

MICHAM EXPLORATION INC.

GEOCHEMISTRY REPORT

TERRACE BAY AREA

DISTRICT OF THUNDER BAY, ONTARIO

#4410

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MINING LANDS SECTION

April 1, 1985 Timmins, Ontario By: Mike Simunovic, B.Sc.

Per: David R. Bell

Geological Services Inc.



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Copper Geochemistry 1"=400'

0 SUMMARY

Micham Exploration Inc. holds a 96 claim group in the Terrace Bay area, District of Thunder Bay, Ontario.

During May and October of 1983 a soil sample survey was conducted on the property. As a result, two major zones of interest as well as other less significant anomalies were located. The most interesting was the anomaly associated with the Empress and West Siville-Ferrier Structures. It was approximately 8,800 feet in length and was anomalous in copper, zinc and gold.

A second zone of interest was located in the Mocan Valley Area. This zone was also anomalous in copper, zinc and gold but, it was not as extensive nor were the results as high. Several other minor zones were located and are covered in this report.

.0 INTRODUCTION

From May 1 to May 20 and October 26 to 30, 1983 a soil sampling survey was conducted on the Terrace Bay area property of Micham Exploration Inc. The program was designed to outline and extend known zones of interest as well as to locate new targets for investigation.

The program was very successful in its aim and as a result further work was performed.

0 PROPERTY AND OWNERSHIP

The Micham Exploration Inc. property consists of a contiguous block of 96 mining claims in the Thunder Bay Mining District. All claims were staked and transferred to Micham in 1982 and are currently in good standing.

Claim TB459728 was a patented claim which became a part of the group in 1983 and is held through an option agreement.

Table 1 lists the claims and Figure 1 illustrates the claim block. (P. Dadson, 1983)

4.0 LOCATION AND ACCESS

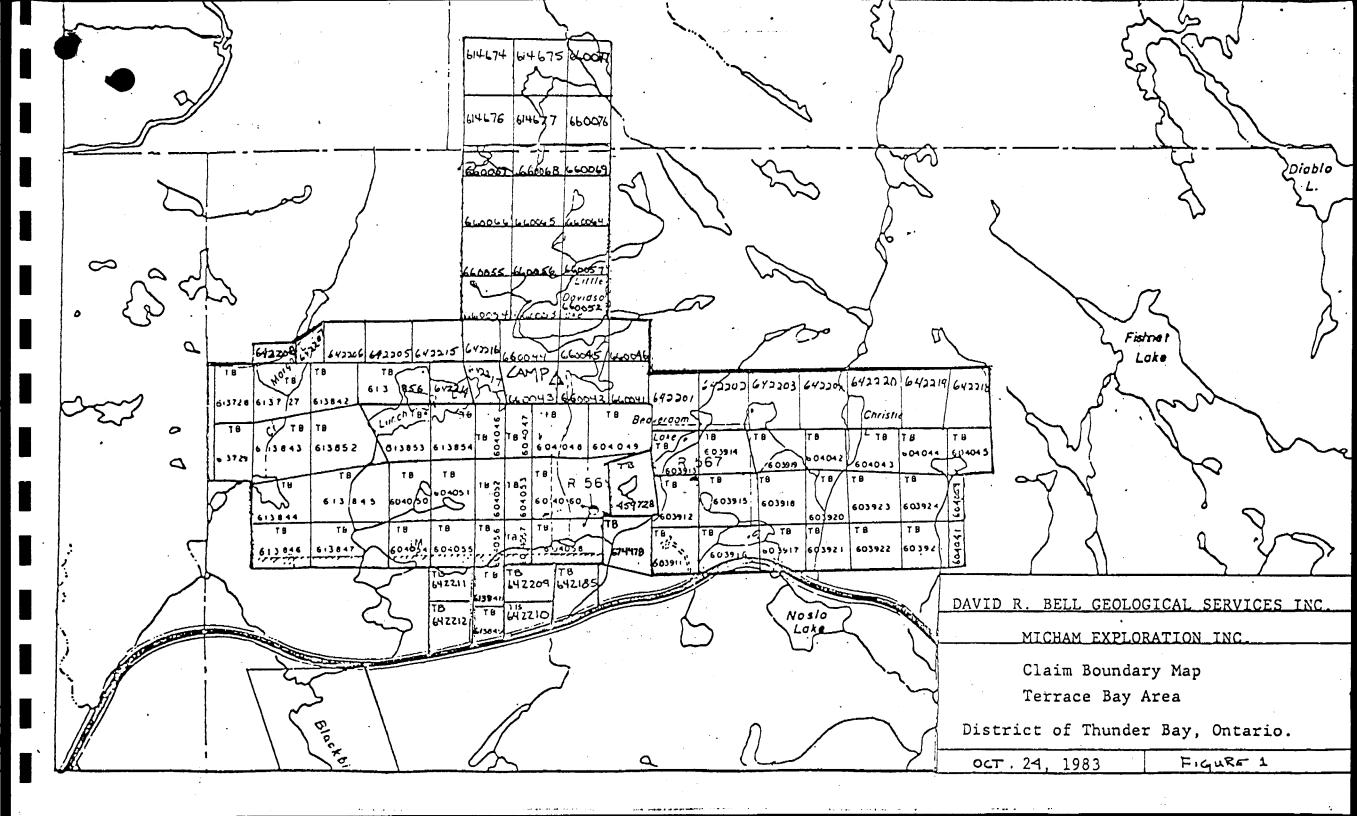
The Micham property is located 11 kilometers northeast of the Town of Terrace Bay and 800 kilometers northwest of Toronto (Figure 2). Lake Superior lies 6 kilometers due south (Figure 3).

The Trans Canada Highway cuts the southern most claims and provides easy access to those claims only. Bush roads continue to the old Empress Mine and to the eastern claims and can be utilized in good weather. The western and northern claims however are only accessible by foot or by helicopter.

Snow machine usage in winter would provide adequate access to all areas although travel would in part be hampered by rugged topography. (P. Dadson, 1983)

5.0 TOPOGRAPHY

Rolling hills cover a large majority of the property but were found to be broken by steep scarp slopes most notably in the vicinity of Margon Lake. In both the eastern and northern sections several high hills were noted with their elevations exceeding 1,500 feet above sea level. The intervening valleys were in general narrow but some were quite broad and alluvium filled. (P. Dadson, 1983)



Claim Number	Recording Date	Township
TB459728	Patent	Syine Township
ТВ603911	May 1, 1981	Syine Township
TB603912	May 1, 1981	Syine Township
ТВ603913	May 1, 1981	Syine Township
ТВ603914	May 1, 1981	Syine Township
TB603915	May 1, 1981	Syine Township
TB603916	May 1, 1981	Syine Township
TB603917	May 1, 1981	Syine Township
TB603918	May 1, 1981	Syine Township
TB603919	May 1, 1981	Syine Township
TB603920	May 1, 1981	Syine Township
TB603921	May 1, 1981	Syine Township
TB603922	May 1, 1981	Syine Township
TB603923	May 1, 1981	Syine Township
TB603924	May 1, 1981	Syine Township
т̀B603925	May 1, 1981	Syine Township
TB604041	May 20, 1981	Syine Township
TB604042	May 1, 1981	Syine Township
TB604043	May 1, 1981	Syine Township
TB604044	May 1, 1981	Syine Township
TB604045	May 1, 1981	Syine Township
TB604046	May 11, 1981	Syine Township
TB604047	May 11, 1981	Syine Township
TB604048	May 11, 1981	Syine Township
TB604049	May 11, 1981	Syine Township
TB604050	May 11, 1981	Syine Township
TB604051	May 11, 1981	Syine Township
TB604052	May 11, 1981	Syine Township

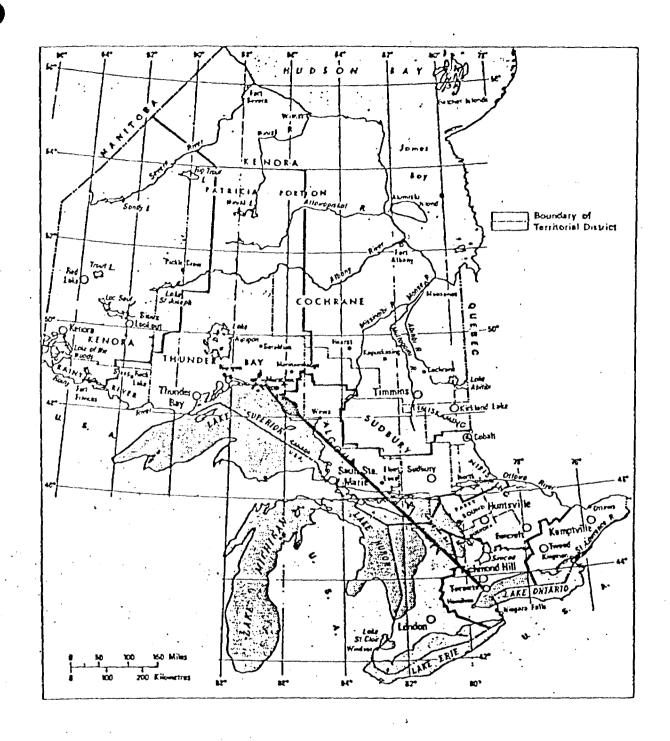
Claim Number	Recording Date	Township
TB604053	May 11, 1981	Syine Township
TB604054	May 11, 1981	Syine Township
TB604055	May 11, 1981	Syine Township
TB604056	May 11, 1981	Syine Township
TB604057	May 11, 1981	Syine Township
TB604058	May 11, 1981	Syine Township
TB604059	May 20, 1981	Syine Township
TB604060	May 25, 1981	Syine Township
TB613737	August 13, 1981	Syine Township
TB613728	September 11, 1981	Syine Township
TB613729	September 11, 1981	Syine Township
TB613842	August 13, 1981	Syine Township
TB613843	August 13, 1981	Syine Township
TB613844	September 11, 1981	Syine Township
TB613845	September 11, 1981	Syine Township
TB613846	September 11, 1981	Syine Township
TB613847	September 11, 1981	Syine Township
TB613848	September 11, 1981	Syine Township
TB613849	September 11, 1981	Syine Township
TB613852	August 13, 1981	Syine Township
TB613853	August 13, 1981	Syine Township
TB613854	August 13, 1981	Syine Township
TB613856	September 11, 1981	Syine Township
TB614674	November 6, 1981	Santoy Lake
TB614675	November 6, 1981	Santoy Lake
TB614676	November 6, 1981	Santoy Lake
TB614677	November 6, 1981	Santoy Lake
TB642185	April 16, 1982	Syine Township
TB642201	April 16, 1982	Syine Township
TB642202	April 16, 1982	Syine Township
TB642203	April 16, 1982	Syine Township
TB642204	April 16, 1982	Syine Township

Teble 1 cont'd

Claim Number	Recording Date	Township
TB642205	April 16, 1982	Syine Township
TB642206	April 16, 1982	Syine Township
TB642207	April 16, 1982	Syine Township
TB642208	April 16, 1982	Syine Township
TB642209	April 16, 1982	Syine Township
TB642210	April 16, 1982	Syine Township
TB642211	April 16, 1982	Syine Township
TB642212	April 16, 1982	Syine Township
TB642214	April 16, 1982	Syine Township
TB642215	April 16, 1982	Syine Township
TB642216	April 16, 1982	Syine Township
TB642217	April 16, 1982	Syine Township
TB642218	April 16, 1982	Syine Township
TB642219	April 16, 1982	Syine Township
TB642220	April 16, 1982	Syine Township
TB660041	September 23, 1982	Syine Township
TB660042	September 23, 1982	Syine Township
TB660043	September 23, 1982	Syine Township
TB660044	September 23, 1982	Syine Township
TB660045	September 23, 1982	Syine Township
TB660046	September 23, 1982	Syine Township
TB660052	September 23, 1982	Syine Township
TB660053	September 23, 1982	Syine Township
TB660054	September 23, 1982	Syine Township
TB660055	September 23, 1982	Syine Township
TB660056	September 23, 1982	Syine Township
TB660057	September 23, 1982	Syine Township
TB660064	September 23, 1982	Syine Township
TB660065	September 23, 1982	Syine Township
TB660066	September 23, 1982	Syine Township
TB660067	September 23, 1982	Syine Township and Santoy Lake

ble 1 cont'd

Claim Number	Recording Date	Township
TB660068	September 23, 1982	Syine Township and Santoy Lake
TB660069	September 23, 1982	Syine Township and Santoy Lake
тв660076	September 23, 1982	Santoy Lake
TB660077	September 23, 1982	Santoy Lake
TB674478	November 26, 1982	Syine Township



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MICHAM EXPLORATION INC.

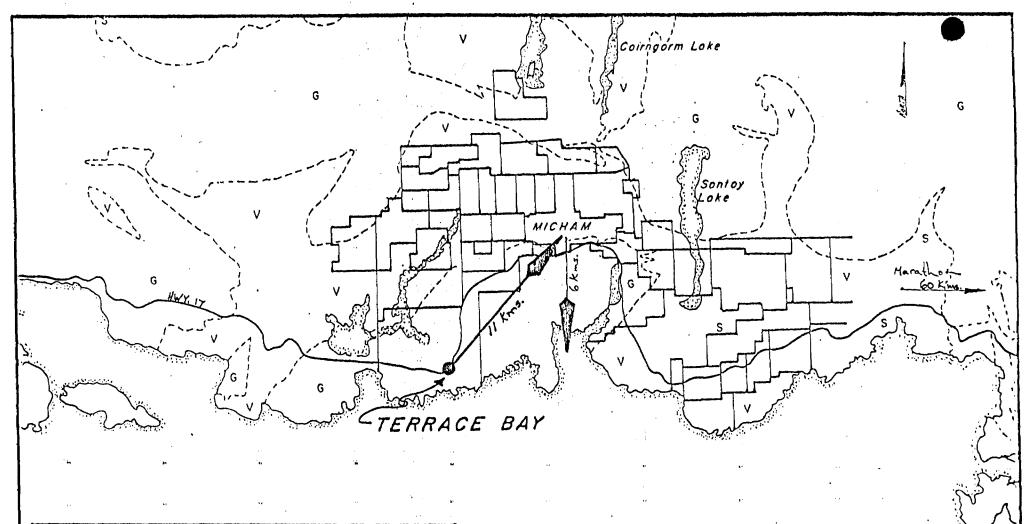
PROPERTY LOCATION

SYINE TWP. AND SANTOY LAKE AREA

TERRACE BAY AREA

DISTRICT OF THUNDER BAY, ONTARIO

October 24, 1983 Figure 2



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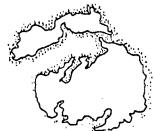
PROPERTY LOCATION

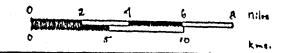
SYINE TWP. AND SANTOY LAKE AREA

TERRACE BAY AREA

DISTRICT OF THUNDER BAY, ONTARIO

October 24, 1983 Figure 3





0 WATER

Numerous small creeks, some being intermittent combined with several large lakes occur throughout the property and would be sufficient for exploration purposes. The larger lakes could probably support a small mining operation. (P. Dadson, 1983)

7.0 CLIMATE

The area of the Micham property experiences a continental climatic pattern altered by the presence of Lake Superior. In general the winters are marked by low temperatures and abundant snowfall while the summers are noted for hot, humid weather. In all seasons the moderating effect of the lake brings periods of warmer temperatures, rain and inevitably low lying fog. (P. Dadson, 1983)

8.0 VEGETATION

A mixture of immature white birch, aspen and black spruce covers most of the claims. However low lying swampy areas had black spruce, alder and spraghum moss. (P. Dadson, 1983)

9.0 ANCILLARY SERVICES

All services and supplies would have to be obtained in Terrace Bay or Marathon 60 kilometers to the east. (P. Dadson, 1983)

10.0 PROPERTY HISTORY

10.1 Empress Mine

1895 Mineralization was found by an Indian and brought to the attention of the McKellar brothers in Fort William

- the brothers visited the property and sampled the vein
- an assay of \$10.60 in gold and silver was obtained at \$20.67 gold

1895-1897

- trenching and stripping was performed on the hill
- an assay office, 30 ton/day mill, boarding house, dressing room, machine shop, blacksmith shop, stables, grain shed, two power houses and a pump house were erected
- drifting and crosscutting was completed on some of the veins
- mine closes December 1896 and reopens January 1897 but closes again in July, 1897

1898-1899

- the mine reopens
- spring 1899 a winze is dug to reach the veins at a greater depth
- December 20, 1899 the mine was closed
- approximately 1,001 feet of drifting and tunnelling was done at this point

1899-1936

- sampling done by different individuals
- 1902 an average of \$3.43 gold/ton at \$20.67 gold was obtained from six trenches
- 1921 Dr. A.P. Coleman got an average of 2.50 gold/ton from 4 samples (\$20.67 Au)
- one was 4.00 Au
- concentrates yielded 6.00 gold/ton

36

- a new company Empress Consolidated Gold
 Mines Ltd. is formed to take over the mine
- company begins a program of hydraulic stripping and diamond drilling
- sampling in "G" trench yielded \$10.85
 gold/ton over 24 feet (35.00 gold)
- a total of approximately 6 diamond drill holes were completed
- no assays were reported
- mine was closed due to lack of ore

1983

1938

- property optioned to Micham Exploration
Inc which undertook linecutting, Mag,
VLF-EM, IP, geological mapping and soil
sampling surveys. Prospecting and rock
sampling were also completed (P. Dadson, 1983)

10.2 Siville-Ferrier Syndicate Ltd.

1933

- Siville-Ferrier Syndicate Ltd. was incorporated in September to develop two property groups which it already held and to acquire further properties. The first or East group, was staked in June and consisted of eight claims numbered TB11060-67. In August, five more claims were added, TB11280-84, making a total area of 178 hectares (440 acres). Shortly afterwards, two more claims were added; a total of 13 The second or West group lies claims. immediately to the west of the old Empress. In July, six claims were staked by W.L. Boyde and J. Ferrier.

34-1935

- Three more claims were added to the West group making a total of nine, numbered TB11093, 11296-8, 11303-4, 11902-4 and the four claims composing the third or north group which were staked by Willian Siville. One hundred and forty days work of unrecorded nature, were performed on the west group and 40 on the north group

1936

- On the West group, 3 parallel veins were uncovered for a length of about 122m (400 feet) and pit sinking was done.

1937

- All claims were transferred to S.J. Boyde, Secretary-treasurer and trustee for Siville-Ferrier Syndicate Limited.

1938

- Surface work traced the main shearing on the West group for 915m (3,000 feet) in which four veins, yielding favourable values, had been encountered. By the end of the year, diamond drilling had been planned.

1939

- Operations were suspended with plans to resume work in 1940.

1940

- Some unspecified surface work and diamond drilling were carried out on the West group. Results unknown.

1942

- The North group claims were cancelled.

varying from 2.75 m (9 ft) to 7.62 m (25 ft).

Grab samples taken as work proceeded from 4 pits along the veins, yielded the following values for gold:(Price of gold in 1936 = \$35.03 per ounce)

	Imperial	(oz/T) Va	lue (1936)	(Can\$)	Metr	ric (g	/tonne)
	0.45		15.75			15.42	
	0.64		22.20		,	.22.00	
, "	0.12		4.20	•		4.10	
	0.14		·- '4 - '90' -			4.80	
\$	0.10		3.50			3.43	
	0.10		3.50			3.43	
	0.37		12.95			12.68	•
	0.33		11.55		•	11.31	
	0:36		12.45		•	12.20	*.
	0.27		9.45	, ,	n.	9.25	
	0.05		1.75	in in the contract of		1.70	
	0.20		6.30			6.20	
11.	0.76		26.30			26.05	••
16.0	0.13		4.55			4.56	
	0.47		16.45			16.10	•
	0.06		2.10		_	2.10	
	0.80		26.66	the transfer		26.00	
	0.20		7.00			6.90	.=
ĺ	0.12		4.20			4.10	•
	1.24		43.40			42.50	
Averag		5 Average		А	verage-	11.80	

On the East group, four dykes or veins were also discovered one of which is 45.7 m (150 ft) in length.

Grab samples taken gave the following results:-

,	Imperial	(oz/T)	Valu	ie (1936) (Can\$) Met	ric	(g/t	onne)
	0.154			5.40			5.	30	
X	0.3	* - 4		10.40			10.	20	
	0.03			1.00			1.	02	
	0.04			1.40	•	•	1.	4	
	0.3			10.40			10.	2	· · · · · · · · · · · · · · · · · · ·
	0.54			19.00			18.	6 .	
3	0.063			2.20			2.	2	
·	0.57			20.00			19.	6 .	
i	0.05	•		1.60			1.	6	
:	0.13			4.60			. 4.	5	
':	2.5			85.60			84.	Ó	
Averag	e- 0.43	A	verage-	14.69		Average-	14.	+2	

The North group was not worked as extensively as the other two groups. The only figure available is an assay value of Can\$ \$131.95 (1936) 1,508 oz (118 g) in gold. (Assessment files, Resident Geologist's office, Thunder Bay). (Jackson, J., 1981)

53	- The claims were cancelled, Siville- Ferrier Syndicate Ltd. having been idle since 1941.
1954	- Parts of the West group were restaked by E. McCowan, S. Downey and A. Spadoni. The claims were cancelled in 1955.
1974	- Three of the original West group claims and a half of another, were restaked as TB418677-80 by Lucien Lacasse and were cancelled in 1976.
1981	- Paul J. Skalesky staked the West group area. The claims are current.
1982-1983	- Micham Exploration Inc. performed Mag, VLF-EM, IP sampling and geological mapping (P. Dadson, 1983)
10.3 <u>Ursa Major</u>	Mine
1896	- Two mining locations AL219 and Al220, (640 acres), were acquired by Jackfish Bay Syndicate Mining Company Ltd.
1898	- Work commenced in August with a labour force of between six and eight miners. A trench 72.9m (239 ft.) in length was

dug through drift material down to bedrock, across the ore body. A vertical shaft $1.22 \times 2.75m$ (4 x 9 ft.) was sunk 16.16m (53 ft.). A new collar was constructed to a depth of 9.234m (27 ft.). In addition to the mine workings, cooking

and sleeping camps, a shaft-house, blacksmith shop, stable and assay office were built.

1900

- The shaft was sunk further to a depth of 35.7m (117 ft.) and timbered for a depth of 24.4m (80 ft.). The work force (miners) was enlarged to fourteen.

1901

- The main shaft was sunk to 37.06m (121½). At a depth of 36.14m (118½ ft.), a crosscut had been driven northwards for 27m (88½ ft.). Work in the shaft was then discontinued. The cross-cut was driven to cut a series of veins outcropping north of the shaft.

On the surface, 122m (400 ft.) northeast of the main shaft, a vein was stripped for 34.16m (112 ft.). Copper and pyrite were found to be present in considerable quantities, and also galena. Assay values of gold and silver were reported to be good. Open cutting was in progress. In the latter half of the year, work ceased.

1934

- Jackfish Bay Syndicate Mining Company Limited became defunct and the property was acquired by Valora Gold Exploration Company Limited.

1936

 Valora Gold Exploration Company Limited became inactive and in the mid-forties had no assets. The property was surrendered.

51 - William Siville restaked the property and completed 56 days work. The claims were cancelled late in 1954 and the area became known as the "Siville" property. 1956 - The property was restaked as TB76664 to 76677 by John Morris and TB76678 and 76679 by W.C. Arrowsmith, in January. On 16th of March, all interest was transferred to Monpre Uranium Exploration Limited. 1957 - On March 12th, Monpre Uranium Exploration Ltd., changed its name to Monpre Mining Company Ltd. 1958 - The claims were cancelled in February. - R.E. Lee restaked much of the property 1960 and W. Friesan staked a small part. The claims were cancelled in 1961.

TB270251-4.

- Frank E. Merryth staked four claims,

over the four claim block.

- Early in the year a geophysical survey, consisting of an Electromagnetic survey and a magnetometer survey was performed

meriting further exploration were delin-

eated, but no further work was done.

The claims were cancelled in December.

In July, ten claims adjacent to those

Ten anomalies

1971

1973

staked by Frank E. Merryth, were staked by Denis de Serres and Claude Darveau. The claims were transferred to Hudson's Bay Exploration and Development Co. Ltd. in August and were cancelled in 1974.

1974

- John E. Halonen staked the old "Merryth" claims as TB550790, 550794, 550797-8.
The claims were cancelled in 1976.

1980

- Pat Halonen staked one claim (TB386506) on the property in March. The claim was cancelled on June 10th, 1981.

1982-1983

Micham Exploration Inc. undertook Mag,
 VLF-EM, IP, rock sampling and geological mapping. (P. Dadson, 1983)

10.4 Mocan Valley

1890

- First reference to gold in the Jackfish Bay area "Mocan Valley Gold Location"
 5.6km north of Jackfish Bay
- assays here gave \$22.00 gold/ton at \$20.67 gold
- a test of 1,290 lbs of ore by the North-Western Reduction and Chemical Works, of Chicago gave \$41.34 gold (Canadian Mining Review, 1890)
- no further information is available.

1981

- P. Skalesky staked the claims

82-1983

- Optioned to Micham Exploration Inc.
- Mag, VLF-EM, IP, sampling and geolological mapping were performed.

11.0 REGIONAL GEOLOGY

The Micham property lies within an area underlain by an interlayered volcano-sedimentary sequence that has been folded, sheared and regionally metamorphosed by the intrusion of several granitic bodies. The interlayered nature of the succession is most notable in the southern portion of the belt while mafic and felsic volcanics predominate in the northern half.

Diorite, gabbro and hornblendite occur as intrusives within the mafic lavas and tuffs and probably represent feeder dykes and sills. The felsic rocks consist chiefly of agglomerates, tuffs and porphyries and volumetrically constitute a large proportion of the pile especially in the central portion of the belt.

Greywackes, slates and their metamorphic equivalents form a broad and continuous succession in the belt's southern portion. Cherts, and siliceous, graphitic schists occur throughout and generally form narrow beds or discontinuous lenses.

Granitic rocks consisting of granite, quartz-diorite, syenite and various hybrids and granitic gneisses form the large, batholithic intrusions which border the belt to the north, east and west. These in turn have been intruded by numerous north-south or northwesterly trending diabase dykes.

Table 2 outlines the general stratigraphy in the area and Figure 4 illustrates the general geology. (Walker, T.W.R., 1967)

TABLE 2 TABLE OF LITHOLOGICAL TYPES

PRECAMBRIAN

Late Precambrian

Keweenawan (?)

Diabase and lamprophyry dykes

intrusive contact

Early Precambrian

Granitic Rocks: granite, quartz diorite, syenite, granite gneiss, hybrid rocks.

intrusive contact-regional metamorphism, folding and shearing.

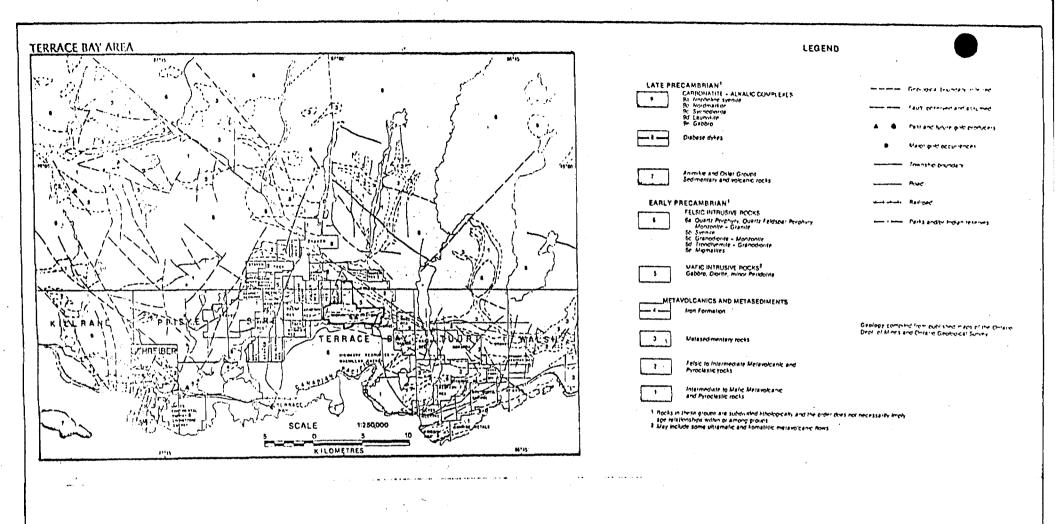
Basic Intrusives: gabbro-diorite, hornblendite, amphibolite.

intrusive contact

Sedimentary Rocks: greywacke, slate, schists iron formation

Felsic Volcanic Rocks: porphyry, agglomerate, tuff, schists and gneisses.

Mafic Volcanic Rocks: pillow lavas, tuffs, schists and amphibolite.



DAVID R. BELL GEOLOGICAL SERVICES INC.

MICHAM EXPLORATION INC.

REGIONAL GEOLOGY TERRACE BAY AREA
ONTARIO

October 24, 1983

Figure 4

.0 PROPERTY GEOLOGY

The Micham claims lie within the north-western portion of a volcanosedimentary belt between two granitic intrusives. In general it is underlain by mafic to felsic volcanics with minor amounts of hybrid granite, diorite and chemical sediments. (P. Dadson, 1983) Metamorphism is of the greenschist facies with minor amphibolite grade along the contacts with the plutons. Some minor folding has taken place but on the whole, the property appears to be structural simple. Faulting has occurred in some areas.

13.0 SOIL SAMPLING PROGRAM

The soil sampling survey was conducted from May 1 - May 20, 1983 and October 26 - Oct. 30, 1983. It was designed to further define and extend known anomalous zones located by previous geological mapping and geophysics. In all approximately 1,521 soil samples were collected. In some areas it was not possible to get a sample.

Samples were collected at 100 foot intervals along lines spaced 400 feet apart. A grub-hoe was used and the B-Horizon of the soil profile was collected.

14.0 STATISTICAL ANALYSIS

The samples collected were analysed for their gold, silver, copper and zinc content. Silver values were relatively insignificant.

In order to eliminate bias and use contour intervals which were directly related to the results obtained, the mean and standard deviation were calculated from the results received for each element. From these values the background, threshold

d anomalous levels were determined and used as contour intervals. Background became mean plus one standard deviation; threshold, mean plus two standard deviations and anomalous, mean plus three standard deviations. Therefore, the background, threshold and anomalous values become 9, 13 and 17 ppb for gold; 0, 1 and 1 ppm for silver; 34, 52 and 70 ppm for copper and 49, 60 and 90 ppm for zinc. All of these results were plotted on 1"=400' scale maps.

As stated before silver values were very insignificant and for the most part consisted of one line spot anomalies. It was the gold, copper and zinc which proved to be of interest.

Two significant zones were outlined by the gold, copper and zinc results. The most prominent is the one which is associated with the Empress Structure and the West Siville-Ferrier showing. This was a north-east south-west striking anomaly which was approximately 8,800 feet in length. It extends from line L64W 20S to L24E 12N and was highly anomalous in all three elements. Gold values reached as high as 3,650 ppb, while copper and zinc reached 710 and 4,160 ppm respectively.

A second zone of interest was associated with the Mocan Valley structure. This was an east-west trending anomalous gold zone which extended from L116W 9N to L100W 15N. Values reached as high as 219 ppb gold. Highly anomalous copper and zinc values were received here as well but, interpretation was difficult. This was because, in this area, every second line was assayed for copper, zinc and silver but, judging from the data present it would appear that these results would form one continuous zone. These results reached as high as 870 ppm copper and 275 ppm zinc.

Just to the south-east of this zone was a copper anomaly which extends from line 100W to line 84W. This zone

hibits an east-west strike and copper values reached 890 ppm. Some slightly anomalous zinc values occurred here as well. Silver and gold were insignificant.

A much lesser zone of significance was located at the far northern reaches of the property, just south of the Ursa Major showing. Here, slightly anomalous values of the zinc and copper were attained. This zone had an east-west strike and extended from line 0 to line 8E at approximately 5N. Gold and silver values in this area were restricted to one line spot anomalies.

Two other minor anomalies of zinc and copper were located on the south-eastern portion of the property. One extended from L60E 12S to L72E 12S while the other was 1,200 feet in length from L12E 14S to line 24E 14S. In both cases the zinc values were much more extensive than the copper results. Copper was restricted to one or two line anomalies.

Due to the relatively thin layer of overburden and good outcrop exposure, it was thought that these anomalies were a true representation of the area and not due to transportation by ice. Although, to some extent the copper and zinc values may be directly related to rock type, since most of the underlying rocks are mafic in composition.

15.0 CONCLUSIONS

During the periods of May 1 to May 20 and October 26 to 30, 1983 a soil geochemistry program was performed on the Terrace Bay area property of Micham Exploration Inc. In all, two areas of major interest along with other less significant zones were outlined. Many of the results received from these zones were highly anomalous such as 3,650 ppb gold, 710 ppm copper and 570 ppm zinc. As a result of the values received, and the extent of the zones outlined, follow-up work is highly recommended.

April 1, 1985

Timmins, Ontario

Respectfully submitted,

Mike Siminovice

Mike Simunovic, B.Sc.

CERTIFICATE OF QUALIFICATIONS

- I, Mike Simunovic hereby certify:
 - that I am a geologist employed by David R. Bell Geological Services Inc., Suite 4, 251 Third Ave., Timmins, Ontario
 - that I am a graduate of Lakehead University 2. in Thunder Bay, holding a Bachelor of Science degree in Geology (1983)
 - 3. that I do not have nor do I expect to receive either directly or indirectly, any interest in this property of Micham Exploration Inc.

April 1, 1985 Timmins, Ontario

Mike Simunovic, B.Sc.

Mike Simunovic

REFERENCES

Canadian Mining Review 1890

Dadson, P. 1983

Jackson, Jane 1981

Walker, J.W.R. 1967 Canadian Mining Review 1890 P 114

"Geological Report Micham Exploration Inc.", Terrace Bay Claims, Syine Township and Santoy Lake Area, District of Thunder Bay, Ontario, 1983

History Siville-Ferrier Holdings 1981

"Geology of the Jackfish-Middleton Area", District of Thunder Bay, Ontario, Department of Mines Geological Report 50, 1967

PERSONNEL

Glenn Coyne 527 Mountjoy St. S. Timmins, Ontario

Edwin Potter General Delivery Swastika, Ontario

Mike Simunovic c/o David R. Bell Geological Services Inc. P.O. Box 1250 Timmins, Ontario May 1, 1983 - May 20, 1983 Oct. 26, 1983 - Oct. 30, 1983

May 1, 1983 - May 20, 1983 Oct. 26, 1983 - Oct. 30, 1983

March 28, 1983 - April 1, 1983



Ministry of Natural Resources

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.

4410 Type of Sur	rvey(s) — S c	o ll Geoc	hemistry			_
Township or	r Area – Sy:	ine Twp.	and Santoy Lake Area	- [MINING CLAIMS TRAVERSED	
Claim noide			loration Inc.	- [List numerically	
Comment Com			Bell Geological Service	- 1		
			ell Geol. Services Inc.	-	(prefix) (number)	
	Report _M11			_	See-attached-list	
			ell, Box 1250, Timmins,			
			May 20/83 ffect 26-Oct 30	78	β	
Total Miles	of Line Cut	N	//A	-		"
				I		
	. PROVISIO S REQUEST		DAYS Geophysical per claim			
The same of the sa			Electromagnetic	ŀ		
1	10 days (incl ng) for first	ludes	-Magnetometer	Į		
survey.	ng, tor mac		-Radiometric			
	20 days for 6	each	-Other			"
B	ıl survey usir		Geological	ŀ		
same grid	l .		Geochemical			
AIRBORNI	E CREDITS	(Special provis	sion credits do not apply to airborne surveys)			
		•	netic Radiometric	_]		•••
Ü	ril 2, 1	(enter d	lays per claim)	<u>v</u> u		
Res. Geol		Qualif	Sications 2-10257	_		••••
Previous Su		Date	Claim Holder			•••
File No.	Type	Date	Claim Holder	\neg		
				$\cdot \mid \mid$		
				.		
•••••				$\cdot \mid \; \mid$		•••
•••••		ļ		.		
				.		استوری
				$\cdot \mid \mid$	TOTAL CLAIMS54	

GEOPHYSICAL TECHNICAL DATA

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

	umber of Stations			
	tation interval			
	rofile scale			
С	ontour interval			
٠ سا	Instrument			
3	Accuracy - Scale constant			
	Diurnal correction method			
8	Base Station check-in interval (hours)			
•	Base Station location and value			
		Parameter of the state of the s		
7	Instrument			
3	Coil configuration			
7	Coil separation			
	Accuracy			
	Method:			☐ Parallel lin
	Frequency	(specify V.L.F. station		
	Parameters measured			
	Instrument			
.1	Scale constant			
, , , ,	Corrections made			
	Base station value and location			
	Elevation accuracy			
	Instrument			
	Method		Frequency Domain	
	Parameters - On time		Frequency	
7	Off time		Range	
	Delay time			
SI	- Integration time			
RESISTIVITY	Power			
-4	Electrode array			
	Electrode spacing			
	Type of electrode			

INDUCED POLARIZATION

SELF POTENTIAL	
Instrument	Range
Survey Method	
Corrections made	
RADIOMETRIC	
. ,	Background Count
•	Dackground Count
Overburden	
Overburden	(type, depth — include outcrop map)
OTHERS (SEISMIC, DRILL WELL	LOGGING ETC.)
•	
,	
Additional information (for underst	anding 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
wines flowif over total area	Over claims only

GEOCHEMICAL SURVEY – PROCEDURE RECORD

Numbers of claims from which samples taken			
Total Number of Samples	ANALYTICAL METHODS		
Type of Sample(Nature of Material) Average Sample Weight	Values expressed in:	per cent p. p. m. p. p. b.	
Method of Collection	Cu, Pb, Zn, Ni, Co,		As -(circle)
Soil Horizon Sampled	- Park		,
•			
Horizon Development			,
Sample Depth Terrain			
	, , , , , ,		
Drainage Development			
Estimated Range of Overburden Thickness			tests
	The state of the s		
	A 3 1 M 1		
	Reagents Used		
SAMPLE PREPARATION	Commercial Laboratory (.		tests
(Includes drying, screening, crushing, ashing)	Name of Laboratory		
Mesh size of fraction used for analysis	Extraction Method		
	Analytical Method		
	Reagents Used		
General	General		
ochera:			
			

MICHAM EXPLORATION INC. PROJECT #4410 LIST OF CLAIMS

TB603911	TB604056
TB603912	TB604057
TB603913	TB604058
TB603914	TB604059
TB603915	TB604060
TB603916	TB613727
TB603917	TB613729
TB603918	TB613842
TB603919	TB613843
TB603920	TB613844
TB603921	TB613845
TB603922	TB613848
TB603923	TB613852
TB603924	TB613853
TB603925	TB613854
TB604042	TB613856
TB604043	TB614675
TB604044	TB614676
TB604045	TB614677
TB604046	TB642201
TB604047	TB642204
TB604048	TB642218
TB604049	TB642219
TB604051	TB642220
TB604052	TB660076
TB604053	TB660077
TB604055	TB614674

LAND MANAGEM



Natural (Ge	oort of Work ophysical, Geological, chemical and Expend		42015SW0	115 2.798	SYINE			3 00
11/43		1)611	The Mining Act				Apenu. Days Cr.	COMMINS
Type of Survey(s)	() be 1 m 3 7		, , , , , , , , , , , , , , , , , , ,		Township of		shaded areas below	·
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Claim Holder(s)				The set of the second section is a				
INI CIFIM	~ EXPLOR	ATION	ひ エハロ				-1182	
Address 1030-609 Granvi								
Survey Company	•		Date o	T Survey (t	(om & to)	اود	Total Miles of line (Cut
DAVID R.B	the Grows	ICAU ST	ERVICES INCESSIVATES	1 188 1 34	3 36 1	6 33	NIA.	
Name and Address of Author (c			SEN PROJUCIAN		ルンエト	2c-		
Mike Simon	elo sur	O.BOX	1850, TIMM	10.201		1N 7:	55	
Credits Requested per Each	Claim in Columns at r	ight	Mining Claims Tra			ical seque	nce)	
Special Provisions	Geophysical	Days per Claim	Mining Clair Prefix Num		Expend. Days Cr.	Prefix	ining Claim Number	Expend, Days Cr.
For first survey:	- Electromagnetic					_		Day: 01.
Enter 40 days. (This includes line cutting)	- Magnetometer		TB 603	' 1		JB	604051	
•	- wagnetometer	ļ	603	1918		rhor w	604052	
For each additional survey: using the same grid:	- Radiometric		603	913		1211	604053	
Enter 20 days (for each)	- Other		603	,914			604055	
	Geological		603	915			604056	
	Geochemical	20	603	916			604057	
Man Days	Geophysical	Days per Claim	603	2917			604058.	
Complete reverse side and enter total(s) here	- Electromagnetic			819		on managements	604059	
	- Magnetometer		■ 1953年表現場	3919		Tarker and	604060	
r	- Radiometric			920			613727	
	- Other		22000	3921		477	613729	
- C	Geological.		100	2922		4.00	613842	
UEC	Geochemical		55750658 550	923			613843	
Airborne Credits	P / 5 1200	Days per Claim	2012	924			613844	
Note: Special provisions	Electromagnetic 101	\	603				613845	
credits do not apply	Westernameter			 .				ļ
to Airborne Sutveys.\	rwagnatomater		604	042	1 1		613848	

Million	1	
	Radiometric	
Expenditures (excludes pow	er stripping)	
Type of Work Performed	-	
Performed on Claim(s)		
		
Calculation of Expenditure Day	s Credits	
Total Expenditures		Total Days Credits
\$	÷ [15]	=
Instructions		
Total Days Credits may be a choice. Enter number of day		

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TB	603911		TB	604051	
	603912			604052	
	603913			604053	
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and the second	603916		1.5	604057	
m en militaria	603917			604058.	
******	603918		an managements	604059	
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	603920		intricted	613727	
	603921		17.7	613729	
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	603923			613843	
	603924			613844	
	603925			613845	
4	604042			613848	
	604043			613852	
Ô	604044		i i	613853	
	604045			613854	
	604046		12.17	613856	
	604047			614675	
	604048			614676	
	604049			614677	
	_			nber of mining vered by this work.	54

For Office Use Only Total Days Cr Recorded April

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

in columns at right.

RABELL do David R Bill Goological Grains Timming Cat PHN 755

P.O. POR1250 Certified by (Signature)



Report of Work

(Geophysical, Geological, Geochemical and Expenditures)

Instructions: -	Please	type	or	prin
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If number of mining claims traversed exceeds space on this form, attach a list.

Only days credits calculated in the

"Expenditures" section may be entered in the "Expend. Days Cr." columns.

SIAGU R The Mining Act - Do not use shaded areas below. (-le12 Two & Xinton Juke Ar SOIL GEOGHEMISTEY Claim Holder(s) MICHAM EXPLURATION INC 1030-609 Granville St., Vancouver, B.C. V7Y 1C6 Survey Company Total Miles of line Cut DAVID & THE GEOLOGICAL SETUCES DOV MO. 473 DOV MO. 473 and Address of Author (of Geo-Technical report) Name and Address of Author (of Geo-Technical report) R. BELL GETLEGICAL SE
Mike Simonario P.O. BOX 1250, Timming Cont. Credits Requested per Each Claim in Columns at right Mining Claims Traversed (List in numerical sequence) Special Provisions Mining Claim Days per Claim Expend. Days Cr. Mining Claim Expend. Days Cr. Geophysical For first survey: - Electromagnetic 643201 1 Enter 40 days, (This includes line cutting) 642204 Magnetometer - Radiometric 642218 For each additional survey: using the same grid: - Other 642219 Enter 20 days (for each) Geological 643330 Geochemical 20 660076 Man Days Geophysical 660077 Complete reverse side - Electromagnetic and enter total(s) here Magnetometer 614674 - Radiometric - Other Geological Geochemical Airborne Credits Days per Note: Special provisions Electromagnetic credits do not apply Magnetometer to Airborne Surveys. Radiometric Expenditures (excludes power stripping) Type of Work Performed Performed on Claim(s) Calculation of Expenditure Days Credits Total Total Expenditures Days Credits \$ Total number of mining claims covered by this report of work. Total Days Credits may be apportioned at the claim holder's For Office Use Only choice. Enter number of days credits per claim selected Mining Recorder Total Days Cr. Date Recorded in columns at right. Date Approved as Recorded Branch Director Recorded Holder or Agent (Signature) W. 5 41612 Certification Verifying Report of Work

Name and Postal Address of Person Certifying

do David & Fall Grading

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.



Technical Assessment Work Credits

	2.7985
Date	Mining Recorder's Report of
1985 05 14	Work No.

File

Recorded Holder	
	MICHAM EXPLORATION INC
Township or Area	
	SYINE TOWNSHIP AND SANTOY LAKE AREA

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic days	
Magnetometer days	TB 603911 to 925 inclusive
Radiometric days	604042 to 049 inclusive 604051 to 053 inclusive
Induced polarization days	604055 to 060 inclusive 613727-29
Other days	613842 to 845 inclusive 613848
Section 77 (19) See "Mining Claims Assessed" column	613852 to 854 inclusive
Geological days	613856 614675 to 677 inclusive 642201-04-18-19-20
Geochemicaldays	642201-04-18-19-20 660076-77 614674
Man days ☐ Airborne ☐	V4TV/T
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 n	nining claims
No credits have been allowed for the following mining c	laims
not sufficiently covered by the survey	Insufficient technical data filed

DAVID R. BELL GEOLOGICAL SERVICES INC.

251 THIRD AVE., SUITE 4 BOX 1250 TIMMINS, ONTARIO P4N 7J5 (705) 264-4286 TELEX - 067-81638

REGISTERED

April 9, 1985

Mr. Fred Mathews
Lands Administration Branch
Mining Lands Section
Ministry of Natural Resources
Room 1617, Whitney Block
Queen's Park
Toronto, Ontario
M7A 1W3

Dear Mr. Mathews:

Re: Geochemical Survey Report for Micham Exploration Inc., Terrace Bay Area

I have enclosed two (2) copies of the above report including maps as per Ministry of Natural Resources requirements, for 20 days of assessment credits for those claims on the attached list. Would you please acknowledge receipt of said reports.

Yours truly, Simusoric

Mike Simunovic Geologist

MS/kg

Encl.

RECEIVED

APR 1 1 1985

MINING LANDS SECTION

File - 4410 - Geochem. reports, corresp. claims



may 29/85

1985 05 14

Your File: 148 Our File: 2.7985

Mining Recorder
Ministry of Natural Resources
P.O. Box 5000
Thunder Bay, Ontario
P7C 5G6

Dear Madam:

Enclosed are two copies of a Notice of Intent with statements listing a reduced rate of assessment work credits to be allowed for a technical survey. Please forward one copy to the recorded holder of the claims and retain the other. In approximately fifteen days from the above date, a final letter of approval of these credits will be sent to you. On receipt of the approval letter, you may then change the work entries on the claim record sheets.

For further information, if required, please contact Mr. R.J. Pichette at 416/965-4888.

Yours sincerely,

S.E. Yundt Director

Land Management Branch

Whitney Block, Room 6643 Queen's Park Toronto, Ontario M7A 1W3

f. J. S. Hurst:mc

Encls.

cc: Micham Exploration Inc Suite 1030 609 Granville Street Vancouver, B.C. V7Y 1C6

cc: R.A.Bell

c/o David R. Bell Geological Services Inc P.O. Box 1250 Timmins, Ontario

P4N 7J5

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



Notice of Intent for Technical Reports

1985 05 14

2.7985/148

An examination of your survey report indicates that the requirements of The Ontario Mining Act have not been fully met to warrant maximum assessment work credits. This notice is merely a warning that you will not be allowed the number of assessment work days credits that you expected and also that in approximately 15 days from the above date, the mining recorder will be authorized to change the entries on his record sheets to agree with the enclosed statement. Please note that until such time as the recorder actually changes the entry on the record sheet, the status of the claim remains unchanged.

If you are of the opinion that these changes by the mining recorder will jeopardize your claims, you may during the next fifteen days apply to the Mining and Lands Commissioner for an extension of time. Abstracts should be sent with your application.

If the reduced rate of credits does not jeopardize the status of the claims then you need not seek relief from the Mining and Lands Commissioner and this Notice of Intent may be disregarded.

If your survey was submitted and assessed under the "Special Provision-Performance and Coverage" method and you are of the opinion that a re-appraisal under the "Man-days" method would result in the approval of a greater number of days credit per claim, you may, within the said fifteen day period, submit assessment work breakdowns listing the employees names, addresses and the dates and hours they worked. The new work breakdowns should be submitted direct to the Land Management Branch, Toronto. The report will be re-assessed and a new statement of credits based on actual days worked will be issued.

Mining Lands Section

File No 2.7985

Control Sheet

TYPE OF SURVEY	GEOPHYSICAL GEOLOGICAL GEOCHEMICAL EXPENDITURE
MINING LANDS COMMENTS:	
lgd	
	S. Hurst Signature of Assessor 85.05.01
	Date

1985 06 04

Your File: 148 Our File: 2.7985

Mining Recorder
Ministry of Natural Resources
P.O. Box 5000
Thunder Bay, Ontario
P7C 5G6

Dear Madam:

RE: Notice of Intent dated Hay 14, 1985 Geochemical Survey on Mining Claims TB 603911, et al, in Syine Township and in Santoy 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,

S.E. Yundt Director Land Management Branch

Whitney Block, Room 6643 Queen's Park Toronto, Ontario M7A 1W3 Phone: (416)965-4888

S. Hurst:mc

cc: Micham Exploration Inc Vancouver, B.C.

cc: R.A. Bell c/o David R. Bell Geological Services Inc Timmins, Ontario

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

cc: Resident Geologist Thunder Bay, Ontario

Encl.

April 24, 1985

File: 2.7985

Micham Exploration Inc Suite 1030 609 Granville Street Vancouver, B.C. V7Y 1C6

Dear Sir:

RE: Geochemical Survey on Mining Claims TB 603911, et al, in Syine Township and the Area of Santoy Lake

Examination of your geochemical reports and maps covering the above-mentioned mining claims, reveals that assessment of your requested credits may not be considered using the Special Provisions method. This is due to the lack of substantial and systematic coverage of each claim in your survey.

Credits will be allowed, however, under the Man-day method provided you complete and return the enclosed Man-day breakdown form.

When returning the above, please quote file 2.7985.

For further information, please contact Susan Hurst aty(416)965-4888.

Yours sincerely,

S.E. Yundt Director Land Management Branch

Whitney Block, Room 6643 Queen's Park Toronto, Ontario M7A 1W3 Phone: (416)965-4888

S. Hurst:mc

cc: Mining Recorder
Thunder Bay, Ontario
Encl.

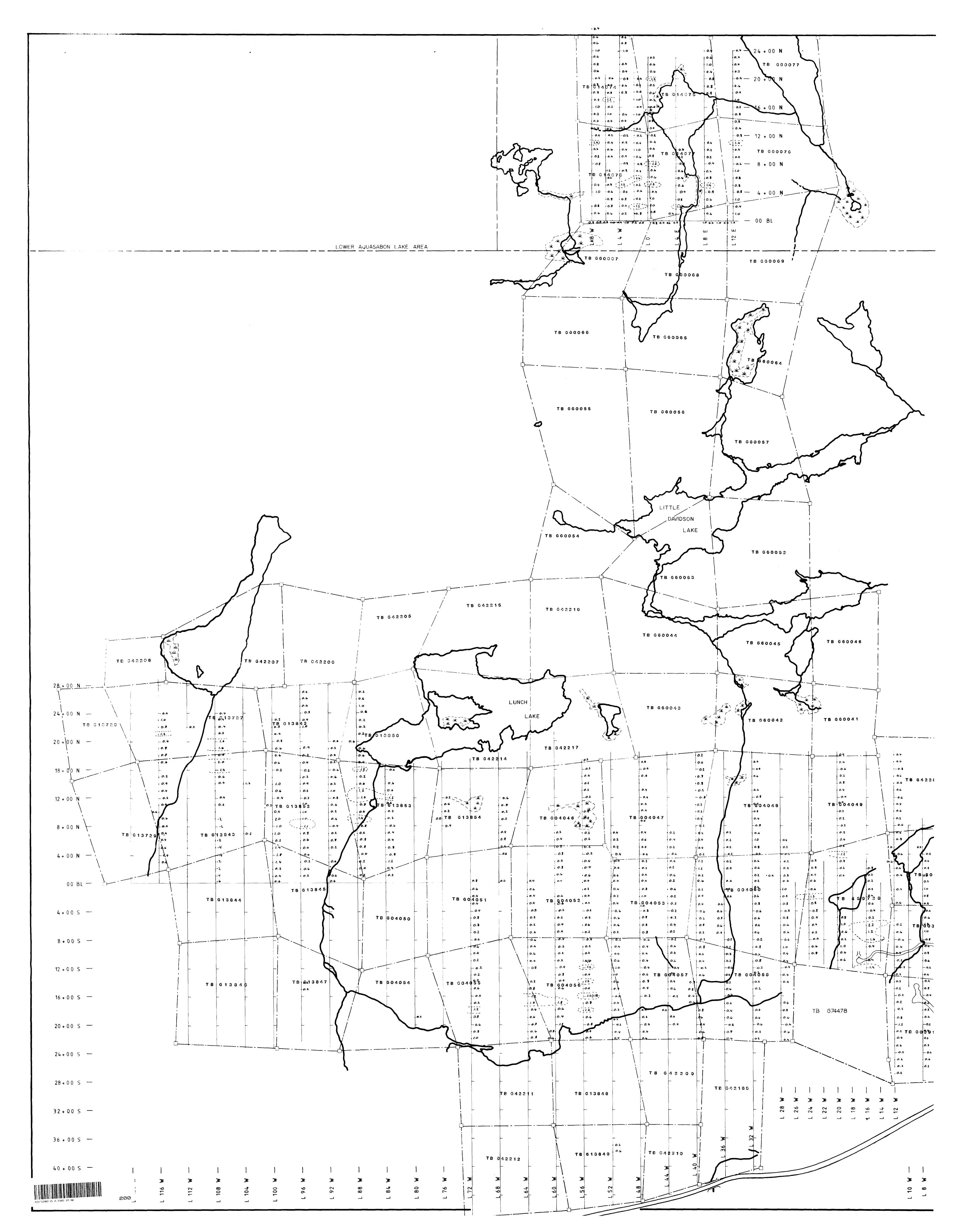
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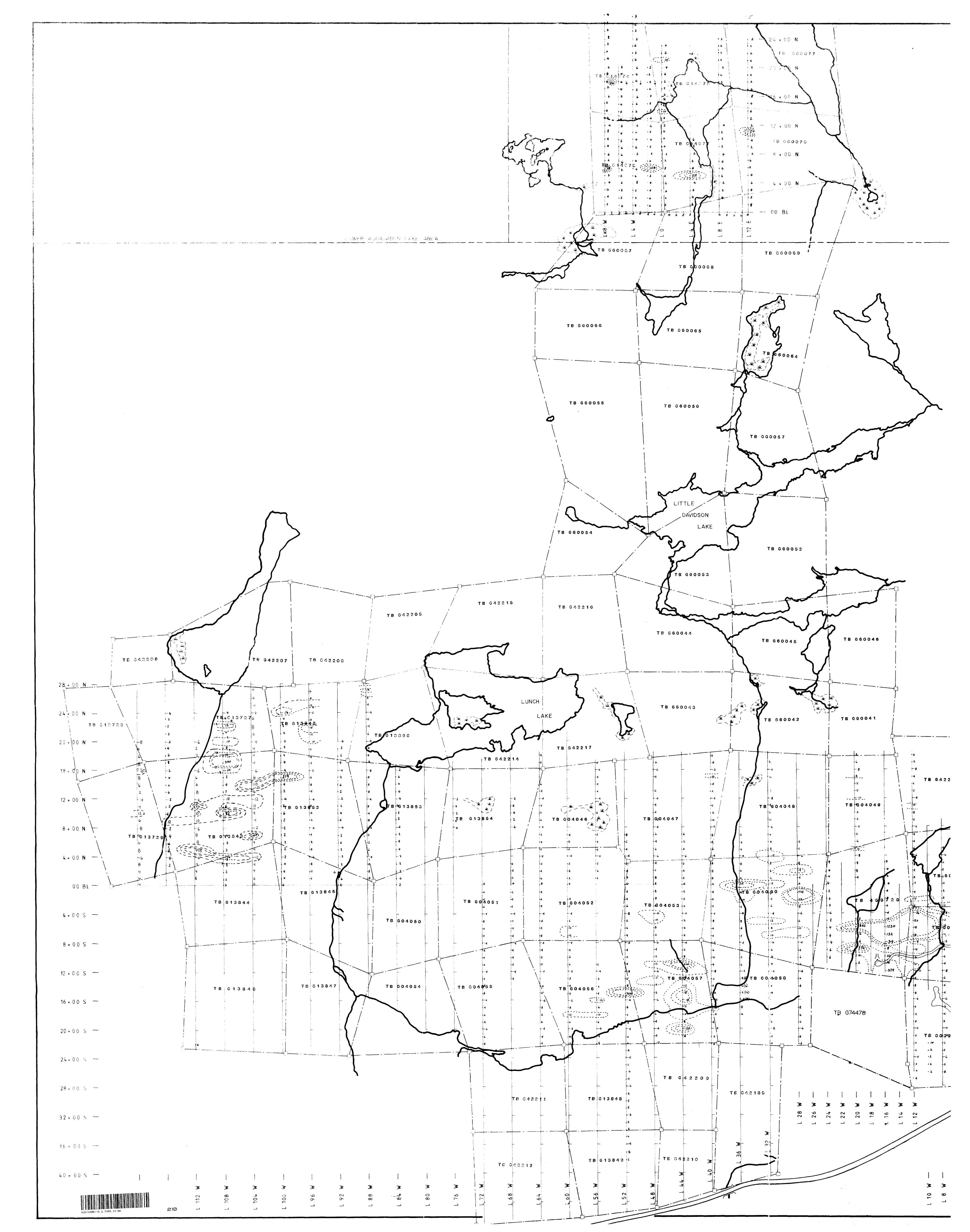
cc: R.A. Bell c/o David R. Bell Geological Services Inc

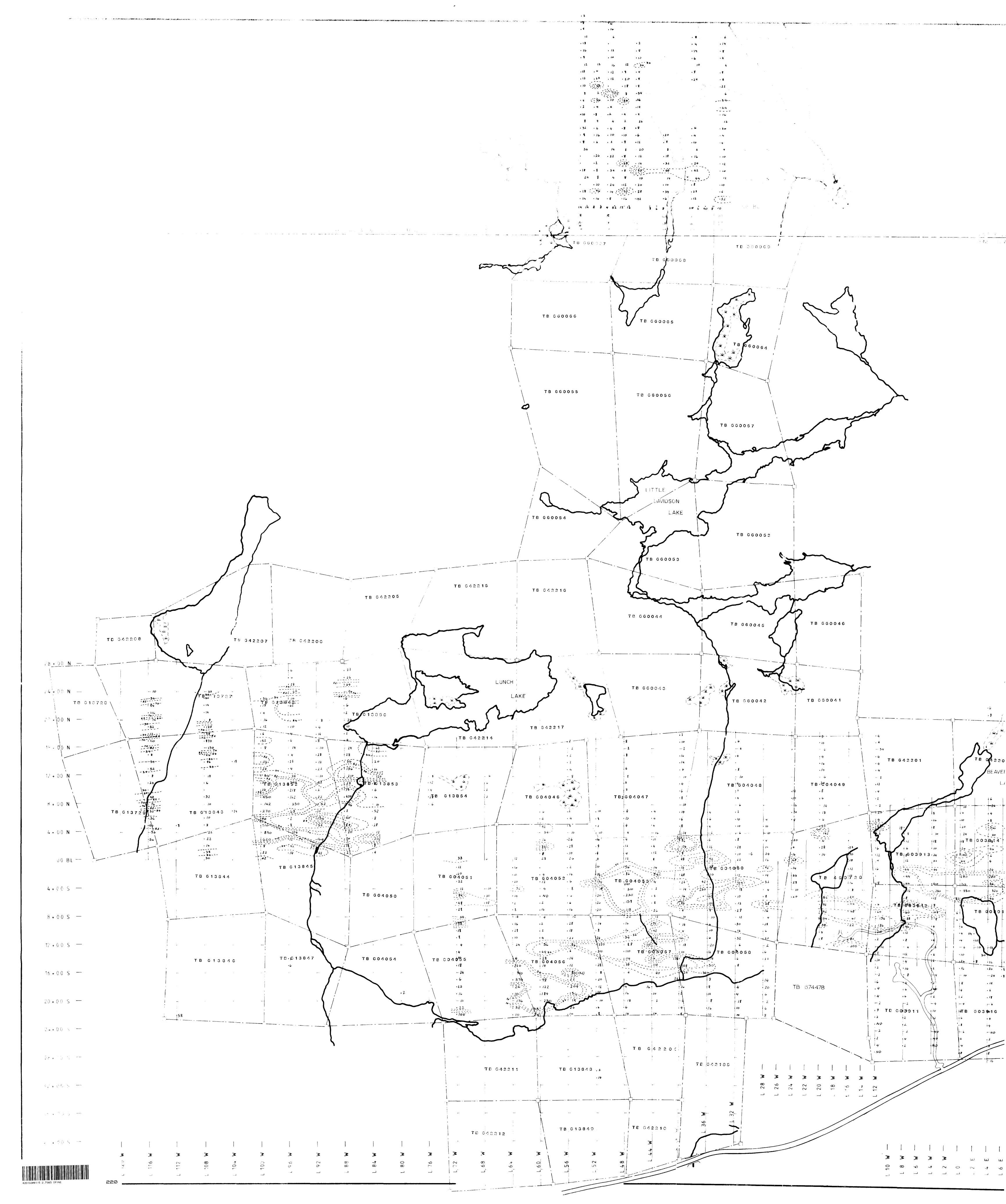
> P.O. Box 1250 Timmins, Ontario P4N 7J5

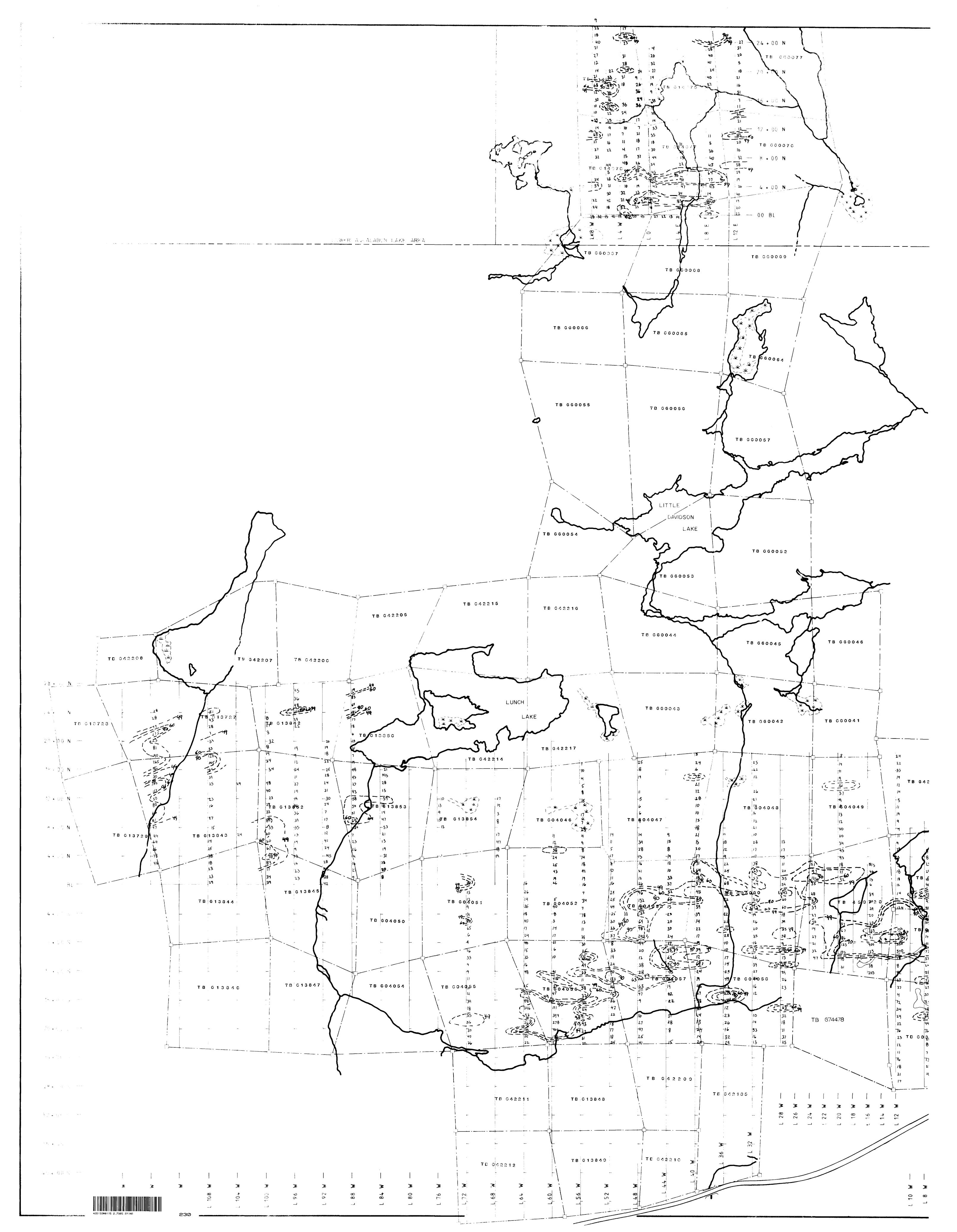
2.1985

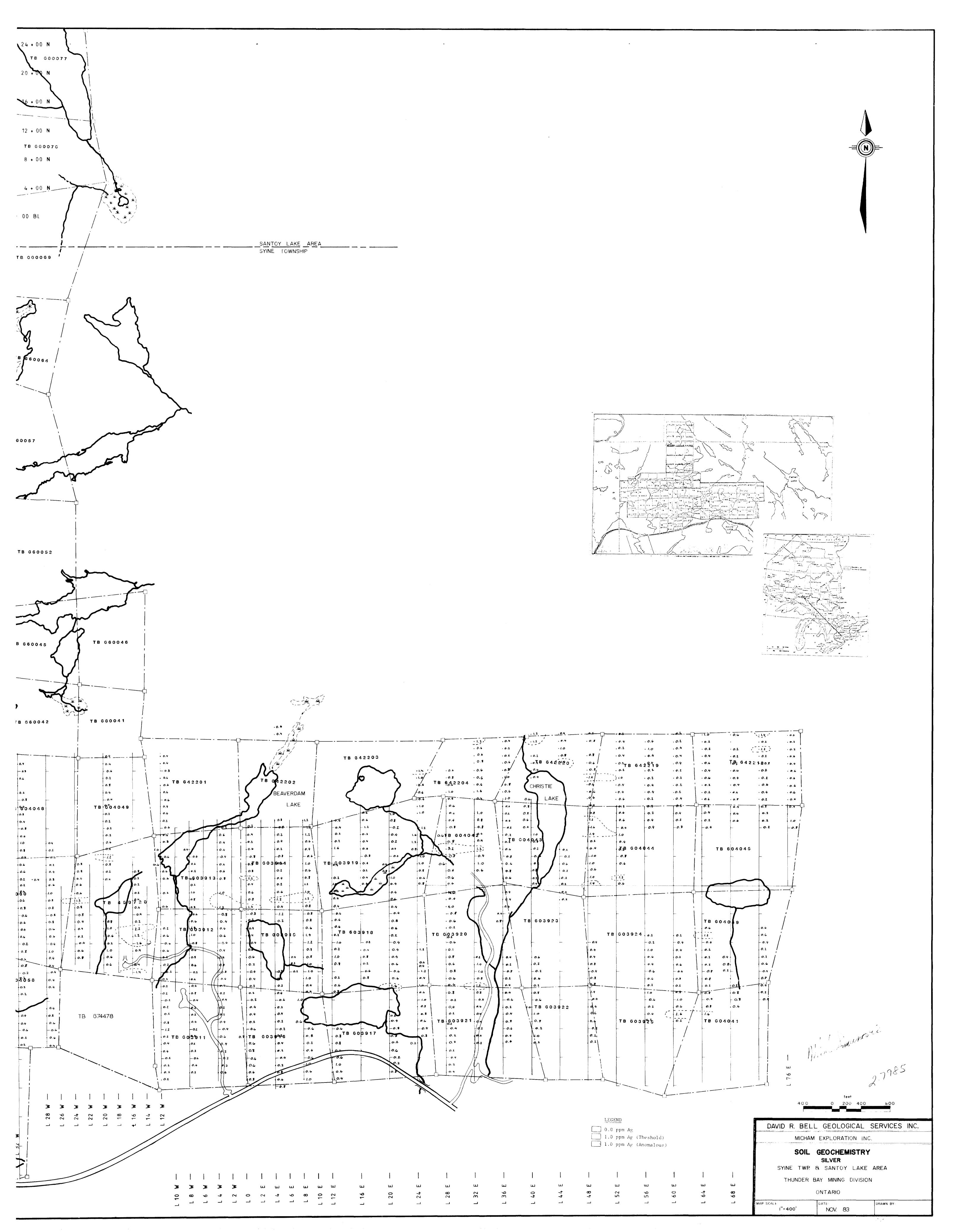
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34	1/4		4	4	34						
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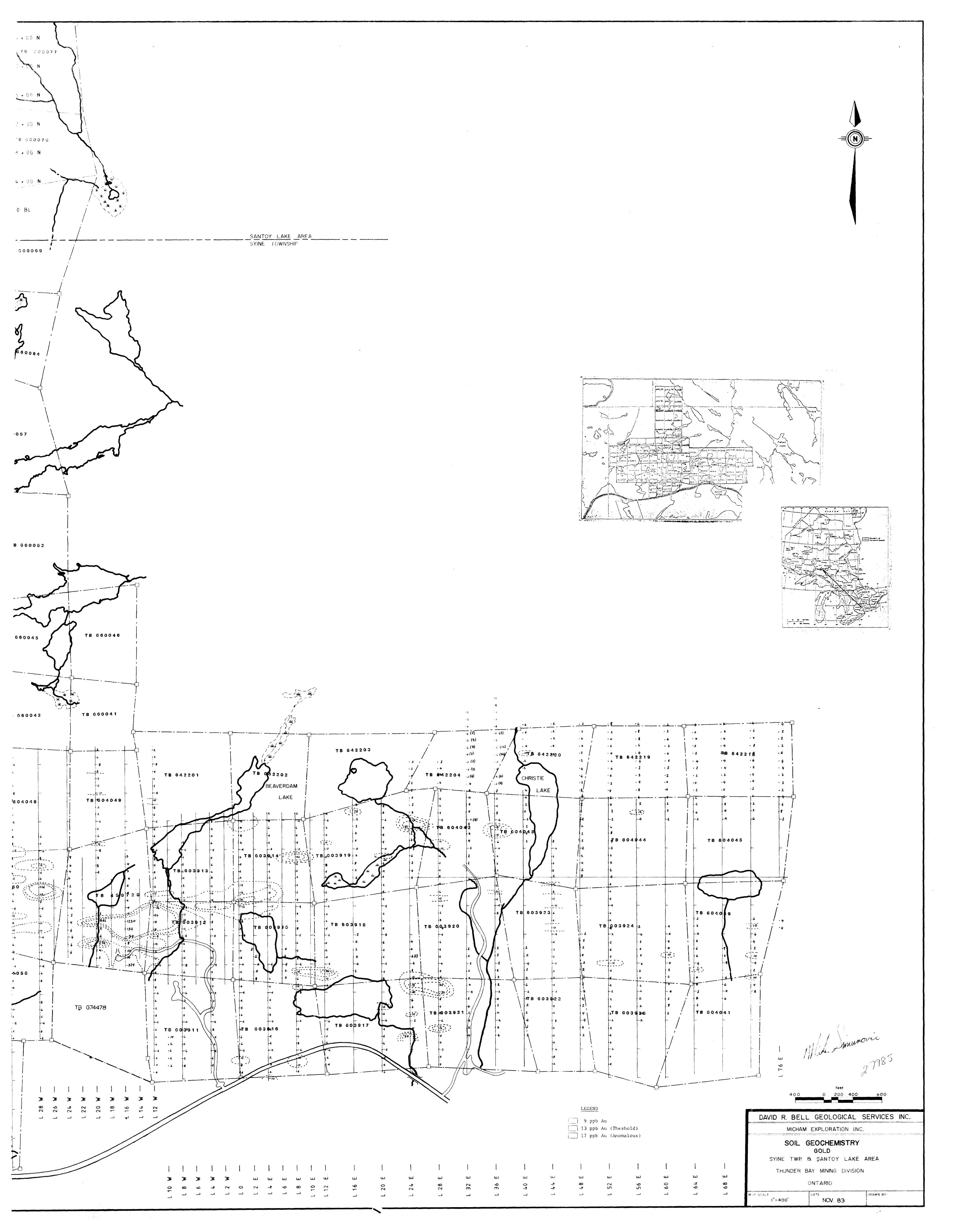












or Male Land Wilson 12 TB 642203 BEAVERDAM LAKE 1:36-LAKE . /8 10TB GO49,43 TB 604045 (36 TB 603923 TB 6040 9 TB G.Q, 3920 120 64 TB 603922 14 124 TB 2603921 8/ TB 603925 TB 603917 111111 DAVID R. BELL GEOLOGICAL SERVICES AN graduate Victoria (Editoria) Control (Alberta Land MICHAM EXPLORATION IN SOIL GEOCHEMISTRY COPPER SYINE TWE IS CANTLY LAKE WHEE THUNDER BAY MONTH OF LIFE A Alle Mich It - 1 NOV. 83

