

010

RECEIVED

APR 13 1989

MINING LANDS SECTION

MAGNETIC  
GEOPHYSICAL SURVEY

DINO PROPERTY  
BAD VERMILION LAKE AREA (G2665)  
NTS 52/c/10

PREPARED BY  
JACK A. BOLEN BSc

*Qual.*  
*2-8848*

MARCH, 1989

KENORA  
MINING DIV  
RECEIVED  
APR 5 1989  
AM 789...112123456 M

*A*

#### INTRODUCTION

The Dino property is located in the Bad Vermilion Lake claim sheet (J 2665), approximately 10 kms south east of the village of Mine Centre in Northwestern Ontario. The property consists of 40 contiguous claims, the 18 of which are being reported on here were recorded Feb. 17, 1987.

#### LOCATION, ACCESS AND PHYSIOGRAPHY

Mine Centre is located on Highway II, 296 kms west of Thunder Bay and 63 kms east of Fort Frances, Ontario. The claims lie on the north east side of Shoal Lake where the Seine River enters Shoal Lake. Access to Shoal Lake is via the Shoal Lake road for 8 kms south from Highway II.

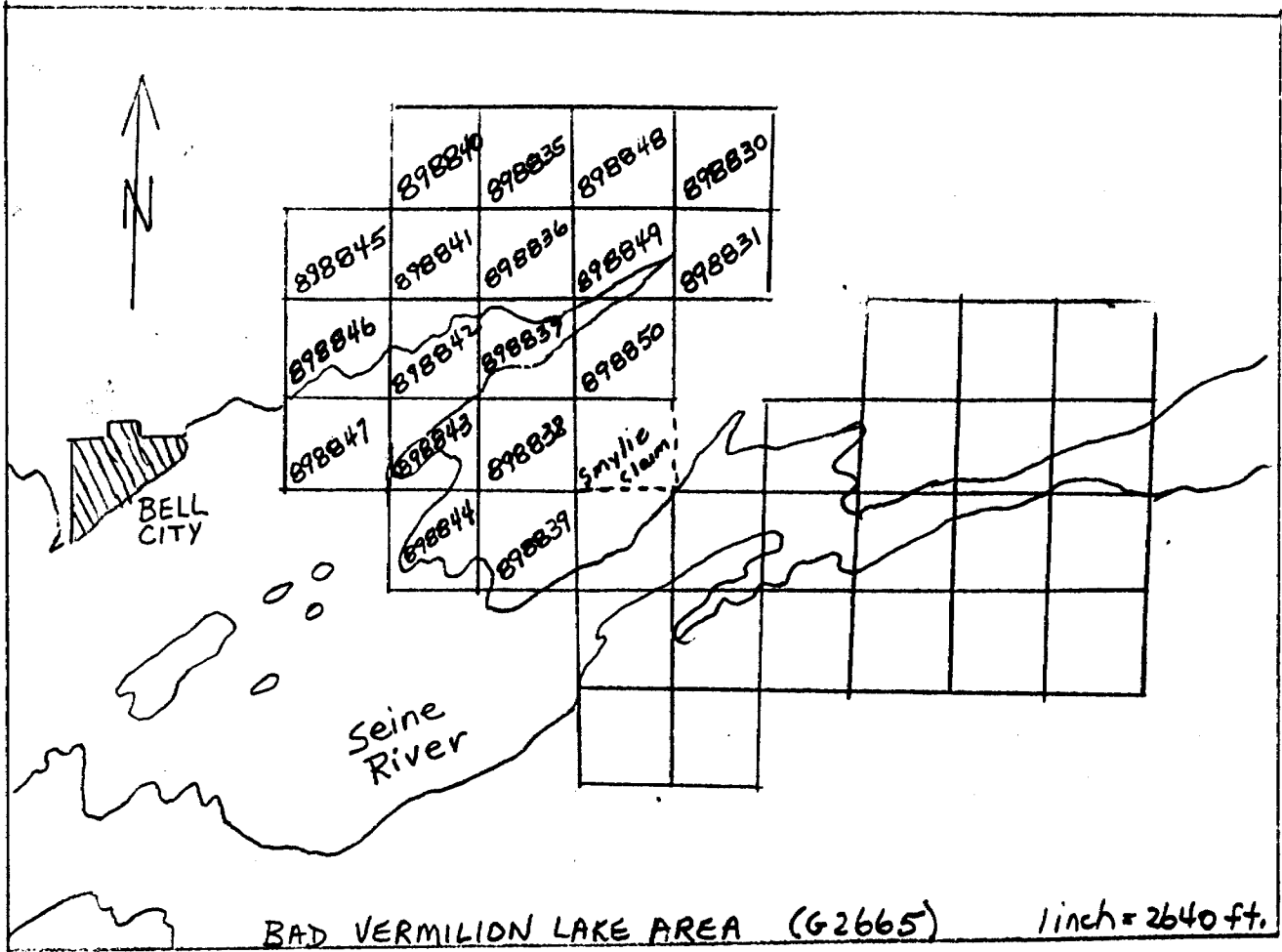
The property consists of undulating broad ridges, recessive cedar swamp and the Shoal Lake, Seine River waterways. Local relief is generally less than 30 meters.

The cover is generally black spruce, white spruce, balsam fir, birch red pine and jack pine on the ridges, with cedar and willows in the low areas. The undergrowth on the property consists of dense hazel and willow.

The property is divided into two ridge areas by an area of low ground through the middle of the property. The low ground consists of wet wild rice paddies and cedar swamp. The property reported on is bounded on the south and south west by the Seine River.

#### MAGNETIC SURVEY AND INTERPRETATION

Lines were cut at 400 foot intervals with stations established at 50 foot intervals. An Imperial System grid was chosen as the EM instrument used has an Imperial length cable. In areas of greater interest, eg. where HEM conductors exist, readings were taken at 20 foot intervals otherwise readings were taken at 50 foot intervals. A contour interval of 100 gammas was used. For ease of plotting 59000 gammas was deducted from all readings. This must be added to each reading to get the total field reading.



CLAIM LIST

K898830  
 K98831  
 K98835  
 K98836  
 K98837  
 K98838

K98839  
 K98840  
 K98841  
 K98842  
 K98843  
 K98844

K98845  
 K98846  
 K98847  
 K98848  
 K98849  
 K98850

page 2

There is three (3) distinct magnetic regions on the map area. The northern portion covers the area of the Seine conglomerates. There is numerous small highs, the highest reading being 60234 gammas or about 700 gammas above background. These small anomalies are interpreted to be variable concentrations of magnetite in the matrix of the Seine conglomerates. The south contact of Seine conglomerate with the felsic volcanics to the south has been very well delineated. The 59600 gamma interval follows the contact very closely.

The second or central region covers the area of the large rice bay that runs through the centre of the property. This region is an area of low magnetic relief and is interpreted to be underlain by felsic volcanics. One magnetic high occurs on line 44.00E, 2.00S. The highest reading is 60005. Due to the shape and size of the anomaly, it is interpreted to be a small gabbro intrusive.

The third or southern region covers an area of volcanics which is variable from intermediate to mafic. There is numerous magnetic highs, most of which correlate well with mafic flows and a small gabbro intrusive. HEM conductors O and N correlate well with magnetic anomalies. These two anomalies are interpreted to be bands of cherty magnetite iron formations. The other anomalies are interpreted to be disseminated magnetite in the mafic flows.

#### RECOMMENDATIONS

It is recommended that the areas of the magnetic anomalies and HEM conductors be prospected to determine the cause of the anomalies. If they cannot be explained by prospecting a short diamond drill hole should be drilled across each anomaly.

## STATEMENT OF QUALIFICATIONS

I, John (Jack) A. Bolen, have been active in exploration geology since 1969. I received my technician degree in geology from Soo College in 1970 and my BSc from Lake Superior State College, Sault Ste Marie, Michigan, in 1976.

I worked for Sherritt Gordon Mines at Lynn Lake, Manitoba, from 1970 to 1980 with time off to return to college. 1981 to 1983 was spent on a drilling program in Botswana for CIDA. 1984 was spent working for Noranda at Hemlo. Since 1984, I have worked full time on my own properties.

I have an intimate knowledge of this property having staked the property, supervising linecutting, geophysics and drafting this report.

I have written several technical assessment reports for Sherritt, Noranda, CIDA and myself over the years.



John A. Bolen



52C10NE0028 2.12354 BAD VERMILION LAKE

020

ELECTROMAGNETIC  
GEOPHYSICAL SURVEY

SEINE RIVER FAULT PROPERTY  
BAD VERMILION LAKE AREA

NTS 52/c/10

PREPARED BY  
JACK A. BOLEN BSc  
GEOLOGIST

RECEIVED  
APR 13 1989  
MINING LANDS SECTION

KENORA  
MINING DIV  
RECEIVED  
APR 5 1989  
AM 789 10 11 12 13 14 15 16

MARCH, 1989



## INTRODUCTION

The Seine River Fault property is located in the Bad Vermilion Lake Area, approximately 12 kms southeast of the village of Mine Centre in Northwestern Ontario.

The property consists of 22 claims which are being reported on here.

From February to December, 1987, a program of line cutting consisting of 22.1 miles and an Electromagnetic survey was conducted. The results of the geophysical survey is discussed and recommendations for further work are made in this report.

## LOCATION, ACCESS AND PHYSIOGRAPHY

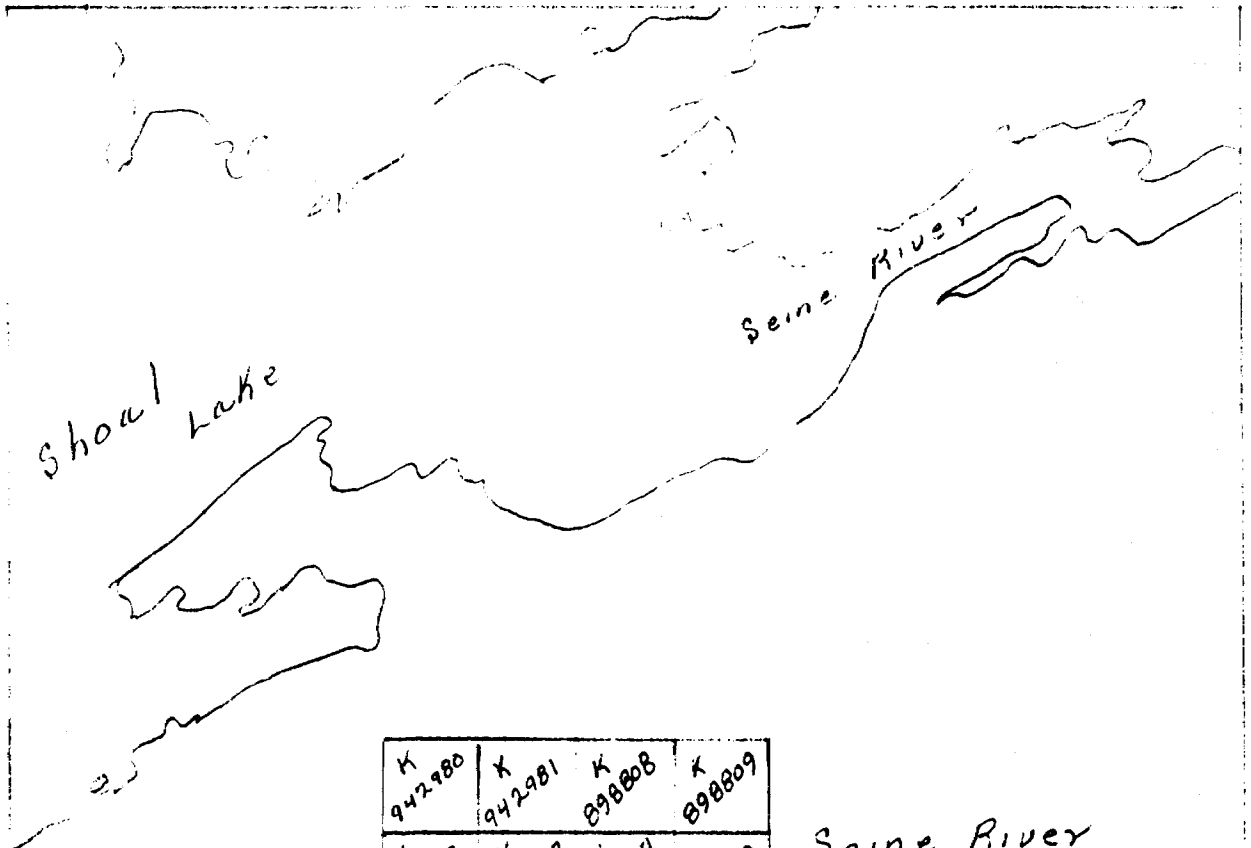
Mine Centre is located on Highway II, 296 kms west of Thunder Bay and 63 kms east of Fort Frances, Ontario. The claims lie 1 km east of the southeast side of Shoal Lake. Access to the property is via the Shoal Lake Road, 10 kms south to Shoal Lake, then by boat 3 kms across Shoal Lake, then across country 1 km on foot.

The property consists of undulating broad ridges, recessive cedar swamp and beaver dams along the Seine Fault. Local relief is generally less than 30 meters.

The cover is generally spruce, balsam, poplar, white birch, jack pine, scrub oak and cedar. The second growth tends toward the trash hardwoods with dense hazel undergrowth.

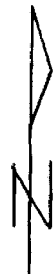
TABLE I CLAIM LIST

K942974	K942982	K898807
K942975	K898801	K898808
K942976	K898802	K898809
K942977	K898803	K898810
K942978	K898804	K898811
K942979	K898805	K898812
K942980	K898806	K898813
K942981		



K 942974	K 942975	K 942976	K 942977	K 942978	K 942979	K 942980
K 898803	K 898804	K 898805	K 898806	K 898807	K 898808	K 898809
K 898810	K 898811	K 898812				

Seine River  
Fault Property



Property owner  
J. A. Bolen

Bad Vermilion Lake Area

1" = 1/2 mile



### ELECTROMAGNETIC SURVEY AND INTERPRETATION

Lines were out at 400 foot intervals with stations established at 100 foot intervals. A McPhar VHEM, Model 600 was used in the horizontal mode at 1200 cps with a 200 foot coil separation.

Four weak anomalies were detected on the property. Anomaly A is the strongest, it is 1600 feet in length and lies parallel to and flanks magnetic anomaly A. Anomaly A lies 50 to 100 feet north of the magnetic high. It is interpreted to be weak sulphide replacement of an oxide iron formation.

Anomaly B is a weak out of phase anomaly 1400 feet in length. It lies in a magnetic low and cross cuts regional stratigraphy at approximately 20 degrees. Anomaly B cannot be easily explained. It is speculated that it may be caused by deep overburden or a cross cutting ionized shear.

Anomaly C is a weak, mainly out of phase conductor that lies in a magnetic low 200 feet to 400 feet north of magnetic anomaly C. It is interpreted to be an ionized shear or an area of deep overburden.

Anomaly D is a weak out of phase anomaly that cross cuts stratigraphy and magnetic anomaly D. It is interpreted to be an ionized cross cutting shear.

### RECOMMENDATIONS

It is recommended that the areas around the four anomalies be prospected to try to explain the electromagnetic results. If possible, a program of trenching and sampling should follow. If the anomalies cannot be explained by surface work, one shallow diamond drill hole should be drilled in each anomaly.

## STATEMENT OF QUALIFICATIONS

I, John (Jack) A. Bolen, have been active in exploration geology since 1969. I received my technician degree in geology from Soo College in 1970 and my BSc from Lake Superior State College, Sault Ste Marie, Michigan, in 1976.

I worked for Sherritt Gordon Mines at Lynn Lake, Manitoba, from 1970 to 1980 with time off to return to college. 1981 to 1983 was spent on a drilling program in Botswana for CIDA. 1984 was spent working for Noranda at Hemlo. Since 1984, I have worked full time on my own properties.

I have an intimate knowledge of this property having staked the property, supervising linecutting, geophysics and drafting this report.

I have written several technical assessment reports for Sherritt, Noranda, CIDA and myself over the years.



John A. Bolen



52C10NE0028 2.12354 BAD VERMILION LAKE

030

RECEIVED

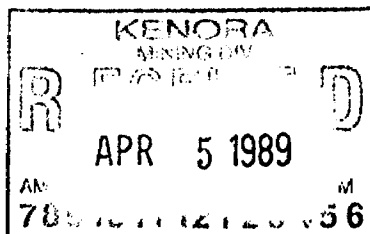
APR 13 1989

MINING LANDS SECTION

GEOLOGICAL REPORT

DINO PROPERTY  
BAD VERMILION LAKE AREA (G 2665)  
NTS 52/c/10

PREPARED BY  
JACK A. BOLEN BSc  
GEOLOGIST



MARCH, 1989

A

## INTRODUCTION

The Dino property is located in the Bad Vermilion Lake claim sheet (G 2665), approximately 10 kms south east of the village of Mine Centre in Northwestern Ontario. The property consists of 40 contiguous claims, the 18 of which are being reported on here were recorded Feb. 17, 1987.

## LOCATION, ACCESS AND PHYSIOGRAPHY

Mine Centre is located on Highway II, 296 kms west of Thunder Bay and 63 kms east of Fort Frances, Ontario. The claims lie on the north east side of Shoal Lake where the Seine River enters Shoal Lake. Access to Shoal Lake is via the Shoal Lake Road for 8 kms south from Highway II.

The property consists of undulating broad ridges, recessive cedar swamp and the Shoal Lake, Seine River waterways. Local relief is generally less than 30 meters.

The cover is generally black spruce, white spruce, balsam fir, birch, red pine and jack pine on the ridges, with cedar and willows in the low areas. The undergrowth on the property consists of dense hazel and willow.

The property is divided into two ridge areas by an area of low ground through the middle of the property. The low ground consists of wet wild rice paddies and cedar swamp. The property reported on is bounded on the south and south west by the Seine River.

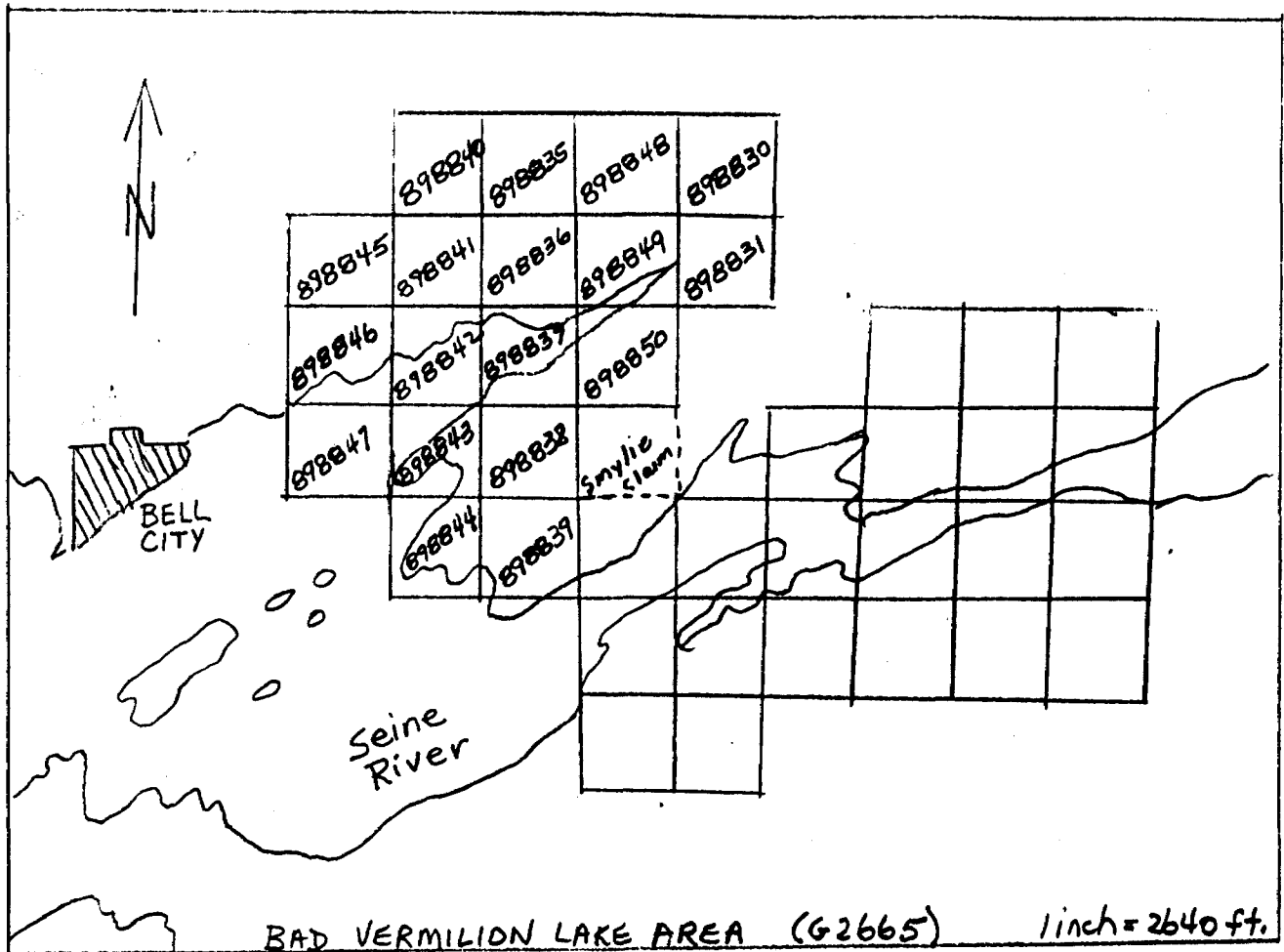
## HISTORY OF EXPLORATION

Prior to this exploration program no systematic work has ever been completed on the property and surrounding area.

In the 1880's, a gold rush to northern Minnesota spilled over into the Mine Centre area. Most of the known showings and deposits in the area were discovered at that time by prospecting alone. Very little work has been done in the area since.

Two gold occurrences occur in close proximity to the Dino property, the Dinosaur and the Smylie occurrences.

Dinosaur; consists of three patent claims J.O.I4, I3 and P669. This property is separated from the N.E. corner of the Dino property by  $\frac{1}{4}$  of a mile. The Dinosaur showing consists of a number of discontinuous narrow quartz veins in a highly altered package of felsic volcanics. Grades locally are very high but also very erratic. Exploration to date consists of a few shallow trenches dating back to the 1880's and 1930's, and now recently by a program of line cutting, VLF, mapping and stripping.



BAD VERMILION LAKE AREA (G2665) 1 inch = 2640 ft.

CLAIM LIST

K898830  
 K98831  
 K98835  
 K98836  
 K98837  
 K98838

K98839  
 K98840  
 K98841  
 K98842  
 K98843  
 K98844

K98845  
 K98846  
 K98847  
 K98848  
 K98849  
 K98850

Smylie; on claim K939222, is contiguous with the Dino property on the north and west side. The Smylie occurrence consists of sulphide replacement of a sheared cherty oxide iron formation. Five drill holes dating from the 1930's had mixed results the best hole returning 6 feet of .77 oz/ton. This hole is drilled 300 feet from the Dino property claim boundary.

At the moment, the Dino and Smylie are part of a larger claim group owned by Gallo Exploration of Toronto.

#### REGIONAL GEOLOGY

The Dino Property lies between the Quetico and Seine River faults. Rocks can be divided into three units; Migmatites north of the Quetico fault, deep water epiclastic sediments of amphibolite grade of metamorphism south of the Seine River fault and a package of conglomerates, arenites, felsic to mafic volcanics and intrusives from QFP to gabbro between the faults. All except the most recent intrusives are of green schist grade of metamorphism.

The Quetico and Seine River faults are both right lateral faults. This has created a dextral wrench zone (Poulsen, 1984 a) on the area between the faults.

A series of shears have been created within the dextral wrench zone which strike at an angle of approximately 30 degrees off the Seine Fault to intersect the Quetico.

#### LOCAL GEOLOGY

##### I./ Mafic Volcanic;

These have the greatest areal extent of the volcanics. The mafic volcanics are composed mainly of massive flows. Pillowed flows are found within the southern unit but due to being highly deformed only a tentative top to the south can be speculated. The mafic volcanics are generally sheared and in most instances can be described as a chlorite schist. Carbonate alteration is present in most places, pervasive in areas of stronger shearing.

Locally small areas have been interpreted as being tuffaceous, due to the high degree of shearing and carbonate alteration it is difficult to ascertain the original rock type.

2./ Intermediate Volcanic;

There is one unit of Intermediate Volcanic on the property, the unit is interpreted to be a tuff which has been highly sheared with pervasive carbonate alteration. The unit is best described as a sericite chlorite schist with abundant carbonate and local chloritoid. It is speculated that this unit lies on an anti-clineal axial plane. This unit may be an highly altered mafic volcanic.

3./ Felsic Volcanic;

There are two units of felsic volcanics on the property, the largest is in contact with the Seine conglomerate to the north. This unit consists essentially of sericite with carbonate alteration. Chloritoid is locally pervasive. The long rice bay covers most of this unit.

4./ Gabbro;

Only one small unit of Gabbro has been recognized. This unit is approximately 500 feet long and 100 feet wide and lies on line 20E, 25S. It is the youngest unit on the property and is a fine to medium grained equigranular gabbro containing approximately 65 per cent mafic minerals. Free quartz is less than 2 per cent.

5./ Feldspar Porphyry;

This unit is a sill like structure that is found between lines 40E and 64E at approximately 18 north. Contacts are sharp. This is a most unusual unit being comprised of 25-30 percent white sauseritized feldspar with a black to dark green chloritic matrix. Locally it is highly carbonitized.

6./ Seine Conglomerate;

This unit is the largest unit in terms of areal extent. The south contact with the volcanics is not exposed but it is interpreted to be a major shear zone. The Seine conglomerate is polymictic containing approximately 30 per cent clasts granite, granodiorite, diorite and volcanics. Volcanic clasts predominate at approximately a 2:1 ratio. The matrix consists mainly of chlorite with local silty and graywacke matrix. It is in contact to the north with sandstones.

7./ Sandstone;

This is a thickly bedded unit in the few outcrops that were observed. Quartz content is estimated to be approximately 65 per cent the remainder being feldspar. It would be best described as a feldspathic arenite. . . . page 4

#### INTERPRETATION

The Dino property can be divided into two major parts; the north portion north of approximately 12.00 north consists entirely of sediments and the portion to the south consisting entirely of volcanics and intrusives. The contact is interpreted to be a major shear which strikes at approximately 50 degrees. This shear shows up on the VHEM survey as a weak out of phase conductor which is probably caused by ionized waters and mylonite along the shear.

Numerous shears cross the property. The rocks have been highly sheared and most can be only described as schists. The precursor of the rock type observed was ascertained as best as possible, although the structural over printing and alteration sometimes made this inference difficult. (Carbonate alteration is pervasive throughout the volcanics with localized areas of chloritoid).

It is speculated that an anticlinal axis traverses the property in the area of approximately 21.00S and a synclinal axis in the area of the rice bay to the north. As this is speculation, they have not been put on the map.

A cross cutting shear has offset unit 5 in the area of line 56 East at 15.00 North. This shear strikes at approximately 140 degrees. Where this shear intersects the shears striking at 50 degrees, it should be more closely inspected for mineralization.

The area of greatest potential is the area on strike of the Smylie occurrence. Good structure, alteration, VHEM conductors combined with good Au values 300 feet east on strike make this a prime target.

One sample 31004 returned an assay of .13 oz/ton Au. This sample was taken at low water (since covered) on line 8.00E, 6.70S. It was a sericite schist with 2-3 per cent pyrite and 8-10 per cent disseminated magnetite, possibly a sheared lean iron formation not unlike the Smylie occurrence.

All samples are grabs and were assayed by Swastika Laboratories Ltd.



SAMPLE #	COORDINATES	ROCK TYPE	ASSAY OZ/TON
3I001	6.20E, 9.00S	6" qtz vein	Nil
3I002	6.40E, 9.20S	4" qtz vein	Nil
3I003	6.70E, 8.10S	4" qtz vein	Nil
3I004	7.30E, 6.60S	lean sericitic IF	.08, .09, .13, .135
3I005	10.50E, 7.75S	mafic vol, 2% py	.05
3I006	10.00E, 10.80S	ankerite, qtz vein	Nil
3I007	9.00E, 11.05S	qtz veinlets	Nil
3I008	6.80E, 11.20S	mafic vol, qtz veinlets	Nil
3I009	0.50E, 19.20S	qtz boulders	Nil
3I010	1.00E, 19.60S	qtz veinlets	Nil
3I011	4.00E, 30.50S	qtz veinlets	Nil
3I018	7.60E, 22.80S	sheared intermediate vol, 1% py	Nil
3I019	9.10E, 24.90S	qtz vein	Nil
3I020	11.50E, 26.30S	qtz-tour vein	Nil
3I021	12.90E, 27.30S	sheared mafic vol, 1% py	Nil
3I022	12.80E, 28.40S	mafic vol, 1% py	Nil
3I023	11.70E, 29.45S	mafic vol, 1% py	Nil
3I027	6.75E, 17.35S	sheared mafic vol, tr py	Nil
3I028	9.25E, 16.80S	sheared mafic vol, 1% py	Nil
3I029	9.00E, 16.80S	qtz vein	Nil
3I030	10.75E, 16.60S	qtz veinlets	Nil
3I031	10.00E, 16.60S	qtz veinlets	Nil
3I032	12.60E, 16.75S	qtz veinlets, tr py	.002
3I033	14.20E, 16.30S	qtz ankerite veinlets	Nil
3I034	15.60E, 16.25S	qtz ankerite veinlets	Nil
3I035	16.00E, 17.30S	calcareous chl ser schist	Nil
3I036	16.30S, 24.05S	mafic vol, tr py	Nil
3I037	19.20E, 18.30S	calcareous inter- mediate tuff	Nil

SAMPLE #	COORDINATES	ROCK TYPE	ASSAY OZ/TON
3I038	31.35E, 16.70S	sheared chl ser schist	Nil
3I039	29.40E, 27.00S	intermediate vol, 1% py	Nil
3I040	30.40E, 9.70S	qtz vein 6"	Nil
3I041	47.65E, 17.50	qtz tour vein	.002
3I082	46.40E, 19.00N	feldspar porphyry tr py	.005/.002
3I083	8.00E, 22.10S	qtz veinlets	Nil
3I084	66.90E, 13.80S	qtz tour vein	Nil
3I085	64.05E, 14.00S	qtz tour vein tr py	Nil
3I079	8.00E, 6.50S	ser schist tr mag	.01/.01
3I080	8.00E, 6.60S	ser schist tr mag	.005

## STATEMENT OF QUALIFICATIONS

I, John (Jack) A. Bolen, have been active in exploration geology since 1969. I received my technician degree in geology from Soo College in 1970 and my BSc from Lake Superior State College, Sault Ste Marie, Michigan, in 1976.

I worked for Sherritt Gordon Mines at Lynn Lake, Manitoba, from 1970 to 1980 with time off to return to college. 1981 to 1983 was spent on a drilling program in Botswana for CIDA. 1984 was spent working for Noranda at Hemlo. Since 1984, I have worked full time on my own properties.

I have an intimate knowledge of this property having staked the property, supervising linecutting, geophysics and drafting this report.

I have written several technical assessment reports for Sherritt, Noranda, CIDA and myself over the years.



John A. Bolen



Ontario



52C10NE0028 2.12354 BAD VERMILION LAKE

900

Ministry of  
Northern Development  
and Mines

Ministère du  
Développement du Nord  
et des Mines

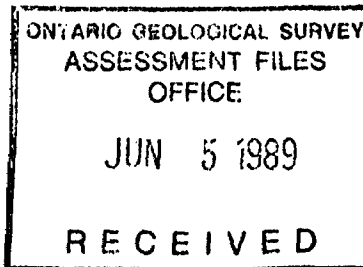
Mining Lands Section  
3rd Floor, 880 Bay Street  
Toronto, Ontario  
M5S 1Z8

Telephone: (416) 965-4888

May 26, 1989

Your file: W8901-43  
Our file: 2.12354

Mining Recorder  
Ministry of Northern Development and Mines  
808 Robertson Street  
P.O. Box 5200  
Kenora, Ontario  
P8N 3X9



Dear Sir:

Re: Notice of Intent dated April 24, 1989 Geophysical (Magnetometer)  
and Geological Survey submitted on Mining Claims K 898831 et al  
in the Area of Bad Vermilion Lake.

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 & Minerals Division

DK:eb  
Enclosure

cc: Mr. G.H. Ferguson  
Mining and Lands Commissioner  
Toronto, Ontario

Resident Geologist  
Kenora, Ontario

John Allan Bolen  
Fort Frances, Ontario



Recorded Holder **JOHN ALLEN BOLEN**  
 Township or Area **BAD VERMILION LAKE**

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
<b>Geophysical</b> Electromagnetic _____ days Magnetometer <u>20</u> days Radiometric _____ days Induced polarization _____ days Other _____ days Section 77 (19) See "Mining Claims Assessed" column Geological <u>20</u> days Geochemical _____ days Man days <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> <input type="checkbox"/> Credits have been reduced because of partial coverage of claims. <input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	K 898831 898835 to 42 incl 898845-46 898848 to 50 incl

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

15 days Magnetometer and 15 days Geological  K 898830	20 days Magnetometer and 10 days Geological  K 898843	15 days Magnetometer and 10 days Geological  K 898844 898847
--	--	--

No credits have been allowed for the following mining claims

not sufficiently covered by the survey       insufficient technical data filed

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



Ministry of  
Northern Development  
and Mines

Ontario

Report of Work  
(Geophysical, Geological,  
Geochemical and Expenditures)

DOCUMENT No.  
W8901-43

- Instructions: - Please type or print  
- If number of mining claims traversed exceeds space on this form, attach a list.  
- Only days credits calculated in the "Expenditures" section may be entered in the "Expend Days Cr." columns.  
- Do not use shaded areas below.

Mining Act MINING LANDS

7 Mar 89

Type of Survey(s) Magnetometer, Geological Township or Area Bad Vermilion Lake G 2665  
 Claim Holder (s) John Allan Bolen Prospector's Licence No. E 29729  
 Address 1215-2nd St E, Ft Frances, Ontario, P9A-1P5  
 Survey Company J. A. Bolen & K. Jones Date of Survey (from & to) 4/7/87 Total Miles of line Cut 18.3  
 Name and Address of Author (of Geo Technical report) J. A. Bolen - 1215-2nd St E, Ft Frances, Ontario, P9A-1P5

Credits Requested per Each Claim in Columns at right

Mining Claims Traversed (List in numerical sequence)

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	
	- Magnetometer	20
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	- Other	
Man Days Complete reverse side and end totals	Geological	20
	Geochemical	
	Geophysical	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	
	Other	

Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
K	898830				
	898831				
	898835				
	898836				
	898837				
	898838				
	898839				
	898840				
	898841				
	898842				
	898843				
	898844				
	898845				
	898846				
	898847				
	898848				
	898849				
	898850				

RECEIVED

FEB 17 1989

MINING LANDS SECTION

RECEIVED  
FEB 9 - 1989  
AM 709

Expenditures (excludes power stripping)

Type of Work Performed \_\_\_\_\_  
 Performed on Claim(s) \_\_\_\_\_  
 Calculation of Expenditure Days Credits  
 Total Expenditures \$ \_\_\_\_\_ ÷ 15 = Total Days Credits \_\_\_\_\_

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

Date Feb 6, 1989 Recorded Holder or Agent (Signature) J. A. Bolen

898801  
 For Office Use Only  
 Total Days Cr. Recorded 720 Date Recorded 89 FEB 9  
 Date Approved as Recorded \_\_\_\_\_ Mining Record [Signature]  
 Branch Director [Signature]  
 Total number of mining claims covered by this report of work. 18

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

Mining Act MINING LANDS

Type of Survey(s) **Horizontal Electromagnetic** Township or Area **62465**  
 Claim Holder(s) **John A. Bolen -** **Bad Vermilion Lake**  
 Address **1215-2nd St East, Ft Frances, Ontario, P9A-1P5** Prospector's Licence No. **E29729**  
 Survey Company **Alan McCormick; J.A. Bolen** Date of Survey (from & to) **1 2 89** Total Miles of line Cut **23.0**  
 Name and Address of Author (of Geo Technical report) **J.A. Bolen 1215-2nd St E, Ft Frances, Ont P9A-1P5**

Credits Requested per Each Claim in Columns at right

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Electromagnetic	
	Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	Radiometric	
	Other	
	Geological	
	Geochemical	
Man Days	Geophysical	Days per Claim
Complete reverse side and enter to (s) here	Electromagnetic	
	Magnetometer	
	Radiometric	
	Other	
	Geological	
	Geochemical	
Airborne Credits	Geophysical	Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Prefix	Mining Claim Number	Expend. Days Cr.	Prefix	Mining Claim Number	Expend. Days Cr.
K	942974				
	942975				
	942976				
	942977				
	942978				
	942979				
	942980				
	942981				
	942982				
	898801				
	898802				
	898803				
	898804				
	898805				
	898806				
	898807				
	898808				
	898809				
	898810				
	898811				
	898812				
	898813				

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures **\$** ÷ **15** =  Total Days Credits

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

Date **Feb 6, 1989** Recorded Holder or Agent (Signature) *J.A. Bolen*

898801  
Total number of mining claims covered by this report of work. **22**

For Office Use Only

Total Days Cr. Recorded **440** Date Recorded **89 Feb 9** Mining Recorder *[Signature]*

Date Approved as Recorded **29 Feb 89** Branch *[Signature]*

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

Name and Postal Address of Person Certifying  
**John A. Bolen - 1215-2nd St East, Ft Frances Ontario, P9A-1P5**

Date Certified **Feb 6, 1989** Certified by (Signature) *J.A. Bolen*



Ministry of  
Northern Development  
and Mines

Geophysical-Geological-Geochemical  
Technical Data Statement

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) Magnetic  
Township or Area Bad Vermilion Lake  
Claim Holder(s) J.A. Bolen - 1215 - 2nd St E.  
Ft Frances, Ont P9A-1P5  
Survey Company J.A. Bolen -  
Author of Report J.A. Bolen - 1215 - 2nd St E  
Address of Author Ft Frances, Ontario  
Covering Dates of Survey 15/7/89 to 15/3/89  
(linecutting to office)  
Total Miles of Line Cut \_\_\_\_\_

**MINING CLAIMS TRAVERSED**  
List numerically

SEE LIST ATTACHED

(prefix) (number)

**SPECIAL PROVISIONS  
CREDITS REQUESTED**

DAYS  
per claim

Geophysical  
- Electromagnetic \_\_\_\_\_  
- Magnetometer 20  
- Radiometric \_\_\_\_\_  
- Other \_\_\_\_\_  
Geological \_\_\_\_\_  
Geochemical \_\_\_\_\_

ENTER 40 days (includes  
line cutting) for first  
survey.

ENTER 20 days for each  
additional survey using  
same grid.

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

Magnetometer \_\_\_\_\_ Electromagnetic \_\_\_\_\_ Radiometric \_\_\_\_\_  
(enter days per claim)

DATE: March 15/89 SIGNATURE: J.A. Bolen  
Author of Report or Agent

Res. Geol. \_\_\_\_\_ Qualifications \_\_\_\_\_

**Previous Surveys**

File No.	Type	Date	Claim Holder

TOTAL CLAIMS 218

If space insufficient, attach list



GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 1954 Number of Readings 2520  
Station interval 50ft - locally 25ft Line spacing 400ft  
Profile scale \_\_\_\_\_  
Contour interval 100 gammas

MAGNETIC

Instrument MP 2 - Scintrex  
Accuracy - Scale constant + 10 gammas  
Diurnal correction method Base line tie in  
Base Station check-in interval (hours) N/A  
Base Station location and value NA.

ELECTROMAGNETIC

Instrument \_\_\_\_\_  
Coil configuration \_\_\_\_\_  
Coil separation \_\_\_\_\_  
Accuracy \_\_\_\_\_  
Method:  Fixed transmitter  Shoot back  In line  Parallel line  
Frequency \_\_\_\_\_  
(specify V.L.F. station)  
Parameters measured \_\_\_\_\_

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 \_\_\_\_\_





GEOPHYSICAL TECHNICAL DATA

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

Number of Stations 1172 Number of Readings 1172  
Station interval 100 ft Line spacing 400 ft  
Profile scale 1 inch = 20%  
Contour interval \_\_\_\_\_

MAGNETIC

Instrument \_\_\_\_\_  
Accuracy - Scale constant \_\_\_\_\_  
Diurnal correction method \_\_\_\_\_  
Base Station check-in interval (hours) \_\_\_\_\_  
Base Station location and value \_\_\_\_\_

ELECTROMAGNETIC

Instrument McPhar VHEM Model 600  
Coil configuration Horizontal  
Coil separation 200 ft  
Accuracy \_\_\_\_\_  
Method:  Fixed transmitter  Shoot back  In line  Parallel line  
Frequency 1200 cps  
(specify V.L.F. station)  
Parameters measured \_\_\_\_\_

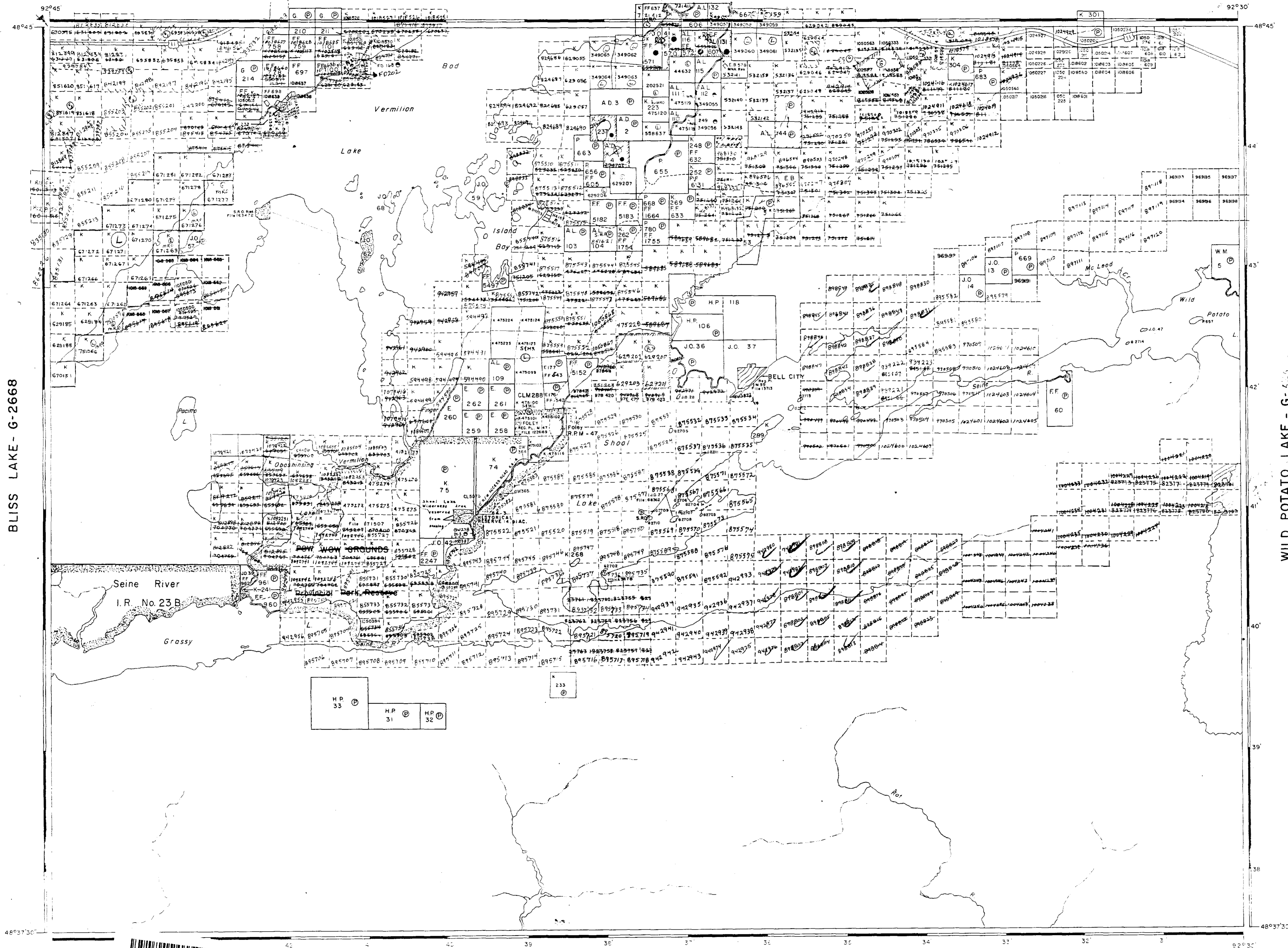
GRAVITY

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 \_\_\_\_\_

LITTLE TURTLE LAKE - G-2682



*Electric  
power lines*

LEGEND

- PATENTED LAND Ⓟ
- CROWN LAND SALE C.S.
- LEASES Ⓛ
- LOCATED LAND L.O.
- LICENSE OF OCCUPATION M.R.O.
- MINING RIGHTS ONLY S.R.O.
- SURFACE RIGHTS ONLY
- ROADS
- IMPROVED ROADS
- KING'S HIGHWAYS
- RAILWAYS
- POWER LINES
- MARSH OR MUSKEG
- MINES
- CANCELLED PATENTED S.R.O.

REFERENCES

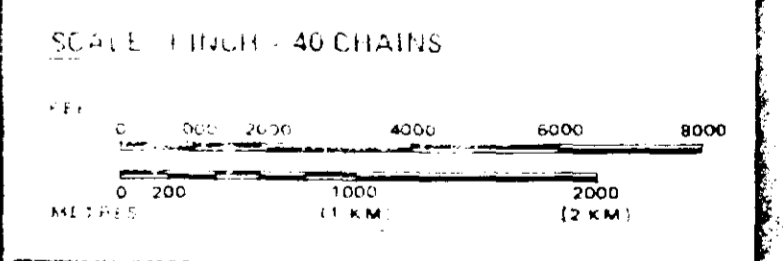
AREAS WITHDRAWN FROM DISPOSITION

- M.R.O. - MINING RIGHTS ONLY
- S.R.O. - SURFACE RIGHTS ONLY
- M+S. - MINING AND SURFACE RIGHTS

Description	Order No.	Date	Disposition	File
Ⓟ	W-2185	NOV 1985	SEVER	AC-OPEWOC NOV 1987
Ⓟ	W-2085	NOV 1985	SEVER	NOV 1987
Ⓟ	W-3583	MAY 1988	M.R.O.	188555

Sand & Gravel

Ⓟ	M.T.C. Pit No 1212	
Ⓟ	" " " 1213	
Ⓟ	" " " 1214	
Ⓟ	M.T.C. Gravel Pit 1016	
Ⓟ	Gravel Pit 170708	
Ⓟ	" " " 2398	
Ⓟ	" " " 1758	
Ⓟ	Gravel Pit No 104	
Ⓟ	M.R. Gravel Reserve No 159	
Ⓟ	QUARRY PERMIT	



AREA BAD VERMILION LAKE

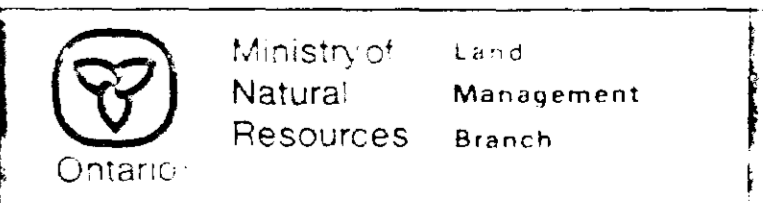
M.N.R. ADMINISTRATIVE DISTRICT

FORT FRANCÉS MINING DIVISION

KENORA

LAND TITLES / REGISTRY

RAINY RIVER



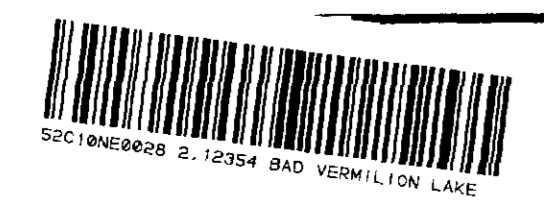
RECEIVED APR 7 1989

11-2474 G-2665

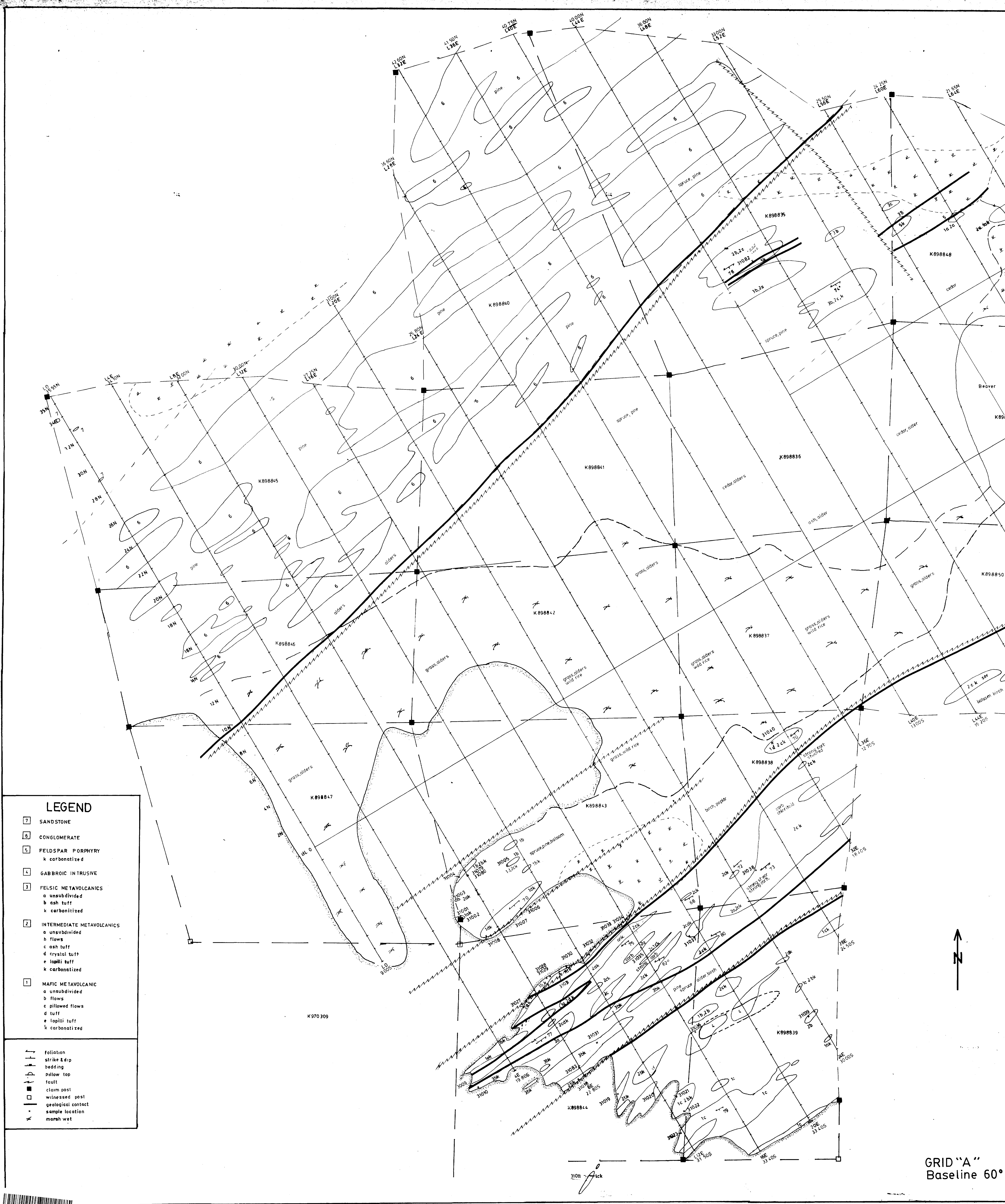
BLISS LAKE - G-2668

WILD POTATO LAKE - G-2665

MELIN LAKE - G-2689





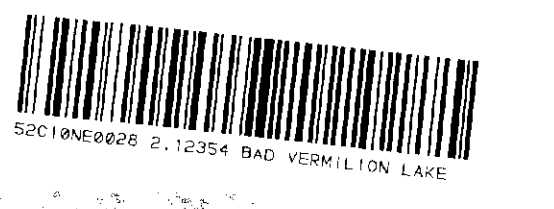


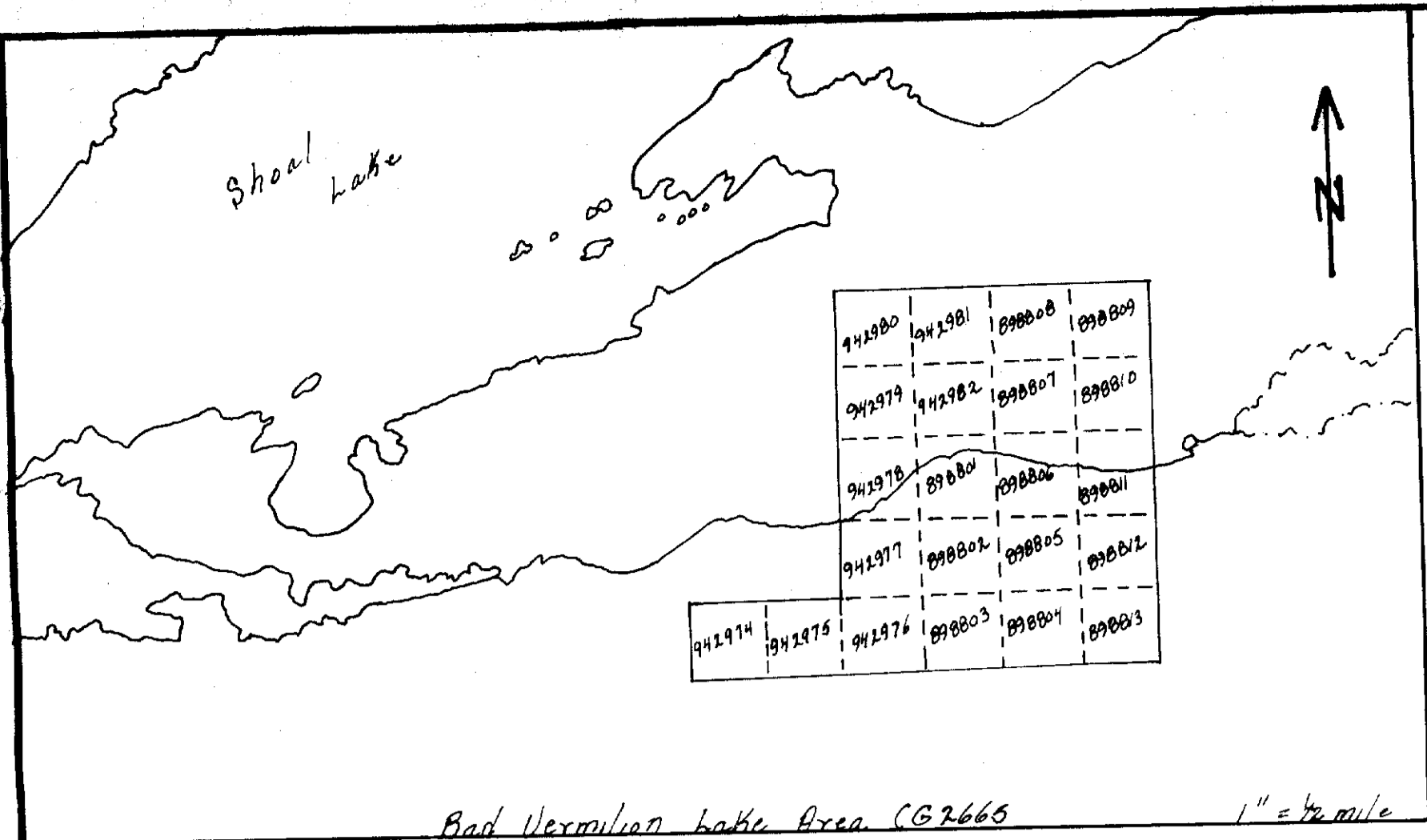
**LEGEND**

- 7 SANDSTONE
- 6 CONGLOMERATE
- 5 FELDSPAR PORPHYRY  
k carbonatized
- 4 GABBROIC INTRUSIVE
- 3 FELSIC METAVOLCANICS  
a unsubdivided  
b ash tuff  
k carbonatized
- 2 INTERMEDIATE METAVOLCANICS  
a unsubdivided  
b flows  
c ash tuff  
d crystal tuff  
e lapilli tuff  
k carbonatized
- 1 MAFIC METAVOLCANIC  
a unsubdivided  
b flows  
c pillowed flows  
d tuff  
e lapilli tuff  
k carbonatized

- foliation
- strike & dip
- bedding
- pillow top
- fault
- claim post
- witnessed post
- geological contact
- sample location
- marsh wet

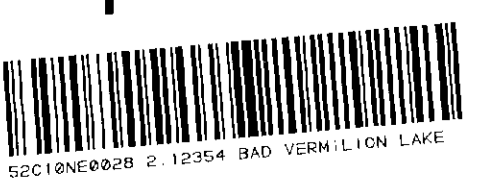
GRID "A"  
Baseline 60° Ast



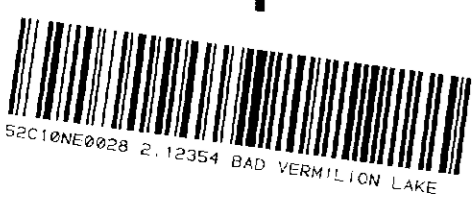
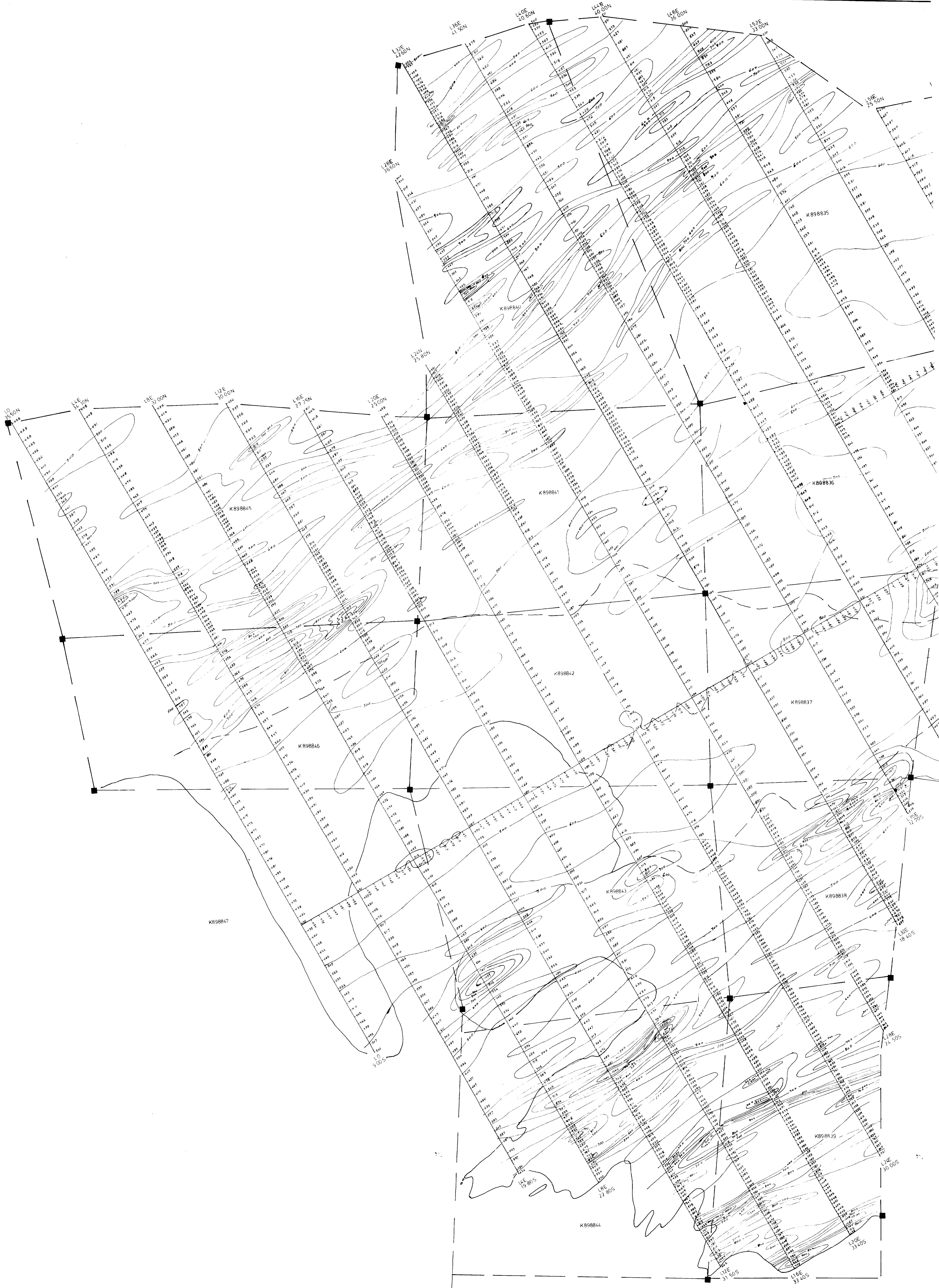


12

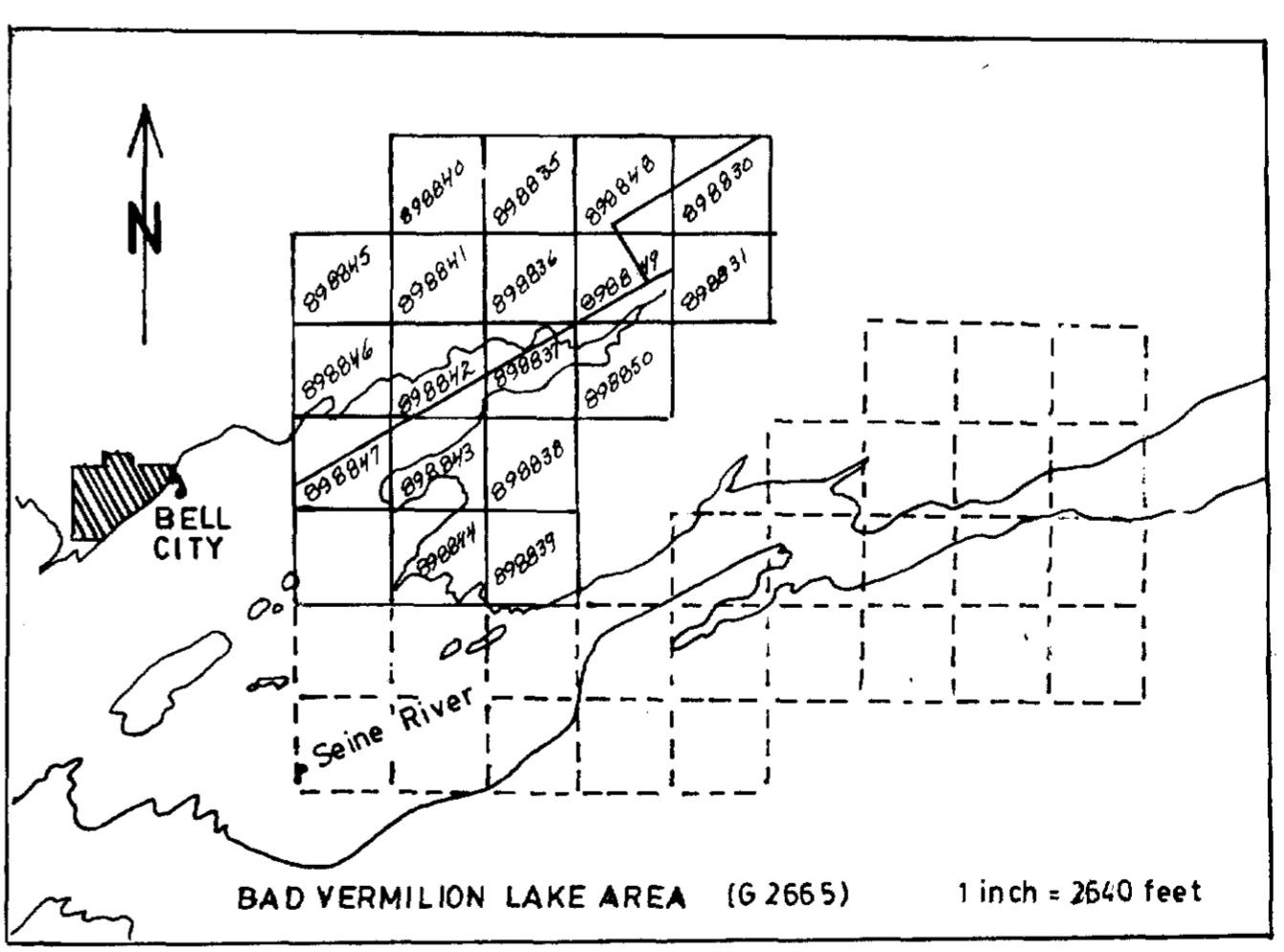
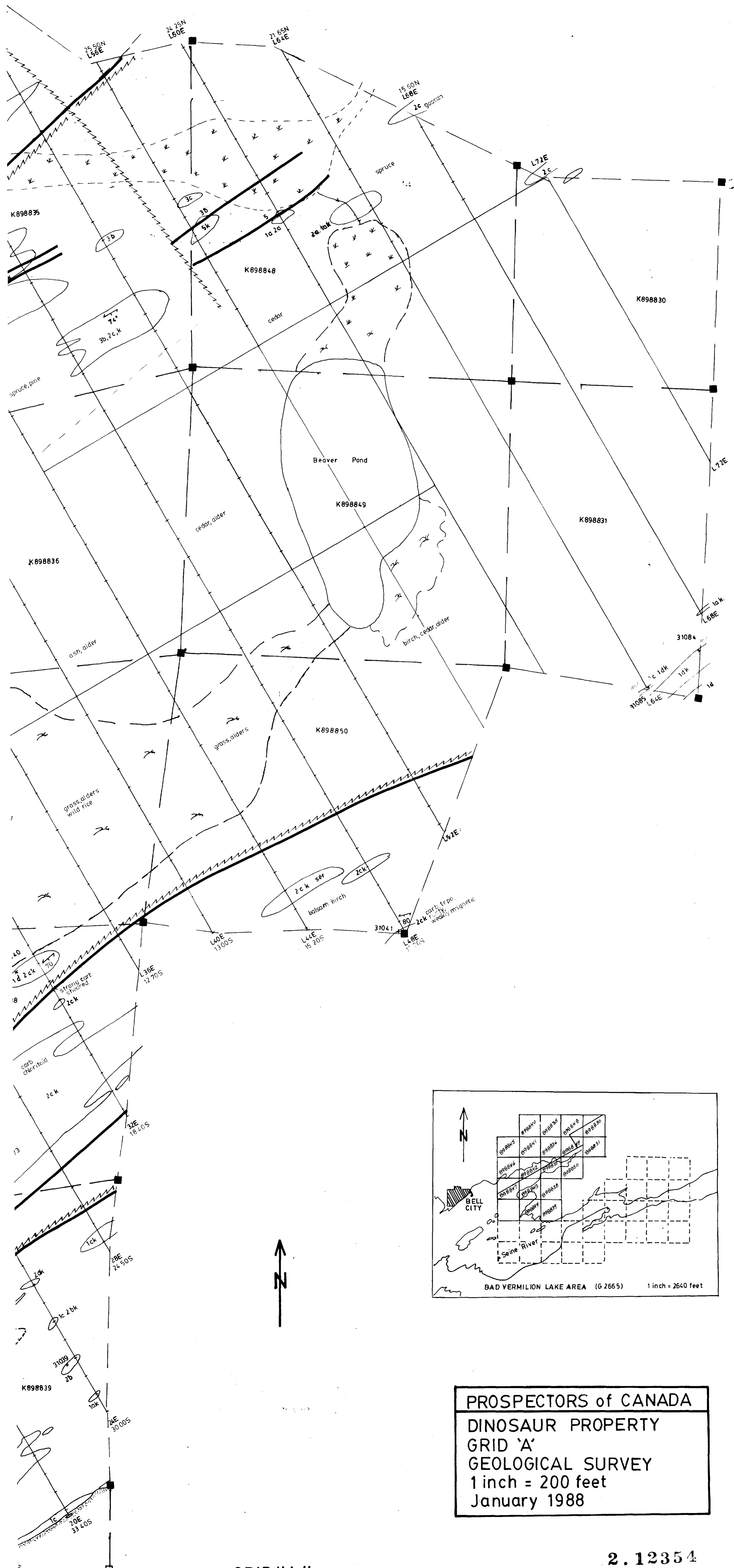
11











PROSPECTORS of CANADA  
 DINOSAUR PROPERTY  
 GRID 'A'  
 GEOLOGICAL SURVEY  
 1 inch = 200 feet  
 January 1988

GRID "A"  
 Baseline 60° Astro

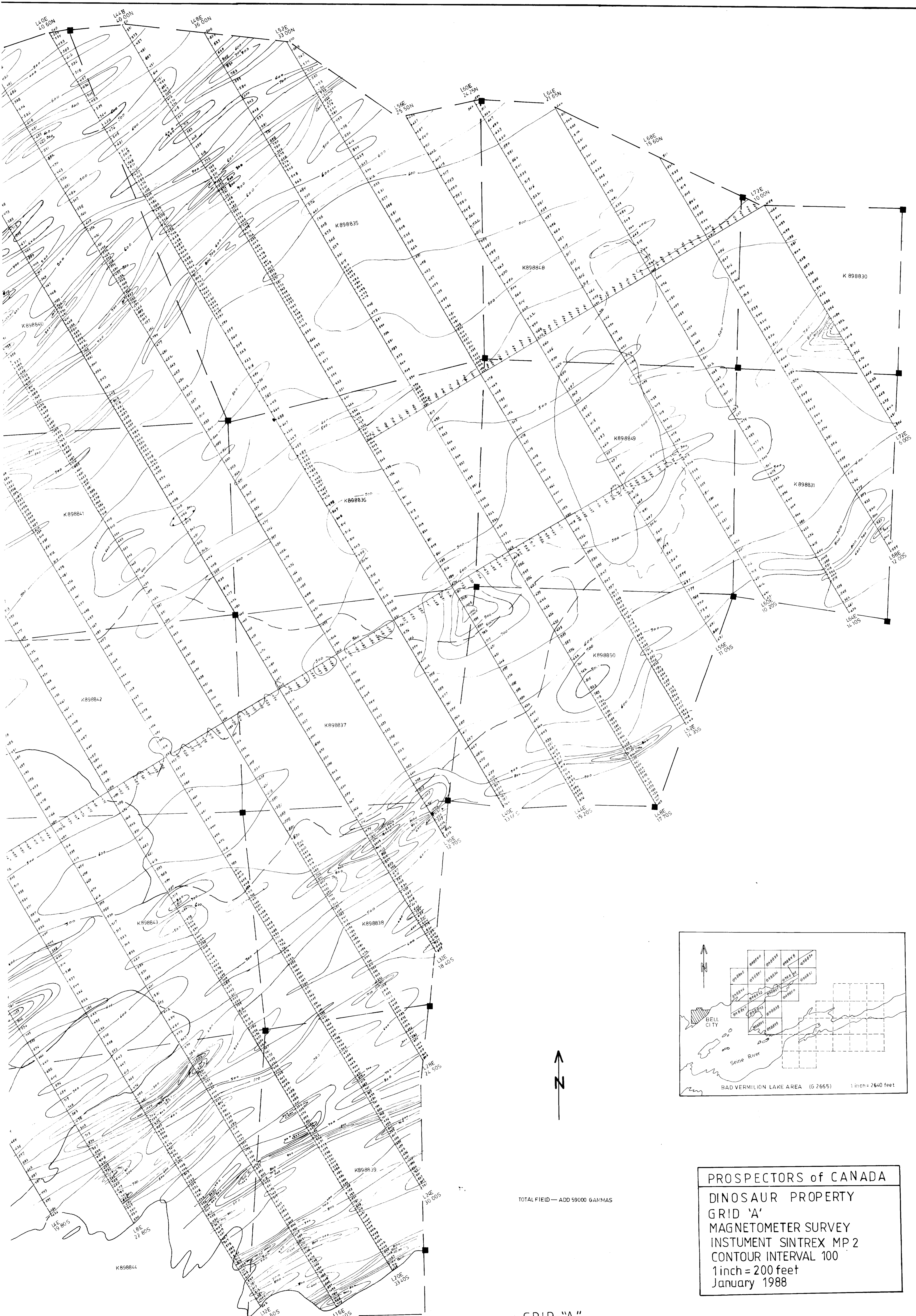
2.12354



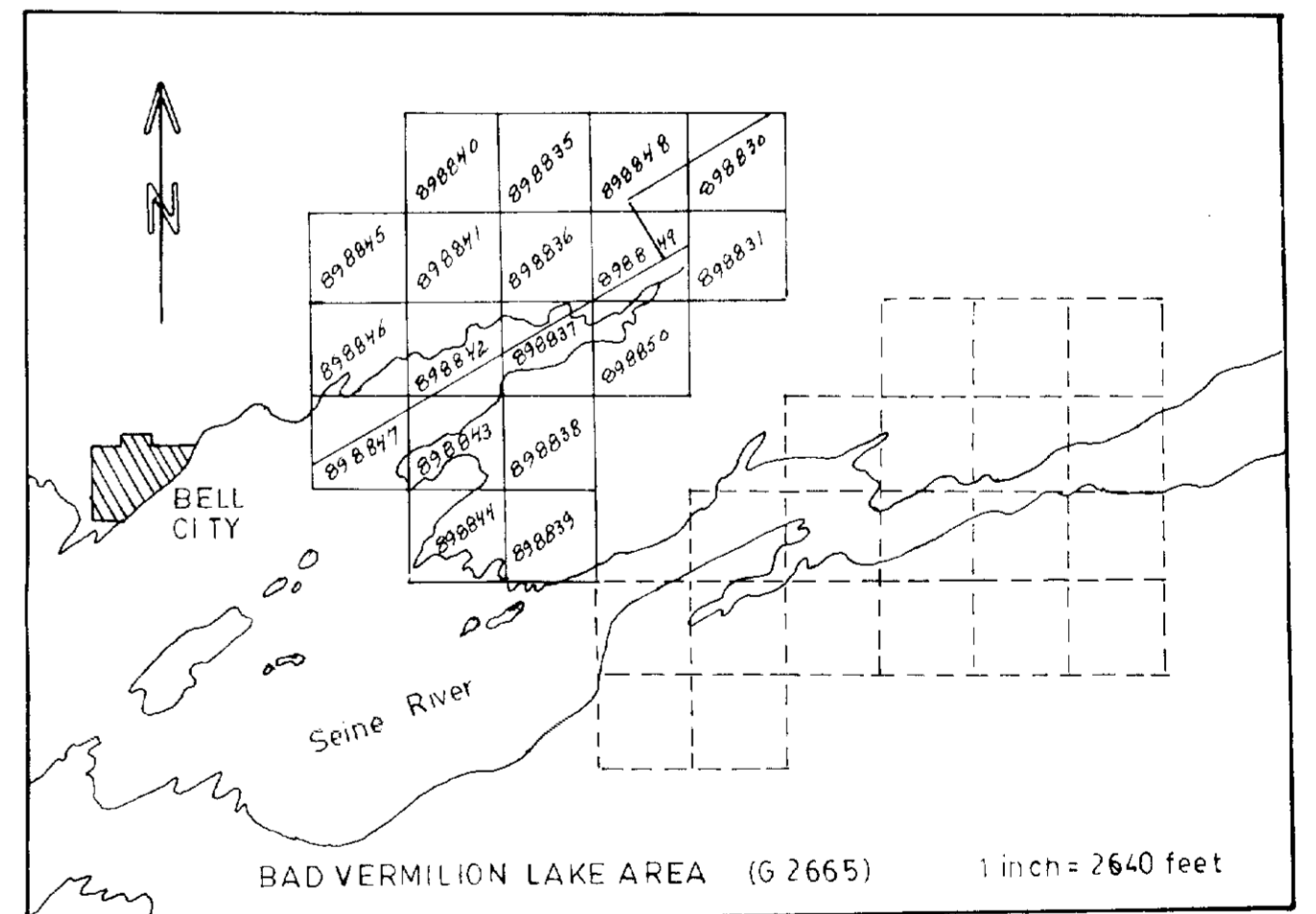
PROSPECTORS of CANADA  
 Horizontal EM Survey  
 McPHAR VHEM Model 660  
 1200cps, coil separation 200 ft.  
 In Phase ———  
 Out Phase - - - -  
 1inch=20%  
 1inch=200 ft. **2.12354**  
 February 19 88

■ OPEN WATER  
 x SWAMP  
 ■ CLAIM POST  
 BASE LINE 72° ASTRO





TOTAL FIELD — ADD 59000 GAMMAS



PROSPECTORS of CANADA  
 DINOSAUR PROPERTY  
 GRID 'A'  
 MAGNETOMETER SURVEY  
 INSTRUMENT SINTREX MP 2  
 CONTOUR INTERVAL 100  
 1 inch = 200 feet  
 January 1988

GRID "A"  
 Baseline 60° Astro

2. 12354