

REPORT

ON THE

GEOLOGICAL MAPPING PROGRAMME

WANAPITEI LAKE PROPERTY

RATHBUN TOWNSHIP

ONTARIO

FOR

GOLD'OR MINING CORP

RECEIVED

NOV 7 1988

MINING LANDS SECTION

L.D.S. Winter

B.A.Sc., M.Sc., F.G.A.C.

October 28, 1988

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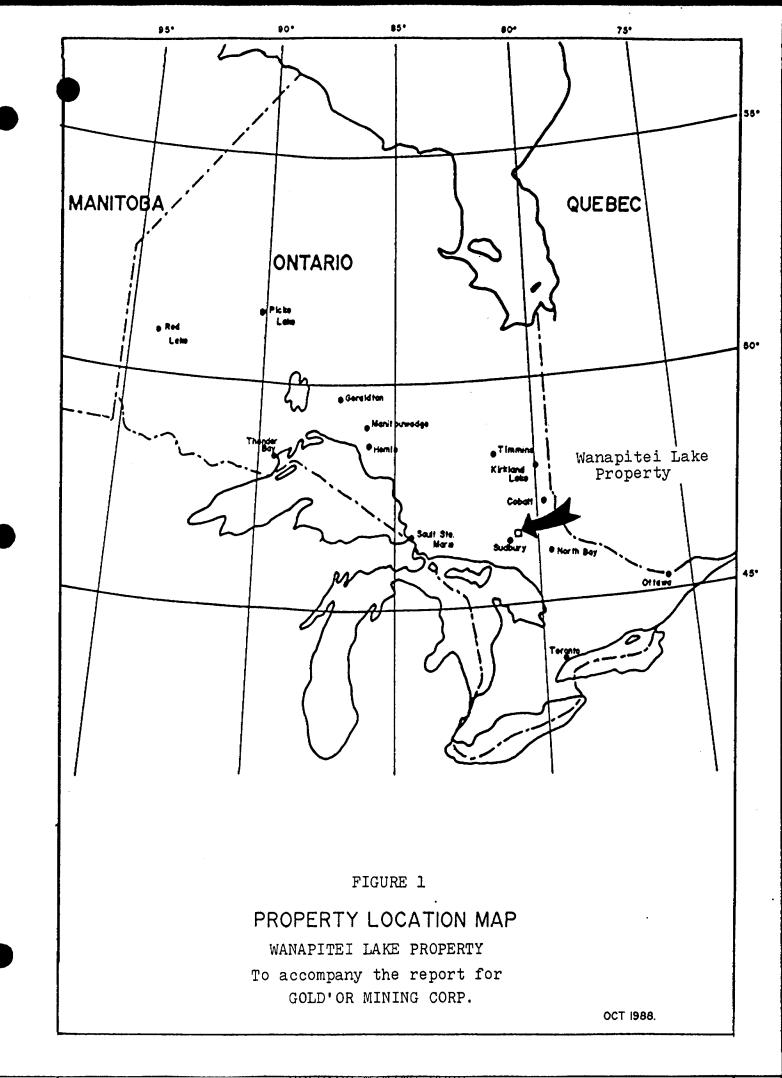
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1. INTRODUCTION

The Wanapitei Lake property consists of 18 staked claims and 5 patented mining claims in Rathbun township on the northern shore of Lake Wanapitei approximately 25 miles northeast of the city of Sudbury (Figure 1).

The first gold discoveries were made in this area in the early 1890's shortly after the copper - nickel discoveries in the Sudbury Basin. The gold mineralization in this, area was further explored in the 1920's and 1930's and recently there has been production of gold from the Orofino and Groundstar properties to the south of the subject claims in Scadding and Davis townships.

The subject property was acquired for its potential for gold mineralization and Norwin Resources Ltd. was requested by the company to geologically map the property. The following report and the accompanying maps present the results of the mapping programme carried out between September 6 and 16, 1988.



2. PROPERTY, LOCATION AND ACCESS

2.1 PROPERTY

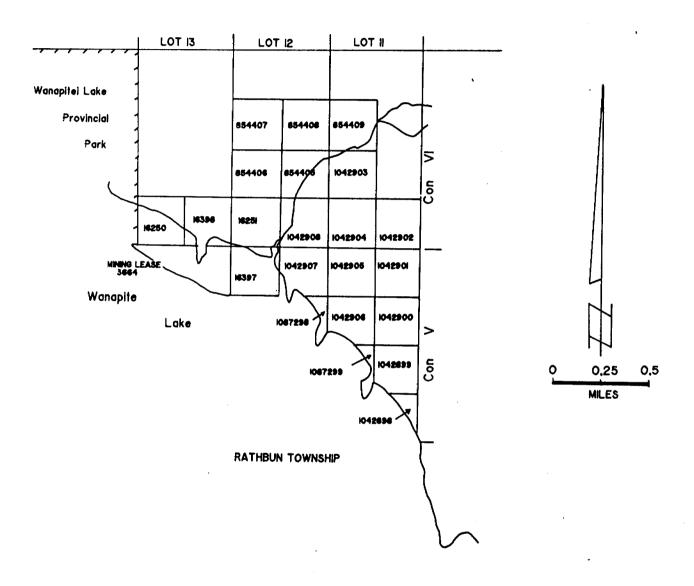
The property consists of 18 unpatented contiguous mining claims and 5 patented mining claims (parcels) as shown in plan M. 1071, Rathbun township, as issued by the Surveys and Mapping Branch of the Ontario Ministry of Natural Resources. (Figure 2) and as recorded in the Sudbury Land Registry Office. The unpatented claims are listed below:

	FORMER *	
CLAIMS	CLAIM NO.	LOCATION
1042903	854404	Con 6, Lot 11, NW1/4S1/2
S854405		Con 6, Lot 12, NE1/4S1/2
S854406		Con 6, Lot 12, NW1/4S1/2
S854407		Con 6, Lot 12, SW1/4N1/2
S854408		Con 6, Lot 12, SE1/4N1/2
S854409		Con 6, Lot 11, SW1/4N1/2
1042898	854416	Con 5, Lot 11, SE1/4S1/2 (partial)
1042899	854417	Con 5, Lot 11, NE1/4S1/2 (partial)
1042900	854418	Con 5, Lot 11, SE1/4N1/2
1042901	854419	Con 5, Lot 11, NE1/4N1/2
1042902	854420	Con 6, Lot 11, SW1/4S1/2
1042904	854421	Con 6, Lot 11, SW1/4S1/2
1042905	854422	Con 5, Lot 11, NW1/4N1/2
1042906	854423	Con 5, Lot 11, SW1/4N1/2 (partial)
1087298	854425	Con 5, Lot 12, SE1/4N1/2 (partial)
1087299	854424	Con 5, Lot 11, SW1/4S1/2 (partial)
1042907	854426	Con 5, Lot 12, NW1/4N1/2 (partial)
1042908	854427	Con 6, Lot 12, SE1/4S1/2

The Patented claims and parcels are:

S16250	Con 6, Lot 13, SW1/4S1/2 Parcel 5873
S16251	Con 6, Lot 12, SW1/4S1/2 Parcel 5872
S16397	Con 5, Lot 12, NW1/4N1/2 Parcel 5875
S16398	Con 6, Lot 13, SE1/4S1/2 Parcel 5874
S5167	Con 5, Lot 13, N ¹ /2 Parcel 3528 -
	Mining Lease 3664.

^{*} Thirteen (13) claims did not have sufficent



After claim map M.1071, Rathbun Township Ministry if Natural Resources, Ontario, Land Management Branch

Figure 2

Claim Map Wanapitei Lake Property Gold'or Mining Corp. assessment work on them and they came open on September 25, 1988. These claims were subsequently restaked as new claims 1042898-1042908 inclusive and claims 1087298 and 1087299.

2.2 LOCATION

This group of claims is located on the northeastern shore of Wanapitei Lake immediately east of Bonhomme Creek in the northern part of Rathbun township, District of Sudbury in northeastern Ontario at 46°-46'N latitude, 80°-43'W longitude. The property is approximately 25 miles northeast of Sudbury, Ontario (Figure 1).

2.3 ACCESS

The property is most easily accessed by boat from either the West Bay road on the west side of the lake from Capreol or highway 541 at Skead on the south shore of the lake. Float equipped aircraft or helicopter could also provide easy access to the claims. A road north along the east side of Lake Wanapitei passes approximately 1 mile east of the property from which the claims can be reached on foot.

3. REGIONAL GEOLOGY

The rocks of the Lake Wanapitei area were formed during Early, Middle and Late Precambrian time. The Early Precambrian-Archean-basement rocks are only exposed along the western part of the lake and to the northwest. The Middle Precambrian sediments of the Huronian Supergroup, which unconformably overlie the Archean basement, are the exposed bedrock north, south and east of the lake. The Huronian sediments have been intruded in turn by dykes and sills of Nipissing diabase and Late Precambrian diabase dykes are common throughout the region. Pleistocene

glaciation has resulted in a thin discontinuous cover of glacial and glaciofluvial deposits over much of the area.

The sediments of the Huronian Supergroup were deposited between 2500 m.y. ago and 2160 m.y. ago on the eroded Archean basement and consist mainly of clastic sediments and minor carbonate-bearing rocks. The Huronian Supergroup consists of 4 groups which generally show а cyclicity consisting of paraconglomerates succeeded by finer grained sediments followed by coarse sands. Only the upper three groups, the Hough Lake Group, the Quirke Lake Group and the Cobalt Group are present in this area.

Nipissing diabase intruded the Huronian sediments 2160 m.y. ago and its present distribution indicates it intruded as both dyke and sill-like bodies throughout the area.

In general, the Huronian sediments and Nipissing diabase have been moderately deformed with the rocks trending west-northwest to northwest and dipping northeast in this area. They are considered to lie on the west limb of a north-south syncline whose axis lies in eastern Davis township. The Grenville Front crosses the southern part of Davis township and has strongly deformed and metamorphosed the units in that area.

4. PROPERTY GEOLOGY - CURRENT MAPPING

All of the bedrock formations underlying the property are of Proterozoic-Precambrian age and consist of units of the Huronian Supergroup. Only units of the Gowganda formation of the Cobalt Group of the Huronian Supergroup are exposed on the property along with Nipissing diabase which has intruded the Gowganda formation (Map accompanying the report).

Seven (7) mappable units within the Gowganda formation were identified during the course of the field work. The units are as defined below:

Unit 1: It is a fine grained, massive greywacke weathering brown to grey to greenish-grey on the fresh surface. It appears to be somewhat siliceous and occasionally contains pebbles, cobbles and boulders of granite up to 20 cm in diameter. In addition, there are 1 to 2% fine glassy quartz fragments.

Unit 2: Unit 2 is a fine grained, massive greywacke becoming moderately laminated to pelitic in places. It weathers light brown to greyish and on the fresh surface it is greenish. It contains abundant chloritic material and up to 2% siliceous fragments.

Unit 3: This unit is a fine grained, laminated pelite with layers up to 1 cm thick. It generally weathers light greybrown and on the fresh surface is dark green (chloritic). Some of the bedding is highlighted by thin chloritic layers and also a trace of pyrite is occasionally present. Occasional granitic clasts were noted.

Unit 4: This unit is a conglomerate containing up to 30% clasts which are usually massive and granitic in composition. The matrix is a greyish-green subpelitic material. For the most part, the clasts are matrix supported. The clasts are generally well rounded. A trace of pyrite is present in the matrix.

Unit 5: This unit is massive, fine grained and weathers buff to tan in colour. It is siliceous and is found as interbeds or scours within the conglomeratic and greywacke units.

Unit 6: This is a fine grained massive pink to white quartzite with a sugary texture which is found as local scours particularly in the better laminated greywacke.

Unit 7: This unit is a dark grey massive siltstone.

The geological units on the property are best exposed in the ridge along the eastern part of the property where they occur as interbedded units striking north-northwest and dipping moderately to the east (20° to 60°). Exposure in the central and northern part of the property is moderate with no exposure in the western part of the property except for the peninsula south of

claim 16398.

In the eastern part of the property, the most easterly unit is Unit 1 which is a fine grained, massive greywacke. Underlying this unit to the west is Unit 4, the conglomerate. This unit appears to be thickest to the north, thins out rapidly in the central part of the area and appears to thicken again in the area of lines 2 and 3 north along the east claim boundary. Underlying the conglomeratic unit is the more pelitic unit, Unit 3. In places this unit appears to be interbedded in zones 1 to 2 meters thick with Unit 1.

In the central and northern parts of the property, the main unit present is Unit 1 with occasional exposures of Units 2, 3, and 7. On lines 17 and 19 N at 5 to 6 W, the conglomeratic unit trending northwest and dipping 40° to the east was observed.

The only exposure of diabase noted on the property is on the peninsula south from claim 16398 in the western part of the claim group. The diabase is massive, medium grained and well jointed.

The Gowganda formation units have been folded into an antiformal structure whose axis lies approximately in the centre of the property and trends north-south. In the northern part of the property, the units trend east-west and dip 40° to the north and along the eastern margin of the property the same units trend north-northwest and dip from 20° to 60° to the east. Small-scale fold structures on line 8+00N at 0+50 mE suggest the fold plunges at -40° at 035°.

Jointing on the property is generally well developed with two (2) prominent trends being northeasterly and northwesterly. Faulting is best developed in the eastern part of the property along the well exposed ridge of outcrop. Shearing and offset of units suggests faulting, trending north-northwest and dipping vertically to steeply east.

The peninsula at the southern end of claim 1087298 contains a breccia approximately 150 feet in diameter. This breccia consists of slab-like fragments of greywacke of the

Gowganda formation in a matrix of quartz with occasional chlorite. The quartz shows a crustiform texture indicating open space filling in many areas. No sulphide mineralization was noted with this breccia. There is some suggestion from the fabric of the breccia that it is orientated north-northwest.

5. PREVIOUS WORK ON THE PROPERTY

In the early 1890's, many minor gold discoveries were made in the area about Lake Wanapitei as prospectors worked eastward from the nickel discoveries in the Sudbury Basin. Further interest was shown in the area in the late 1920's and 1930's and sporadic exploration occurred in the area during the 1960's and 1970's. Work initiated at that time located and outlined the gold deposit now being mined by Orofino Resources in southeastern Scadding township. Here. three gold-zones containing 250,000 tons at 0.234 oz gold per ton are reported of which 2 will be mined by open pit methods and 1 by underground methods (Canadian Mining Journal, 1984). In central Davis township the Northstar Lake Prospect is reported to contain 111,129 tons grading 0.16 ounces gold per ton and 0.85% copper. (Gordon et al, 1979). To date, 22 gold showings and prospects have been reported from the Lake Wanapitei area.

Dressler (1982) described the McVittie property, the patented claims, as follows:

"Only very limited information is available on this property which is located on a small peninsula in northern Lake Wanapitei. Three shafts filled with mud and water and old and rusty mining equipment give evidence of a small abandoned mining operation. Several west - to - northwest-trending quartz-carbonate veins up to 1 m thick were observed by the author. At the northern shaft, strongly mineralized vein rocks containing much pyrite and sulphide-bearing gabbro were noted in the rock dumps.

J. McVittie diamond drilled five holes for a total

length of 200 m and reported assays varying from 0.01 to 0.42 ounces of gold per ton. The information does not give any details whether the gold occurs solely in the quartz veins or whether it is also found in the sulphide bearing Nipissing gabbro."

The intersections in the 5 drill holes as reported in the Ontario Geological Survey assessment files, Sudbury, are:

	From (ft)	To (ft)	Core Length (ft)	Oz gold/T
Hole # 1	53	63	10	0.068
	138	147.5	9.5	0.18
Hole # 2	17.5	24	6.5	0.082
	155	158	3	0.062
Hole # 3	27	35	8	0.125
	87	90	3	0.32
Hole # 4	7 1	75	4	0.155
	93	97	4	0.42
Hole # 5	71.5	81.5	10	0.21
	97.5	101	3.5	0.175

The exposed mineralization in the three main old pits occur in three (3) east-west striking and south dipping (45°-60°) structures. Two are quartz-carbonate veins and the other consists of massive pyrite and arsenopyrite in pink, strongly altered gabbro.

There is no previously reported work from the area of the staked claims in the north and eastern parts of the property.

6. CONCLUSIONS

The salient features of the property as indicated by the geological mapping programme are:

1) Property is underlain dominantly by units of the Gowganda formation of the Cobalt Group of the Huronian

Supergroup.

- 2) One exposure of Nipissing diabase is present on the small peninsula south of claim 16398 in the western part of the property.
- 3) The Gowganda formation has been divided into seven (7) subunits based on the mapping programme.
- 4) The Gowganda formation units have been folded along an approximately north-south axis such that the property is underlain by an anticlinal structure plunging approximately 40° to the north and with the units along the eastern part of the property dipping at 20° to 60° east.
- 5) Shearing trending north-northwest and dipping steeply was observed in the eastern part of the property.
- 6) Jointing on the property is generally well developed with the two (2) most prominent trends being northeasterly and northwesterly.
- 7) On the peninsula at the southern end of claim 1087298 a breccia of slab-like fragments of greywacke in a matrix of quartz with occasional chlorite is present. This breccia appears to be similar to breccia pipes in the general Lake Wanapitei area.
- 8) The area with the most obvious economic potential is the peninsula of diabase which extends south into Lake Wanapitei in the western part of the property. Here east-west striking and south dipping structures containing quartz-carbonate veining, sulphide mineralization and sodium alteration with significant gold values are exposed.

SOCIATIO

L. D. S. Winter

ELLON

Respectfully submitted,

L.D.S. Winter

B.A.Sc., M.Sc., F.G.A.C

October 28, 1988

<u>REFERENCES</u>

- Assessment Files, Ministry of Natural Resources,
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- Canadian Mining Journal 1984
 Scadding Mine Starts Operations, October 1984, p.7.
- 3. Dressler, B.O. 1982
 Geology of the Wanapitei Lake Area, District of Sudbury, Ont. Geol. Survey, Geol. Report 231, p. 125.
- 4. Exsics Exploration Limited, 1987

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- 5. Gordon, J.B., et al, 1979

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 Ontario Geological Survey, Mineral Deposits
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- 6. Kindle, L.F. 1933

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 Vol. 41, 1932 p. 29-49.
- 7. Thomson, J.E. 1961

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- 8. Thomson, J.E., and Card, K.D. 1963

 Kelly and Davis Townships, Ont. Dept. of Mines,
 Geol. Report 15, 20 p.

PERSONNEL

The following personnel were involved in mapping the property and preparing the report.

- L.D.S. Winter, B.A.Sc., M.Sc., F.G.A.C.
 - 4 days field mapping
 - 3 days report preparation.
- D. Pilkey, B.Sc.
 - 2 days field mapping.
- R. de Gagne, Geol. Ty.
 - 2 days field mapping.

Gordon Winter, B.A.

- 4 days field assistant.

Cheryl Lang, Geol. Tn. - drafting

- 2 days

Denise Greene, typist

- 1 day

CERTIFICATE OF QUALIFICATION

- I, Lionel Donald Stewart Winter do hereby certify:
- that I am a geologist and reside at 1849 Oriole Drive, Sudbury, Ontario, P3E 2W5,
- 2. that I am a Fellow of the Geological Association of Canada,
- 3. that I graduated from the University of Toronto in Mining Engineering in 1957 with a Bachelor of Applied Science and from McGill University, Montreal in 1961 with a Master of Science (Applied) in Geology,
- 4. that I have practised my profession continuously for 27 years,
- 5. that my report on the Wanapitei Lake property, Rathbun Township, Ontario dated October 28, 1988 is based on my personal knowledge of the geology of the area and on a review of published and unpublished information on the property and surrounding area and supervision of the mapping programme,

ASSOCIATION Sometimes of the Second S

L.D.S. Winter B.A.Sc., M.Sc., F.G.A.C. October 28, 1988

Report of Work

ONTARIO

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SEPT. 19:88

SUDBURY

(Geophysical, Geological,

DOCUMENT No. W8807 -

Intructions: - Please type or print.

Geochemical and Expenditures?

900

IN APO7-191 Mining Act Type of Survey(s) GEOLOGICAL Claim Holder(s) rospector's Licence No. OR MINING GOLD CORP T. 5001 444 DAYTONA. AVE., FORT ERIE, ONTARIO LZA 479

Trey Company Date of Survey (from & to) Total Mil. Day | Mo. | C. | Day | Mo. | VI. | USED EXISTING GEN NORWIN RESOURCES LTD. Name and Address of Author (of Geo-Technical report) L.D.S. WINTER, NORWIN RES. LTD., SEO NOTRE DAME AVE., SUDBURY P3C5LZ Credits Requested per Each Claim in Columns at right Mining Claims Traversed (List in numerical sequence) Special Provisions Days per Claim Mining Claim Expend. Days Cr. Mining Claim Geophysical Prefix Number For first survey: - Electromagnetic 854404 S Enter 40 days. (This includes line cutting) Magnetometer 854405 - Radiometric 854406 For each additional survey: using the same grid: - Other 854407 Enter 20 days (for each) Geological 20 854408 Geochemical 854 409 Man Days Days per Claim Geophysical 854416 Complete reverse side - Electromagnetic 854417 and enter total(s) here 854418 - Magnetometer Radiometric 854419 • Other 854420 Geological 854421 Geochemical 854422 MINING Airborne Credits Days per Claim LANDS SECTION 854423 Note: Special provisions Electromagnetic 854426 credits do not apply to Airborne Surveys. Magnetometer 854427 Radiometric Expenditures (excludes power stripping) JUDBUR' Type of Work Performed MINING DIV ONTARIO GEOLOGICAL SURVEY RECEIV ASSESSIMENT FILES Performed on Claim(s) OFFICE SEP 1-9-1988 MOV 25 1988 7|8|9|10|11|12|1|2|3|4|5|6 Calculation of Expenditure Days Credits Total Total Expenditures \$ Total number of mining claims covered by this report of work, /6 Instructions Total Days Credits may be apportioned at the claim holder's For Office Use Only choice. Enter number of days credits per claim selected Total Days (Recorded in columns at right. Sept. 27/88 Date 320 SEPT. 19:88 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 L.D. S. WINTER, NORWIN RESOURCES LTD., STO NOTRE DAME AVE. **Date Certified**



OFFICE USE ONLY

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)	Geological	
Township or Area	Rathbun Township	MINING CLAIMS TRAVERSED
Claim Holder(s)	Gold'Or Mining Corp.	List numerically
Survey Company	Norwin Resources Ltd.	<u>S</u> 854405
Author of Report	L. D. S. Winter	(prefix) (number) - 854406
Address of Author	560 Notre Dame Avenue, Sudbui	^y
Covering Dates of Survey_	September 6 to 16, 1988 (linecutting to office)	854407
Total Miles of Line Cut	28.7 km	854408
		854409
SPECIAL PROVISIONS CREDITS REQUESTED		
ENTER 40 days (include	esMagnetometer	
line cutting) for first survey.	-Radiometric	
ENTER 20 days for each		
additional survey using	Geological	
same grid.	Geochemical	
AIRBORNE CREDITS (Sp.	ecial provision credits do not apply to airborne surveys)	
	tromagnetic Radiometric (enter days per claim)	
DATE:	SIGNATURE:Author of Report or Agent	-
Res. Geol.	_Qualifications <u>2.1503</u>	
Previous Surveys		
File No. Type I	Date Claim Holder	
		TOTAL CLAIMS
L		

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 Instrument _____ Accuracy - Scale constant _____ Diurnal correction method _____ Base Station check-in interval (hours)_____ Base Station location and value _____ Instrument _____ Coil configuration _____ Coil separation _____ Accuracy _____ ☐ Fixed transmitter ☐ Shoot back ☐ In line Method: ☐ Parallel line Frequency. (specify V.L.F. station) Parameters measured______ Instrument _____ Scale constant GRAVITY Corrections made Base station value and location Elevation accuracy_____ Instrument _____ ☐ Frequency Domain Parameters - On time ______ Frequency _____ - Off time ______ Range _____ - Delay time _____ - Integration time Power _____ Electrode array

INDUCED POLARIZATION

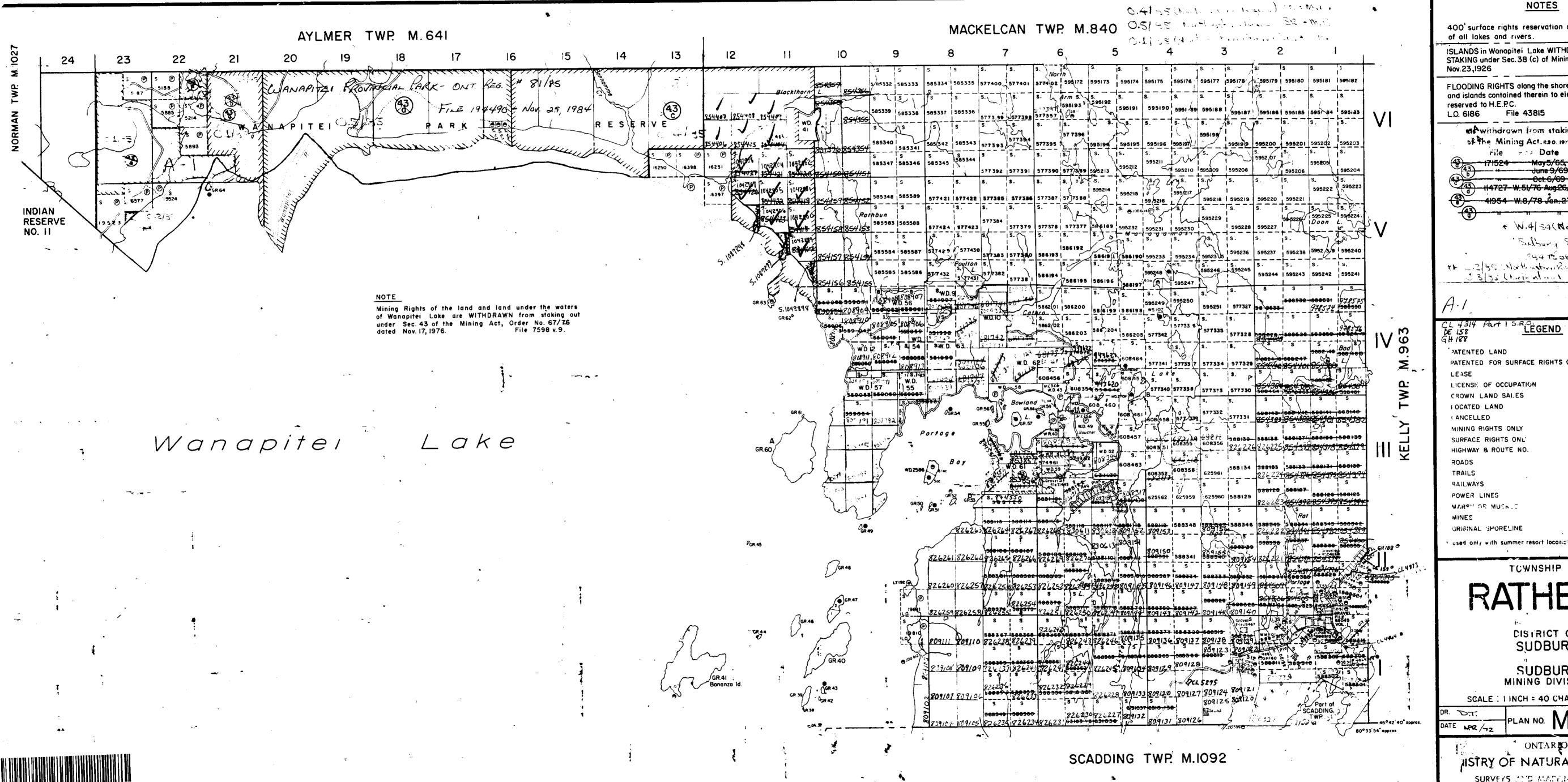
Electrode spacing _____

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 WEI	L LOGGING ETC.)
Type of survey	
Instrument	
Accuracy	
Parameters measured	
Additional information (for under	standing results)
AIRBORNE SURVEYS	
Instrument(s)	
	(specify for each type of survey)
Accuracy	(specify for each type of survey)
Navigation and flight path recover	y method
Aircraft altitude	Line Spacing
Miles flown over total area	Over claims only

GEOCHEMICAL SURVEY - PROCEDURE RECORD

Numbers of claims from which samples taken		<u> </u>	
Total Number of Samples	ANALYTICAL METHODS		
Type of Sample(Nature of Material) Average Sample Weight	Values expressed in: per cent p. p. m.		
Method of Collection	р. р. о. —		
	Cu, Pb, Zn, Ni, Co, Ag, Mo, As,-(circl	•	
Soil Horizon Sampled			
Horizon Development		•	
Sample Depth			
Terrain	,		
	8		
Drainage Development	Field Laboratory Analysis		
Estimated Range of Overburden Thickness	No. (te	sts)	
	Extraction Method		
	Analytical Method		
	Reagents Used		
SAMPLE PREPARATION	Communication		
(Includes drying, screening, crushing, ashing)	Commercial Laboratory (te	•	
Mesh size of fraction used for analysis			
	Extraction Method	_	
	Analytical Method		
	Reagents Used		
General	General	_	
			



NOTES

400 surface rights reservation along the shores

ISLANDS in Wanapitei Lake WITHDRAWN FROM STAKING under Sec. 38 (c) of Mining Act RSO.1970.

FLOODING RIGHTS along the shores of Wanapitei Lake and islands contained therein to elev. IOO.5 (crest of dam)

L.O. 6186 File 43815

MAWithdrawn from staking under Section of the Mining Actieso, 1970 (See 42, R.S. 1830).

43) 114727-W.51/76 Aug 26/76 - S.R.O. -

· Sulbary SRAM.R.

PATENTED LAND

PATENTED FOR SURFACE RIGHTS ONLY

LICENSE OF OCCUPATION

SURFACE RIGHTS ONL

POWER LINES

ORIGINAL SHORELINE

TOWNSHIP OF

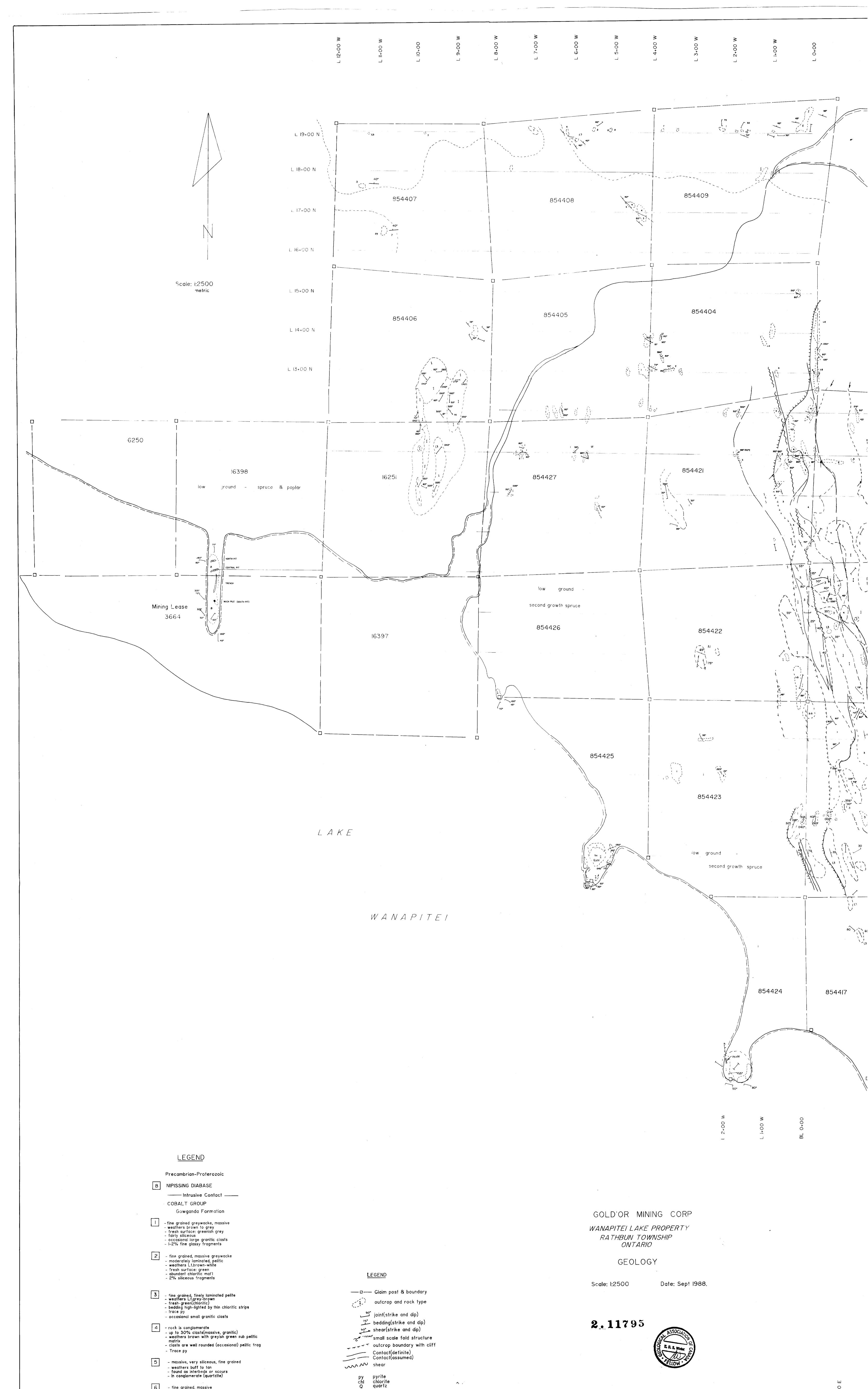
SUDBURY

SUDBURY MINING DIVISION

SCALE : I INCH = 40 CHAINS (1/2 MILE)

ONTARIO

JISTRY OF NATURAL RESOURCES SURVEYS AND MADEING BRANCH



210

- fine grained, massive

pink-white qtzitesugary texturefound in local scours

– dk. grey siltstone

