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#### BOND GOLD CANADA INC.

Report on a Geology Survey Pogson Option Property Claim Nos: K899255 - 259 incl; K972946 and K972947; K974257 - 286 incl; Shoal Lake, Northwestern Ontario Kenora Mining Division NTS Sheet No. 52E/108W

# RECEIVED

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MINING LANDS SECTION



52E10NW9474 2.12298 ECHO BAY

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#### Report on a Geology Survey Pogson Option Property

#### Kenora Mining Division

#### PART A

#### A. <u>INTRODUCTION</u>:

The following is a report on a mapping survey carried out by BOND GOLD CANADA INC. (formerly St. Joe Canada Inc.) between June 1 - July 5, 1987 on claims K899255-259 incl., K972946 and K972947; K974257-286 inclusive, 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 Toys 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.

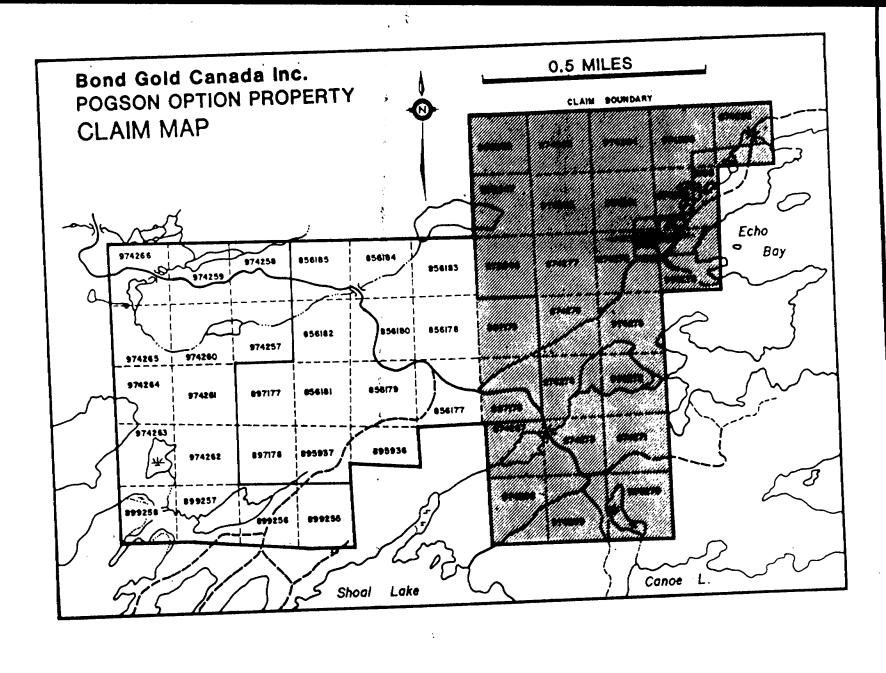
All of the claims are registered in the name of:

BOND GOLD CANADA INC. #1100 - 20 Adelaide Street, East Toronto, Ontario M5C 2W9

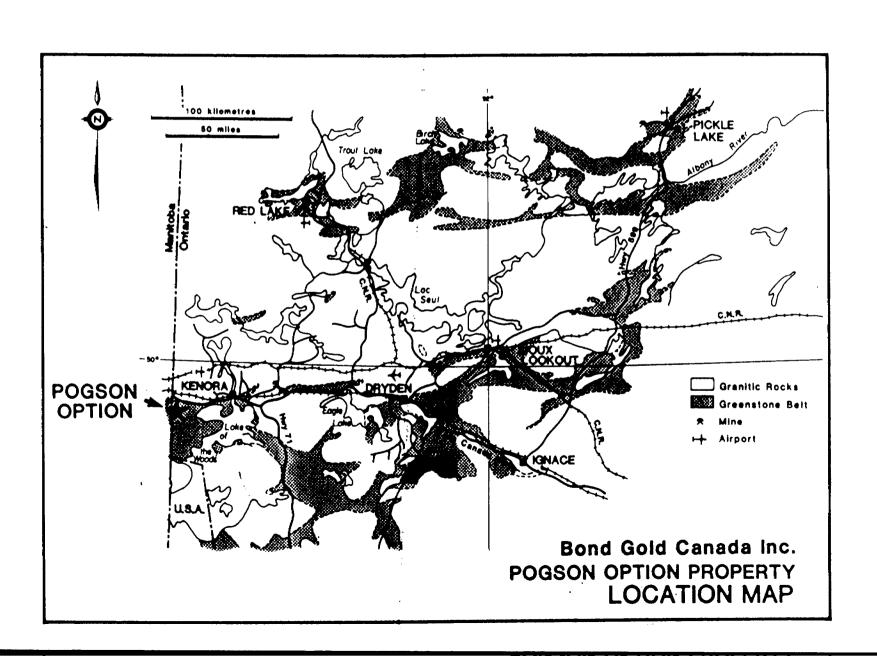
In 1987, the property was optioned from Messrs. Pogson and Currie.

#### 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.



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#### C. <u>GENERAL GEOLOGY</u>:

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 calc-alkaline metavolcanic flows and tuffs and narrow clastic sedimentary units which have been intruded by laterally extensive gabbro sills over the northern 1/3 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. <u>MAPPING SURVEY</u>:

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

Kevin Leonard 886 Tanager Avenue Burlington, Ontario L7T 2Y2

Pavel Vasak 8-750 Burnhamthorpe Road Mississauga, Ontario L4Y 2X3 Bruce Fagan R.R. #4 Coldwater, Ontario LOK 1E0

Karen McInnis 229 Rusholme Road Apt. #101 Toronto, Ontario M6H 2Y9

Jeff McGolrick 3077 Oliver Road Thunder Bay, Ontario P7B 6C2

Data from the mapping survey have been plotted on Plans 1 and 2, 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 reestablished and expanded, re-chained in metric and picketed every 25m. The baseline (BSL205) 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.

#### (i) <u>Poqson Option Claims Geology</u>:

The claims are underlain by a varied sequence of mafic to felsic volcanic flows and tuffs that have been intruded on the north by mafic (e.g. gabbro) intrusive rocks and on the south by a multiphased felsic intrusive (e.g. porphyritic granodiorite, quartz-feldspar porphyry) stock. Arkose and graphitic cherty argillite represent metasedimentary units which form narrow, repetitious horizons within the felsic volcanic sequence.

Mafic volcanic tuffs and pillowed flows occupy the northern margin as well as the southeast corner of the claims area. These rocks strike between 60° and 85°, dip steeply north and are characterized by a medium to fine-grained, well foliated fabric showing in some cases well developed pillow selvages. The tuffaceous phase of this sequence shows conspicuous light grey lapilli sized fragments set in a chloritized matrix. The mafic flows are commonly sheared to a chlorite-carbonate schist.

Gabbro outcrops along the northern one-third of the claims, forming sharp contacts on the north with mafic flows and tuffs and on the south with felsic pyroclastic rocks. This unit shows excellent lateral extent and has been traced on surface for about 2.8km. It dips steeply north and is periodically well mineralized with pyrite and pyrrhotite along its margins.

The southern two-thirds of the property is dominated by felsic pyroclastic and intrusive rocks. Their similar chemistry together with pervasive shearing (e.g. occupies the northern extension of the Duport deformation zone) makes differentiation of the two assemblages difficult in many areas.

The felsic volcanic rocks consist of bedded rhyolite, dacitic tuffs which are in part porphyritic and are for the most part sheared to a yellow-green coloured, fissile talc-quartz-sericite schist. As mentioned previously, modifying the felsic pyroclastic sequence are narrow bands (e.g. 0.5-5m wide) of cherty argillite that are defined by strong HLEM and VLF-EM responses.

The granodiorite porphyry and its equivalents form prominent, rugged outcrops in the vicinity of the powerline and along the southcentral part of the property. The intrusive shows conspicuous, vitreous quartz eyes (e.g. a few mm in diameter) embedded in medium-grained, light grey-green groundmass. The stock contains local concentrations of pyrite, galena, molybdenite, bismuthinite and rare visible gold.

Gold mineralization on the claims is hosted within sulphidized shear zones (e.g. the Pogson shear zone has been traced 150m) spatially associated along the margin of the granodiorite stock. Additional zones of mineralization have been found along lithological transitions between the gabbro and mafic volcanics and between gabbro and the felsic pyroclastics.

#### E. <u>RECOMMENDATIONS</u>:

It is recommended that 1,000m of diamond drilling be used to evaluate the gold potential of the Pogson shear zone as well as the favourable contact zone to the east between the granodiorite intrusive and the felsic pyroclastic sequence.

Submitted by:

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Kevin Leonard

Toronto, Ontario March 27, 1989

## SCHEDULE A

K974267
K974268
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K974286

#### F. 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.

#### <u>Smith, L.G., 1923:</u>

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, and International Symposium on the Geology of Gold: Toronto, 1986. 517p.

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#### 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.

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#### <u>Certificate</u>

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

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

a Longra Kévin Leonard

DATED AT TORONTO this 27th day of March., 1989.

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Ontario . Geophysical, Goological, Geophysical, Geophysic							
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Claim Holder (s)			22	90	I LCh	PLOSPECTON LICENCE NO	12
Bond Gold	i Canada	Inc				7-360	8
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Name and Address of Author to	of Geo Technical report)		~ ^ ~			tario L7T2	۲۵
Credits Requested per Each				Claims Traversed (			
Special Provisions	Geophysical	+ Days per , Claim	Prefix	Mining Claim Number	Expend. Days Cr.	Prefix Number	Expend Days Cr
For first survey	- Electromagnetic			974257		K 97427	
Enter 40 days. (This includes line cutting)	- Magnetometer		<b>  ^ ~</b>	974258		1 1 1 3	
For each additional survey.	Badiometric					97428	
using the same grid	Other	¥		974259		97428	
Enter 20 days (for each)	Geological		11	974260		97428	
	Geochemical	40		974261		97428	
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Complete reverse side	Geophysical	Claim		974263		974,28	I
and enter total(s) here	<ul> <li>Electromagnetic</li> </ul>			974264		97428	6
	<ul> <li>Magnetometer</li> </ul>	•		974265		89925	ь.
	- Radiometric	·	-	974266		89925	2
	- Other	· •		974267		89925	7
	Geological	+		974268	····	89925	8
	Geochemica!	<u> </u>		974269		89925	59
Airborne Crealits		Days per Claim		974270		97294	6
Note: Special provisions creduts do not apply	Electromagnetic			974271		97294	7
to Airborne Surveys	Magnetometer			974272			
	Radiometric	<u>'</u>		974273			
Expenditures (excludes pow Type of Work Performed	er stripping)			974274			
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Calculation of Expenditure Day Total Expenditures		Tota s Credits					
S		]	L		<b>،</b> ا	Total number of mining	l
Instructions			4	899255		claims covered by this report of work	37
Total Days Credits may be ap choice. Enter number of day				For Office Use O	nly		
in columns at right Total Days Cr. Date Recorded Mining Corder D. H							
Pate Rei	Date Recorded Holder or Agent (Signature) Bate Approved as Recorded Branch Director						
Darad/89 Javan 1480 See herries Statement							
Certification Venifying Repo		nowledge	t the factors	t forth in the Report	of Work appo	pri herria havina naite a	New the more
or witnessed same during and	For after its completion	-				aso nereto, naving periorn	ICC FHE WORFF
Name and Postal Address of Per	son Certitying	50		R-	1. ~ 1	Od LT	<u>โ</u> อто ]

George -



## 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) <u>Geological</u>		
Township or Area <u>Echo and E</u>	Boys Tp G2616	MINING CLAIMS TRAVERSED
Claim Holder(s) Bond Gold	Canada Inc.	List numerically
Survey Company Bond Gold	Canada Inc.	
Author of ReportKevin Leor	nard	(prefix) (number)
Address of Author 886 Tanage	er Avenue, Burlington, Ontario	
Covering Dates of Survey_June_	1 - July 5, 1987 (linecutting to office)	
Total Miles of Line Cut <u>30</u>		
SPECIAL PROVISIONS CREDITS REQUESTED	DAYS per claim	
	Geophysical	
ENTER 40 days (includes	Electromagnetic	
line cutting) for first	-Magnetometer	
survey.	-Radiometric	
ENTER 20 days for each	-Other	
additional survey using same grid.	Geological <u>40</u>	
0	Geochemical	
	vision credits do not apply to airborne surveys)	
	gnetic Radiometric	
DATE: March 25, 1989 SIGN	ATURE: Author of Report or Agent	
Res. GeolQual	lifications 2.5/33	
Previous Surveys		
File No. Type Date	Claim Holder	
	•••••••••••••••••••••••••••••••••••••••	
	•••••••••••••••••••••••••••••••••••••••	
		TOTAL CLAIMS37

**OFFICE USE ONLY** 

## GEOPHYSICAL TECHNICAL DATA

GROUND SURVEY	<u>S</u> If more than one survey, sp	ecify data for each ty	pe of survey	••
Number of Stations		Number of	of Readings	
	·····		-	
		-	-	
Contour interval				
Instrument				
Accuracy – Scale	constant			
Accuracy – Scale Diurnal correction Base Station chec	n method			
Base Station chec	k-in interval (hours)			
Base Station locat	tion and value			
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Instrument				
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Coil separation _				
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Corrections made				
Corrections made		· · · · ·		
Base station value	and location			·····
Elevation accurac	y	· · · · · · · · · · · · · · · · · · ·		
Instrument				
<u>Method</u> 🗌 Tim	ne Domain		requency Domain	
Parameters – On	time	F1	requency	
- Off	time	R	ange	
– Del	ay time			
- Inte	egration time			
– Off – Del – Del – Inte				
Electrode spacing	; <u></u>			
Type of electrode	9			

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 o	utcrop map)
OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)	
Type of survey	
Instrument	
Accuracy	
Parameters measured	
Additional information (for understanding results)	· · · · · · · · · · · · · · · · · · ·

<u>AIRBORNE ŞURVEYS</u>	
Type of survey(s)	
Instrument(s)(specify	for each type of survey)
Accuracy	for each type of survey)
Sensor altitude	
Navigation and flight path recovery method	
Aircraft altitude	Line Spacing
	Over claims only

## **GEOCHEMICAL SURVEY – PROCEDURE RECORD**

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Numbers of claims from which samples taken\_\_\_\_\_

otal Number of Samples	MALL METHODS				
ype of Sample(Nature of Material)	Values expressed in: per cent				
verage Sample Weight	p. p. m. □ p. p. b. □				
lethod of Collection	• •				
oil Horizon Sampled	Others				
lorizon Development	Field Analysis (tests)				
ample Depth	Extraction Method				
crrain					
	Reagents Used				
rainage Development	Field Laboratory Analysis				
stimated Range of Overburden Thickness					
	Extraction Method				
	Analytical Method				
	Reagents Used				
SAMPLE PREPARATION (Includes drying, screening, crushing, ashing)	Commercial Laboratory (tests)				
lesh size of fraction used for analysis	Name of Laboratory				
	Extraction Method				
	Analytical Method				
	Reagents Used				
eneral	General				
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### SCHEDULE A

K899255		
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K972946		
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				File
				2.12298
Date				Mining Recorder's Report of Work No.
	April	5,	1989	W8901-36

ECHO BAY AREA / BOYS TOWNSHIP	
Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic days	K 974257 to 259 incl. 974261-262
Magnetometer days	974264 974268 to 271 incl.
Radiometric days	974273 to 286 incl. 899255 to 259 incl.
Induced polarization days	972946
Other days	
Section 77 (19) See "Mining Claims Assessed" column	
Geological days	
Geochemical days	
Man days Airborne	
Special provision 🔀 Ground 🕅	
Credits have been reduced because of partial coverage of claims.	
Credits have been reduced because of corrections to work dates and figures of applicant.	
ecial credits under section 77 (16) for the following mining	
30 days geological K 974260 974263 974265 974267 972947	20 days geological K 974266 974272
o credits have been allowed for the following mining claims	
	ufficient 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; Geologocal - 40; Geochemical - 40; Section 77(19) - 60.

ntario	y
Ministry of Northern Development and Mines	Mining Lands Section 3rd floor, 880 Bay Street Toronto, Ontario M5S 1Z8
Ministère du Développement du Nord et des Mines	Telephone: (416) 965-4888
May 8, 1989	Your file: W 8801-36 Our file: 2.12298
Mining Recorder Ministry of Northern Development and Mines 808 Robertson Street P.O. Box 5200 Kenora, Ontario P8N 3X9	MAY 1.9 1989
Dear Sir:	RECEIVED

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 R.m. RM:eb Enclosure

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

> K. Leonard Burlington, Otnario

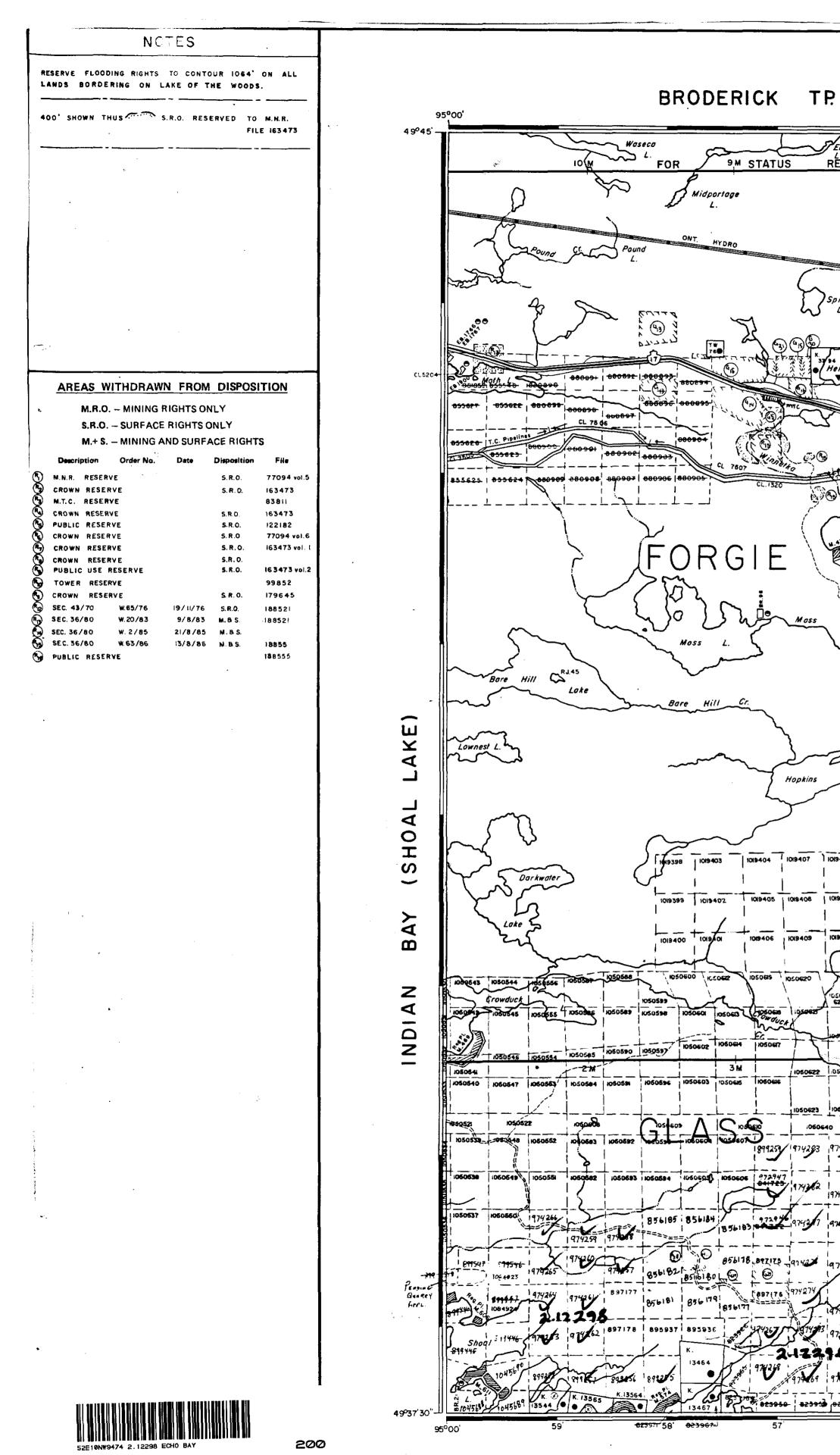
Resident Geologist Kenora, Ontario

Bond Gold Canada Inc. Toronto, Ontario 2.122 98

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SP Endportage

9,M STATUS

