



52E10NW9479 2.12299 ECHO BAY

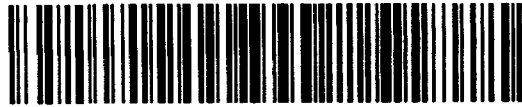
010

BOND GOLD CANADA INC.

**Report on a Geophysical Survey
Pogson Option Property
Claim Nos: K856177-185 Incl.;
K897175-178 Inc.;
K895936 and 937.**

**Shoal Lake, Northwestern Ontario
Kenora Mining Division
NTS Sheet No.: 52E/10SW**

**RECEIVED
MAR 30 1989
MINING LANDS SECTION**



52E10NW9479 2.12299 ECHO BAY

010C

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**Report on a Geophysical Survey
Pogson Option Property**

Kenora Mining Division

PART A

A. INTRODUCTION:

The following is a report on a VLF-EM geophysical survey carried out by Bond Gold Canada Inc. (formerly St. Joe Canada Inc.) between June 1 - July 5, 1987 on claims K856177-185 incl., K897175-178 incl., K895936 and 937, a part of the Pogson Option Property.

i) Property: Description, Location and Access:

The Pogson Option Property encompasses 52 contiguous unpatented mining claims totalling 841 hectares, located 60km west of Kenora, 10km south of the Trans-Canada Highway, Glass Township in the Shoal-Echo Lakes area of northwestern Ontario. The property is within NTS Quadrangle 52E/10SW and the claims are recorded on the Echo Bay and Boys Twp. claim map G Plan 2616 (see Figures 1 and 2).

Access is afforded by the Clytie Bay Road which crosses the property connecting Shoal Lake with the Trans-Canada Highway. A powerline passes through the claims.

All of the claims are registered in the name of:

Bond Gold Canada Inc.
20 Adelaide St. E.
Suite 1100
Toronto, Ontario
M5H 2J4

In 1987, the property was optioned from Messrs. Pogson and Currie.

B. HISTORY:

Previous work includes trenching and sampling by Mr. Pogson in 1985-86 over a number of known showings on the property. Several short strike length, satellite and formational HLEM conductors with coincident magnetic anomalies were identified over the northern half of the claims by Selco during their 1983 base metal reconnaissance program. A number of the anomalies were drill tested with results unknown. In 1985, Homestake Mineral Development Company carried out an airborne survey which covered the present Pogson property. A number of bedrock conductors were identified and remain to be drill tested.

St. Joe Canada Inc.
 POGSON OPTION PROPERTY
 CLAIM MAP

0.5 MILES

CLAIM BOUNDARY

AREA COVERED
 BY SURVEY

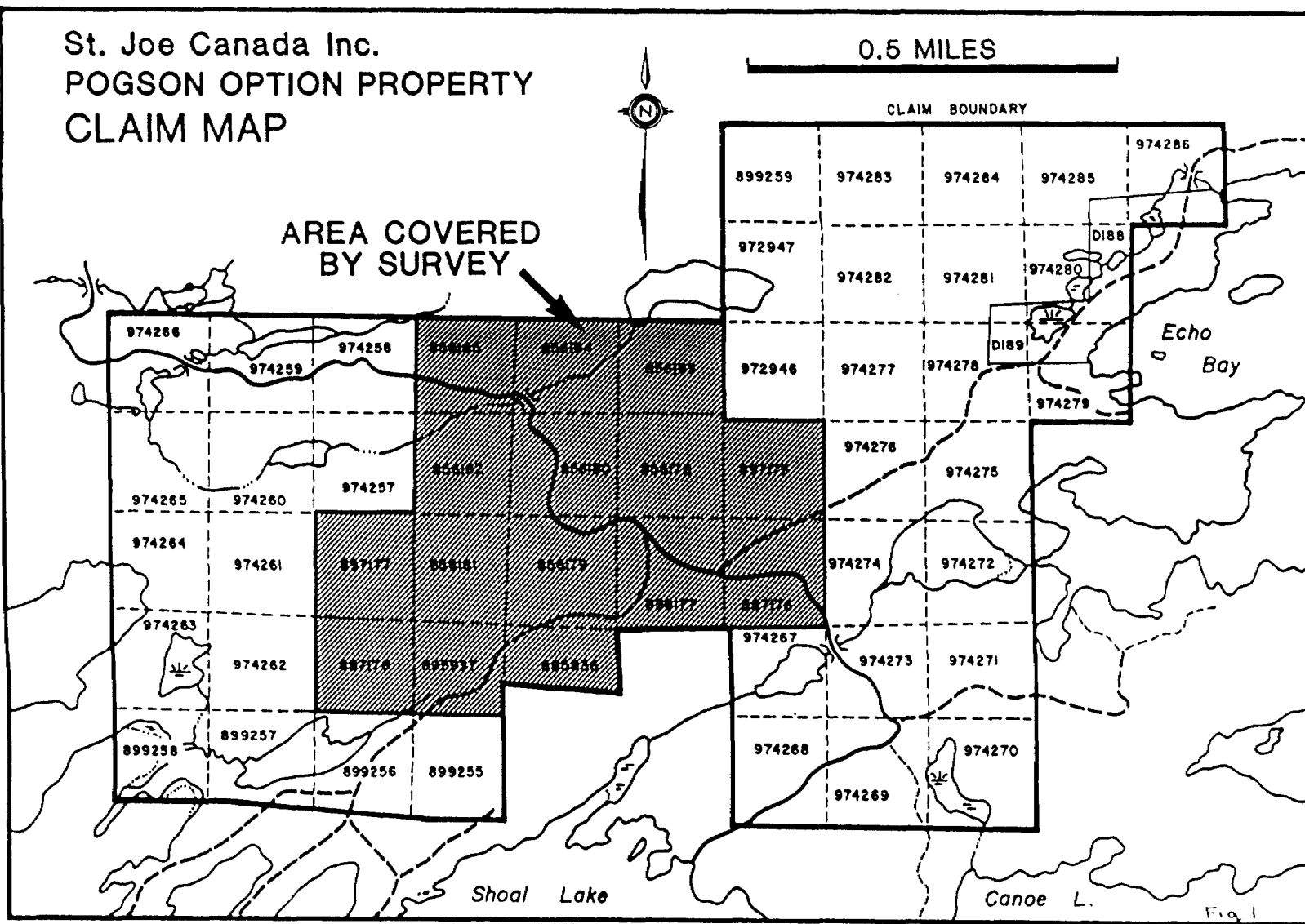
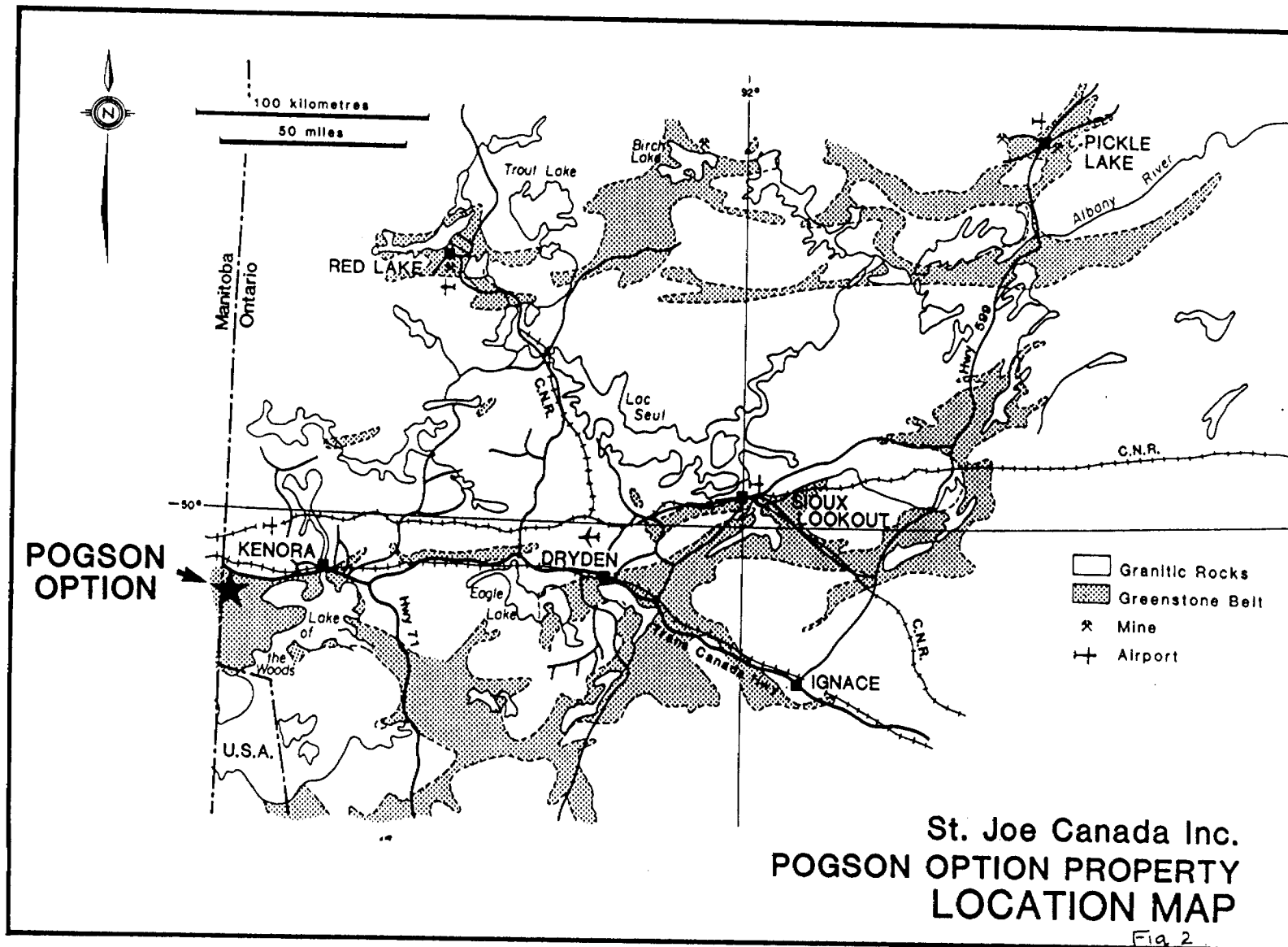


Fig. 1



St. Joe Canada Inc.
 POGSON OPTION PROPERTY
 LOCATION MAP

Fig. 2

C. GENERAL GEOLOGY:

The property is located in the western portion of the Wabigoon Sub-province of the Precambrian Shield. It is underlain by a variable, alternating sequence of north-dipping, east-west striking intermediate and felsic cal-alkaline metavolcanic flows and tuffs and narrow clastic sedimentary units which have been intruded by laterally extensive gabbro sills over the northern one-third of the property and by a prominent granitoid intrusive in the southeastern portion of the claims. The rocks have been pervasively sheared along the Shoal Lake deformation zone which represents a southwesterly splay off the Crowduck-Witch Bay regional fault zone.

D. GEOPHYSICAL SURVEY RESULTS:

The survey was carried out between June 1 - July 5, 1987 by:

Kevin Leonard
886 Tanager Avenue
Burlington, Ontario
L7T 2Y2

Bruce Fagan
R.R. #4
Coldwater, Ontario
LOK 1E0

Data from the VLF-EM geophysical survey have been plotted on Plan 1, located in the back pocket of the report.

A baseline oriented at 80° (BSL20N) was cut and picketed at 25m intervals. In addition, an overgrown existing grid was re-established and expanded, re-chained in metric and picketed every 25m. The baseline (BSL20S) is oriented at 64° and crosslines spaced approximately 122m apart trend at right angles (154°) to the baseline. The survey was completed at a scale of 1:2500.

The claims were surveyed, using a Geonics EM16R instrument at a frequency of 24KHZ, utilizing the Cutler, Maine station.

The purpose of the VLF-EM survey was to follow-up on the results of the 1983 Selco geophysical survey in order to precisely determine the location of their short strike length HLEM conductors and to delineate extensions to the Pogson shear zone outlined previously by prospecting and trenching.

The survey was successful in delineating the Selco HLEM anomalies. The most conspicuous anomaly is the formational conductor which lies north of the baseline between lines 36W and 29W. The anomaly weakens under swamp cover to the west (Plan 1). The eastern portion of the conductive response appears to separate into two narrow parallel conductors.

Mapping concomitant with the geophysical survey has explained the anomaly as sulphidized, graphite-bearing tuffaceous sediments (Plan 1).

A weak VLF-EM anomaly corresponds to the trenched portion of the Pogson shear zone. However, the survey was unable to trace the shear zone beyond where it has been identified in outcrop.

Two short strike length conductors were relocated about 300m north of the formational conductor. The westerly anomaly extends from line 29W to 31W and relates to the sequence of intermediate pyroclastics and mafic pillowed flows. The easterly conductor lies south of a small unnamed lake in the vicinity of line 25W. It appears to be spatially associated with the contact between felsic to intermediate pyroclastic and mafic intrusive (e.g. gabbro) rocks (Plan 1).

Additional east-west zones of conductivity coinciding with swampy areas and/or topographic depressions are interpreted to be caused by conductive overburden.

Recommendations

An induced polarization survey is recommended over the prospective VLF-EM anomalies prior to a 1,000m drill program. The drilling will also be used to test the down dip/along strike potential of the Pogson shear zone.

REFERENCES

Davies, J.C., 1978:

Geology of Shoal Lake - Western Peninsula Area, District of Kenora. Ontario Geological Survey Open File Report 5242, 131p.

Davies, J.C. 1965:

Geology of High Lake - Rush Bay Area, District of Kenora. Ontario Geological Survey Open File Report No. 41, 57p.

Davies, J.C. and Smith, P.M., 1984:

The structural and stratigraphic control of gold in the Lake of the Woods area. pp. 185-193, in Summary of Field Work and Other Activities 1984, by the Ontario Geological Survey, edited by John Wood, Owen L. White, R.B. Barlow, and A.C. Colvine, Ontario Geological Survey Miscellaneous Paper 119, 309p.

Smith, L.G., 1923:

Report on the "Mikado" Mine, unpublished report, Regional Geologists Office, Kenora. 20p.

Smith, P.M., 1986:

Duport, A structurally controlled gold deposit in northwestern Ontario, Canada. pp. 197-212, in A.J. Macdonald, ed., Proceedings of Gold '86, an International Symposium on the Geology of Gold: Toronto, 1986. 517p.

Smith, P.M. and Thomas, D.A., 1986:

Interrelationship of gold mineralization and the Canoe Lake stock, northwestern Lake of the Woods area. pp. 242-252, in Summary of Field Work and Other Activities 1986, by the Ontario Geological Survey, edited by P.C. Thurston, Owen L. White, R.B. Barlow, M.E. Cherry, and A.C. Colvine, Ontario Geological Survey miscellaneous Paper 132, 435p.

APPENDIX 1

CERTIFICATE

CERTIFICATE

I, Kevin Leonard, of the City of Burlington, Province of Ontario, do hereby certify that:

1. I reside at 886 Tanager Avenue, Burlington, Ontario.
2. I have worked as a geologist for the last ten years.
3. I am a graduate of McMaster University with an Honours Degree (1978) in Geology.
4. I am a member of the Prospectors and Developers Assoc. of the Canadian Institute of Mining and Metallurgy, and of the Geological Association of Canada.
5. I helped carry out the geophysical survey. The map preparation was done under my supervision. I have written the report.


Kevin Leonard

DATED AT TORONTO this 25th day of March, 1989

APPENDIX II

TECHNICAL DATA STATEMENT



Ministry of Natural Resources

File _____

GEOPHYSICAL - GEOLOGICAL - GEOCHEMICAL
TECHNICAL DATA STATEMENT

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

Type of Survey(s) Ground Geophysical - EM
Township or Area Echo and Boys Twp. G2616
Claim Holder(s) Bond Gold Canada Inc.

Survey Company Bond Gold Canada Inc.
Author of Report Kevin Leonard
Address of Author 886 Tanager Avenue, Burlington, Ont.
Covering Dates of Survey 01/06/87 - 05/07/87
(linecutting to office)
Total Miles of Line Cut 8

MINING CLAIMS TRAVERSED
List numerically

K	897175
(prefix)	(number)
	897176
	897177
	897178
	895936
	895937
	856177
	856178
	856179
	856180
	856181
	856182
	856183
	856184
	856185
TOTAL CLAIMS <u>15</u>	

If space insufficient, attach list

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	<u>20</u>
-Magnetometer	_____
-Radiometric	_____
-Other	_____
Geological	_____
Geochemical	_____

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

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

DATE: March 23/89 SIGNATURE: Kevin Leonard
Author of Report or Agent

Res. Geol. _____ Qualifications 2.5133

Previous Surveys

File No.	Type	Date	Claim Holder

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations _____ Number of Readings _____

Station interval _____ Line spacing _____

Profile scale _____

Contour interval _____

MAGNETIC

Instrument _____

Accuracy - Scale constant _____

Diurnal correction method _____

Base Station check-in interval (hours) _____

Base Station location and value _____

ELECTROMAGNETIC

Instrument EM16B VLF-EM

Coil configuration _____

Coil separation _____

Accuracy Resistivity: ± 2% full scale; Phase: ± 0.5%

Method: Fixed transmitter Shoot back In line Parallel line

Frequency 15-25 KHZ VLF Radio Band - Cutter
(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 _____

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 _____



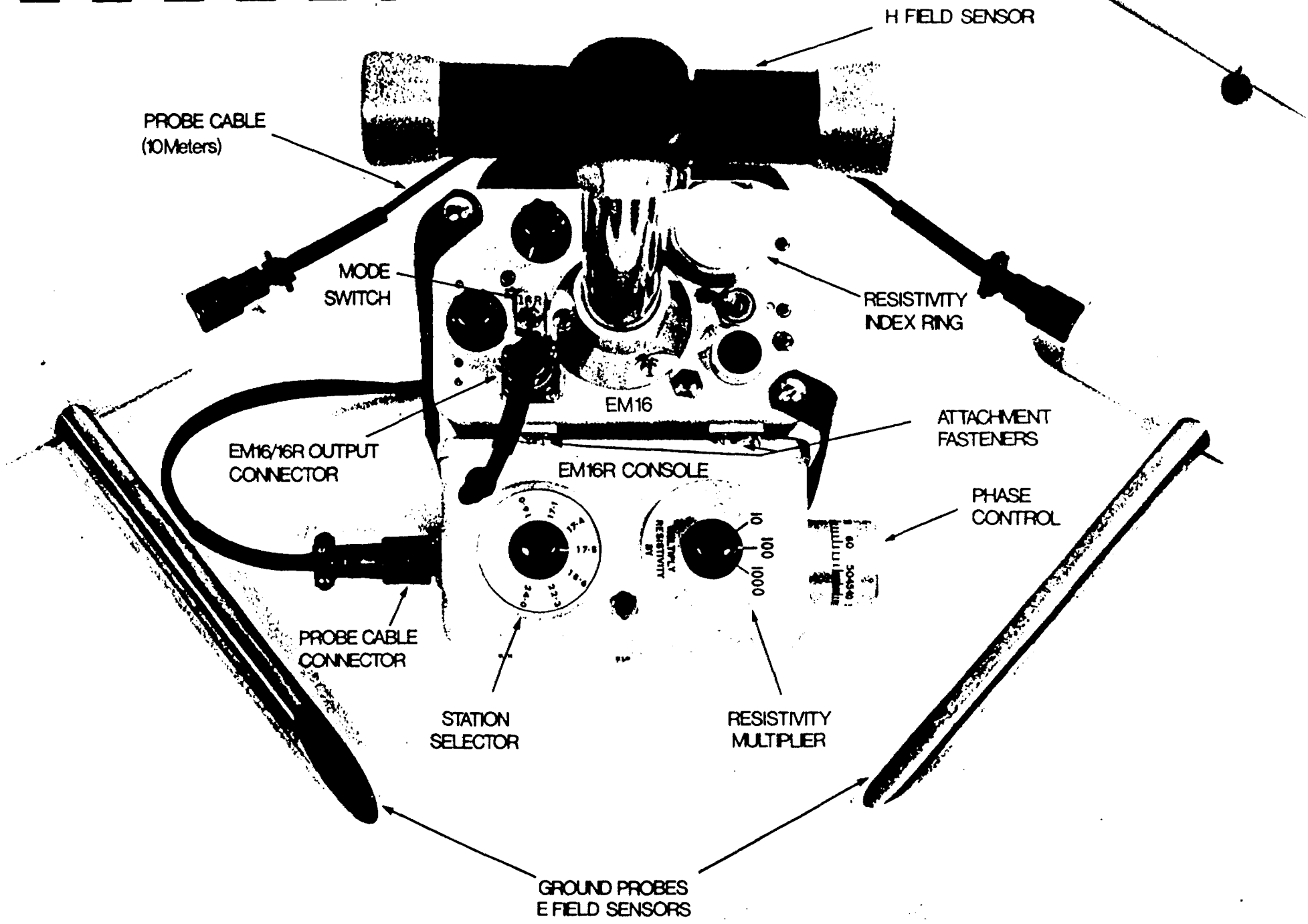
GEONICS LIMITED

1745 Meyerside Drive, Unit 8, Mississauga, Ontario, Canada L5T 1C5 Tel. (416) 676-9580 Cables: Geonics

OPERATING MANUAL
for
EM16R VLF RESISTIVITY METER
(Attachment to EM16)

EM16R SPECIFICATIONS

MEASURED QUANTITY	• Apparent Resistivity of the ground in ohm-meters • Phase angle between E_x and H_y in degrees
RESISTIVITY RANGES	• 10 - 300 ohm-meters • 100 - 3000 ohm-meters • 1000 - 30000 ohm-meters
PHASE RANGE	0-90 degrees
RESOLUTION	• Resistivity: $\pm 2\%$ full scale • Phase : $\pm 0.5^\circ$
OUTPUT	Null by audio tone. Resistivity and phase angle read from graduated dials.
OPERATING FREQUENCY	15-25 kHz VLF Radio Band. Station selection by means of rotary switch.
INTERPROBE SPACING	10 meters
PROBE INPUT IMPEDANCE	100 M Ω in parallel with 0.5 picofarads
DIMENSIONS	19 x 11.5 x 10 cm. (attached to side of EM16)
WEIGHT	1.5 kg (including probes and cable)



H FIELD SENSOR

PROBE CABLE
(10Meters)

MODE
SWITCH

RESISTIVITY
INDEX RING

EM16

ATTACHMENT
FASTENERS

EM16/16R OUTPUT
CONNECTOR

EM16R CONSOLE

PHASE
CONTROL

PROBE CABLE
CONNECTOR

STATION
SELECTOR

RESISTIVITY
MULTIPLIER

GROUND PROBES
E FIELD SENSORS

L-75 MW

L-50 MW

L 10 MW

L-20 ME

L-50 ME

L-110 ME

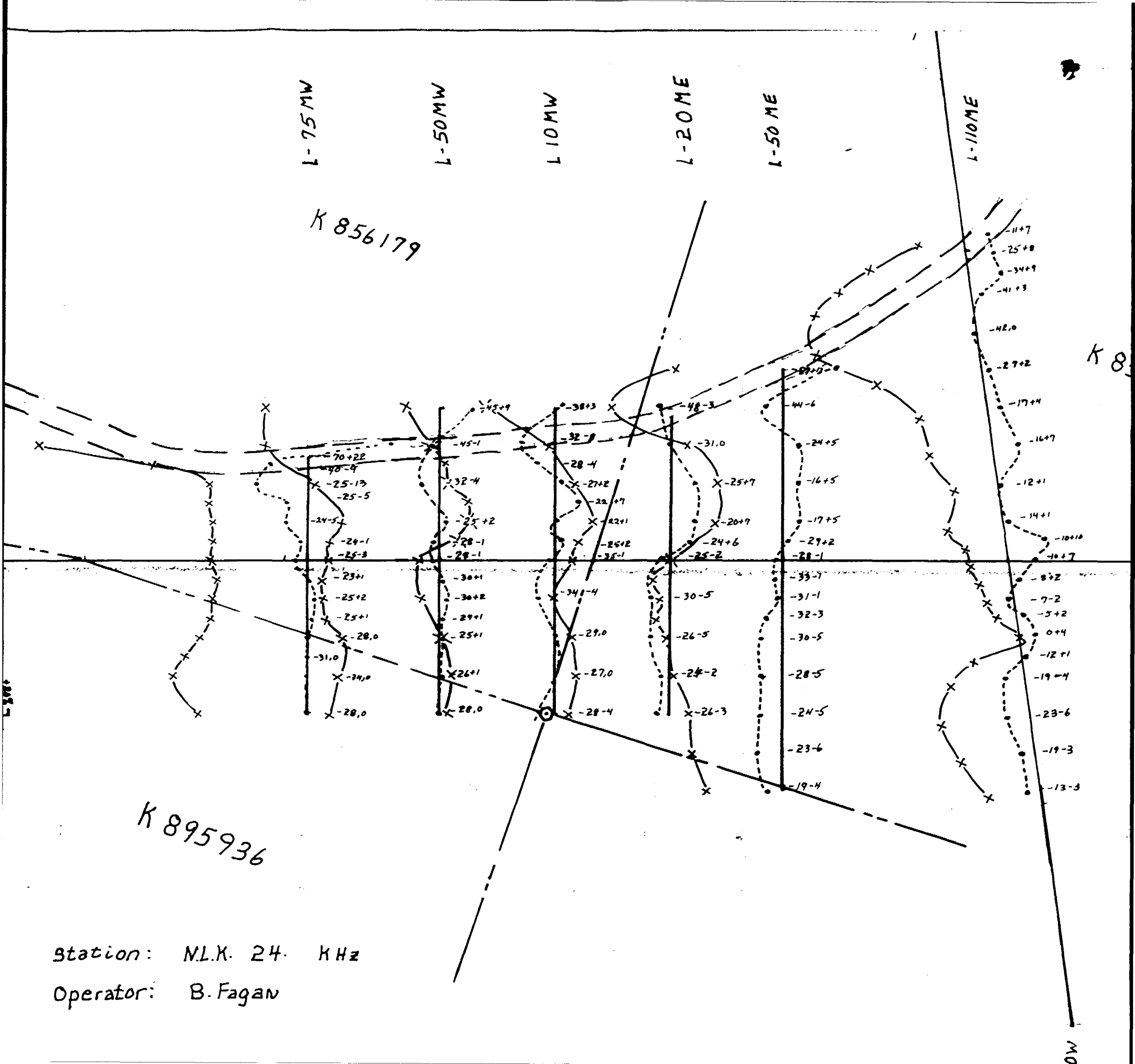
K 856179

K 8

K 895936

Station: MLK. 24. KHz

Operator: B. Fagan



L-20ME

L-50ME

L-110ME

L-29W

K 856177

Trench Line

2.12299

ST JOE CANADA INC

POGSON OPTION

V.L.F. EM SURVEY

Kevin Leonard

Shoal Lake Ontario

Scale:	Drawn By:	Date:	N.T.S. Ref
1cm=10m	B. Fagan	June 1987	52 E 1

W0



Ministry of
Northern Development
and Mines
Ontario

Report of Work

(Geophysical, Geological,
Geochemical and Expenditure)



52E10NW9479 2.12299 ECHO BAY

900

Name of Survey(s)

2.12299

Claim Holder(s)

Ground Geophysical - EM

Glass/Echo Bay/Boys

Address

Bond Gold Canada Inc.

Prospector's License No

T-3608

Survey Company

1100-20 Adelaide St E Toronto Ontario

MSC 2TB

Name and Address of Author (of Geo Technical report)

Bond Gold Canada Inc.

Date of Survey (from & to)
01 Day | 06 Mo | 87 Yr | 07 Day | 08 Yr

Total Miles of line Cut

15

Kevin Leonard, 886 Tanager Avenue Burlington Ontario L7T 2Y2

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	20
For each additional survey: using the same grid: Enter 20 days (for each)	- Magnetometer	
	- Radiometric	
	- Other	
	Geological	
	Geochemical	
Man Days	Geophysical	Days per Claim
Complete reverse side and enter total(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 Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
Prefix	Number		Prefix	Number	
K	897175				
	897176				
	897177				
	897178				
	895936				
	895937				
	856177				
	856178				
	856179				
	856180				
	856181				
	856182				
	856183				
	856184				
	856185				

Expenditures (excludes power stripping)

Type of Work Performed: GEOLOGICAL SURVEY ASSESSMENT FILES OFFICE

Performed on Claim(s): APR 6 1989

Calculation of Expenditure Days Credits

Total Expenditures: \$ ÷ 15 =

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.

Total number of mining claims covered by this report of work: 15

856177

For Office Use Only

Total Days Cr. Recorded: 300

Date Recorded: 89 FEB 6

Date Approved as Recorded: April 89

Mining Recorder: [Signature]

Branch Director: [Signature]

Date: Jan 24/89

Recorded Holder or Agent (Signature): [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: Kevin Leonard 886 Tanager Ave Burlington Ont L7T 2T2

Date Certified: Jan 24/89

Certified by (Signature): [Signature]

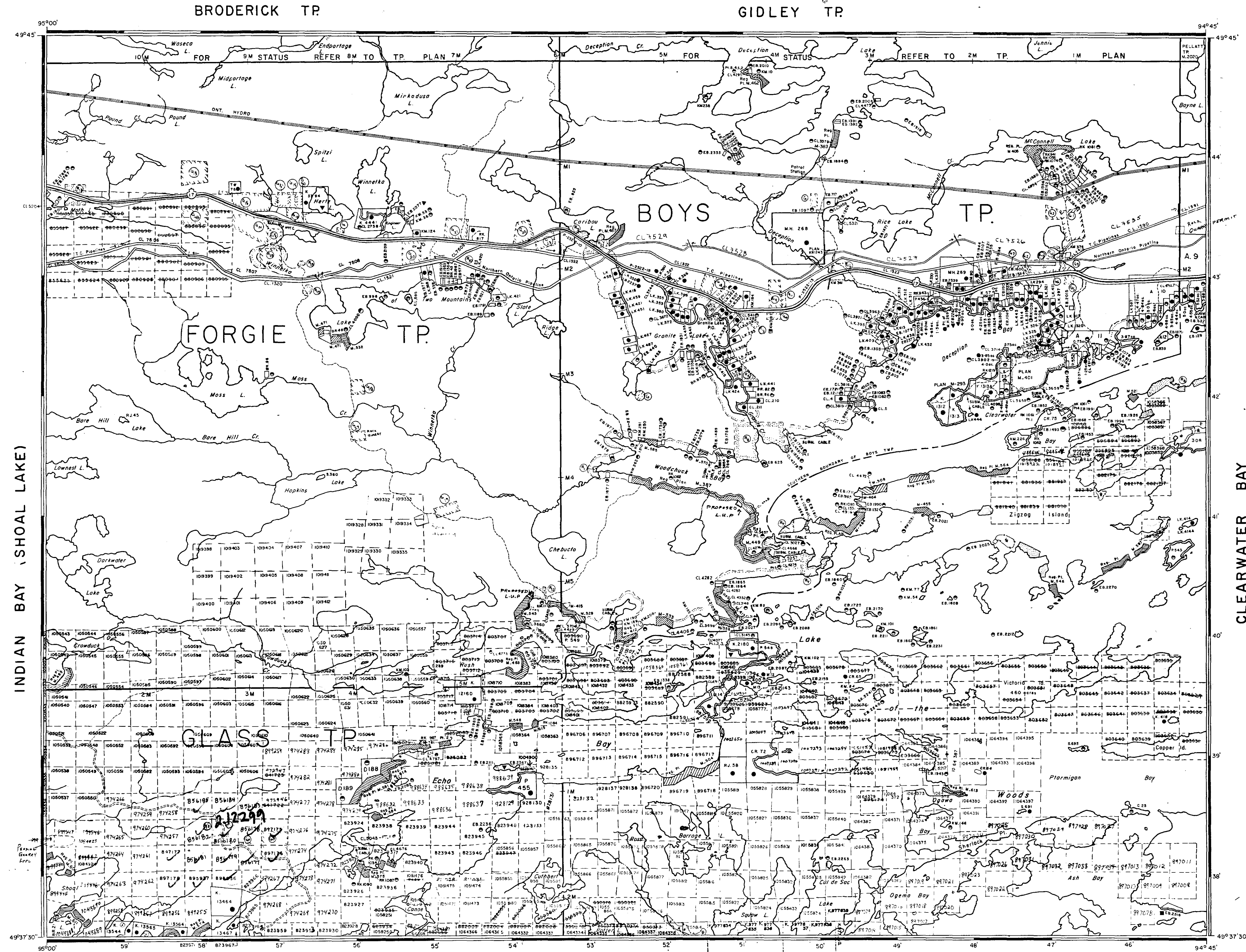
NOTES

RESERVE FLOODING RIGHTS TO CONTOUR 1064' ON ALL LANDS BORDERING ON LAKE OF THE WOODS.

400' SHOWN THUS S.R.O. RESERVED TO M.N.R. FILE 163473

AREAS WITHDRAWN FROM DISPOSITION

Description	Order No.	Date	Disposition	File
M.N.R. RESERVE	S.R.O.	77094 vol.5		
CROWN RESERVE	S.R.O.	163473		
M.T.C. RESERVE		83811		
CROWN RESERVE	S.R.O.	163473		
PUBLIC RESERVE	S.R.O.	122182		
CROWN RESERVE	S.R.O.	77094 vol.6		
CROWN RESERVE	S.R.O.	163473 vol.1		
PUBLIC USE RESERVE	S.R.O.	163473 vol.2		
TOWER RESERVE		99852		
CROWN RESERVE	S.R.O.	179645		
SEC. 43/70	W.65/76	19/11/76	S.R.O.	188521
SEC. 36/80	W.20/83	9/8/83	M.B.S.	188521
SEC. 36/80	W.2/85	21/8/85	M.B.S.	18855
SEC. 36/80	W.63/86	13/8/86	M.B.S.	18855
PUBLIC RESERVE				188555



INDIAN BAY (SHOAL LAKE)

CLEARWATER BAY

LEGEND

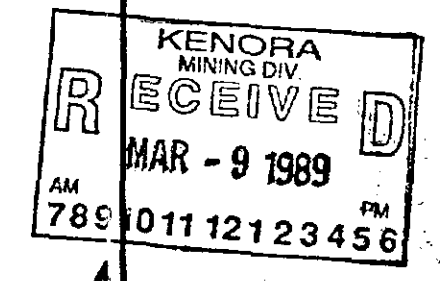
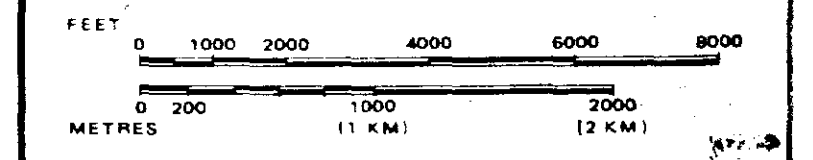
- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES:
 - TOWNSHIPS, BASE LINES, ETC.
 - LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES:
 - LOT LINES
 - PARCEL BOUNDARY
 - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION OR COMPOSITE PLAN RESERVATIONS
- ORIGINAL SHORELINE
- MARSH OR MUSKIEG
- 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	
RESERVATION	
CANCELLED	
SAND & GRAVEL	

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

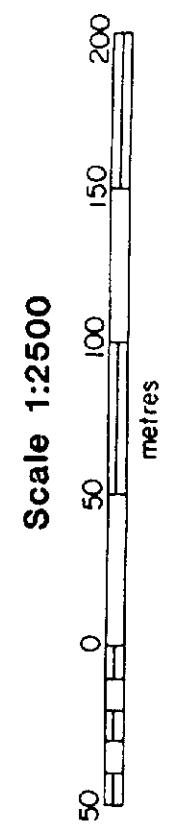
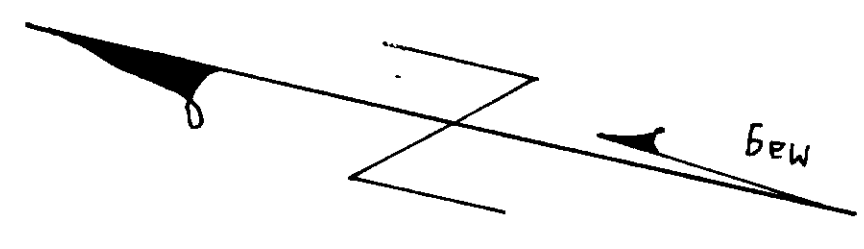
SCALE: 1 INCH = 40 CHAINS



AREA
ECHO BAY
 M.N.R. ADMINISTRATIVE DISTRICT
 KENORA
 MINING DIVISION
 KENORA
 LAND TITLES / REGISTRY DIVISION
 KENORA

Ministry of Natural Resources Ontario
 Ministry of Northern Development and Mines

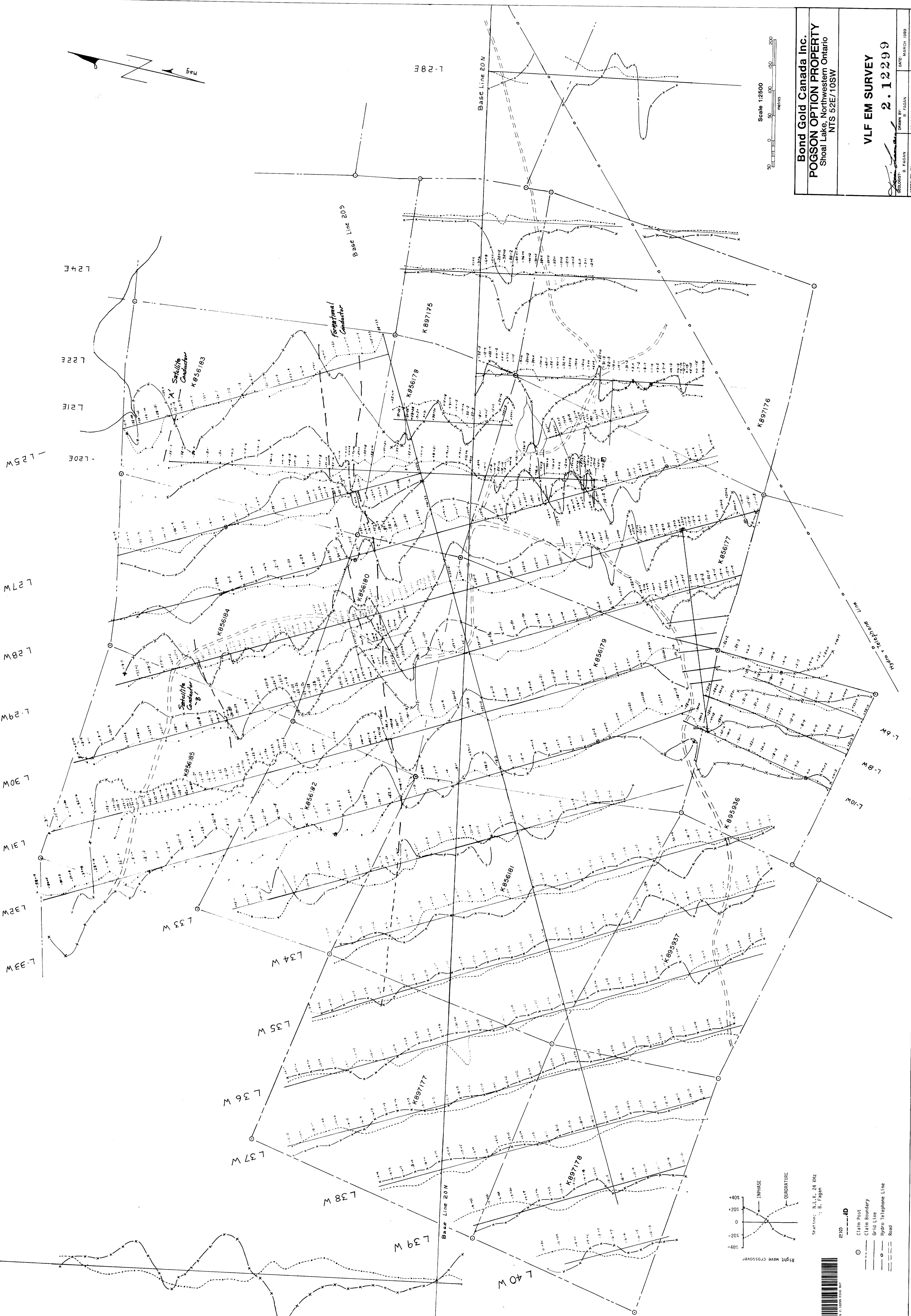
Date JANUARY, 1987
 Number
 1949
G-26



Bond Gold Canada Inc.
POGSON OPTION PROPERTY
 Shoal Lake, Northwestern Ontario
 NTS 52E/10SW

VLF EM SURVEY
2.12299

APPROVED BY: [Signature] DATE: MARCH 1989
 DRAWN BY: B. FAGAN
 GEOLOGIST: [Signature] REVISED BY: X. LEONARD
 MAP NO:



Station: N.L.C. 24 102
 : B. Fagan

