COMINCO LTD.

EXPLORATION

EASTERN DISTRICT

RICHAN LAKE PROPERTY

ASSESSMENT REPORT

SOIL GEOCHEMICAL SURVEY

NTS: 52-J-1

JUNE 1, 1989

N.L. SZABO

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NTS: 52-J-1

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1. SUMMARY

The Richan Lake property of 173 claims is located in the northern portion of the Sturgeon Lake - Savant Lake Greenstone Belt of Northwestern Ontario, 10 miles ESE of the town of Savant Lake and 120 miles NW of Thunder Bay. The claims were staked in March 1986, and are 100% owned by Cominco Ltd.

The property was staked as a result of a Cominco regional geochemical survey, which indicated anomalous metal values in a number of Lakes on the property.

The area has been sporadically explored since the 1900's. A three year period of extensive exploration followed the 1969 discovery of the Mattabi massive sulphide deposit in the same belt to the south. In the period of 1970 to 1972 ground geophysical surveys were done on the property and over twenty diamond drill holes were drilled to test conductors.

The property is underlain by intermediate to mafic volcanics, sediments, and acid to mafic intrusives.

A Cominco geochemical reconnaissance program in 1985 located anomalous metal concentration in lake sediment, and the property was staked to protect the anomalies.

An airborne geophysical survey was conducted by Cominco over the property in early 1987. In 1988 Cominco Ltd. performed reconnaissance VLF, prospecting, reconnaissance mapping, and a soil geochemical survey on portions of the Richan property.

2. LOCATION AND ACCESS

The Richan Lake property is located in northwestern Ontario, approximately 10 miles ESE of the village of Savant Lake and 120 miles NW of Thunder Bay. Access to the property is by gravel road from Savant Lake. Savant Lake is on the CNR transcontinental line, and is reachable by highway 599 from Ignace on the Trans Canada Hwy.

3. PROPERTY, OWNERSHIP AND WORK PERFORMED

The 173 claim property was staked in March 1986, and is 100% owned by Cominco Ltd. Claim No's are PA889008 to 053 incl., PA889257 to 300 incl., PA889601 to 627 incl., PA889635 to 640 incl., PA889976 to 979 incl., PA889982 to 890000 incl., PA923480 to 483 incl., PA923492 & 493, PA889916 to 952 incl., PA898576 & 577.

The soil geochemical survey, subject of this report, covered claims 889611-612, 889623-624, 889636, 923483, 923492, 889978-79, 889982-983, 889036-037, 889048-049, 889051-052, and 889287.

4. GEOCHEMICAL SURVEYS

Field Methods:

Lines were run by compass and topofill. Line and sample spacing depended on reconnaissance VLF and airborne geophysical results. The B horizon was sampled where possible, humus samples were collected where B horizon was too deep for 1 metre auger.

Analytical Methods:

B horizon samples were sieved to -80 mesh. Humus samples were ashed prior to analysis. Analysis for Au was done by bromide extraction, description of the method is attached to this report. All analytical work was performed by Cominco's Eastern District Exploration Laboratory.

5. CONCLUSIONS

Anomalous gold values were generally found to be sporadic, and with the exception of the Wellington Lake grid, probably represent the nugget effect and possible analytical problems normally associated with gold analyses. The Wellington Lake grid hosted a more cohesive gold anomaly which will require additional work.

6. ATTACHMENTS

		Scale
Plate 1	Richan Lake Location Map	1:50,000
Plate 2	Richan Main Gr. Geochem	1:2500
Plate 3	Richan Queens Gr. Geochem	1:2500
Plate 4	Richan Well Gr. Geochem	1:2500

Submitted by: N L Szabo

N.L. Szabo, Project Geologist
Exploration, Eastern District

/ml

Dual
2.6056

DETERMINATION OF GOLD ON LARGE WEIGHT SAMPLES

(Geochemical Procedure)

1. Weigh 50 - 100 g. of the sample into a suitable size Coors porcelain evaporating dish.

2. Place it on the halo support of a Fisher burner. Start heating it slowly, to prevent the dish from cracking. Increase the gas flow gradually, until the flame burns at its highest temperature. Stir the sample frequently with a spatula or glass rod to insure thorough contact with the air. At this point the sample should reach 550 - 600° C. Continue the heating until it is thoroughly roasted. Complete roasting is very important. All traces of organic material (including residual carbon) and sulphides must be burnt out, or they strongly interfere in the following steps. On an average the roasting takes 15 - 30 minutes. For high sulphide samples it could take as long as 45 minutes.

3. After the roasting, cool and transfer the sample into a 250 mL wide mouth Erlenmeyer flask. Slowly add 25 mL conc. HCl, to decompose the carbonates. For more than 50 g. carbonates a larger volume of HCl may be needed. In this case record the volume of HCl added. The carbonates must be completely decomposed and the sample must be thoroughly moistened with the HCl. Dolomite samples have a tendency to start the decomposition on heating only. In this case they could froth out of the flask.

4. When the carbonates are decomposed and the sample is thoroughly moistened with the HCl, from a dispenser add 25 mL HBr-Br_2 solution (50 mL Br_2 in 950 mL HBr). Stopper with the polypropylene hollow stopper outfitted with a glass vent tube. Place it into the sleeve of a microwave oven and connect the vent tube to the exhaust tube passing through the back wall of the oven. For the exhaust tube use a combination of glass and Fluoran tubing.

5. Heat the sample to boiling and boil for not more than 5 - 10 seconds. Determine the time needed to boil the sample, by experiment. Remove the flask from the oven and cool. At this point it is absolutely necessary to have an excess of Br_2 in the solution. If all the Br_2 has been consumed, which is indicated by the bleaching of the strong brown-red color, add some more HBr-Br_2 and heat again and record the volume of acid mix added, or better still, start the analysis with a fresh sample and insure a better roasting. The sulphides left in the sample after roasting consume the Br_2.

Roast 1½ - 1¾ min

6. Add from a dispenser 150 mL H_2O, mix well and let settle (See: Note). Pour about 40 mL of the supernatant solution into a 50 mL centrifuge tube and centrifuge. Pipet 20 mL into a 20X150 mm screw cap test tube. The screw cap should have a teflon liner. Add 4 mL NaCl solution and from a dispenser add exactly 1 mL DIBK extracting solution. Cap the tube tight.

7. Shake the tube on a shaker for 5 minutes. Let the phases separate. Centrifuge if emulsified. If Fe is present as indicated by the strong brown color of the DIBK layer, decant into another tube and backwash the Fe with 10 mL 0.1M HBr and 2 mL NaCl solution.

8. Determine the Au by aspirating the upper organic layer into the air-acetylene flame of an atomic absorption spectrometer at 242.8 nm wavelength.

9. Calibrate the instrument against synthetic calibration standards as described below.

Note: Because of the volume of the large sample itself, which varies with its specific gravity, diluting to a precise volume is not recommended. Instead, the volume of the reagents added should be as precise as possible Add together the volumes of the reagents to gain the final volume of the sample solution. Using the above procedure, the final volume is 200 mL and if 50g. sample is weighed, the 20 mL aliquot represents 5g sample.

Calibration:

Prepare by dilution, from a 1000 $\mu g\ mL^{-1}$ Au stock solution a 25 $\mu g\ mL^{-1}$ and a 1 $\mu g\ mL^{-1}$ standard solution. To a set of 6 screw caps test tubes (20x150mm) add the volumes specified in the following table, of the diluted standard solutions. Then add 2.5 mL HCl, 2.5 mL HBr-Br_2 mix, 4 mL NaCl solution. Add exactly 5 mL DIBK. Cap the tubes and shake on a shaker for 5 min. Let the phases separate. Calibrate the atomic absorption spectrometer by aspirating the upper organic layer into the air-acetylene flame at 242.8 nm wavelength and recording the absorbances.

COMINCO LTD.

EXPLORATION EASTERN DISTRICT

RICHAN LAKE PROPERTY

GEOLOGICAL ASSESSMENT REPORT

NTS: 52-J-1

SEPTEMBER 5, 1989 N.L. SZABO

1. LOCATION AND ACCESS

The Richan Lake property is located in the northern portion of the Sturgeon Lake - Savant Lake Greenstone Belt of NW Ontario, 10 miles ESE of the town of Savant Lake and approximately 120 miles NW of Thunder Bay, Ontario.

An all-weather gravel road from Savant lake bisects the property and a system of lakes and old forestry roads give reasonable access to most areas on the property.

2. SUMMARY OF WORK

The property is 100% owned by Cominco Ltd. and all work, except for linecutting, was performed by Cominco employees.

The work reported on currently was performed on claim No's 923483, 923492, 889978-79, 889033, 889036-37, 889048-49, 889051-52, and 889287.

Work on the property was performed between the dates of June 27, 1988 and August 18, 1988.

A Cominco reconnaissance program in the area in 1985 located Au-anomalous lake sediment samples in Wellington, Queens and Vanessa Lakes, leading to the acquisition of the properties.

The area has been sporadically explored since the 1900's. A three year period of extensive exploration followed the 1969 discovery of the Mattabi massive sulphide deposit in the same belt to the south. This exploration effort, consisting of airborne and ground geophysical surveys followed by diamond drilling led to the discovery of the NBU Mine and Lyon Lake and Creek Zone massive sulphide deposits. This exploration activity was primarily aimed at locating base metal deposits. The only significant gold production in the area was from the St. Anthony Mine, producing approximately 63,000 ounces between 1901 and 1941.

The Richan property is underlain by intermediate to mafic volcanics, sediments, and mafic to ultramafic intrusives. The major structural feature in the area, the Sturgeon Narrows Cataclastic Zone is to the southwest of the Richan property.

A late 1986 Cominco program consisted of limited prospecting, reconnaissance VLF, soil sampling and trenching, restricted to the road bisecting the Richan property and to the NE corner of the property. In early 1987 18km of lines were cut, Mag and VLF surveys were conducted over the NE corner of the property, and the claims were covered with an airborne Mag, VLF, and EM survey. The 1988 Cominco program conducted soil geochemical surveys, mapping, prospecting, and ground VLF in areas of known anomalous gold concentration in lake sediments.

3. PROPERTY GEOLOGY

The Richan property is underlain by rocks of the Beckington Lake East Cycle comprised of formations C3 and D3, massive mafic flows and wacke-siltstone medial to distal turbidites respectively, and Formation E3 of the Richan Lake Cycle, comprised of mafic metavolcanic flows with minor interbeds of wacke-siltstone. (After Trowell, N.F., 1981, 1983).

This assemblage is intruded in a number of areas by rocks of felsic and mafic to ultramafic affinity.

Pyrite-pyrrhotite ($\pm$ graphite) iron formation occur throughout the above sequences as shown by diamond drilling and suggested by the presence of numerous conductors.

No shear zones have been mapped on surface on the Richan property, but extensive shearing has been noted in many diamond drillholes on the property.

The Savant Lake - Sturgeon Lake belt has been metamorphosed to greenschist - lower almandine-amphibolite facies rank.

Mineralization in the area consists of pyrite-pyrrhotite graphite iron formation often enriched by silica. The presence of minor chalcopyrite and sphalerite has been noted in diamond drillholes occasionally. Assays were only available for four of the 33 holes drilled on the Richan property, two of which intersected pyrite pyrrhotite zones containing .01 to .02 oz/ton Au. Extensive alteration was noted in many diamond drillholes on the Richan property, and included chloritization, sericitization, silicification, and carbonatization.

The work on the Wellington Lake grid mapped primarily mafic tuffs, massive mafic flows, minor sediments and felsic tuffs.

The Main Grid was found to be underlain by a northeasterly trending package of mafic and felsic tuffs, metasediments, siliceous iron formation and granites.

Cominco's exploration programs located only three gold mineralized quartz veins, each less than six inches in thickness and less than 30' in length, and none were considered of any economic significance.

All geological mapping on the property was done by Matthew Egner, B.Sc. honours, Carleton University, 1987. Field supervision was by the writer of the report.

4. REFERENCES

Trowell, N.F., 1981: Geology of the Beckington Lake Area; ODM, Geological Report No. 200.

_____, 1983: Geology of the Sturgeon Lake Area; ODM Geological Report No. 221.

_____, 1983: Geology of the Squaw Lake - Sturgeon Lake Area; ODM, Geological Report No. 227.

Ontario Assessment Files.

Submitted by: Nicholas L Szabo
N.L. Szabo, Sr. Geologist
Exploration, E.D.

/ml

Ontario

900

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

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

Telephone: (416) 965-4888

February 28, 1990

Your File: W8903-080
Our File: 2.12530

Mining Recorder
Ministry of Northern Development and Mines
Court House
P.O. Box 3000
Sioux Lookout, Ontario
P0V 2T0

Dear Sir:

Re: Notice of Intent dated January 25, 1990 for Geological and Geochemical surveys submitted on Mining Claims TB 830249 et al in Beckington Lake Area.

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
KJS
LS:pt
Enclosure

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

Comico Limited
Toronto, Ontario

Resident Geologist
Sioux Lockout, Ontario

Ontario

AMENDED

Ministry of
Northern Development
and Mines

Ministère du
Développement du Nord
et des Mines

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

Telephone: (416) 965-4888

March 5, 1990

Your File: W8903-080
Our File: 2.12530

Mining Recorder
Ministry of Northern Development and Mines
Court House
P.O. Box 3000
Sioux Lookout, Ontario
P0V 2T0

Dear Sir:

Re: Notice of Intent dated January 25, 1990 for Geological and Geochemical surveys submitted on Mining Claims PA 889033 et al in Beckington Lake Area.

The assessment work credits, as listed with the above-mentioned Notice of Intent have been approved as of the above date. This document replaces approval sent out on February 28, 1990.

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

LS:pt
Enclosure

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

Resident Geologist
Sioux Lockout, Ontario

Comico Limited
Toronto, Ontario

Ministry of Northern Development and Mines

Ont.

Technical Assessment Work Credits

File 2.12530

Date Jan 25, 1990

Mining Recorder's Report of Work No. W8903-080

AMEMDED

Recorded Holder

COMINCO LTD.

Township or Area

BECKINGTON LAKE AREA.

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic _____ days	PA 889033
Magnetometer _____ days	889036-37
Radiometric _____ days	889048-49
Induced polarization _____ days	889051-52
Other _____ days	889287
Section 77 (19) See "Mining Claims Assessed" column	923483
Geological 15.1 days	923492
Geochemical _____ days	889978-79
Man days ☒ Airborne ☐	889053
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.	

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

No credits have been allowed for the following mining claims

☒ not sufficiently covered by the survey ☒ insufficient technical data filed

PA 889286
889290-91
889610 to 612 incl.
889623-24,889636
889982-83

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.

828 (85/12)

Ministry of Northern Development and Mines

Ont.

Technical Assessment Work Credits

File 2.12530

Date Jan 25, 1990

Mining Recorder's Report of Work No. W8903-080

AMEMDED

Recorded Holder

COMINCO LTD.

Township or Area

BECKINGTON LAKE AREA.

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828 (85/12)

Ministry of Northern Development and Mines

Ontario

Technical Assessment Work Credits

OK

File: 2.12530

Date: Dec 12, 1989

Mining Recorder's Report of Work No.: W8903-080

Recorded Holder: COMINCO LTD.

Township or Area: BECKINGTON LAKE AREA.

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	PA 889033
Electromagnetic _____ days	889036-37
Magnetometer _____ days	889048-49
Radiometric _____ days	889051-52
Induced polarization _____ days	889287
Other _____ days	889611-12
Section 77 (19) See "Mining Claims Assessed" column	889623-24
Geological _____ days	889636
Geochemical 5 days	923483
Man days ☐ Airborne ☐	923492
Special provision ☒ Ground ☒	889978-79
☒ Credits have been reduced because of partial coverage of claims.	889982-83
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Ministry of Northern Development and Mines

Ontario

Technical Assessment Work Credits

OK

File: 2.12530

Date: Dec 12, 1989

Mining Recorder's Report of Work No.: W8903-080

Recorded Holder: COMINCO LTD.

Township or Area: BECKINGTON LAKE AREA.

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	PA 889033
Electromagnetic _____ days	889036-37
Magnetometer _____ days	889048-49
Radiometric _____ days	889051-52
Induced polarization _____ days	889287
Other _____ days	889611-12
Section 77 (19) See "Mining Claims Assessed" column	889623-24
Geological _____ days	889636
Geochemical 5 days	923483
Man days ☐ Airborne ☐	923492
Special provision ☒ Ground ☒	889978-79
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889290-91
889610
889053

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May 30

Ministry of Northern Development and Mines

Ontario

MINING LANDS

Report of Work

(Geophysical, Geological, Geochemical and Expenditures)

Mining Act

DOCUMENT No. W8903 • 080

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.

2.12530

Type of Survey(s): GEOLOGICAL AND GEOCHEMICAL

Township or Area: BECKINGTON LAKE AREA G2532

Claim Holder(s): COMINCO LTD.

Prospector's Licence No.: A 10043

Address: 2200-120 ADELAIDE ST. W. TORONTO M5H ITI

Survey Company: COMINCO LTD.

Date of Survey (from & to): 26 06 88 (Day | Mo. | Yr.) 16 08 88 (Day | Mo. | Yr.)

Total Miles of line Cut:

Name and Address of Author (of Geo-Technical report): N.L. SZABO C/O COMINCO LTD.

Credits Requested per Each Claim in Columns at right

Special Provisions		Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	Geophysical - Electromagnetic	
	Geophysical - Magnetometer	
For each additional survey: using the same grid: Enter 20 days (for each)	Geophysical - Radiometric	
	Geophysical - Other	
	Geological	20
	Geochemical	20
Man Days		**Days per Claim**
Complete reverse side and enter total(s) here	Geophysical - Electromagnetic	
	Geophysical - Magnetometer	
	Geophysical - Radiometric	
	Geophysical - Other	
	Geological	
	Geochemical	
Airborne Credits		**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 Prefix	Mining Claim Number	Expend. Days Cr.
P.A.	889033 - 1	
	889036 - 1	
	889037 - 1	
	889048 - 1	
	889049 - 1	
	889051 - 1	
	889052 - 1	
	889286 - 1	
	889287 - 2	
	889290 - 1	
	889291 - 1	
	889610 - 1	
	889611 - 1	
	889612 - 1	
	889623 - 1	
	889624 - 1	
	889636 - 1	
	923483 - 1	
	923492 - 1	
	889978 - 2	
	889979 - 1	
	889982 - 1	
	889983 - 1	

Mining Claim Prefix	Mining Claim Number	Expend. Days Cr.
P.A.	889053 - 1	

RECEIVED APR 10 1989 MINING LANDS SECTION

RECEIVED APR 10 1989 PATRICIA MINING DIVISION

Total number of mining claims covered by this report of work: 24

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	Mining Recorder
960	APRIL 10, 1989	R. Mycho
	Date Approved as Recorded	Branch Director
	See revised work statement	

Date: APRIL 6, 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.

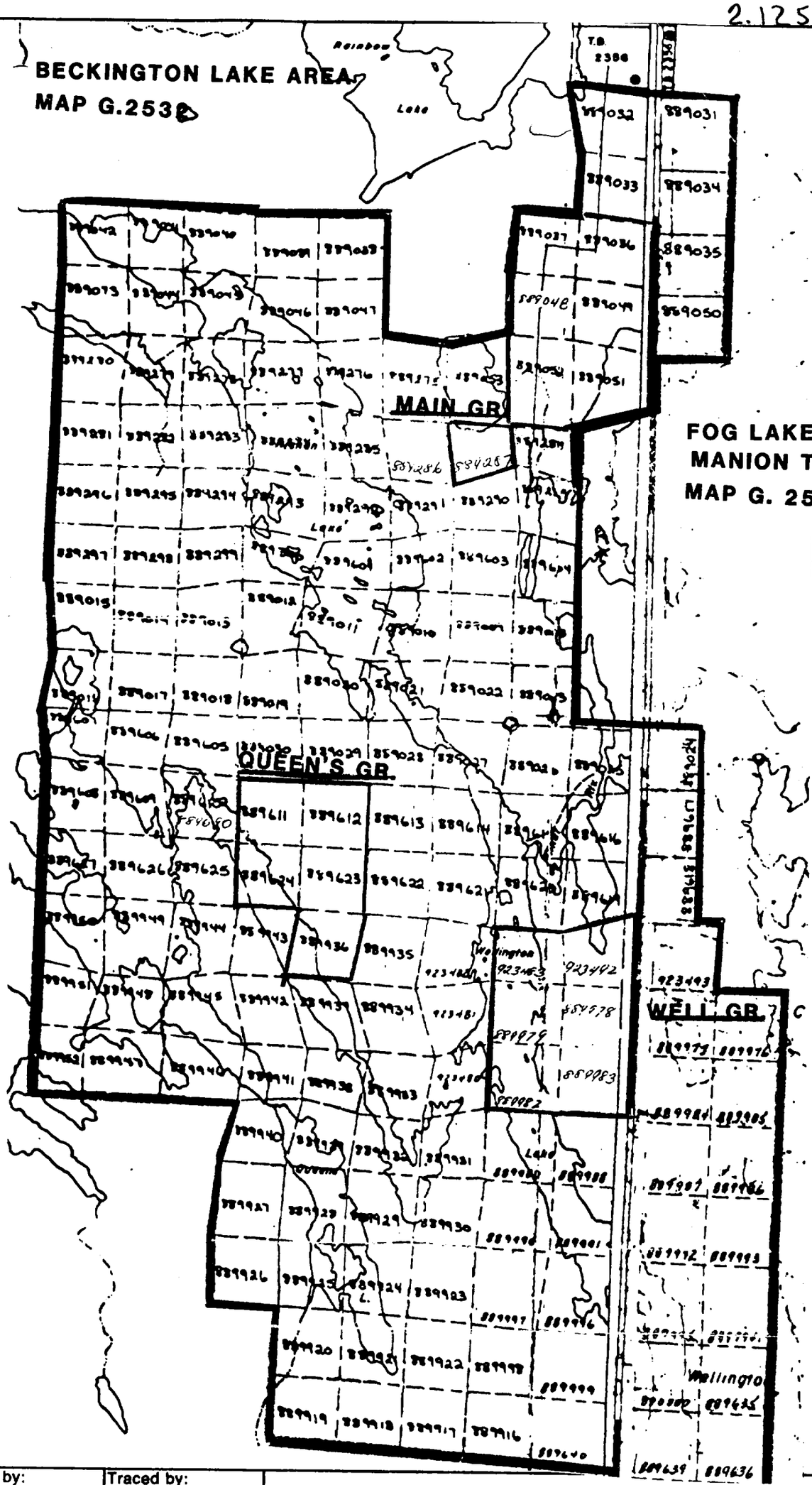
Name and Postal Address of Person Certifying: N.L. SZABO C/O COMINCO LTD 2200-120 ADELAIDE ST. W. TORONTO, ONTARIO M5H ITI

Date Certified: APRIL 6, 1989

Certified by (Signature): N L Szabo

1362 (85/12)

2.12530



Drawn by:		Traced by:	
Revised by	Date	Revised by	Date

RICHAN PROPERTY

Scale:	Date:	Plate: 1

NCI - 112A - CL

210-0610

Evans Lake Area - G-2031

Barnard Lake Area G-2531

Fog Lake & Manion Twp. G-2542

Squaw Lake Area - G-3 0

90°45'

90°30'

50°15'

50°07'30"

BOUCHER TWP.
FOR STATUS REFER TO TWP PLAN

CHEVRIER TWP.
FOR STATUS REFER TO TWP PLAN

PROJECTED LINE

SAVANT TOWNSITE

Chivelston Lake

CANADIAN NATIONAL RAILWAY

STA STAUNTON

BALLAST PIT

SAVANT LAKE INTERMEDIATE AERODROME
FILE 97873

AIRPORT

PHILLIPS & BENNER O.L.S. (1931) LINE

MER

Beckington Lake

Rainbow Lake

Gordon Lake

Wellington Lake

Mitchell Lake

Couture Lake

Ouiette Lake

North Arm

Sturgeon Lake

Sturgeon Bay

Horizontal Bay

1M 2M 3M 4M 5M 6M 7M 8M 9M 10M

AL 668 TB 648

AL 666,7 TB 211

AL 666 TB 210

TB 963

TB 720

TB 6978

BG 158 TB 6579

BG 157 TB 6980

BG 156 TB 6981

BG 155 TB 6982

HW 697

HW 696

SV 376 TB 1037

TB 19530

TB 19531

TB 1353

TB 19532

TB 19533

TB 19534

TB 1355

AL 773

TB 19535

TB 19536

TB 19537

TB 19538

Po 19051

Po 19052

Po 19053

TB 2357

TB 2201

TB 2356

43' 42' 41' 40' 39' 38' 37' 36' 35' 34' 33' 32' 31'

14' 13' 12' 11' 10' 9' 8'

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	OC
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

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
SEC 43/75			S R O	143788
SEC 43/70	W36, 74	27/6/74	S R O	143788
SEC 43/75	W28/76	8/7/76	S R O	

Aug 9 85
Aug 29 85

Nov 85

SAND AND GRAVEL

- M T C GRAVEL PIT Nº 636
- " " Nº 637
- GRAVEL FILE 183533
- " " 143788
- M T C GRAVEL PIT Nº 635
- " " Nº 1446
- " " Nº 1436, FILE 143788
- GRAVEL FILE 160704
- M T C GRAVEL PIT Nº 10-14 FILE 43788
- QUARRY PERMIT

April 18/86
Nov 8/86

July 25/86

66405

SCALE. 1 INCH = 40 CHAINS

FEET 0 1000 2000 4000 6000 8000

METRES 0 200 1000 .1 KM 2000 (2 KM)

AREA

BECKINGTON LAKE

M.N.R. ADMINISTRATIVE DISTRICT

IGNACE

MINING DIVISION

PATRICIA

LAND TITLES / REGISTRY DIVISION

THUNDER BAY

Ontario Ministry of Natural Resources — Land Management Branch

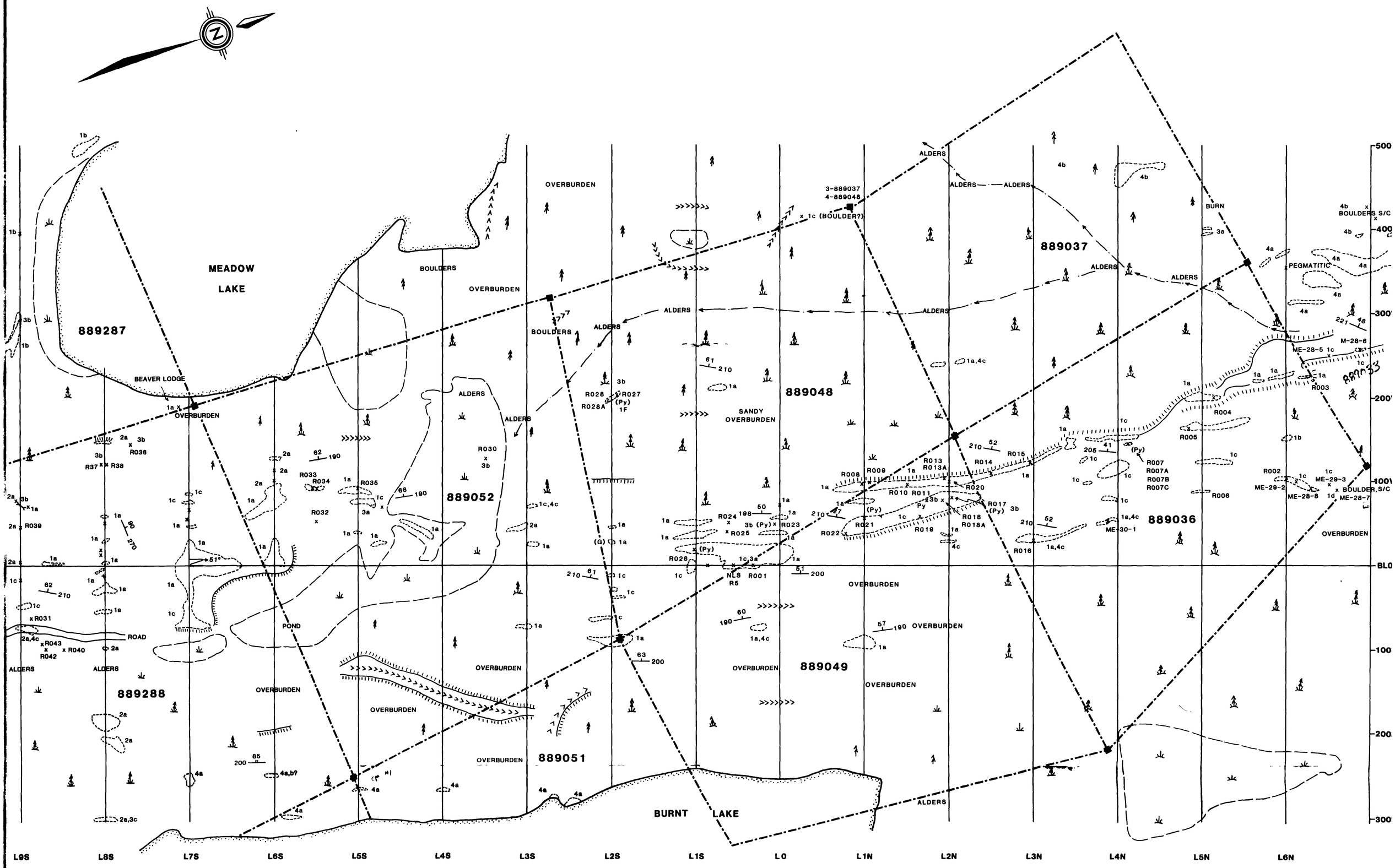
Date FEBRUARY, 1984

Number G-2532

2.125 30

200

52J02NE0001 2.12530 BECKINGTON LAKE



LEGEND

4 GRANITE

Contains approximately 20% Quartz
35% K-Spar
35% Plag
10% Biotite

This content varies from Quartz-rich to poor and Biotite-rich to poor. Occassionally Biotite is replaced by or included with Amphibole.

a) GRANITE
Massive to slightly foliated, usually Biotite poor, medium to coarse grained.

b) GRANITE-BIOTITE GNEISS
Well foliated Granite, Biotite ± Amphibole rich.

c) GRANITE DYKES
Ussually small (5cm to 1m), fine to coarse grained, often Porphyritic with Feldspar or Quartz, ussually Biotite poor.

3 IRON FORMATION

a) LEAN CHERTY
Chemical sediment, usually recrystallized, less than 10% Magnetite, found as beds with the Volcanics and Sediments.

b) SULPHIDIZED LEAN CHERTY
Contains 5-10% (or more) Py±Cpy,Po

2 METASEDIMENTS

a) Wacke
An impure Sandstone containing varying amounts of Muscovite or Biotite. White to beige and well bedded.

1 METAVOLCANICS

Contains Chlorite and Tremolite, may contain considerable Biotite. The most Chloritic bands are Garnetiferous.

a) MAFIC TUFF
Moderate to well bedded and laminated, Garnetiferous, Schistose, contains Chlotire, Biotite Tremolite. Occassionally seen as Tuffaceous Sediment with considerable Quartz. May contain few lenses of sediment.

b) MASSIVE MAFIC METAVOLCANIC
Fine to coarse grained, in places Amphibolitic, may contain stretched pillow selvadges, often contains beds of Tuff and sediment.

c) INTERBEDDED MAFIC TUFF AND SEDIMENTS ± FELSIC TUFF?
Similar to (1a) but with considerable sediments. Variable, contains Tuffaceous sedimentary lenses.

d) FELSIC METAVOLCANIC
Rare, waxy, light grey, veined with carbonate, pods of 1-3% Po, only found as one boulder or s/c.

SYMBOLS

- OUTCROP
- SWAMP
- SPRUCE BOG
- RIDGE/ESKER
- 220/70 BEDDING
- 220/70 FOLIATION
- FOLD PLUNGE
- SLOPE
- INTERMITENT CREEK
- LAKE
- CLAIM POST
- CONTACT (KNOWN)
- CONTACT (INTERPRETED)
- FAULT
- R035 SAMPLE
- TRENCH
- (Py) PYRITE

RICHAN - ONTARIO

2.12530

M.Egner L.S.

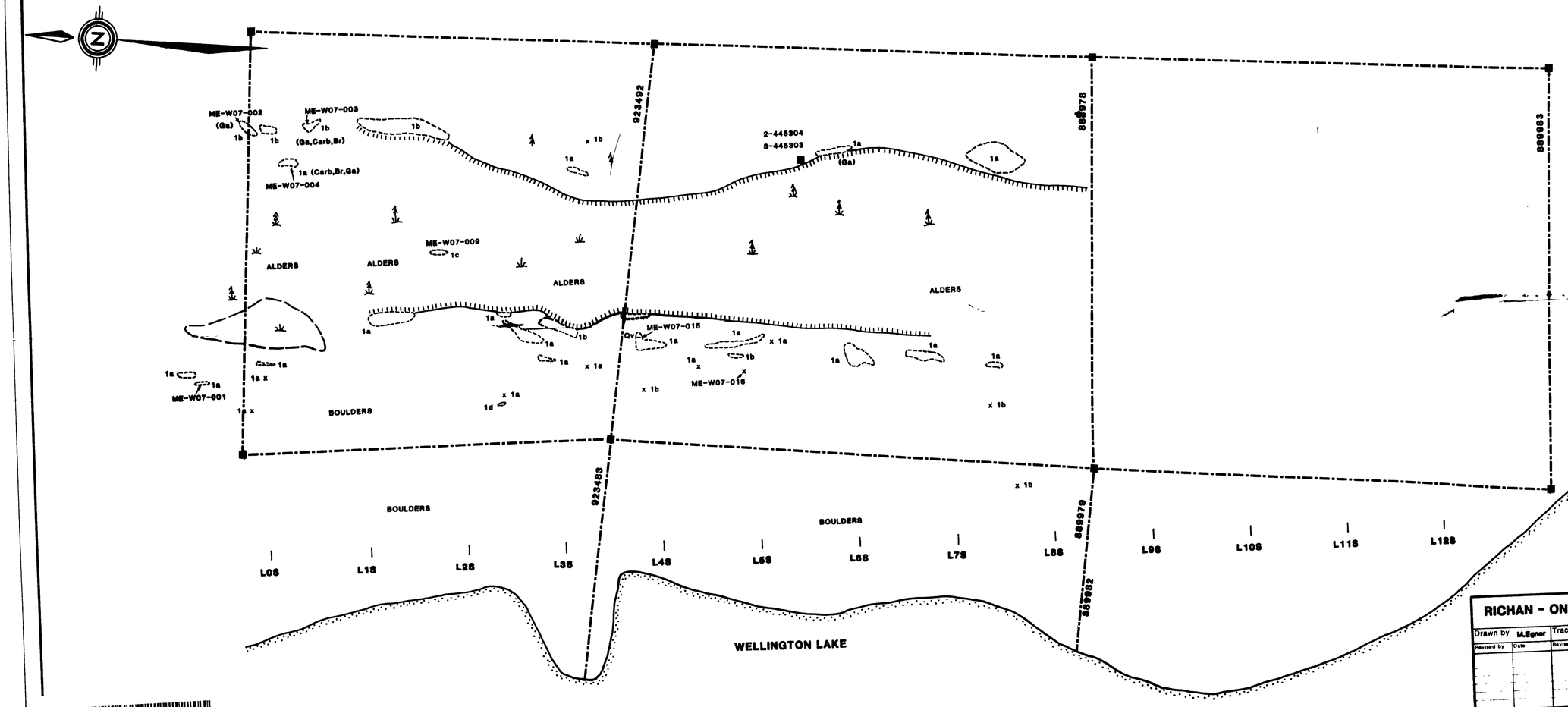
RICHAN PROPERTY
MAIN GRID

GEOLOGY MAP

1:2500 JULY 1988 1

52J02NE0001 2.12530 BECKINGTON LAKE

210



NOTE:
FOR LEGEND SEE RICHAN PROPERTY
MAIN GRID GEOLOGY MAP.

2.12530

RICHAN - ONTARIO

Drawn by	M.Egner	Traced by	L.S.
Revised by	Date	Revised by	Date

RICHAN PROPERTY
WELL GRID
GEOLOGY MAP

Scale: 1:2500 | Date JULY 1988 | Plate: 2

FORM 2 10

52J02NE0001 2 12530 BECKINGTON LAKE

220

3W 2W 1W 0 1E 2E 3E

7N

BL

889033

889036

6N

889037

5N

4N

889049

3N

889048

2N

1N

889052

889051

1S

2S

3S

889287

6S

7S

8S

N

0.0 50.0 100.0 200.0 METRIC

LAKE

2.12530

AU ppb.

- A HORIZON
- B HORIZON

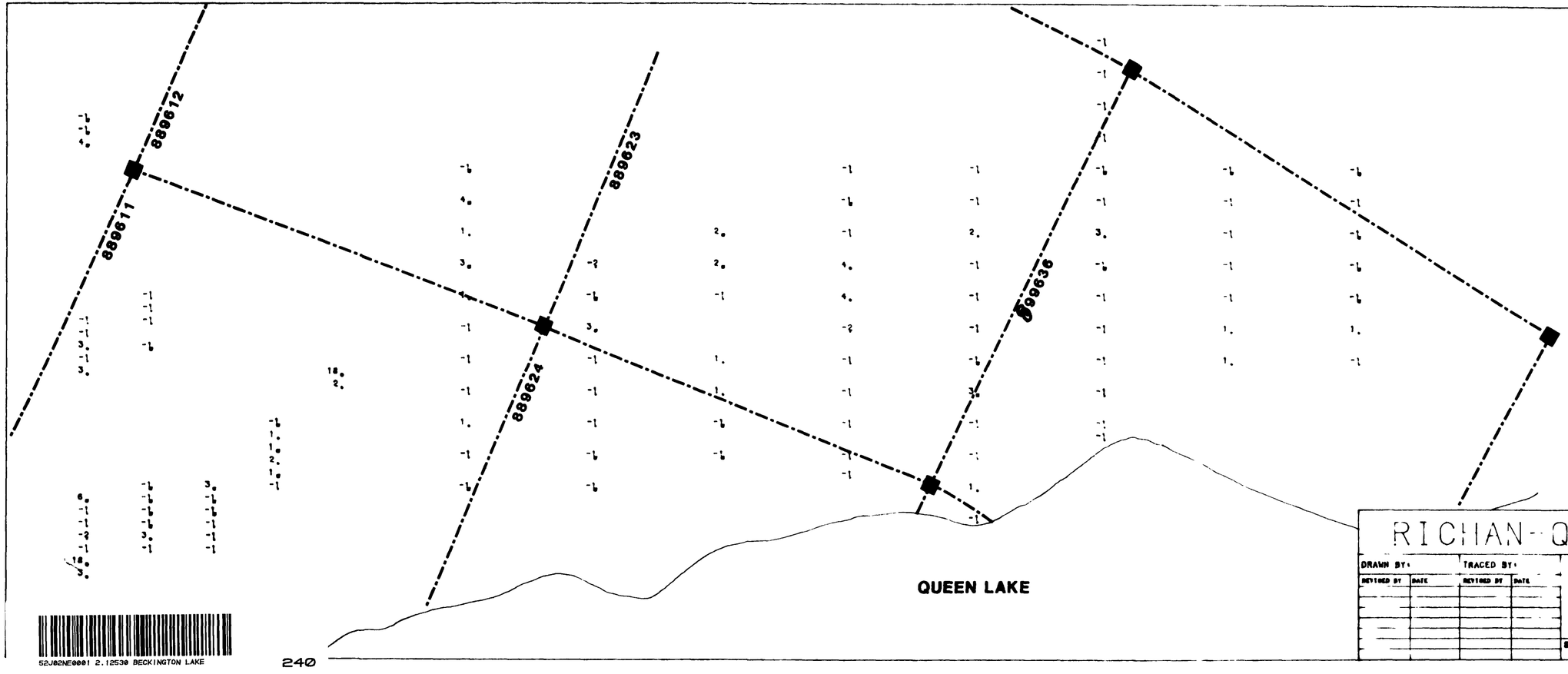
RICHAN MAIN GR GEOC

DRAWN BY:		TRACED BY:	
DEPTHED BY	DATE	DEPTHED BY	DATE

SOIL SURVEY
Au (ppb)

SCALE: 1:2500 DATE: Apr. 15/89 PLATE: 2

52J02NE0001 2 12530 BECKINGTON LAKE



2.12530 AU ppb.

- A HORIZON
- B HORIZON

0.0 50.0 100.0 200.0 METRIC

RICHAN-QUEENS GR

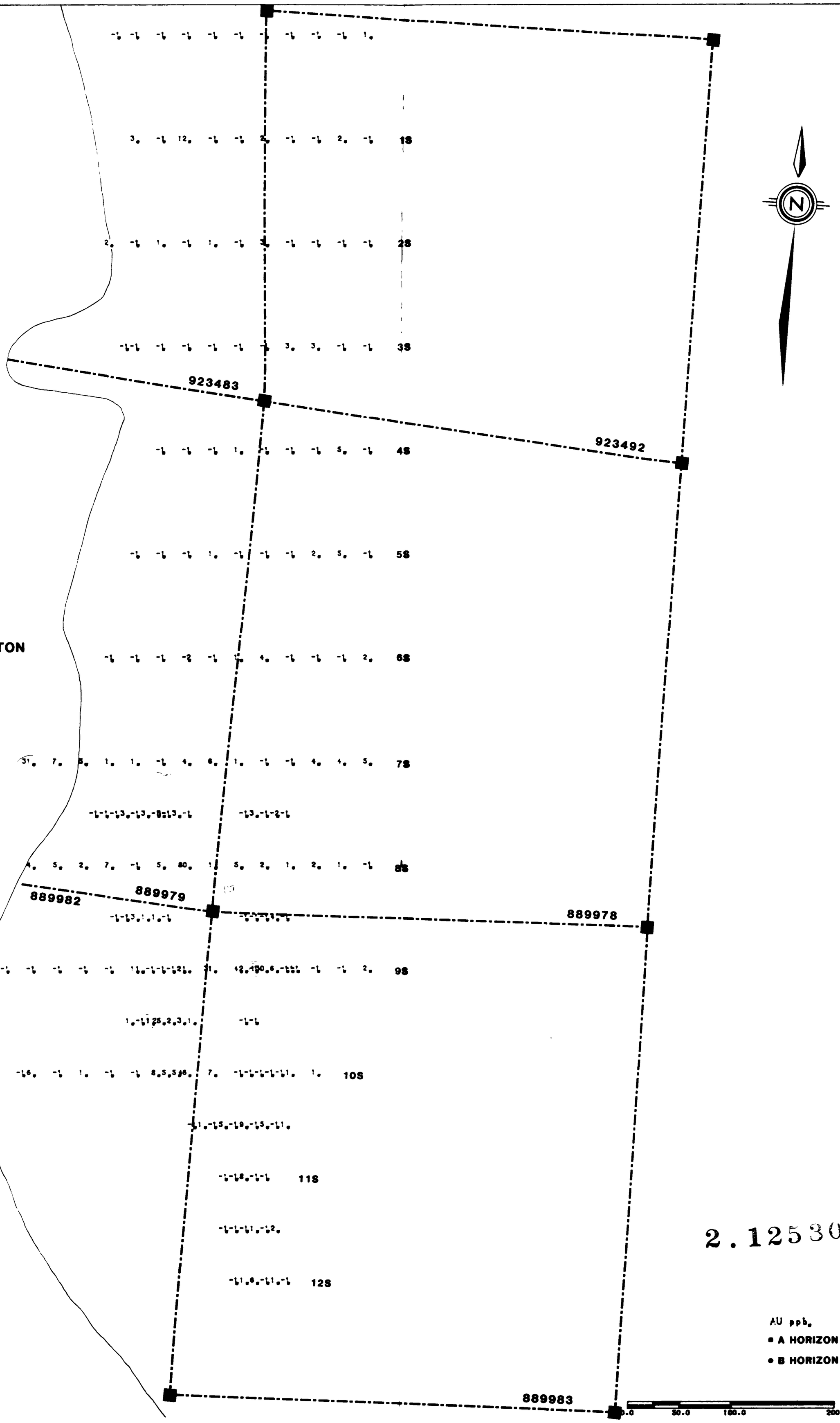
DRAWN BY: TRACED BY:

REVISED BY	DATE	REVISED BY	DATE

SOIL GEOCHEMISTRY
Au (ppb)

SCALE: 1:2500 DATE: May 05/89 PLATE: 3

52J02NE0001 2.12530 BECKINGTON LAKE



2.12530

52J02NE0001 2.12530 BECKINGTON LAKE

RICHAN-WELL GR. GEOC

DRAWN BY:		TRACED BY:	
REVISED BY	DATE	REVISED BY	DATE

SOIL SURVEY
Au (ppb)

SCALE: 1:2500 | DATE: APR. 13/89 | PLATE: #