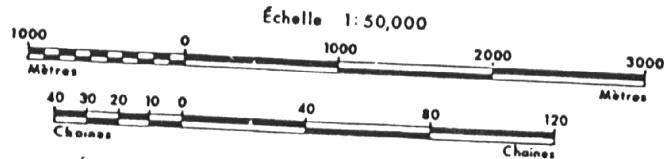


GRAND CALUMET

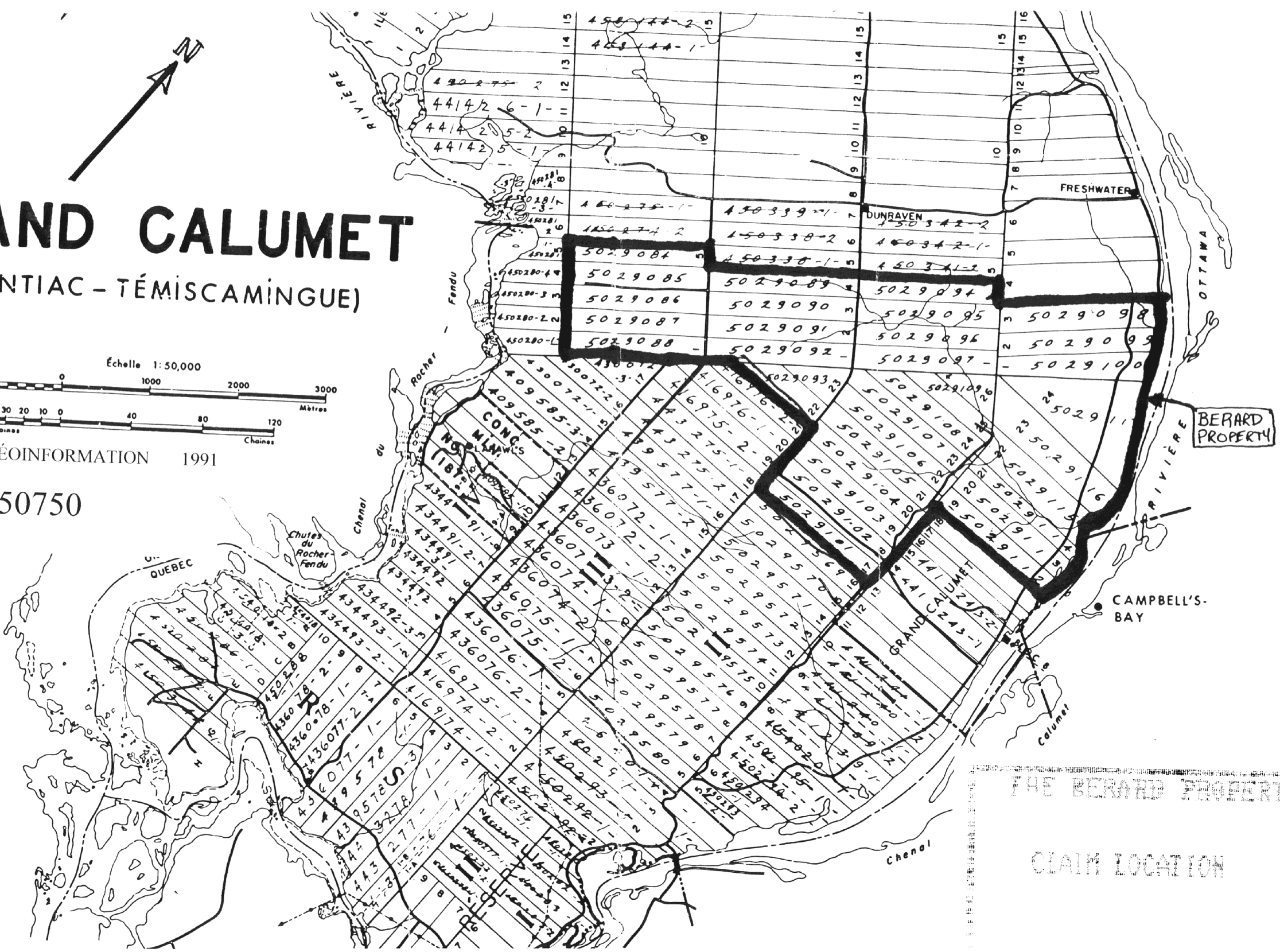
(PONTIAC - TÉMISCAMINGUE)



MRN-GÉOINFORMATION 1991

GM 50750

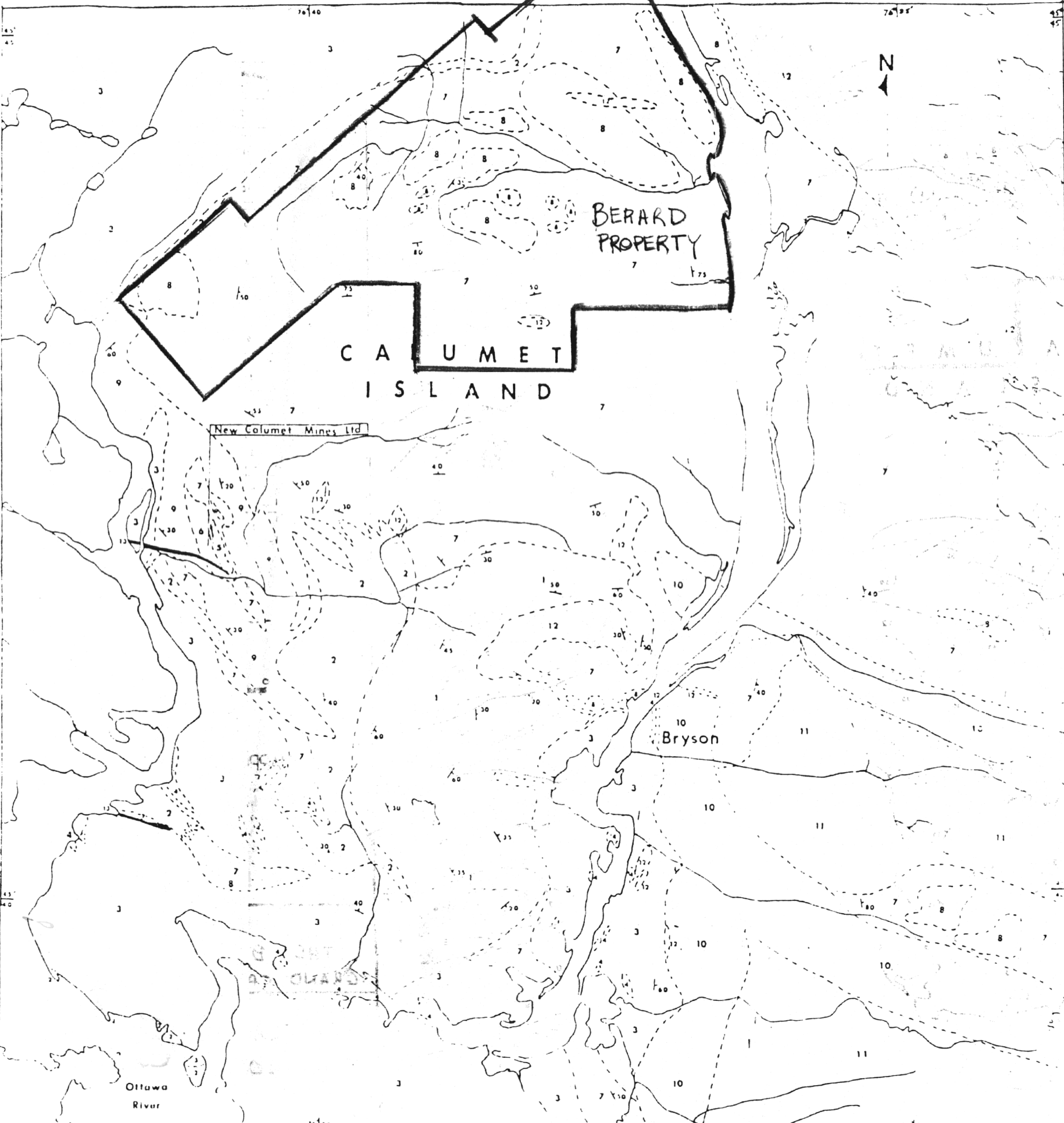
REGIONAL RÉAL
JF MINES



THE BERARD PROPERTY

CLAIM LOCATION

LITCHFIELD

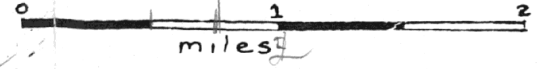


L E G E N D

- 13 Diabase
- 12 Granite
- 11 Undifferentiated Hornblende Gneiss and Gabbro
- 10 Gabbro
- 9 Migmatite
- 8 Migmatized Hornblende Gneiss
- 7 Basic Hornblende Gneiss
- 6 Biotite Gneiss
- 5 Carbonate - Scapolite Amphibolite
- 4 Rusty Weathering Gneiss
- 3 Marble
- 2 Granular Amphibolite
- 1 Banded Hornblende and Biotite Gneiss
- Strike and Dip
- Geological Boundary

1" = 800'

SCALE



MAPPED BY OSBORNE, 1944

Ministère de l'Énergie et des Ressources
 Division des données géoscientifiques
 DATE 7 NOV 1991
 NO.G.M. 050750

THE BERARD PROPERTY
 GRAND CALUMET ISLAND, QUEBEC

GENERAL GEOLOGICAL MAP OF
 THE SOUTH HALF OF CALUMET IS.

R V

LEGEND

- UNIT
- 8 LEUCO CRATIC BIOTITE GNEISS, grey, medium grained, moderately foliated
 - 7 HORNBLENDE GNEISS, green, fine to medium grained, massive to poorly foliated, 15-50% hornblende, hornblende porphyroblasts common
 - 6 QUARTZ-SERIOLITE SCHIST +/- cordierite, pyroxene, biotite, pyrite
grey to brown, orange brown weathered, moderately to strongly foliated, moderately grained +/- sphalerite, galena

- sil - silicified
- cc - calcite
- po - pyroxene
- cd - cordierite
- zn - sphalerite
- pb - galena
- qpy - chalcopyrite

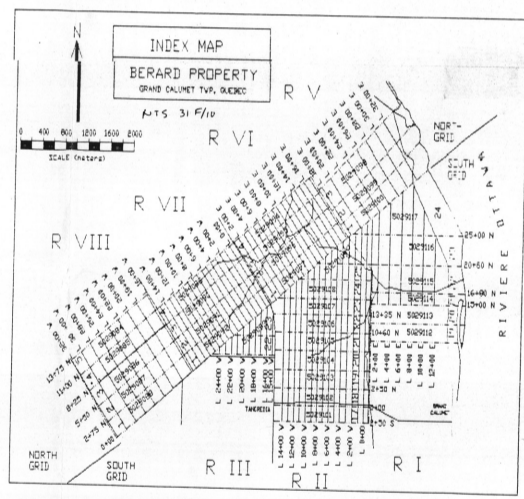
↔, ↗, ↘ foliation, (dip, subvertical)

○ outcrop

- - - contact (inferred)

x 08A278 (10000, 1000, 1.0, 50, 200)
 (20 ppm, P ppm, Hg ppm, Au ppm, Cu ppm)
 Sample location Sample #

#NOTE# THIS MAP WAS CREATED FROM 7 DAYS OF PROSPECTING GEOLOGY ONLY, WHOSE PURPOSE WAS TO GET AN IDEA OF THE GENERAL GEOLOGY. DUE TO THE TIME FRAME ONLY A FEW OUTCROPS WERE NOTED. A DETAILED GEOLOGICAL SURVEY WILL BE UNDERTAKEN IN JULY AND AUGUST, 1991 (PRAISED)



N



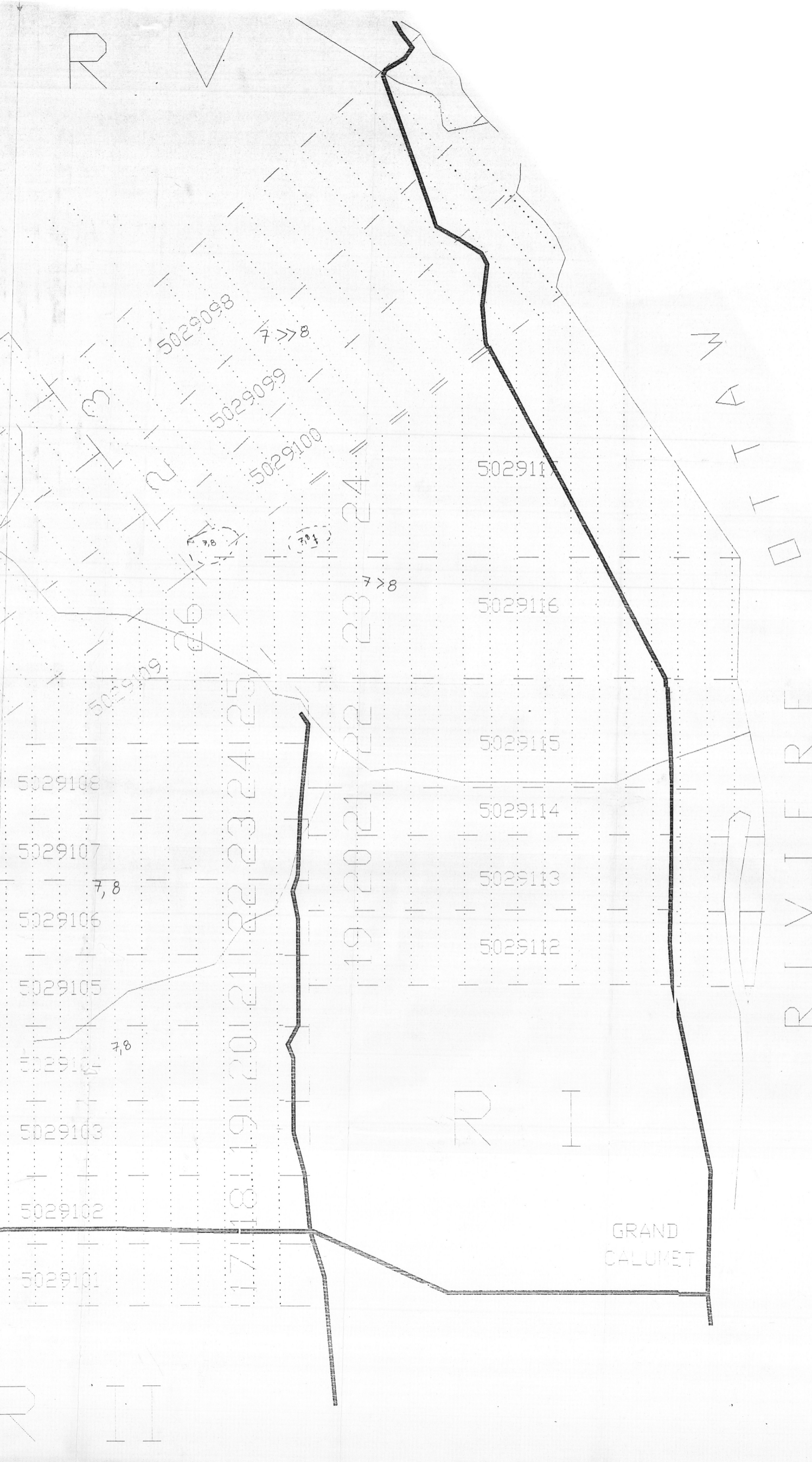
Ministère de l'Énergie et des Ressources
 Québec
 Date de dépôt: NOV 1991
 NOGM 050750

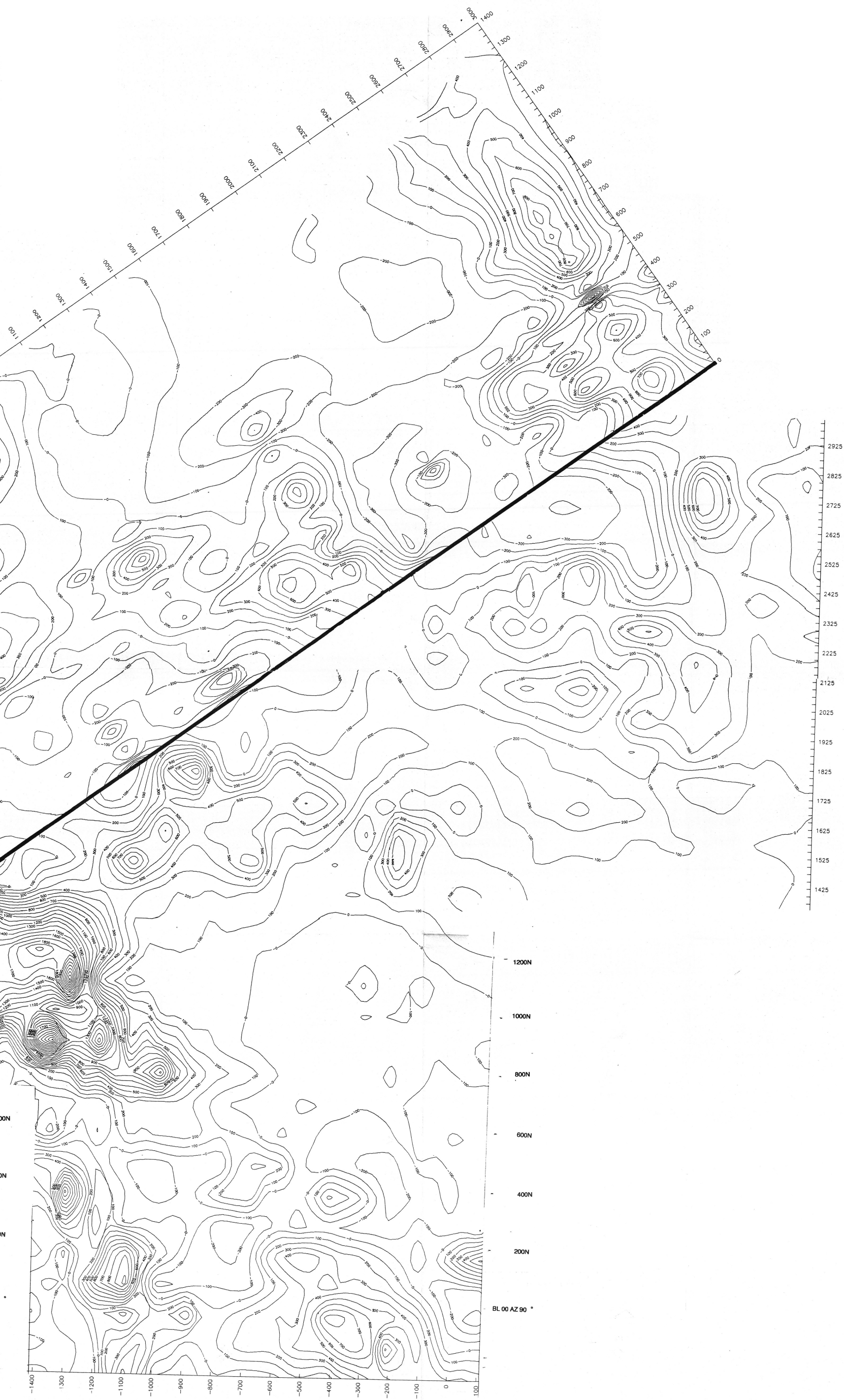
SCALE 1: 5000



BERARD PROPERTY
 GRAND CALUMET TWP. SW QUEBEC
 PRELIMINARY
 GENERAL GEOLOGY MAP
 (from prospecting /geology traverses, 7 days)
 (WORK IN PROGRESS)

DRAWN BY: C.B. NTS: 31 F/10
 DATE: 28/06/91 SCALE: 1: 5000





Cathay Exploration Inc		
Client: Chris Bishop	CO# 32	Date: 05/1991
Property: BERARD		
Township: Ile du Grand Calumet	NTS: 31F/15	
County: Pontiac Temiscamingue	By: D.Gamble	

Ministère de l'Énergie et des Ressources
 Division des permis géologiques
 DATE: 7 NOV 1991
 NO G.M. 050750

Total Magnetic Field		
Field Unit:	EDA Omni Mag +	Staff Length: 2.50 m
Base Station:	EDA Omni Mag IV	Gradient: 0.50 m
Base Station Interval:	10s - 30s	Base Reference: 57,000
Base Station Location:	140E, 120N	Absolute Base: 57,270
Operator: Karen Pflug & Dennis Gamble		
Contour Interval:	100 gammas	Method: Kriging
Search Radius:	400 m	Nearest Points: 40
Cell Size:	35m x 70m	Smooth: ON

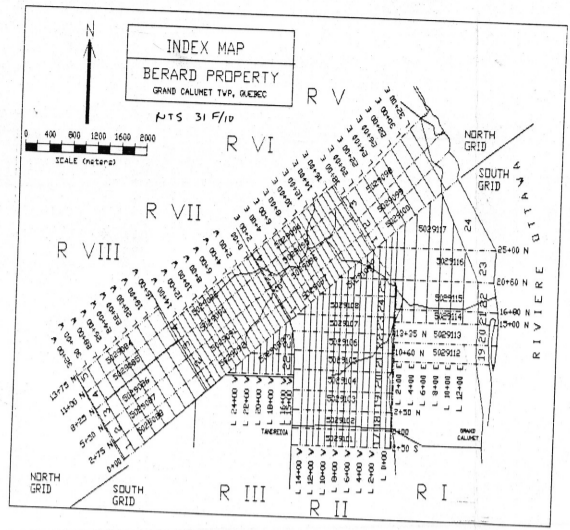
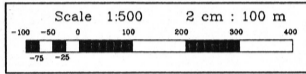
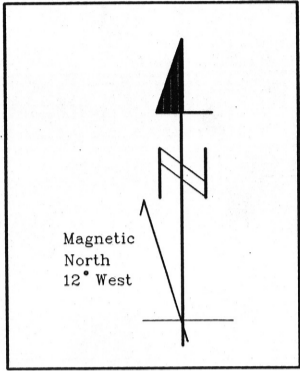
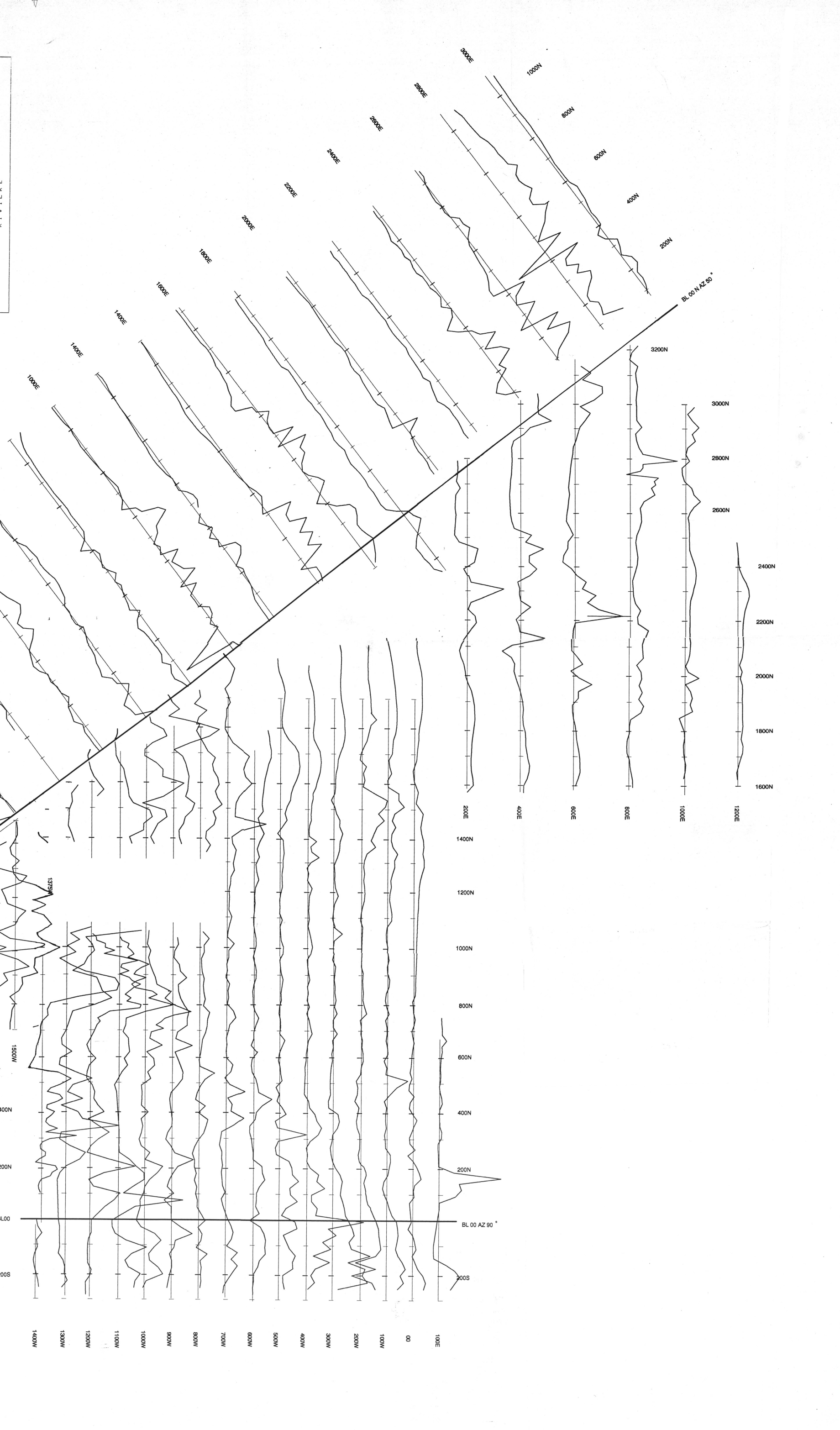


FIGURE 7





Cathay Exploration Inc		
Client: Chris Bishop	CO# 32	Date: 05/1991
Property: BERARD		
Township: Ile du Grand Calumet	NTS: 31F/15	
County: Pontiac Temiscamingue	By: D.Gamble	

Ministère de l'Énergie et des Ressources
 Division des données géostatistiques
 DATE: 7 NOV 1991
 NO G.M. C50750

Total Magnetic Field	
Field Unit: EDA Omni Mag +	Staff Length: 2.50 m
Base Station: EDA Omni Mag iv	Gradient: 0.50 m
Base Station Interval: 10s - 30s	Base Reference: 57,000
Base Station Location: 140E, 120N	Absolute Base: 57,270
Operator: Karen Pflug & Dennis Gamble	

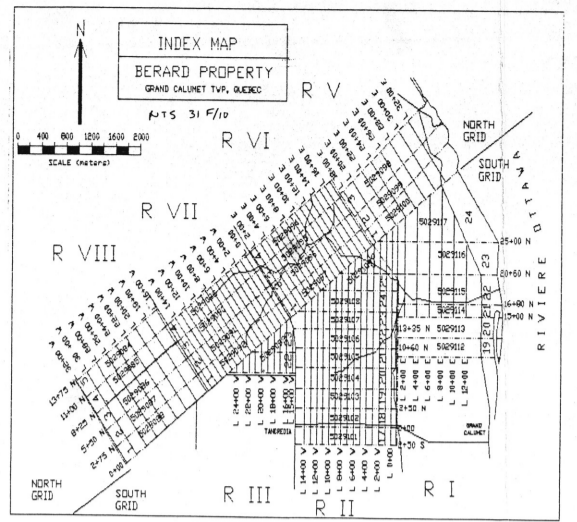
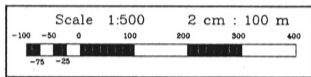
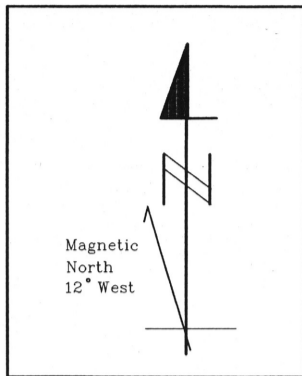
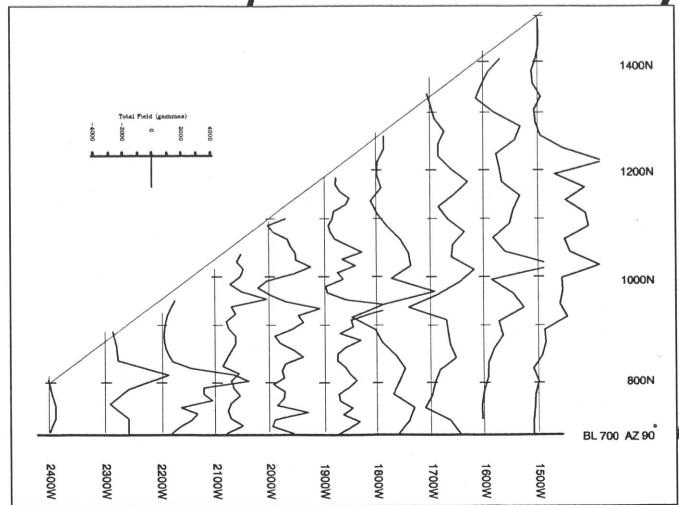
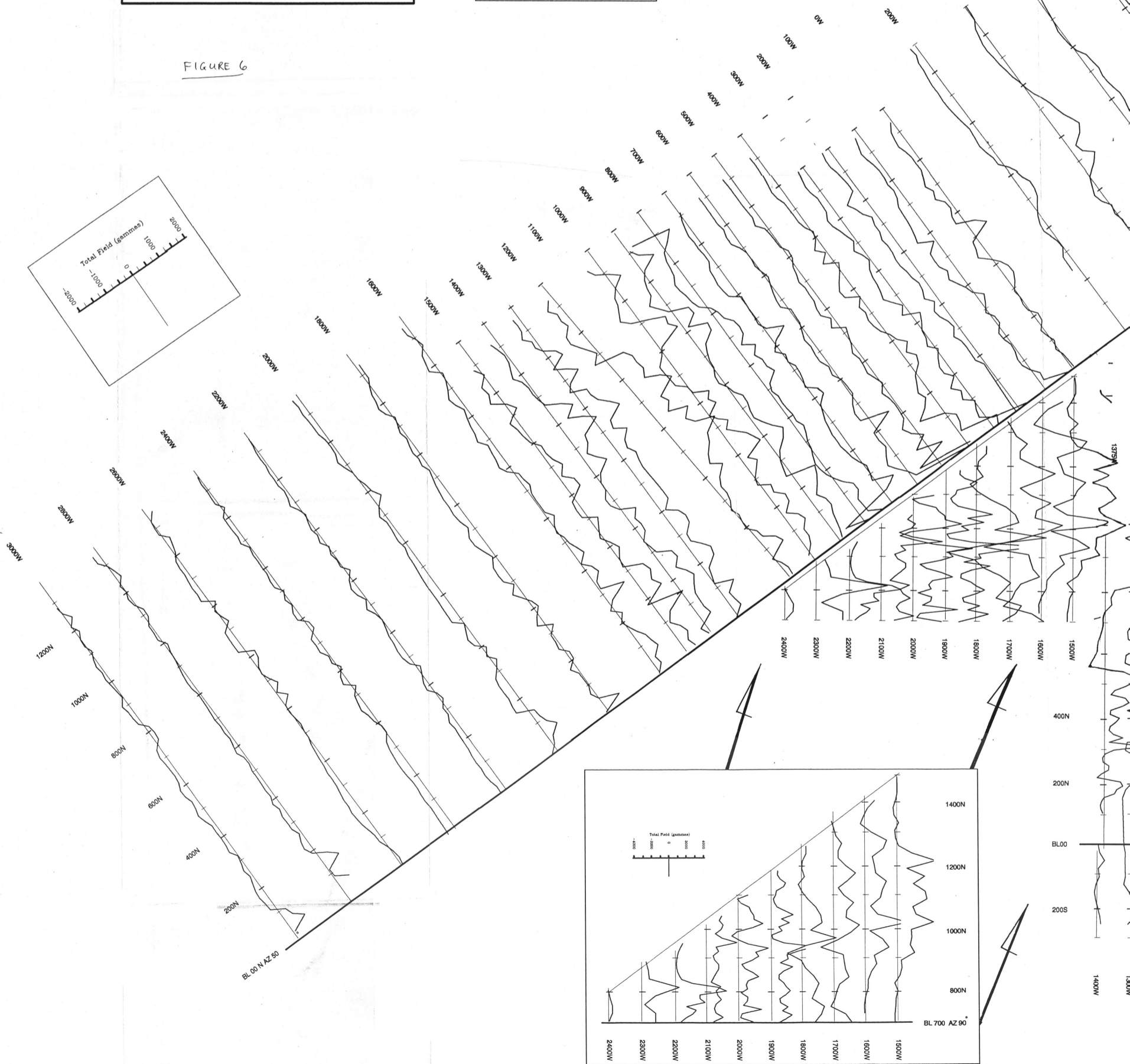
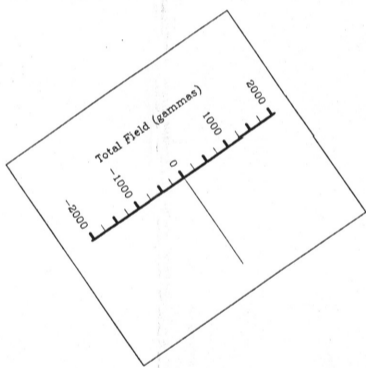
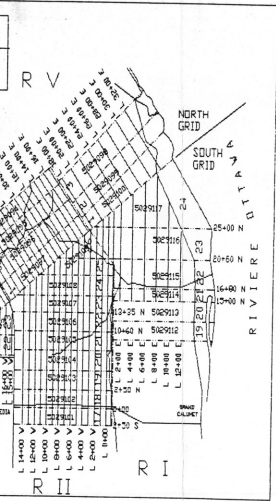


FIGURE 6





CREDIA

GRAND CALUMET

R I I

R I

R I V I E R E


R I V

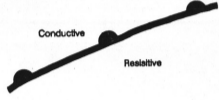
R V

Cathay Exploration Inc		
Client: Chris Bishop	CO# 32	Date: 05/1991
Property: BERARD		
Township: Ile du Grand Calumet	NTS: 31F/15	
County: Pontiac Temiscamingue	By: D.Gamble	

Ministère de l'Énergie et des Ressources
 Division des données géométriques
 DATE: 7 NOV 1991
 NO G.M. 050750

VLF INTERPRETATION	
Field Unit: EDA Omni Mag +	Station: Cutler 24.0 kHz
Base Station: Disabled	Azimuth: 93°
Field Strength: 15-50 units(good)	By: D. Gamble

Conductor Axis: 

Resistivity Contrast: 

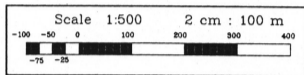
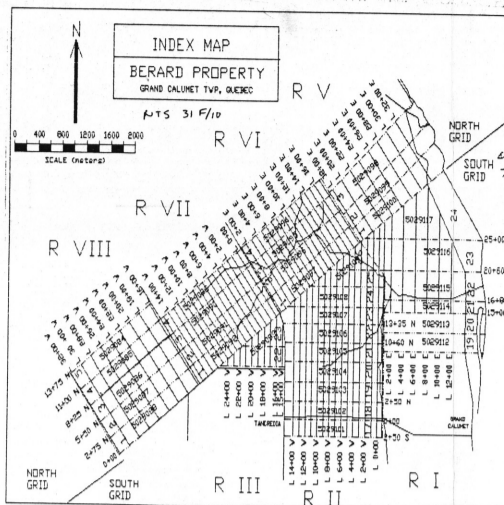
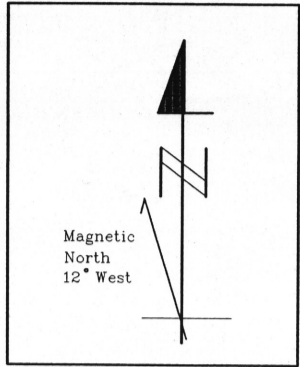


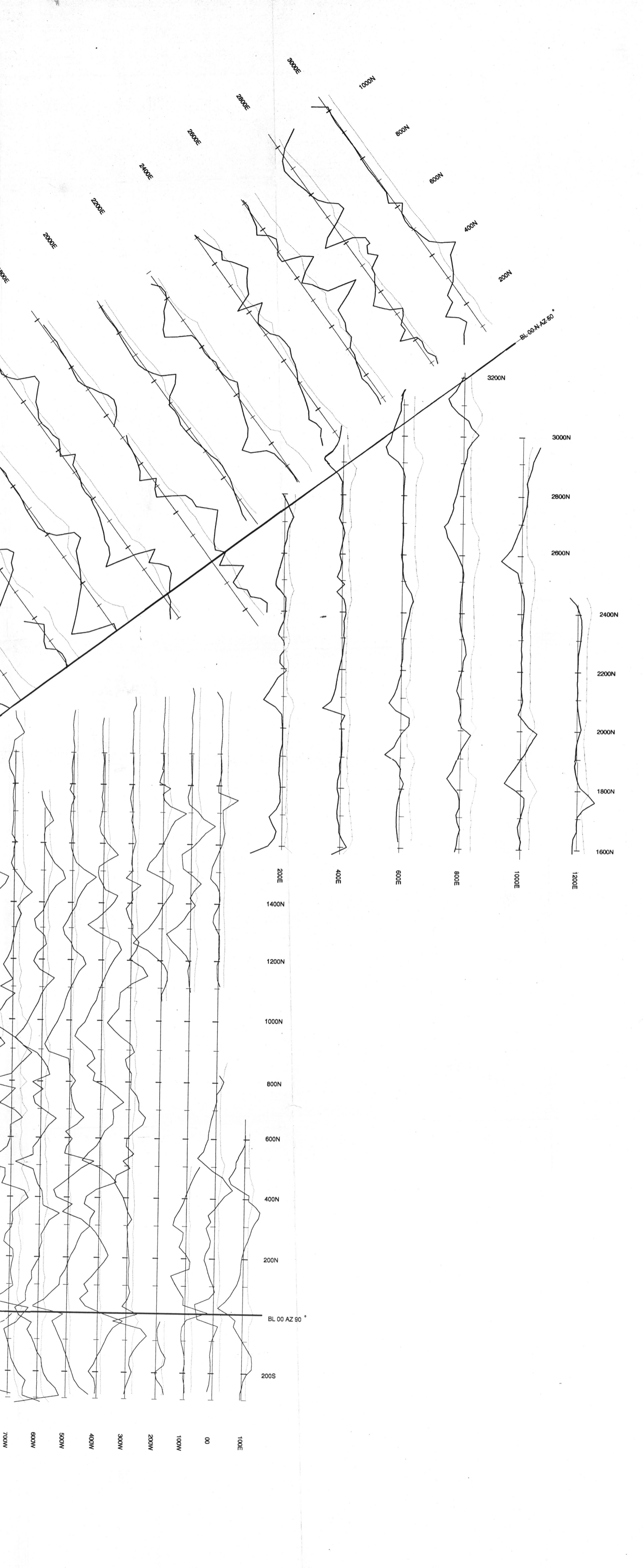
FIGURE 9

R VII

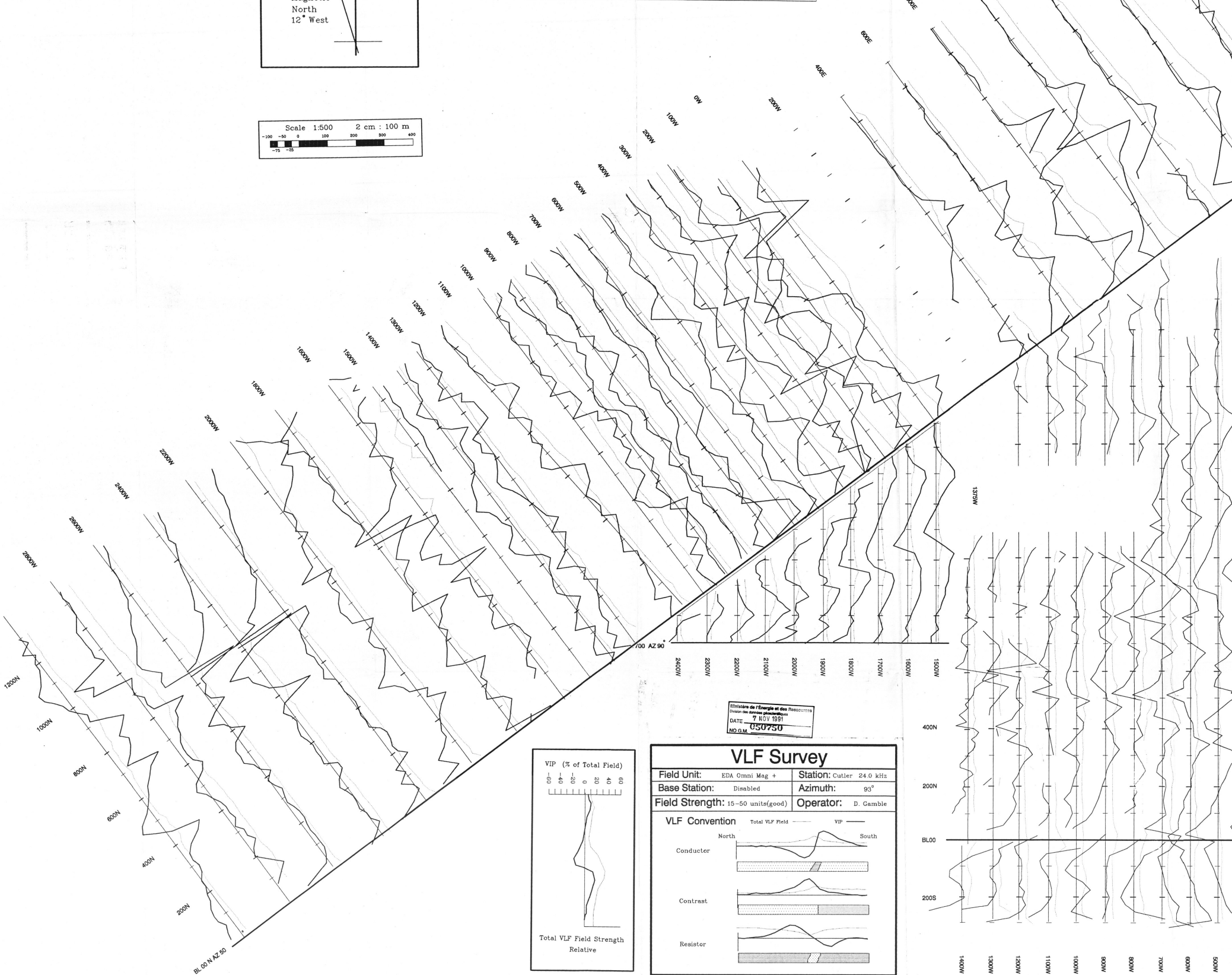
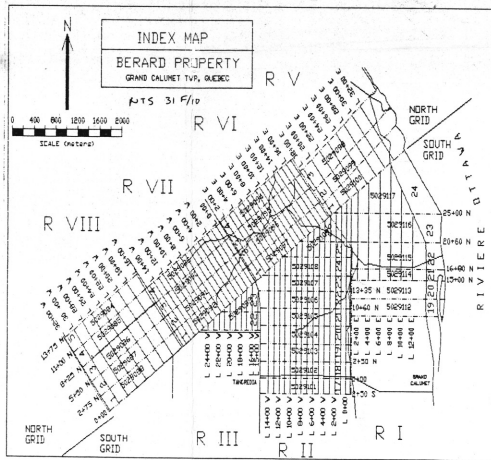
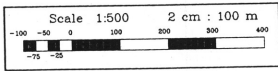
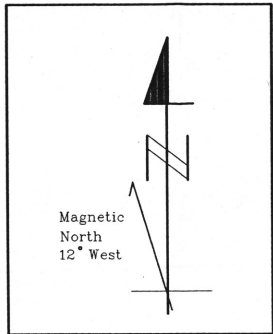
R VIII



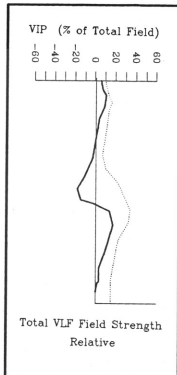
TANCREDIA



Cathay Exploration Inc			
Client: Chris Bishop	CO# 32	Date: 05/1991	
Property: BERARD			
Township: Ile du Grand Calumet		NTS: 31F/15	
County: Pontiac Temiscamingue		By: D.Gamble	



Ministère de l'Énergie et des Ressources
 Québec
 DATE: 7 NOV 1991
 NO. G.M. 050750



VLF Survey			
Field Unit:	EDA Omni Mag +	Station:	Cutler 24.0 kHz
Base Station:	Disabled	Azimuth:	93°
Field Strength:	15-50 units(good)	Operator:	D. Gamble
VLF Convention			
	North	Total VLF Field	South
Conductor			
Contrast			
Resistor			

FIGURE 8