



42A05NW0115 2.12703 WHITESIDES

010

2.12703

GOLD LITHOGEOCHEMISTRY IN THE SHAFT AREA OF THE UNION PROPERTY

WHITESIDES TOWNSHIP  
PORCUPINE MINING DIVISION  
ONTARIO  
N.T.S. 42A/5

2.12703

Glen J. Prior  
Norwin Geological Ltd.  
August, 1989

RECEIVED

AUG 20 1989

MINING LANDS SECTION

CON'



42A05NW0115 2.12703 WHITESIDES

010C

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APPENDICES

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## Summary

The Union Property, which consists of four unpatented mining claims, is situated in Whitesides Township, northeastern Ontario, approximately 35 km west-southwest of Timmins. Former exploration within the property area included the sinking of a 260 foot shaft and 460 feet of drifting and crosscutting. A program of lithogeochemical sampling within the area of the shaft collar, described in this report, returned values of up to 0.176 oz Au/ton. Mineralization occurs within a zone of strong alteration and ductile deformation approximately 20 m wide containing quartz, iron carbonate, chlorite, sericite, green mica, tourmaline, pyrite and chalcopyrite.

## Introduction

The Union Property consists of four unpatented mining claims located in central Whitesides Township, northeastern Ontario (figure 1). The property lies approximately 35 km west-southwest of Timmins and 1 km east of the Kamiskotia River. Road access to the eastern part of the property may be gained by driving northwest from highway 101 along a series of old logging roads (figure 2).

## Land Position

The Union Property consists of the following four claims (see also figure 2):

CLAIM NUMBERS	DATE RECORDED
P1042412	July 4, 1988
P1042413	July 4, 1988
P1042414	July 6, 1988
P1042415	July 6, 1988

The claims were staked by and are presently held by Glen James Prior of Norwin Geological Ltd.

## History

In 1913 a 75 foot prospecting shaft was sunk on what is now the Union Property (Sutherland et al., 1922). Between 1920 and 1922 the ground was developed by the Union Mining Corporation, Limited. The original prospecting shaft was deepened to 260 feet with levels established at 150 and 250 feet. On the 150 foot level 230 feet of crosscutting and 100 feet of drifting were completed while on the 250 foot level 130 feet of crosscutting was done. Work in Whitesides Township was terminated by the company in order to exploit a property in the Kirkland Lake area (Sutherland et al., 1922; Sutherland et al., 1923).

No assessment data for the area of the Union Property occurs within the assessment files of the Resident Geologist's Office in Timmins. During staking and sampling (described in this report) no evidence of line cutting or diamond drilling was noted.

## Geology

Graham (1931) describes the gold occurrence at the Union Mine as follows (see also figure 3): "The shaft was put down on a chlorite carbonate schist zone, which is 60 feet wide and outcrops over a length of 300 feet. This zone, resulting from the alteration of Keewatin basalt flow top, is filled with stringers and irregular masses of quartz. Associated with the quartz are pyrite, pyrrhotite, chalcopryite, calcite, and ankerite. The schist enclosing the quartz is also well mineralized with sulphides. A small aplite dyke, a foot wide, penetrates irregularly through Keewatin basalts about 400 feet south of the schist zone. A 60-foot diabase dike cuts north through the centre of this zone.

Alteration and mineralization of the Keewatin basalt resulted from the intrusion of a large granite dike, which was encountered at depth in the shaft."

### Alteration And Mineralization Noted During Sampling Program

Mineralization within the Union shaft area is hosted by a zone of alteration and ductile deformation approximately 20 meters wide trending approximately 085 degrees. Deformation and alteration within the zone has created strongly foliated, schistose rocks with steeply dipping foliations trending subparallel to the boundaries of the highly altered zone. Quartz and quartz-iron carbonate veins up to 4 meters in width, trending subparallel to foliation, are common within the altered rocks. The veins contain up to 4 % pyrite and chalcopryite and up to 20 % very fine grained tourmaline. The wallrocks are very strongly foliated, schistose rocks composed of varying proportions of quartz, iron carbonate, chlorite, sericite and green mica. Locally, green (chrome ?) mica forms up to 5% of the rock.

### Sampling Program And Results

Rock sampling of the area near the Union shaft was undertaken in November, 1988 and May, 1989. All samples were analysed for Au by Accurassay Laboratories Ltd. of Kirkland Lake, Ontario (appendix 1). Initial analyses were performed using fire assay preconcentration with an A.A. finish (recorded in ppb). Samples returning greater than 1000 ppb Au were reanalysed by fire assay with a gravimetric finish (recorded in oz/ton). The locations of the 62 samples collected is shown on figure 3 with analyses in excess of 50 ppb indicated on figure 4. Twenty-one of the samples (34%) contain greater than 50 ppb Au, 15 (24%) returned values in excess of 100 ppb and 5 samples (8%) yielded results of over 1000 ppb Au. Fire assay reanalyses of the samples over 1000 ppb Au returned 0.176, 0.075, 0.065, 0.036, and 0.018 oz Au/ton. These samples are described below:

<u>Sample Number</u>	<u>Au (oz/ton)</u>	<u>Description</u>
UN55550	0.036	Rubble on rock dump near shaft. White, fine grained quartz with 5-8 % black, very fine grained tourmaline stringers up to 2 mm across. 0.5-2% chalcopryite in small pods.
UN55562	0.075	Angular trench rubble. White, quartz vein material with minor limonite and trace malachite along hairline fractures, 2-3 % chalcopryite and 1-2 % pyrite. The sulphides occur intimately associated in blebs up to 5 mm across and as irregular veinlets along hairline fractures.
UN17121	0.065	Rubble on rock dump near shaft. Massive quartz with up to 2% coarse, irregular chalcopryite.
UN17123	0.018	Similar to UN17121
UN17143	0.176	Rubble on rock dump near shaft. Massive quartz with wallrock inclusions and 0.5 % chalcopryite and pyrite.

Respectfully submitted,



Glen J. Prior, M.Sc.,  
Norwin Geological Ltd.  
August, 1989

REFERENCES

Graham, A.R., 1931. Groundhog-Kamiskotia Area, Cochrane District, Ontario; Ont. Dept. of Mines. Annual Report, Vol. 40, Part 3, p. 23-36.

Sutherland, T.F., McMillan, J.G., Bartlett, J., and Webster, A.R., 1922. Mines of Ontario; Ont. Dept. of Mines Annual Report, Vol. 30, Part 1, p. 63-158.

Sutherland, T.F., McMillan, J.G., Bartlett, J., Webster, A.R., and Cole, G.E., 1922. Mines of Ontario; Ont. Dept. of Mines Annual Report, Vol. 31, Part 10, p. 11-86.

STATEMENT OF QUALIFICATION

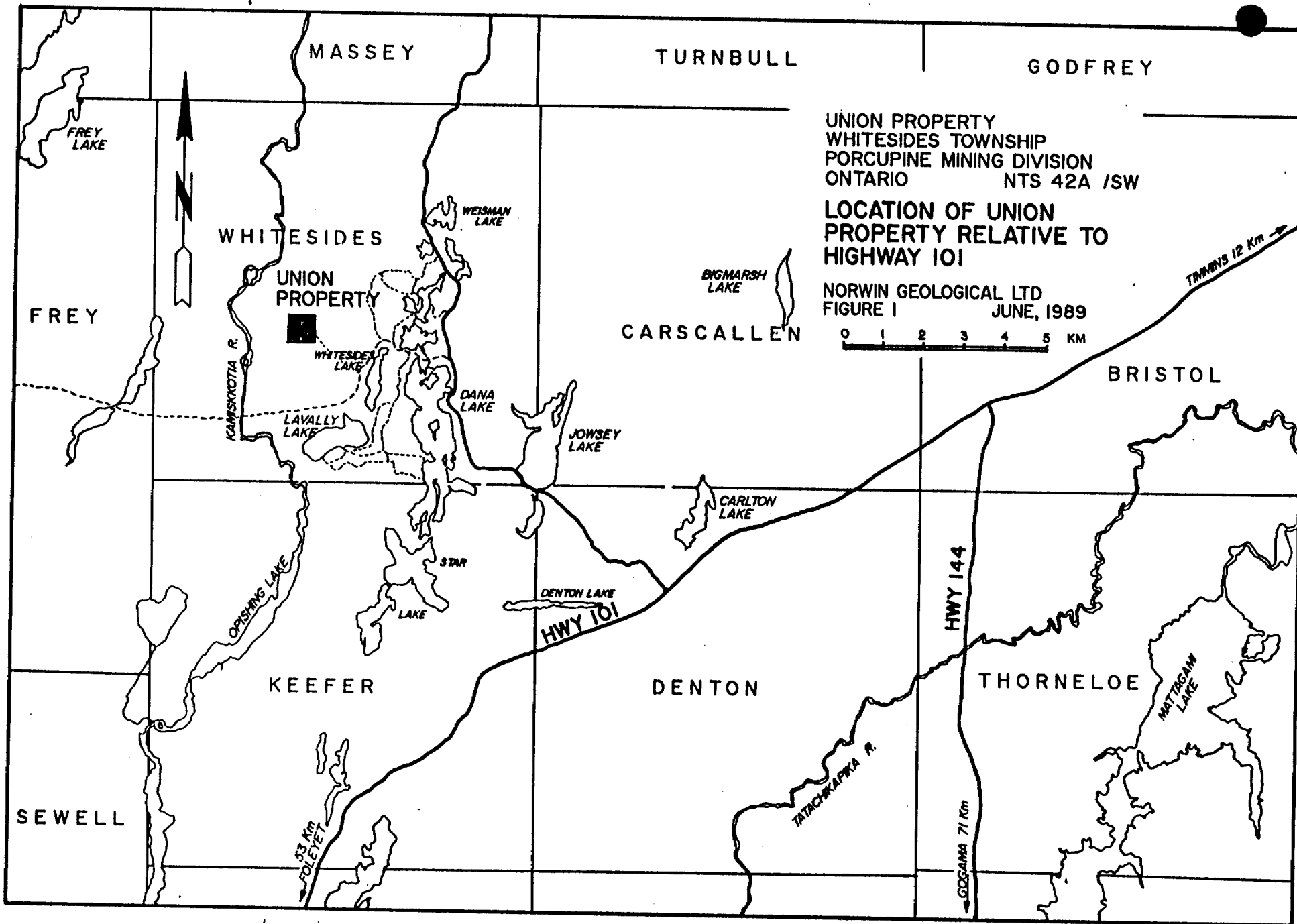
I, Glen James Prior do hereby certify:

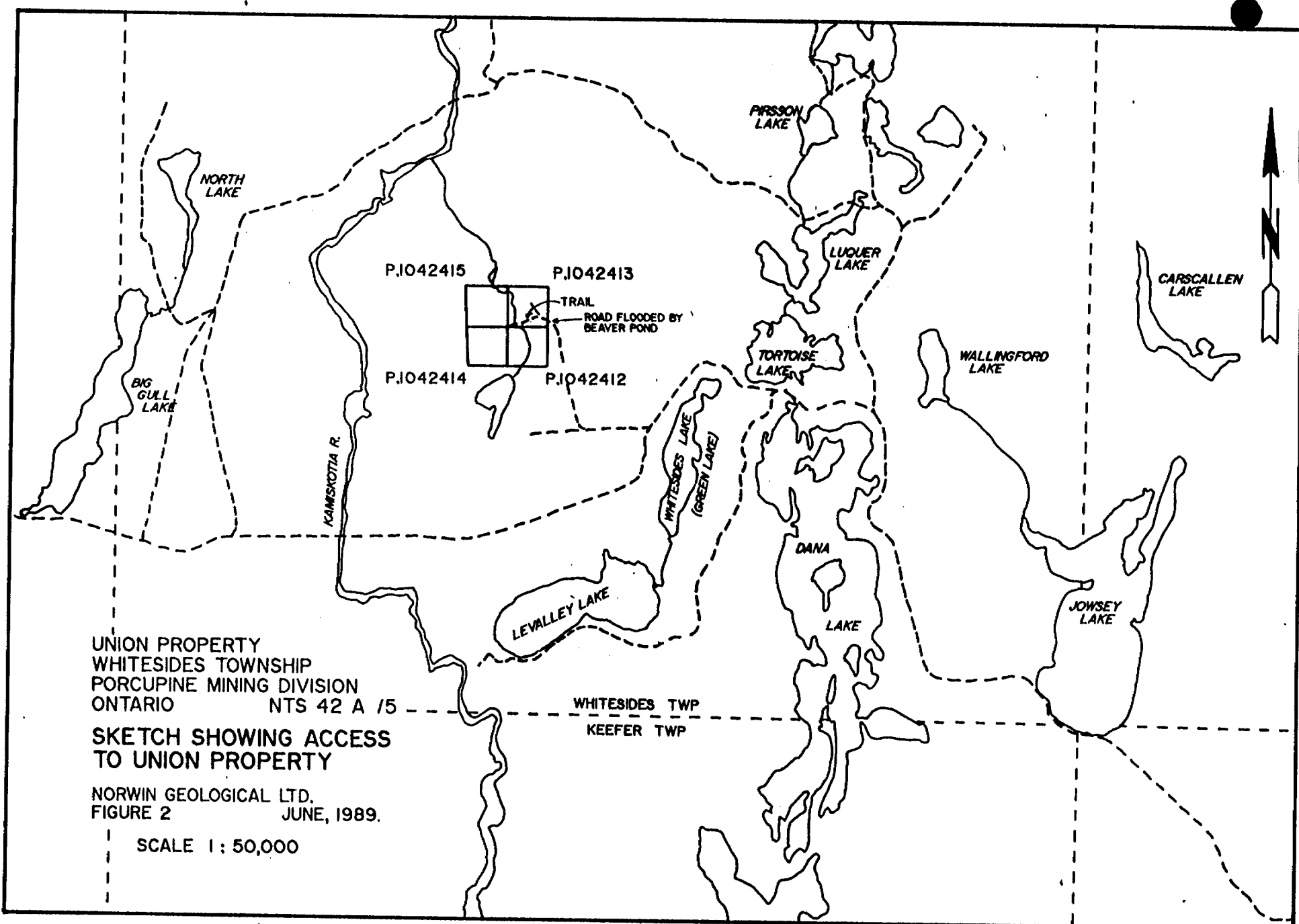
1. that I am a geologist and reside at C412-1290 Bancroft Drive, Sudbury, Ontario, P3B 4E1,
2. that I graduated from Laurentian University, Sudbury, Ontario, in 1982 with an Honours Bachelors of Science Degree in Geology and received a Master of Science Degree in Geology from the same institution in 1987,
3. that I have practiced my profession for the past seven years,
4. that this report is based upon field work on the Union Property that I supervised during November, 1988 and May, 1989.



Glen J. Prior, M.Sc.,  
Norwin Geological Ltd.  
August, 1989







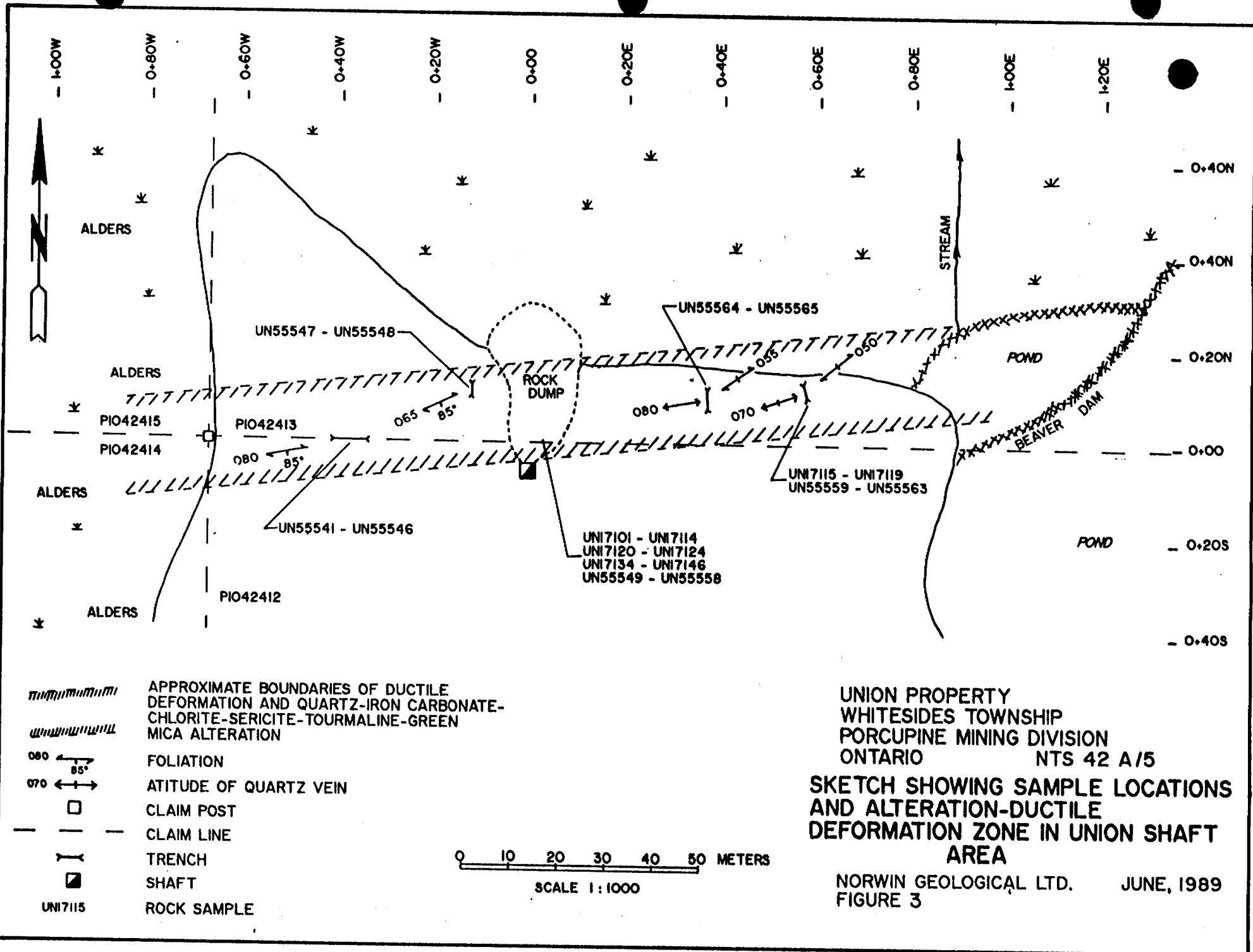
UNION PROPERTY  
 WHITESIDES TOWNSHIP  
 PORCUPINE MINING DIVISION  
 ONTARIO NTS 42 A 15

**SKETCH SHOWING ACCESS  
 TO UNION PROPERTY**

NORWIN GEOLOGICAL LTD.  
 FIGURE 2 JUNE, 1989.

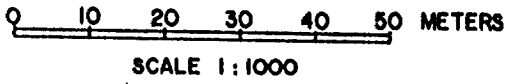
SCALE 1 : 50,000

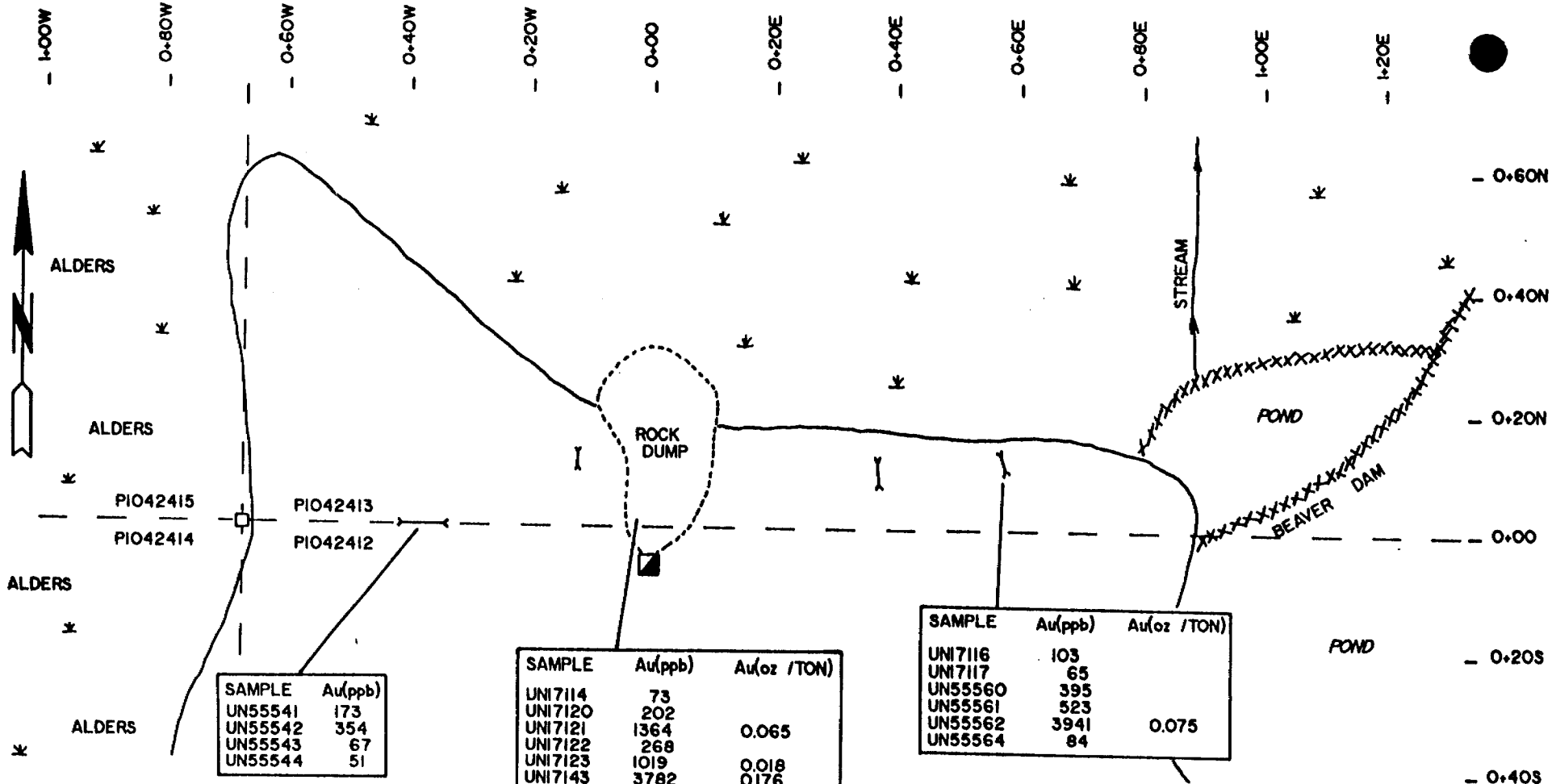
WHITESIDES TWP  
 KEEFER TWP



UNION PROPERTY  
 WHITESIDES TOWNSHIP  
 PORCUPINE MINING DIVISION  
 ONTARIO NTS 42 A/5  
**SKETCH SHOWING SAMPLE LOCATIONS  
 AND ALTERATION-DUCTILE  
 DEFORMATION ZONE IN UNION SHAFT  
 AREA**  
 NORWIN GEOLOGICAL LTD. JUNE, 1989  
 FIGURE 3

- APPROXIMATE BOUNDARIES OF DUCTILE DEFORMATION AND QUARTZ-IRON CARBONATE-CHLORITE-SERICITE-TOURMALINE-GREEN MICA ALTERATION
- FOLIATION
- ATTITUDE OF QUARTZ VEIN
- CLAIM POST
- CLAIM LINE
- TRENCH
- SHAFT
- UN7115 ROCK SAMPLE



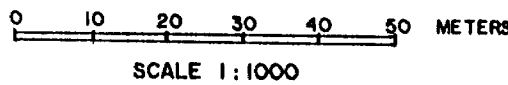


SAMPLE	Au(ppb)
UN55541	173
UN55542	354
UN55543	67
UN55544	51

SAMPLE	Au(ppb)	Au(oz /TON)
UNI7114	73	
UNI7120	202	
UNI7121	1364	0.065
UNI7122	268	
UNI7123	1019	0.018
UNI7143	3782	0.176
UN55549	167	
UN55550	1412	0.036
UN55553	84	
UN55554	157	
UN55556	953	

SAMPLE	Au(ppb)	Au(oz /TON)
UNI7116	103	
UNI7117	65	
UN55560	395	
UN55561	523	
UN55562	3941	0.075
UN55564	84	

□ CLAIM POST  
 --- CLAIM LINE  
 I TRENCH  
 ■ SHAFT  
 Au(ppb) F.A. & A.A. ANALYSIS  
 Au(oz /TON) FIRE ASSAY



UNION PROPERTY  
 WHITESIDES TOWNSHIP  
 PORCUPINE MING DIVISION  
 ONTARIO NTS 42 A/5

SKETCH SHOWING GOLD  
 LITHOGEOCHEMISTRY IN UNION  
 SHAFT AREA

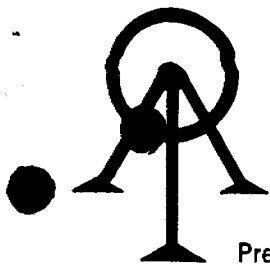
NORWIN GEOLOGICAL LTD. JUNE, 1989.

FIGURE 4

NOTE : ONLY ANALYSIS RETURNING >50 ppb Au ARE SHOWN.

APPENDIX 1

ANALYSES



# ACCURASSAY LABORATORIES LTD.

P.O. BOX 604  
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J5  
TEL.: (705) 567-6343

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

## Certificate of Analysis

Page: 1

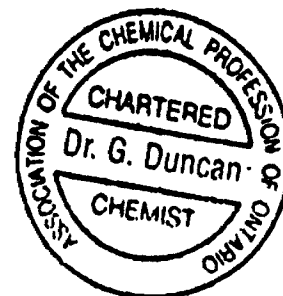
21969

Mr. Glen Prior  
Norwin Resources Ltd.  
560 Notre Dame Ave.  
Sudbury, Ontario  
P3C-5L2

Date: November 23 1988

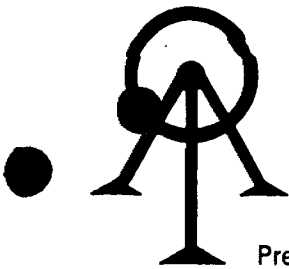
Work Order # : 881169  
Project :

SAMPLE NUMBERS		Gold
Accurassay	Customer	ppb
155492	UN17101	48
155493	UN17102	31
155494	UN17103	16
155495	UN17104	12
155496	UN17105	19
155497	UN17106	12
155498	UN17107	15
155499	UN17108	16
155500	UN17109	26
155501	UN17110	16
155501	UN17110	20 Check
155502	UN17111	14
155503	UN17112	12
155504	UN17113	20
155505	UN17114	73
155506	UN55541	173
155507	UN55542	354
155508	UN55543	67
155509	UN55544	51
155510	UN55545	17
155510	UN55545	15 Check
155511	UN55546	48
155512	UN55547	16
155513	UN55548	12
155513	UN55548	21 Check



Per: G. Duncan

ORIGINAL



# ACCURASSAY LABORATORIES LTD.

P.O. BOX 604  
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J5  
TEL.: (705) 567-6343

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

## Certificate of Analysis

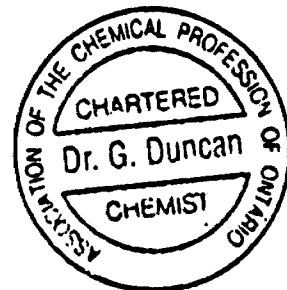
Page: 1

24649 Norwin Resources Ltd.  
560 Notre Dame Ave.  
Sudbury, Ontario  
P3C-5L2

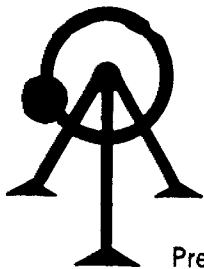
Date: May 25 1989

Work Order # : 891366  
Project :

SAMPLE NUMBERS		Gold	
Accurassay	Customer	ppb	
193491	UN-55549	167	
193492	UN-55550	1412	
193493	UN-55551	36	
193494	UN-55552	44	
193495	UN-55553	84	
193496	UN-55554	157	
193497	UN-55555	44	
193498	UN-55556	953	
193499	UN-55557	27	
193500	UN-55558	6	
193500	UN-55558	13	Check
193501	UN-55559	13	
193502	UN-55560	395	
193503	UN-55561	523	
193504	UN-55562	3941	
193505	UN-55563	84	
193506	UN-55564	5	
193507	UN-55565	<5	
193508	UN-17115	9	
193509	UN-17116	103	
193509	UN-17116	86	Check
193510	UN-17117	65	
193511	UN-17118	10	
193512	UN-17119	8	
193513	UN-17120	202	
193514	UN-17121	1364	
193515	UN-17122	268	
193516	UN-17123	1019	
193517	UN-17124	10	
193518	UN-17134	29	
193518	UN-17134	22	Check



Per: G. Duncan



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KIRKLAND LAKE, ONTARIO, CANADA P2N 3J5  
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President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

## Certificate of Analysis

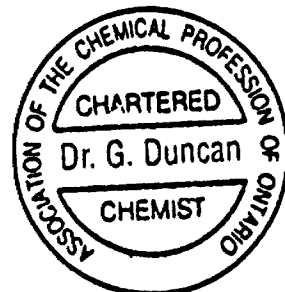
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24650 Norwin Resources Ltd.  
560 Notre Dame Ave.  
Sudbury, Ontario  
P3C-5L2

Date: May 25 1989

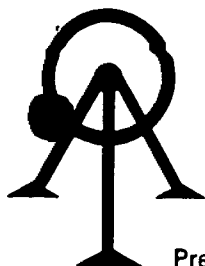
Work Order # : 891366  
Project :

SAMPLE NUMBERS		Gold
Accurassay	Customer	ppb
193519	UN-17135	36
193520	UN-17136	18
193521	UN-17137	<5
193522	UN-17138	9
193523	UN-17139	8
193524	UN-17140	6
193525	UN-17141	<5
193526	UN-17142	10
193527	UN-17143	3782
193527	UN-17143	3871 Check
193528	UN-17144	31
193529	UN-17145	8
193530	UN-17146	13
193530	UN-17146	13 Check



Per: G. Duncan





# ACCURASSAY LABORATORIES LTD.

P.O. BOX 604  
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J5  
TEL.: (705) 567-6343

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

## Certificate of Analysis

24818 Norwin Resources Ltd.  
560 Notre Dame Ave.  
Sudbury, Ontario  
P3C-5L2

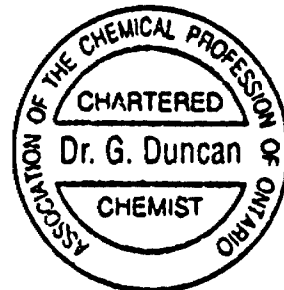
Page #1

Date: 06/05/89 19

Work Order 891366  
Project  
R E A S S A Y

Assay results are as follows:

SAMPLE NUMBER	Original Gold	Check
Accurassay Customer	ppb	Oz/T
193492 UN-55550	1412	0.036
193504 UN-55562	3941	0.075
193514 UN-17121	1364	0.065
193516 UN-17123	1019	0.018
193527 UN-17143	3782	0.176
193527 UN-17143	3871 Check	



Per: G. Duncan

APPENDIX 2

ASSESSMENT DATA



Ontario

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) LITHO GEOCHEMISTRY
Township or Area WHITESIDES
Claim Holder(s) GLEN J. PRIOR
C412-1290 BANCROFT DR., SUDBURY, ONT. P3B 4E1
Survey Company NORWIN GEOLOGICAL LTD.
Author of Report GLEN J. PRIOR
Address of Author C412-1290 BANCROFT, SUDBURY, ONT. P3B 4E1
Covering Dates of Survey NOV. 16, 1988 - AUG. 28, 1989
(linecutting to office)
Total Miles of Line Cut \_\_\_\_\_

MINING CLAIMS TRAVERSED
List numerically
P: 1042412 (prefix) (number)
P: 1042413

SPECIAL PROVISIONS CREDITS REQUESTED
Geophysical DAYS per claim
-Electromagnetic
-Magnetometer
-Radiometric
-Other
Geological
Geochemical

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)
Magnetometer \_\_\_\_\_ Electromagnetic \_\_\_\_\_ Radiometric \_\_\_\_\_
(enter days per claim)

DATE: AUG. 28, 1989 SIGNATURE: [Signature]
Author of Report or Agent

Res. Geol. \_\_\_\_\_ Qualifications 2.9660

Previous Surveys
Table with columns: File No., Type, Date, Claim Holder

TOTAL CLAIMS \_\_\_\_\_

OFFICE USE ONLY

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 \_\_\_\_\_ 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 \_\_\_\_\_

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 \_\_\_\_\_

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 P. 1042412, P. 1042413

Total Number of Samples 62

Type of Sample ROCK  
(Nature of Material)

Average Sample Weight 0.5 KG.

Method of Collection GRAB SAMPLES FROM  
OUTCROP, TRENCHES, AND SHAFT ROCK PUMP

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 —

CRUSHED TO - 1/4 INCH

PULVERIZED TO - 150 MESH

General —

ANALYTICAL METHODS

Values expressed in: per cent   
p. p. m.   
p. p. b.

Cu, Pb, Zn, Ni, Co, Ag, Mo, As, -(circle)

Others Au

Field Analysis ( — tests)

Extraction Method —

Analytical Method —

Reagents Used —

Field Laboratory Analysis

No. ( — tests)

Extraction Method —

Analytical Method —

Reagents Used —

Commercial Laboratory ( 62 + 5 = 67 tests)

Name of Laboratory ACCURASSAY LABORATORIES LTD.

Extraction Method —

Analytical Method FIRE ASSAY WITH A.A. FINISH

Reagents Used —

FIVE

General SAMPLES RETURNING GREATER

THAN 1000 PPB Au WERE

REANALYSED BY FIRE ASSAY

WITH A GRAVIMETRIC FINISH.

THESE ANALYSES WERE

REPORTED IN 02 Au / TON.

FINANCIAL SUMMARY

EXPENDITURES

Rock Samples:

Nov. 23/89	22 Analyses @ \$6.50	\$ 143.00
	22 Sample Props @ \$3.50	77.00
May 25/89	40 Analyses @ \$6.50	260.00
	40 Sample Props @ \$3.95	158.00
June 5/89	5 Gold Checks @ \$8.00	<u>40.00</u>
		\$ 678.00

CALCULATION OF EXPENDITURE CREDITS

\$678.00 ÷ 15 = 42.5 days credit

ASSIGNMENT OF EXPENDITURE CREDITS

Mining Claims

Expenditure Days Credits

P. 1042414	22.6
P. 1042415	22.6

**ACCURASSAY LABORATORIES LTD.**  
 CHARTERED CHEMISTS, ASSAYERS, ANALYTICAL CONSULTANTS  
 Box 604, 3 Industrial Dr., Kirkland Lake  
 Ontario, Canada P2N 3J5

# INVOICE

# 88810

TO TEL.: (705) 567-6343 - FAX: (705) 568-8368

Norwin Resources Ltd  
 560 Notre Dame Ave  
 Sudbury, Ontario  
 P9C-5L2

DATE	November 23, 1988
CUSTOMER ORDER N°	
WORK-ORDER N°	881169
DATE SUBMITTED	

TERMS net 30 days, 2.0% per month on overdue accounts.

QUANTITY	DESCRIPTION	PRICE	AMOUNT
22	Gold Assays	6.50	143 00
22	Sample Prep. cert. # 21969	3.50	77 00
	Total		220 00

CHEQUE  
 DATE 19 11 88 # 1053

*Thank You!*



**ACCURASSAY LABORATORIES LTD.**

CHARTERED CHEMISTS, ASSAYERS, ANALYTICAL CONSULTANTS

Box 604, 3 Industrial Dr., Kirkland Lake  
Ontario, Canada P2N 3J5

**INVOICE**

# 890727

TO TEL.: (705) 567-6343 - FAX: (705) 568-8368

Norwin Resources Ltd  
560 Notre Dame Ave.  
Sudbury, Ontario  
P3C-5L2

DATE	May 25, 1989
CUSTOMER ORDER N°	
WORK ORDER N°	Various
DATE SUBMITTED	

TERMS

net 30 days, 2.0% per month on overdue accounts.

QUANTITY	DESCRIPTION	PRICE	AMOUNT
11	Gold Assays W.O. #891365	6.50	71 50
11	Sample Prep. cert.# 24648	3.95	43 45
UNION [ 40	Gold Assays W.O. #891366	6.50	260 00
40	Sample Prep. cert.# 24649-50	3.95	158 00
	Total.....		532 95

PAID  Cash  Cheque  
Date June 23/89

*Thank You!*

**ACCURASSAY LABORATORIES LTD.**  
 CHARTERED CHEMISTS, ASSAYERS, ANALYTICAL CONSULTANTS  
 Box 604, 3 Industrial Dr., Kirkland Lake  
 Ontario, Canada P2N 3J5

# INVOICE

# 800780

TO TEL.: (705) 567-6343 - FAX: (705) 568-8368

Horwin Resources Ltd  
 560 Notre Dame Ave.  
 Sudbury, Ontario  
 P3C 5L2

DATE	June 5, 1999
CUSTOMER ORDER N°	
WORK ORDER N°	Various
DATE SUBMITTED	

TERMS net 30 days, 5.0% per month on overdue accounts

QUANTITY	DESCRIPTION	PRICE	AMOUNT
UNION - 5	Gold Checks W.O.# 891866 cert.# 24818	8.00	40 00
3	Gold Checks W.O.# 891430 cert.# 24819	8.00	24 00
	Total.....		64 00

PAID  Cash  Cheque  
 Date June 23/99 1389

*Thank You!*

DOCUMENT  
W 89



42A05NW0115 2.12703 WHITESIDES

900

#335 Mining Act  
2.12703

Type of Survey(s) <b>Lithochemical</b>		Township or Area <b>Whitesides Township</b>
Claim Holder(s) <b>Glen J. Prior</b>		Prospector's Licence No. <b>D-19738</b>
Address <b>C412 - 1290 Bancroft Drive, Sudbury, Ontario P3B 4E1</b>		
Survey Company <b>Norwin Geological Ltd.</b>	Date of Survey (from & to) <b>16 11 88 15 05 89</b>	Total Miles of line Cut
Name and Address of Author (of Geo-Technical report) <b>Glen Prior, C412 - 1290 Bancroft Drive, Sudbury, Ontario P3B 4E1</b>		

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)	<input type="checkbox"/> Electromagnetic <input type="checkbox"/> Magnetometer <input type="checkbox"/> Radiometric <input type="checkbox"/> Other	
For each additional survey: using the same grid: Enter 20 days (for each)	<input type="checkbox"/> Geological <input type="checkbox"/> Geochemical	
Man Days	Geophysical	Days per Claim
Complete reverse side and enter total(s) here	<input type="checkbox"/> Electromagnetic <input type="checkbox"/> Magnetometer <input type="checkbox"/> Radiometric <input type="checkbox"/> Other	
	<input type="checkbox"/> Geological <input type="checkbox"/> Geochemical	
Airborne Credits		Days per Claim
Note: Special provisions credits do not apply to Airborne Surveys.	<input type="checkbox"/> Electromagnetic <input type="checkbox"/> Magnetometer <input type="checkbox"/> Radiometric	

Mining Claims Traversed (List in numerical sequence)

Mining Claim			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
P	1042414	22.6			
	1042415	22.6			
<div style="display: flex; justify-content: space-around;"> <div style="border: 2px solid black; padding: 5px; text-align: center;"> <b>RECEIVED</b> JUN 30 1989                             </div> <div style="border: 2px solid black; padding: 5px; text-align: center;"> <b>RECORDED</b> JUN 30 1989                             </div> </div> <div style="margin-top: 20px; text-align: center;"> <div style="border: 2px solid black; padding: 5px; text-align: center;"> <b>RECEIVED</b> JUL 10 1989                             </div> </div> <div style="margin-top: 20px; text-align: center;"> <div style="border: 2px solid black; padding: 5px; text-align: center;"> <b>RECEIVED</b> OCT 11 1989                             </div> </div>					
MINING LANDS SECTION					
ONTARIO GEOLOGICAL SURVEY ASSESSMENT FILES OFFICE					

Expenditures (excludes power stripping)

Type of Work Performed <b>Gold Analyses</b>														
Performed on Claim(s) <b>Samples Collected on Claims</b>														
<b>P1042412 and P1042413</b>														
Calculation of Expenditure Days Credits														
<table> <tr> <td>Total Expenditures</td> <td></td> <td>÷</td> <td>Total Days Credits</td> <td></td> <td>=</td> <td>Total Days Credits</td> </tr> <tr> <td>\$ 678</td> <td></td> <td></td> <td>15</td> <td></td> <td></td> <td>45.2</td> </tr> </table>	Total Expenditures		÷	Total Days Credits		=	Total Days Credits	\$ 678			15			45.2
Total Expenditures		÷	Total Days Credits		=	Total Days Credits								
\$ 678			15			45.2								
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 <b>June 29, 1989</b>	Recorded Holder or Agent (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

For Office Use Only		Mining Recorder 
Total Days Cr. Recorded <b>45.2</b>	Date Recorded <b>JUNE 30 89</b>	Branch Director 
Date Approved as Recorded <b>1002 89 RM</b>		

Total number of mining claims covered by this report of work.



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

DOCUMENT No. **W 8906-332**

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

Aug. 19

Mining Act

Type of Survey(s)	Lithochemical <b>2. 12703</b>	Township or Area	Whitesides Township
Claim Holder(s)	Glen J. Prior	Prospector's Licence No. D-19738	
Address C412 - 1290 Bancroft, Sudbury, Ontario P3B 4E1			
Survey Company	Norwin Geological Ltd.	Date of Survey (from & to)	Total Miles of line Cut
		16 11 88 15 05 89	---
Name and Address of Author (of Geo-Technical report)		Glen Prior, C412 - 1290 Bancroft, Sudbury, Ontario P3B 4E1	

Credits Requested per Each Claim in Columns at right

Mining Claims Traversed (List in numerical sequence)

Special Provisions	Geophysical	Days per Claim	Mining Claim		Expend. Days Cr.	Mining Claim		Expend. Days Cr.
			Prefix	Number		Prefix	Number	
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic		IP	1042412				
	- Magnetometer			1042413				
	- Radiometric							
	- Other							
For each additional survey: using the same grid: Enter 20 days (for each)	Geological							
	Geochemical							
	Man Days							
	Complete reverse side and enter total(s) here							
	- Electromagnetic							
	- Magnetometer							
	- Radiometric							
	- Other							
	Geological							
	Geochemical	28						

Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
IP	1042412				
	1042413				

RECEIVED JUN 30 1989

RECEIVED JUL 10 1989

RECORDED JUN 30 1989

MINING LANDS SECTION

ONTOLOGICAL SURVEY ASSESSMENT FILES OFFICE

SEP 26 1989

RECEIVED

Total number of mining claims covered by this report of work.

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.

For Office Use Only

Total Days Cr. Recorded

Date Recorded **JUNE 30 1989**

Mining Recorder *[Signature]*

Date Approved as Recorded *[Signature]*

Branch Director *[Signature]*

Date **June 29, 1989**

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  
**L.D.S. Winter c/o Norwin Geological Ltd., 560 Notre Dame Avenue  
Sudbury, Ontario P3C 5L2**

Date Certified **June 29, 1989**

Certified by (Signature) *[Signature]*

**DOCUMENT No. W 8906-335**

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

Aug 19

Mining Act

Type of Survey(s) Litho geochemical		2.12703		Township or Area Whitesides Township	
Claim Holder(s) Glen J. Prior			560-8735		Inspector's Licence No. D-19738
Address C412 - 1290 Bancroft Drive, Sudbury, Ontario P3B 4E1					
Survey Company Norwin Geological Ltd.			Date of Survey (from & to) 16 11 88   15 05 89 Day   Mo.   Yr.   Day   Mo.   Yr.		Total Miles of line Cut
Name and Address of Author (of Geo-Technical report) Glen Prior, C412 - 1290 Bancroft Drive, Sudbury, Ontario P3B 4E1					

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 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 Claims Traversed (List in numerical sequence)

Mining Claim			Mining Claim		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
P	1042414	22.6			
	1042415	22.6			
<div style="border: 2px solid black; padding: 5px; display: inline-block;"> <b>RECEIVED</b>                  JUN 30 1989             </div> <div style="border: 2px solid black; padding: 5px; display: inline-block;"> <b>RECEIVED</b>                  JUL 10 1989                  MINING LANDS SECTION             </div> <div style="border: 2px solid black; padding: 5px; display: inline-block;"> <b>RECORDED</b>                  JUN 30 1989             </div>					

Total number of mining claims covered by this report of work.

Expenditures (excludes power stripping)

Type of Work Performed  
Gold Analyses

Performed on Claim(s)  
Samples Collected on Claims  
P1042412 and P1042413

Calculation of Expenditure Days Credits

Total Expenditures	÷	15	=	Total Days Credits
\$ 678				45.2

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.

For Office Use Only

Total Days Cr. Recorded 45.2	Date Recorded JUNE 30 1989	Mining Recorder <i>[Signature]</i>
	Date Approved as Recorded	Branch Director

Date June 29, 1989	Recorded Holder or Agent (Signature) <i>[Signature]</i>
-----------------------	--

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 c/o Norwin Geological Ltd., 560 Notre Dame Avenue,  
Sudbury, Ontario P3C 5L2

Date Certified  
June 29, 1989

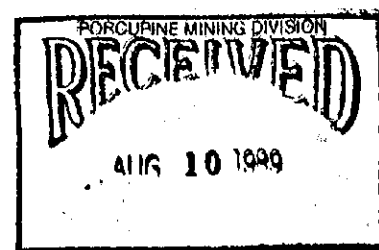
Certified by (Signature)  
*[Signature]*

**REFERENCES**

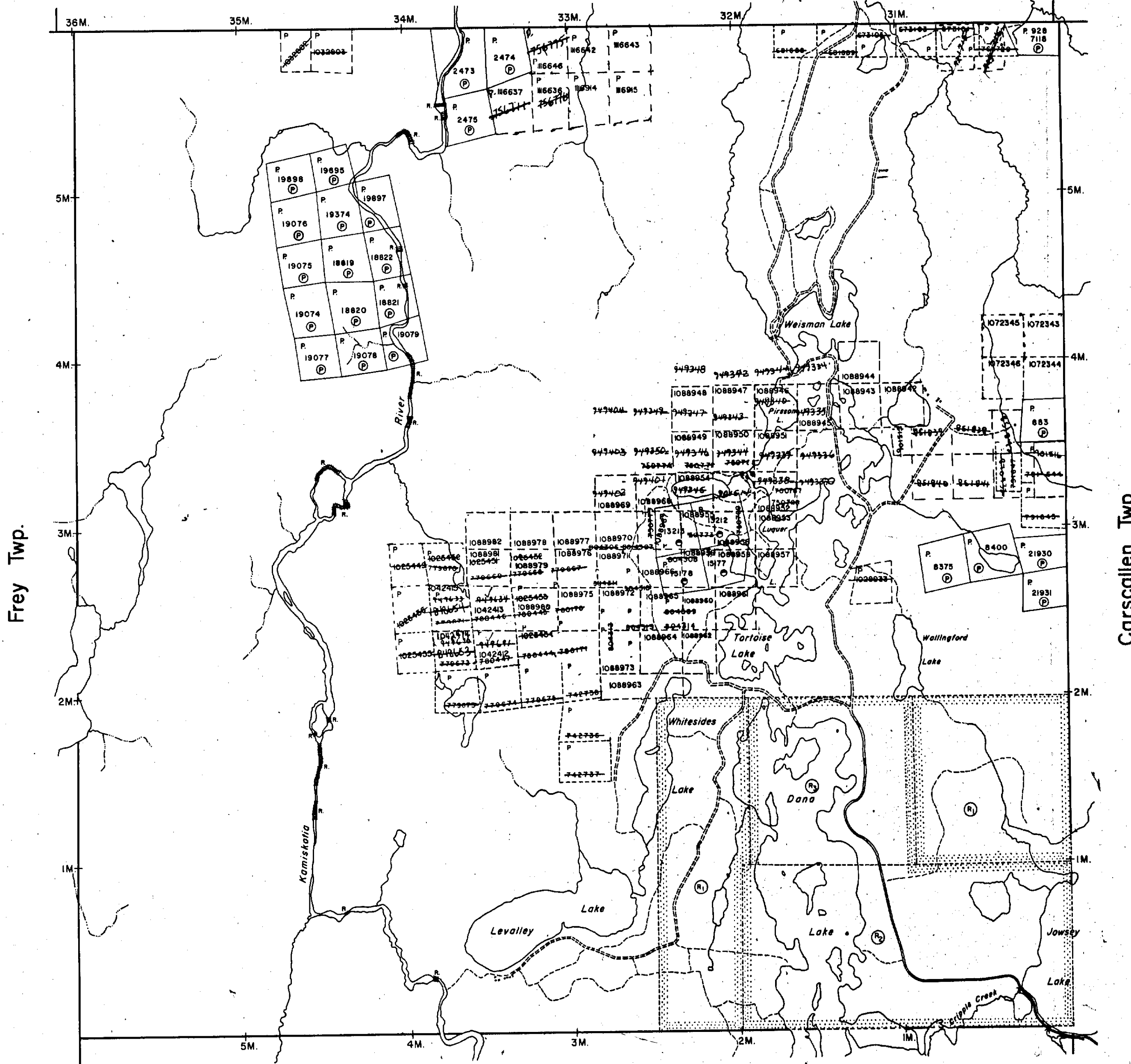
**AREAS WITHDRAWN FROM DISPOSITION**

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

Description	Order No.	Date	Disposition	File
JOWSEY LAKES PARK RES.			S.R.O.	171006
W 66/83			M.R.O.	
43/70		FEB. 3/66	M+S	171506
43/70		26/1/71	M+S	171506



**Massey Twp.**



**Keefe Twp.**

**LEGEND**

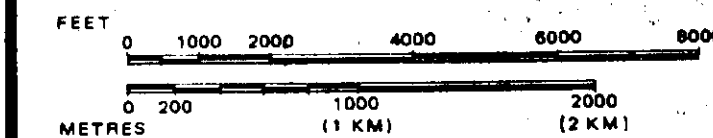
- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES:
  - TOWNSHIPS, BASE LINES, ETC.
  - LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES:
  - LOT LINES
  - PARCEL BOUNDARY
  - MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING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



**TOWNSHIP**

**WHITESIDES**

M.N.R. ADMINISTRATIVE DISTRICT

**TIMMINS**

MINING DIVISION

**PORCUPINE**

LAND TITLES / REGISTRY DIVISION

**COCHRANE**



Date FEBRUARY 1985

Number

**G-3230**