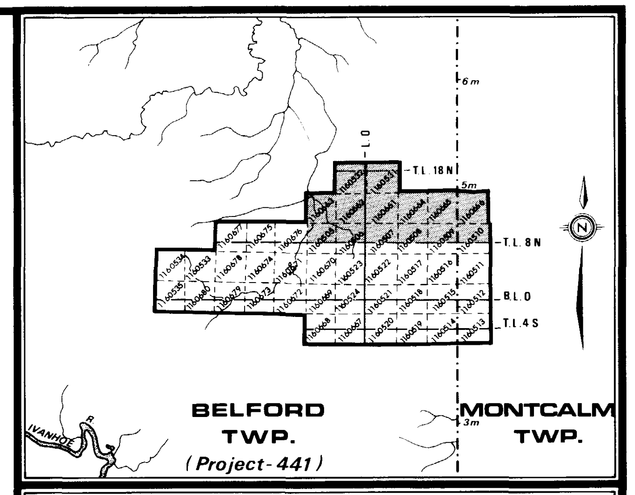

INDEX MAP

SCALE 1:50000

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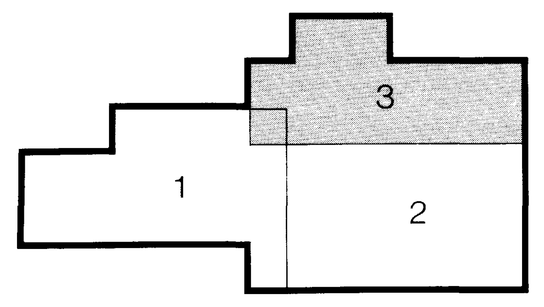
METRES



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- □ *Claim post location assumed.*

RECEIVED
MAY 02 1991
MINING LANDS SECTION
2.14084

BELFORD MONTCALM

GEOLOGICAL INTERPRETATION

FOR

PLACER DOME INC.

PROJECT 441- BELFORD & MONTCALM 3 of 3

Instrument

SURVEYED BY _____ DATE: MARCH 1991

DRAWN BY GEOSOFT, S.Sigouin SCALE 1:2500

Twp BELFORD & MONTCALM

SERVICES EXPLORATION SERVICES ENRG REG'D