



42A05SE0072 2.7419 THORNELOE

010

ESSO MINERALS CANADA
Project #676

Report on Overburden Drill Program
Thorneloe-1 Group
Thorneloe Township, Ontario
NTS 42A/5

September, 1984

J. MacPherson
Geologist

10/10/84
10/10/84
10/10/84



42A055E0072 2.7419 THORNELOE

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SUMMARY

An overburden drill program was carried out on Esso Minerals' claim group in Thorneloe Township during August 7-8, 1984. Seven holes were drilled for a total length of 529 feet during the program. The holes were drilled using a reverse circulation drill rig supplied by Bradley Brothers Ltd.

Basal till was intersected in four of the seven drill holes and a total of 34 samples were collected. The heavy mineral concentration was carried out by Overburden Management Ltd. in Ottawa. Assays for gold, copper and arsenic were done by Bondar-Clegg Analytical Labs.

Results of this drill program indicate that only background values of gold exist in the sections sampled, with one exception.

Future work on the property should consist of further drilling at closer spacings and possible follow-up of the one anomalous drill hole.

INTRODUCTION

As part of an exploration program directed towards discovering an economic gold deposit on Esso Minerals' claim group in Thorneloe Township, a reconnaissance-style overburden drill program was carried out during the period August 7-8, 1984.

The contract was let to Bradley Bros. Drilling Ltd. who subsequently drilled a total of 529 feet in 7 holes. A reverse circulation type drill rig mounted on a Nodwell was used to drill the overburden holes. Basal tills and gravels were sampled, along with chips of the bedrock.

LOCATION AND ACCESS

The property is located ten miles west-southwest of the city of Timmins in Thorneloe Township, District of Cochrane, Ontario.

Road access from Timmins is excellent, with paved Highway 144 located just west of the grid area. There are numerous good gravel and bush roads on the property as well as the Tatachikapika River near the east boundary, which is navigable by canoe.

The topography of the area is fairly flat, with an occasional low rolling sand dune providing the only relief.

QUATERNARY GEOLOGY OF THE WEST TIMMINS AREA

Four stratigraphic units of varying thicknesses make up the Quaternary geology of this area.

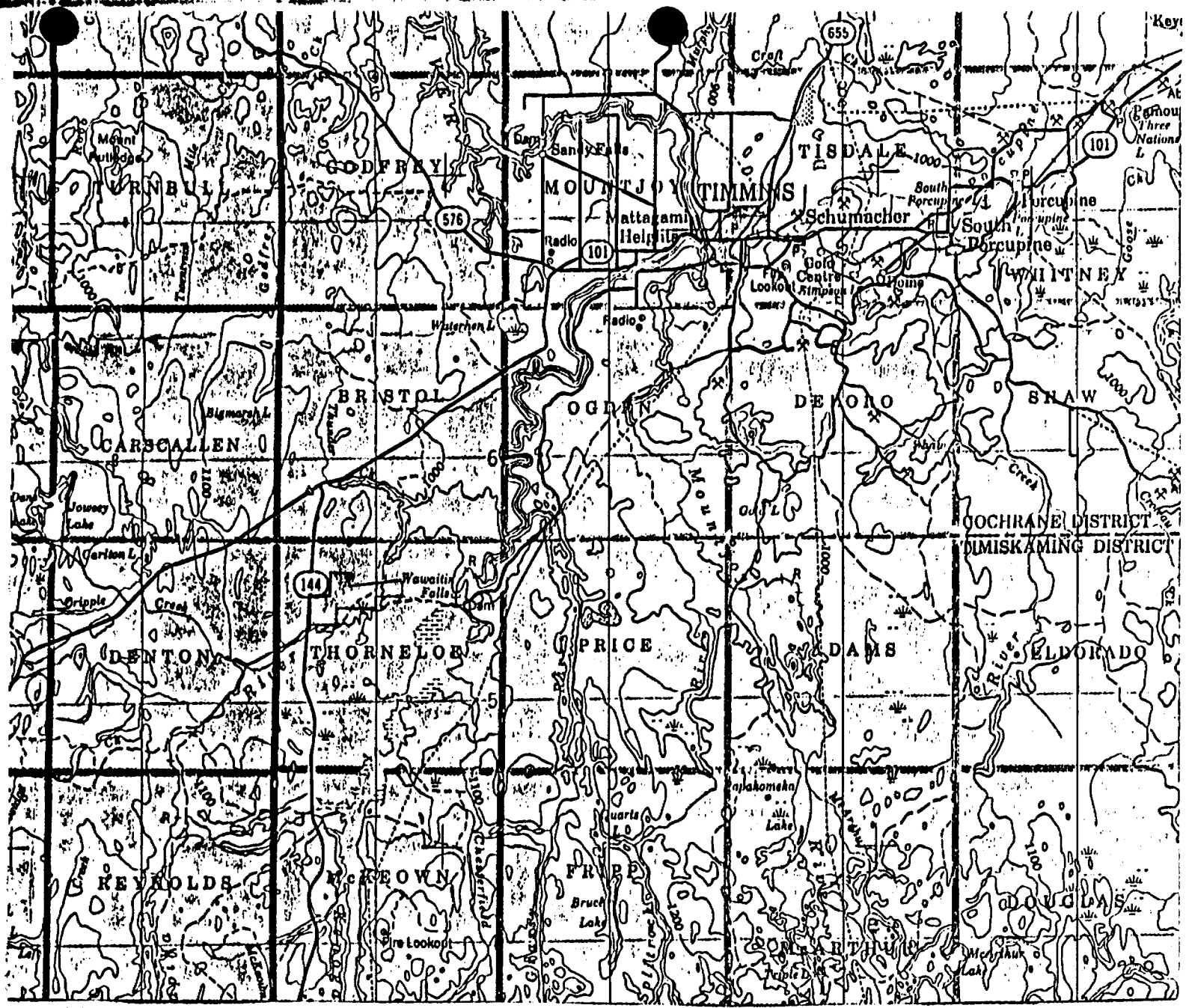
They are as follows:

1. Lake Ojibway Sediments

These glaciolacustrine sediments consist of silt, fine sand and varved clay. They are the youngest sediments, occur at surface, and may be up to 50 metres thick.

2. Esker Sands and Gravels

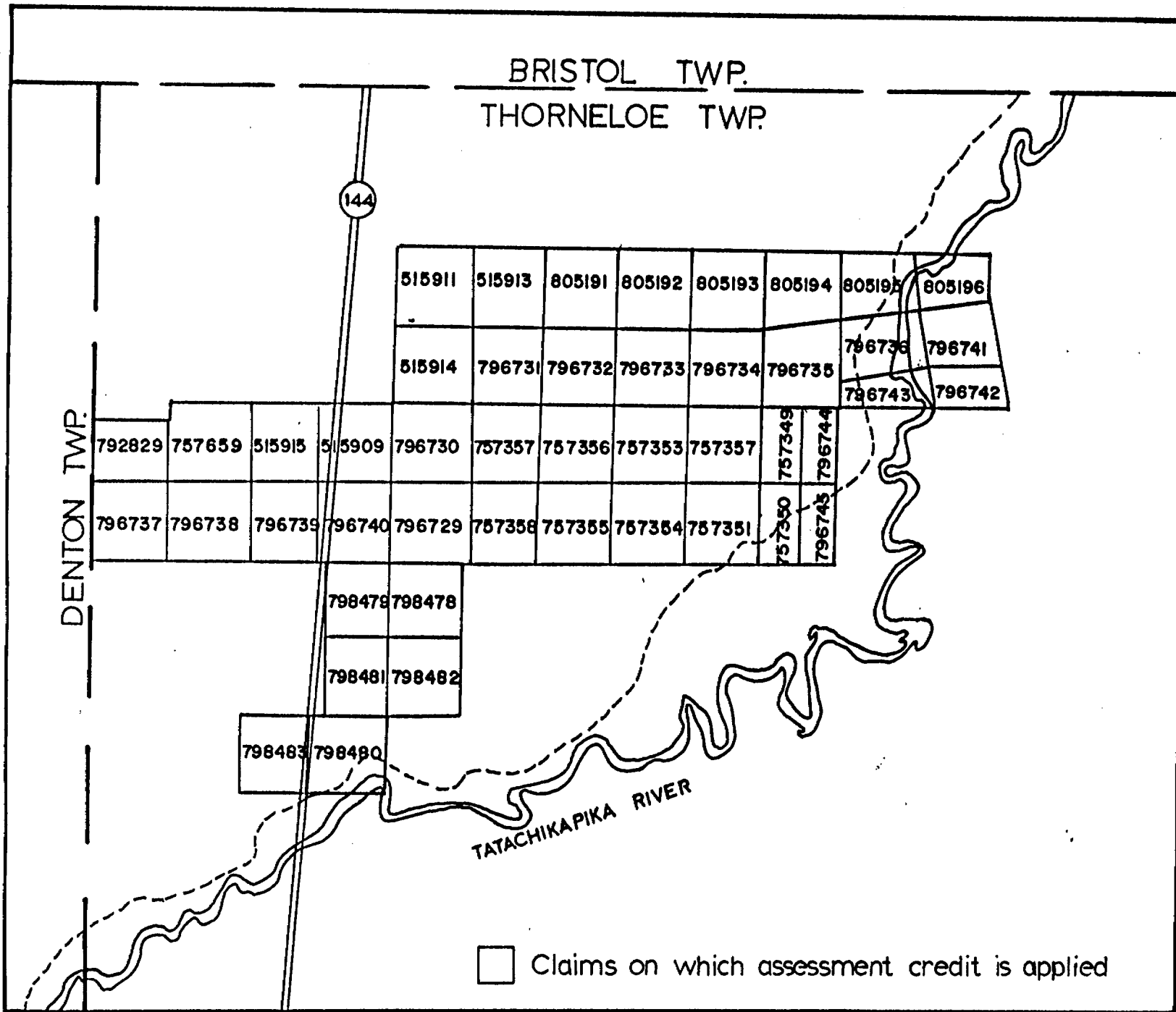
These glaciofluvial sands and gravels were deposited in esker-delta outwash systems during the retreat of the Late Wisconsinian glacier.



LOCATION MAP, THORNLOE PROJECT

SCALE: 1 INCH = 4 MILES

Note: Coloured area is covered by survey.



Claim sketch, Thorneloe Project

SCALE: 1 Inch = 1/2 mile

3. Matheson Till

This till underlies the two units above and varies between 1 and 10 metres in thickness. The upper part of the section is a water-lain till and shows crude stratification. The gravels with silty matrix and fine pebbly silts and sands are often interfingered with thin clay horizons deposited in Lake Ojibway during the retreat of the Late Wisconsinian glacier.

4. Remnants of Older Till

The older till, glaciolacustrine and glaciofluvial horizons are confined to deep bedrock depressions and are normally transported great distances. As a result, due to their distant source, they are not useful for local exploration.

EQUIPMENT AND METHODOLOGY OF DRILL PROGRAM

Equipment used on the program consisted of a Longyear 38 drill mounted on a Nodwell. A second Nodwell carried the drill rods and water for the program. Reverse circulation drilling was the method employed to recover the overburden. The drill crew consisted of a foreman and two helpers.

The return waterline carried the overburden in suspension to a cyclone. After passing through the cyclone, the material entered a large bucket, where the coarse material settled out. A screen on top of the bucket enabled the person logging the hole to periodically examine the material as it exited from the cyclone. The overflow from the coarse bucket entered a second bucket, where the finer material settled out. Overflow from this second bucket re-entered the water storage tank, where it was recirculated through the hole.

Roy Shegelski and the author carried out the logging of the overburden and collection of till and gravel samples. A total of 34 samples were collected and sent to Overburden Management Ltd. in Ottawa for heavy mineral separation. The heavy mineral separates were then assayed by Bondar-Clegg Analytical Labs for gold, copper and arsenic.

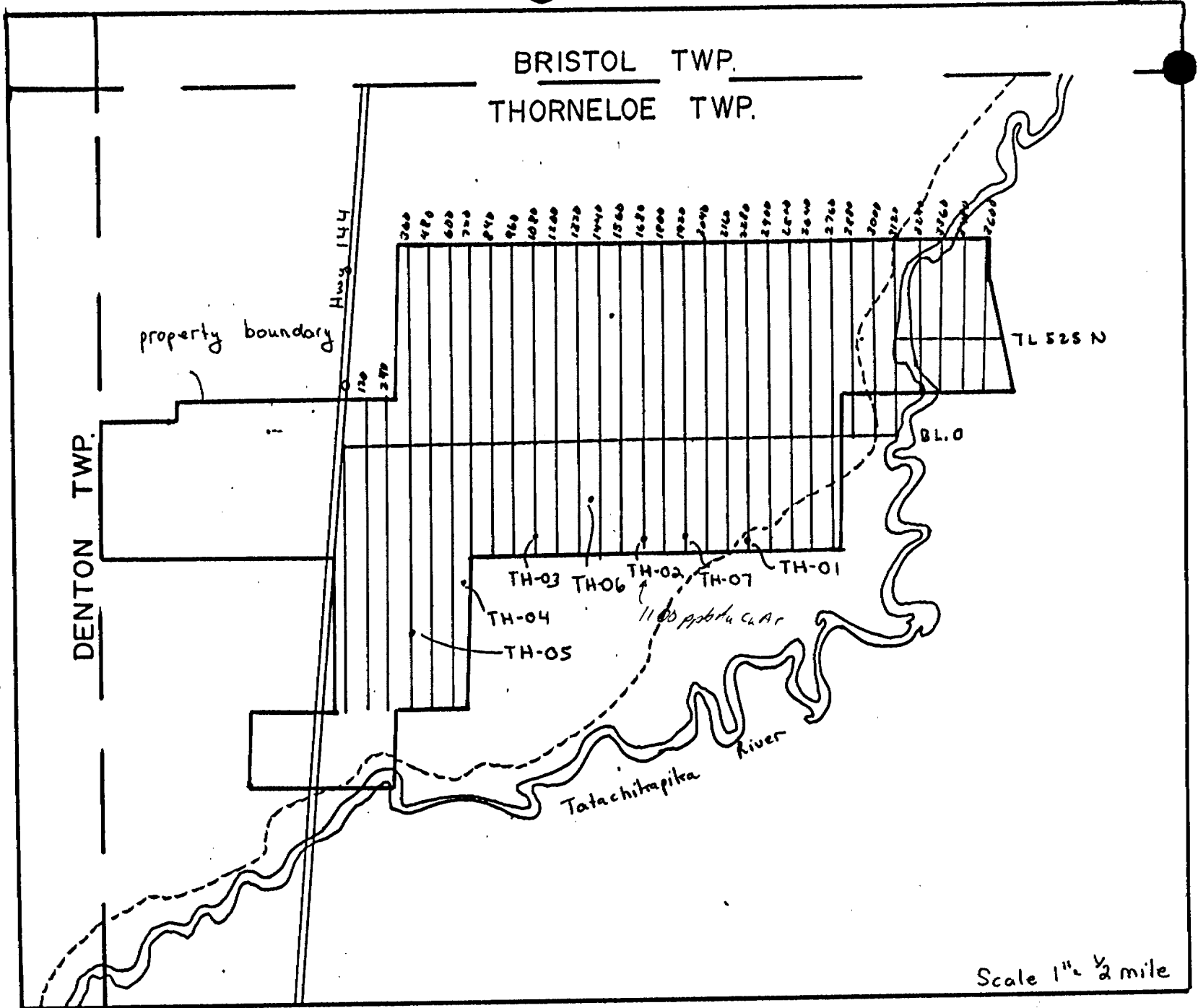


Figure 3. Location map, overburden drill holes.

SUMMARY OF OVERBURDEN RESULTS

The reader is referred to the drill logs and sections contained in Appendices I and II at the end of this report for detailed descriptions of the drill holes.

In summary, the overburden composition and thickness varied considerably from hole to hole. Fine to medium-grained beach derived sands, poor to moderately sorted gravels, boulder fields, clay layers of varying thicknesses and basal till were intersected. Basal till was positively identified in holes 2, 3, 4 and 6. All components of the overburden were sampled, as well as bedrock chips which were recovered from six of the seven holes drilled.

The table on the following page summarizes the seven drill holes.

.../8

<u>Hole No.</u>	<u>Grid Location</u>	<u>Depth (to bedrock)</u>	<u>Overburden</u>	<u>Bedrock</u>
TH-01	40 m E of L2280E, 525S	25.9 m	very fine to fine sands; gravel & boulders	sericitic schistose metasediment
TH-02	20 m E of L1680E, 550S	17.4 m	sand to pebbly sand, pebble/gravel beds, thin clay layers, boulders & basal till	talc-chlorite schist
TH-03	L1080E, 525S	15.1 m	sand to silt, boulder beds, basal till	diabase
TH-04	L720E, 800S	40.5 m	sand to pebbly sand, silt, thick clay layer, gravel/boulder beds, basal till	mafic intrusive
TH-05	L360E, 900S	27.4 m (no B.R.)	I/B gravels and silt/sand beds Occ. clay layer	-
TH-06	50 m NE of L1320E, 350S	5.8 m	pebbly sand, occ. boulder bed, basal till	sericitic, schistose metasediment
TH-07	L1920E, 525S	15.3 m	fine to med. sand, boulder bed	talc-chlorite schist

CONCLUSIONS AND RECOMMENDATIONS

The values returned from the basal till samples were all around background, with the exception of one sample. All bedrock samples were also around background.

The spacing between drill holes was quite large due to the reconnaissance nature of the drill program. Fill-in holes are recommended, especially in the area of TH-02, which returned the most encouraging values.

September 26, 1984

J.A. MacPherson

J.A. MacPherson

STATEMENT OF QUALIFICATIONS

I, Joseph A. MacPherson, do certify the following:

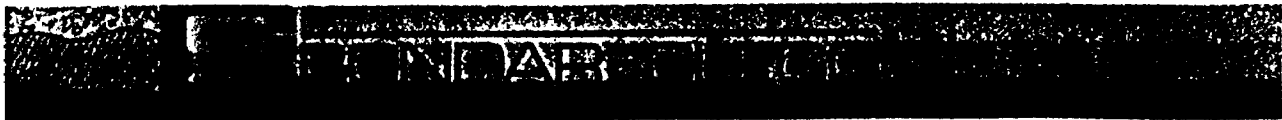
1

1. I am a graduate of Laurentian University in Sudbury, Ontario, and hold an Honours Bachelor of Science degree in Geology.
2. I have been practising my profession continuously since graduation in 1980.
3. I have no personal monetary or stock interest in any of the properties which are discussed in this report.

Date: *Sept. 28/84*

Signed: *J. A. MacPherson*

Bondar-Clegg & Company Ltd.
 5420 Canotek Rd.
 Ottawa, Ontario
 Canada K1J 8X5
 Phone: (613) 749-2220
 053-3233



ESSO MINERALS CANADA
 JOE MACPHERSON
 P.O. BOX 290
 TIMMINS, ONTARIO
 P4H 7K4

Invoice: 108137
 Date: September 06, 1984
 Report No: 014-2286

39 Analyses of Copper	at	1.95	76.05	
Subtotal			76.05	76.05
39 Analyses of Gold - Fire Assay	at	6.50	253.50	
Subtotal			253.50	253.50
39 Analyses of Arsenic	at	3.50	136.50	
Subtotal			136.50	136.50
Sample Preparation				
39 Samples of PULVERIZE -200	at	1.75	68.25	
Subtotal			68.25	68.25
Invoice Total				\$534.30

<u>October 9 1984</u>	12831
<u>Received from Esso Resources</u>	
<u>Five hundred thirty-four</u>	<u>30</u> 100 Dollars
<u>For Invoice 108137</u>	
<u>\$534.30</u>	<u>R. Bondar</u>
BONDAR-CLEGG & COMPANY LTD 5420 CANOTEK RD. GLOUCESTER, ONTARIO K1J 8X5	





OVERBURDEN DRILLING MANAGEMENT LIMITED

3 CLEOPATRA DRIVE, NEPEAN, ONTARIO K2G 3M9 (613) 226-1774

September 10, 1984

To: Mr. Jim Pirie
Esso Minerals Canada Ltd.
120 Adelaide Street West
P.O. Box 4029, Station A
Toronto, Ontario
M5W 1K3

Re: Laboratory Services
Invoice #0984110

Laboratory Services:

39 overburden samples @ .28.00
1 concentrate further refined
through panning @ 20.00

1,092.00

20.00
\$1,112.00

Field Supplies: as per attached list

65.55

\$1,177.55

PAID OCT 11 1984
Averill

Averill
N. Averill
General Manager

BRADLEY BROS. LIMITED

August 15, 1984

RECEIVED

AUG 27 1986

CONTRACT DIAMOND DRILLING

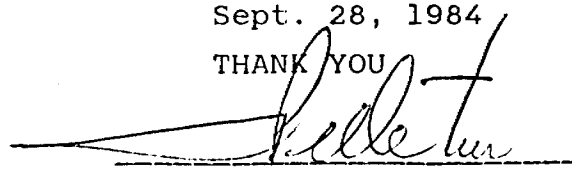
Esso Minerals Canada
15 Cedar North
P.O. Box 290
Timmins, Ontario P4N 7K4

HOLE No.	TO COVER DIAMOND DRILLING FOR			FOOTAGE COMPLETED	
	FROM	TO	Aug. 7 to 8, 1984		
	Float to move from Denton Township to Thornloe Township 20 miles			@ \$5.00	\$100 00
TH-1	0'	78'	78'		
TH-2	0'	66'	66'		
TH-03	0'	53'	53'		
TH-04	0'	140'	140'		
TH-05	0'	96'	96'		
TH-06	0'	34'	34'		
TH-07	0'	59'	59'		
	Operating hours: 21 hours			@ 180.00	3,780 00
	Down the hole consumables:				
	2 Tricone bits @ \$650.00			- \$1300.00	
	1 Adaptor			456.00	
				<u>\$1756.00</u>	
	Plus 15%			<u>263.40</u>	2,019 40
	Demobilization: 20 miles			@ 5.00	<u>100 00</u>
					<u>\$5,999 40</u>

October 1, 1984.

RECEIVED PAYMENT IN FULL
Sept. 28, 1984

THANK YOU



BRADLEY BROS. LIMITED



42A05SE0072 2.7419 THORNELOE

900

Mining Lands Section

File No 2.7419

Control Sheet

TYPE OF SURVEY GEOPHYSICAL

GEOLOGICAL

GEOCHEMICAL

EXPENDITURE

MINING LANDS COMMENTS:

LD

Dorcy
Signature of Assessor

19/11/84
Date

1984 12 31

Your File: 414/84
Our File: 2.7419

Mining Recorder
Ministry of Natural Resources
60 Wilson Avenue
Timmins, Ontario
P4N 2S7

Dear Sir:

RE: Overburden drilling filed under Section 77(19)
of the Mining Act RSO 1980 submitted on Mining
Claims P 515909 et al in the Township of Thorneloe

Please disregard the Notice of Intent dated December 11, 1984
on the above-mentioned survey. The recorded holder has since
provided further information.

The credits as listed on the attached statement have been
approved as of the above date.

Yours sincerely,

S.E. Yundt
Director
Land Management Branch

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

D. Isherwood:mc

cc: Esso Resources Canada
120 Adelaide Street West
Toronto, Ontario
M5W 1K3

cc: Joseph A. MacPherson
1340 Richard Crescent
P.O. Box 431
Timmins, Ontario
P4N 7E3

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

cc: Resident Geologist
Timmins, Ontario

Encl.

Recorded Holder	ESSO RESOURCES CANADA
Township or Area	THORNELOE TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical Electromagnetic _____ days Magnetometer _____ days Radiometric _____ days Induced polarization _____ days Other _____ days Section 77 (19) See "Mining Claims Assessed" column Geological _____ days Geochemical _____ days Man days <input type="checkbox"/> Airborne <input type="checkbox"/> Special provision <input type="checkbox"/> Ground <input type="checkbox"/> <input type="checkbox"/> Credits have been reduced because of partial coverage of claims. <input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	\$8716.25 SPENT ON OVERBURDEN DRILLING PERFORMED ON CLAIMS: P 757350 - 351 757355 757358 798478 798481 581 ASSESSMENT WORK DAYS CREDIT ALLOWED WHICH MAY BE GROUPED IN ACCORDANCE WITH SECTION 76(6) OF THE MINING ACT RSO 1980.

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

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; Geological — 40; Geochemical — 40; Section 77 (19)—60:



ESSO MINERALS CANADA

120 ADELAIDE STREET WEST, P.O. BOX 4029, STATION "A"

TORONTO, ONTARIO M5W 1K3

(416) 968-5200

S. B. MAC EACHERN
Regional Exploration Manager

P.

December 22, 1984

Mr. R.J. Pichette
Ministry of Natural Resources
Land Management Branch
Whitney Block, Room 6610
Queen's Park
Toronto, Ontario
M7A 1W3

RECEIVED

DEC 29 1984

MINING LANDS SECTION

Re: Your File: 2.7419, Thorneloe Twp.
Our File: 414/84

Dear Sir:

Please be advised that Dr. R.J. Shegelski and Mr. J.A. MacPherson are employees of Esso Minerals Canada, a division of Esso Resources Canada.

These persons performed the work and authored the technical survey report concerning overburden drilling in Thorneloe Township. They incurred a cost of \$1,005.00 which should be included in the expenditures as originally submitted. A breakdown of this expenditure is as follows:

<u>Name</u>	<u>Day Rate</u>	<u>No. of Days</u>	<u>Expenditure</u>
R.J. Shelgelski - Report Preparation	\$200.00	3	\$600.00
J.A. MacPherson - Drill Supervision/Sampling	\$135.00	3	\$405.00
			<u>\$1,005.00</u>

Your acceptance of the above statements should cause a revision of the assessment work credits allowed for the technical report.

Respectfully submitted,

G.A. Haron

Gerald A. Haron
P. Eng.

GAH/db

c.c. J.A. MacPherson, Timmins



Ministry of
Natural
Resources

Jan 11/84

~~DEC 27, 1984~~

*- if receipt or
affidavit not
received by
Jan 11/84
Proceed to
approval*

1984 12 11

Your File: 414/84
Our File: 2.7419

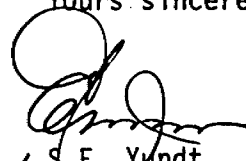
Mining Recorder
Ministry of Natural Resources
60 Wilson Avenue
Timmins, Ontario
P4N 2S7

Dear Sir:

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

RD D. Isherwood:mc

Encls.

cc: Esso Resources Canada
120 Adelaide Street West
Toronto, Ontario
M5C 1K9

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

Joseph A. MacPherson
1340 Richard Crescent
P.O. Box 431
Timmins, Ontario
P4N 7E3

FILE

*- spoke Joseph
MacPherson on
84-1A-14 -
- will be sending
in statement by an
officer of the company
substantiating further
at pendulants for the
Please note - statement
is out by 306
Ray*



Ontario

Ministry of
Natural
Resources

Notice of Intent
for Technical Reports

1984 12 11

2.7419/414/84

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.

Recorded Holder

ESSO RESOURCES CANADA

Township or Area

THORNELOE TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical Electromagnetic _____ days Magnetometer _____ days Radiometric _____ days Induced polarization _____ days Other _____ days	\$7710.95 SPENT ON OVERBURDEN DRILLING PERFORMED ON CLAIMS: P 757350-351 757355 757358 798478 798481
Section 77 (19) See "Mining Claims Assessed" column	514 ASSESSMENT WORK DAYS CREDIT ALLOWED WHICH MAY BE GROUPED IN ACCORDANCE WITH SECTION 76(6) OF THE MINING ACT RSO 1980.
Geological _____ days	
Geochemical _____ days	
Man days <input type="checkbox"/> Airborne <input type="checkbox"/>	
Special provision <input type="checkbox"/> Ground <input type="checkbox"/>	
<input checked="" type="checkbox"/> Credits have been reduced because of partial coverage of claims.	
<input checked="" type="checkbox"/> 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

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; Geological — 40; Geochemical — 40; Section 77(19)—60;



Ministry of
Natural
Resources

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

Mining Act

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.

444/84
27419

4 Dec 1984

Type of Survey(s) REVERSE CIRCULATION OVERBURDEN DRILLING		Township or Area THORNELOE	
Claim Holder(s) ESSO RESOURCES CANADA		Prospector's Licence No. T-872	
Address 120 ADELAIDE ST. W., TORONTO, ONTARIO			
Survey Company Bradley Bros. Drilling Ltd.		Date of Survey (from & to) 07 08 84 08 08 84 Day Mo. Yr. Day Mo. Yr.	Total Miles of line Cut -
Name and Address of Author (of Geo-Technical report) J. MacPherson, 1340 Richard Cresc., P.O. Box 431, Timmins, Ontario			

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	
	- Radiometric	
For each additional survey: using the same grid: Enter 20 days (for each)	- 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		
Prefix	Number	Expend. Days Cr.	Prefix	Number	Expend. Days Cr.
P	515909	60			
	515911	60			
	515913	60			
	515914	60			
	515915	60			
	757659	40			
	798480	40			
	798483	40			
	792829	40			
	796737	40			
	796738	40			
	796739	40			

RECORDED
OCT 3 1984
Receipt No. 21

PORCUPINE MINING DIVISION
RECEIVED
OCT 3 1984
A.M. 7 8 9 10 11 12 1 2 3 4 5 6 P.M.

Expenditures (excludes power stripping)	
Type of Work Performed (<i>Sect. 77-19</i>) OVERBURDEN DRILLING	
Performed on Claim(s) P-757350, 757351, 757355, 757358, 798478, 798481	
Calculation of Expenditure Days Credits	Total Days Credits
Total Expenditures \$ 8716.25	$\div 15 = 581$
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.	

Total number of mining claims covered by this report of work. **12**

Date Sept 28/84 Recorded Holder or Agent (Signature) *[Signature]*

For Office Use Only		
Total Days Cr. Recorded 580	Date Recorded Oct 3/84	Mining Recorder <i>[Signature]</i> Mining Recorder Branch Director
	Date Approved as Recorded	<i>see revised statement</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 Joseph A. MacPherson, 1340 Richard Cresc., P.O. Box 431, Timmins, Ontario P4N 7E3		
	Date Certified Sept 28/84	Certified by (Signature) <i>J.A. MacPherson</i>
267-6680		

GRAPHIC LOG

27419

TILL



Matrix fine-medium sand $\frac{1}{2}$ silt. Pebbly. Record color of silt.

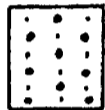


Matrix as above. Cobbly.



Clayey matrix (gritty lumps on screen and/or clay coating on pebbles). Cobbly. Record color of clay.

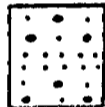
GRAVEL



Matrix medium-coarse sand or granules. Pebbly.

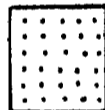


Matrix as above. Cobbly.

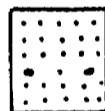


Pebbly with sand interbeds.

SAND



Record grain size (fine, medium, coarse); note thickness of layers and degree of oxidation.



Pebbly sand interbed (few one-quarter inch pebbles on screen)

CLAY



Record color and compactness. Note varves and any sand or silt interbeds.

SILT



Record color

* In most cases where clast compositions are not specified, approximately 70% of clasts were dark colored, predominantly mafic volcanic. The remainder were a mixture of felsic volcanic, granitic intrusive and rare Paleozoic limestone.

REVERSE CIRCULATION DRILL HOLE LOG

DATE August 8 19 84

HOLE NO TH-06 LOCATION 50 m NE of L1320, 350 S
 GEOLOGIST RJS, JM DRILLER Bradley Bros BIT NO. B66470 BIT FOOTAGE _____

SHIFT HOURS
2:25pm TO 4:00 pm

MOVE TO HOLE _____
 DRILL _____

TOTAL HOURS
1 1/2

MECHANICAL DOWN TIME _____
 DRILLING PROBLEMS _____

CONTRACT HOURS

OTHER _____
 MOVE TO NEXT HOLE _____

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG					
0				0 - 1.5 m to overburden prior to drilling					
1									
1.5				1.5-3.3 m brown oxidized fine sand					
2	•••••								
3	•••••			3.3-3.6 m pebbly sand with minor clay lumps, poorly sorted					
4	•••••			3.6-4.5 m boulder beds with fine sand matrix					
5	•••••			4.5-5.8 m loss of water, drilling edge of bedrock					
6	•••••			5.8-6.7 m crushed bedrock					
7	•••••			6.7-8.8 m metasedimentary sericite schist					
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									

Surface









bedrock

meta-sediment

REVERSE CIRCULATION DRILL HOLE LOG

DATE _____ 19____
 SHIFT HOURS _____ TO _____
 TOTAL HOURS _____
 CONTRACT HOURS _____

HOLE NO TH-05 LOCATION _____
 GEOLOGIST _____ DRILLER _____ BIT NO. _____ BIT FOOTAGE _____
 MOVE TO HOLE _____
 DRILL _____
 MECHANICAL DOWN TIME _____
 DRILLING PROBLEMS _____
 OTHER _____
 MOVE TO NEXT HOLE _____

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG				
21				21.3-22.5 m fine sand and minor clay lumps with pebbles from 21.8 to 21.9 m followed by medium grained, moderately white sand.				
22								
23				22.5-23.7 m gravel, boulder bed with mafic volcanics, granite, andesitic volcanics				
24				23.7-24.7 m sand layer, medium grained, quartzose grading into gravel at 23.9 m				
25				24.7-25.3 m fine sand layer				
26				25.3-25.6 m pebbly sandstone to fine gravel				
27				25.6-26.2 m gravel, boulders in fine sand matrix				
28				26.2-27.4 m fine to coarse pebbly sandstone grading into a boulder bed - BIT FINISHED				
29								
30								
31								
32								
33								
34								
35								
36								
37								
38								
39								
40								

BIT SHOT, HAD TO ABONDON HOLE

REVERSE CIRCULATION DRILL HOLE LOG

Thorneloe Twp. - Redsucker Project

DATE August 7/19 84

HOLE NO TH-03 LOCATION L1080E, 525S just west of line
 GEOLOGIST RJS, JM DRILLER Bradley Bros BIT NO. CB66434 BIT FOOTAGE 55'

SHIFT HOURS
1:30 TO 2:45 pm

MOVE TO HOLE _____
 DRILL _____

TOTAL HOURS
1 1/4

MECHANICAL DOWN TIME _____
 DRILLING PROBLEMS _____

CONTRACT HOURS _____

OTHER _____
 MOVE TO NEXT HOLE _____

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG					
0				0 - 1.5 m to overburden					
1									
1.5				1.5-3.6 m fine sand with brown clay lumps					
2									
3				3.6-8.5 m fine grey sand with small pebbles, some clay at 6.4 m along with large pebbles					
4									
5									
6									
7									
8				8.5-9.7 m till with sandy-silty clay lumps and boulders, limestone boulders and lumps of silty clay at top					
9									
10				9.7-13.4 m boulder beds with poorly sorted sand as matrix, loss of clay lumps at 11.3 m					
11									
12									
13				13.4-15.1 m basal till or gravel with clay lumps at the top and at 14.9 m					
14									
15				15.1-15.25 m bedrock diabase dyke					
16									
17									
18									
19									
20									

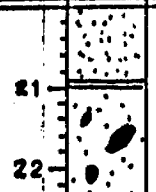
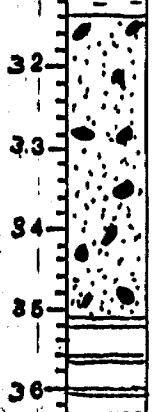
Surface

bedrock

diabase

REVERSE CIRCULATION DRILL HOLE LOG

DATE _____ 19 _____	HOLE NO <u>TH-04</u>	LOCATION _____
SHIFT HOURS _____	GEOLOGIST _____	DRILLER _____ BIT NO. _____ BIT FOOTAGE _____
TO _____	MOVE TO HOLE _____	
TOTAL HOURS _____	DRILL _____	
CONTRACT HOURS _____	MECHANICAL DOWN TIME _____	
	DRILLING PROBLEMS _____	
	OTHER _____	
	MOVE TO NEXT HOLE _____	

DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG				
21		20.9-23.7 m		pebble bed with unsorted sand and (silty?) clay layers or matrix, a large variety of rock fragments becoming finer grained at 23.7 m				
22		23.7-24.4 m		fine pebble bed				
23		24.4-24.8 m		clayey hard pan boulder bed with a variety of boulders but commonly 70% dark fragments				
24		24.8-25.6 m		mixture of silt and clay with no clasts (transition to clay bed)				
25		25.6-28.0 m		massive, medium grey clay				
26		28.0-29.2 m		layered light and dark grey clay beds				
27		29.2-31.3 m		silty clay with a boulder (dropstone?) at 29.3 m				
28		31.3-34.5 m		gravel with pebbles, sand, large diorite and basalt boulders at 32.9 m, finer pebbles at 34.5 m				
29		34.5-35.1 m		pebbly sandstone ending in clayey sand				
30		35.1-36.3 m		sand with clay layers at 35.6 and 35.9 m				
31		36.3-40.5 m		probable basal till sandy at top with diorite boulder at 37.5 m, red granite boulder and mafic boulders at 39.9 m ending in basal granodiorite and diorite boulders				
32		40.5-41.1 m		coarse grained feldspar porphyritic, epidotized, (magnetic) bedrock. Probable dyke or sill				
33								
34								
35								
36								
37								
38								
39								
40								

mafic dyke bedrock

**OVERBURDEN DRILLING MANAGEMENT LIMITED
REVERSE CIRCULATION DRILL HOLE LOG**

DATE August 7 19 84 HOLE NO TH-01 LOCATION Thorneloe Twp.-Redsucker Project
40 m east of L2280E, 525S
 GEOLOGIST RJS, JM DRILLER Bradley Bros BIT NO. CB66434 BIT FOOTAGE 83'
 SHIFT HOURS MOVE TO HOLE 8:45 am
8:45 am TO 11.30 am DRILL Long year
 TOTAL HOURS MECHANICAL DOWN TIME None
2 3/4 DRILLING PROBLEMS None
 CONTRACT HOURS OTHER _____
 MOVE TO NEXT HOLE 11:30 am

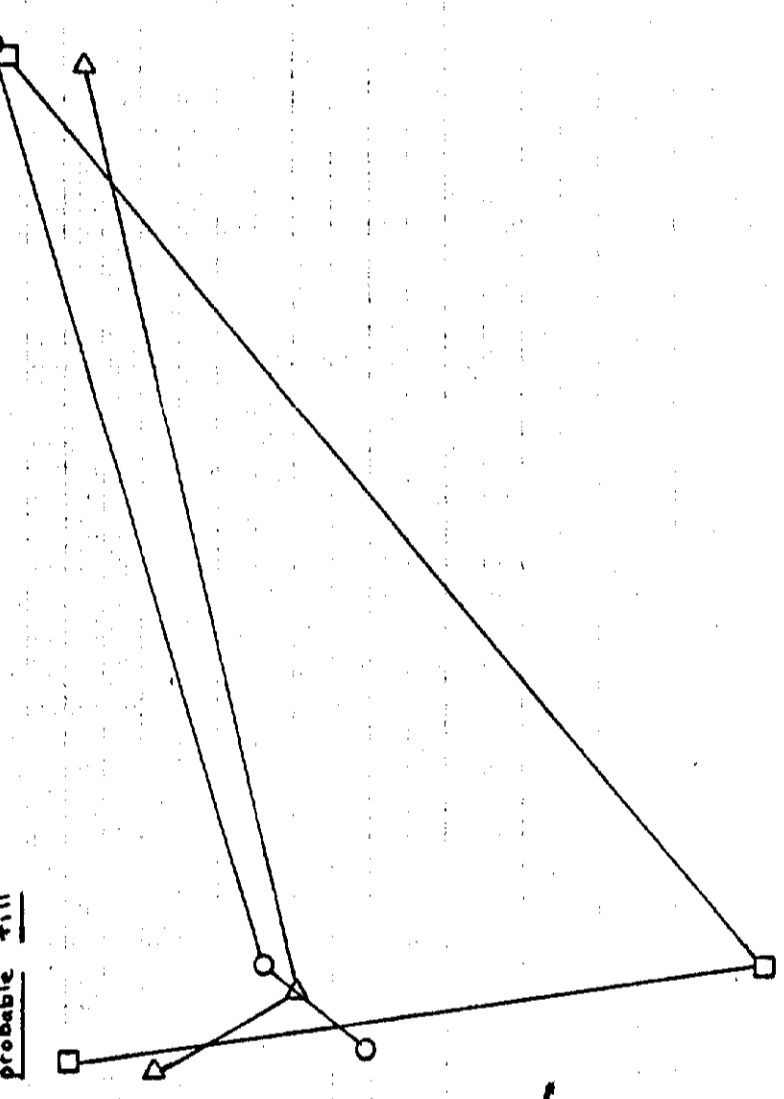
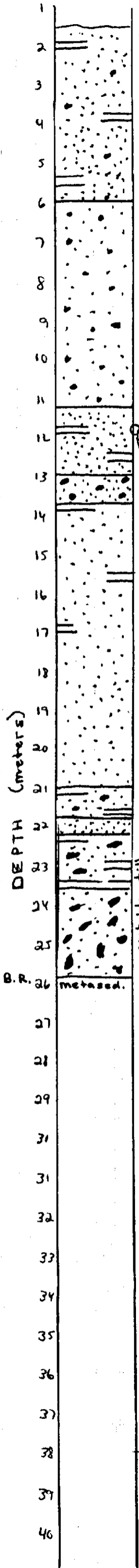
DEPTH IN METRES	GRAPHIC LOG	INTERVAL	SAMPLE NO.	DESCRIPTIVE LOG					
1		0-1.5 m		upper oxidized sand penetrated prior to drilling					
2		1.5-6.0 m		matrix of medium to light brown sand, fine grained with small pebbles and clay chips					
3									
4									
5									
6		6.0-11.25 m		pebbly, fine sandstone layer					
7									
8									
9									
10									
11									
12		11.25-13.0 m		fine to medium grained sand becoming greyer colored with local lumps of silty clay					
13		13.0-13.7 m		fine grey sand with pebbles up to 2.5 cm					
14		13.7-20.4 m		fine grey sand with minor lumps of clay grading to fine light grey sand					
15									
16									
17									
18									
19									
20		20.4-21.0 m		coarse sand					

TH-01

SOIL AND ASSAY PROFILE

- GOLD
- △ COPPER
- ARSENIC

27419



200

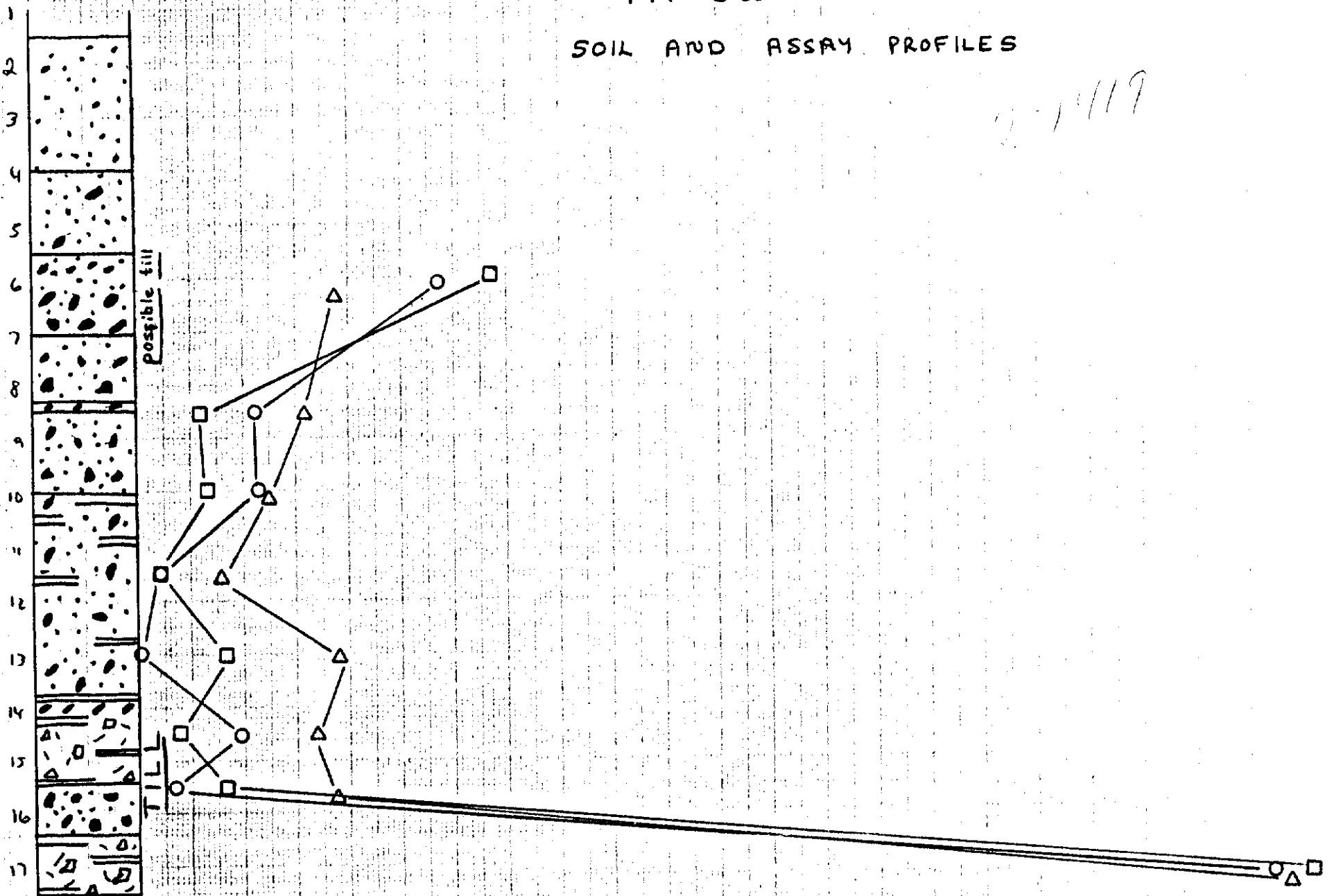
50 100 150 200 250 300 350 400 450 500 550 600 650 700 750 800 850 900 950 1000 1050 1100
 Au (ppb)

25 50 75 100 125 150 175 200 225 250 275 300 325 350 375 400 425 450 475 500 525 550 575 600
 Cu, As (ppm)

TH-0a

SOIL AND ASSAY PROFILES

2-1119



- GOLD (ppb)
- △ COPPER (ppm)
- ARSENIC (ppm)



210

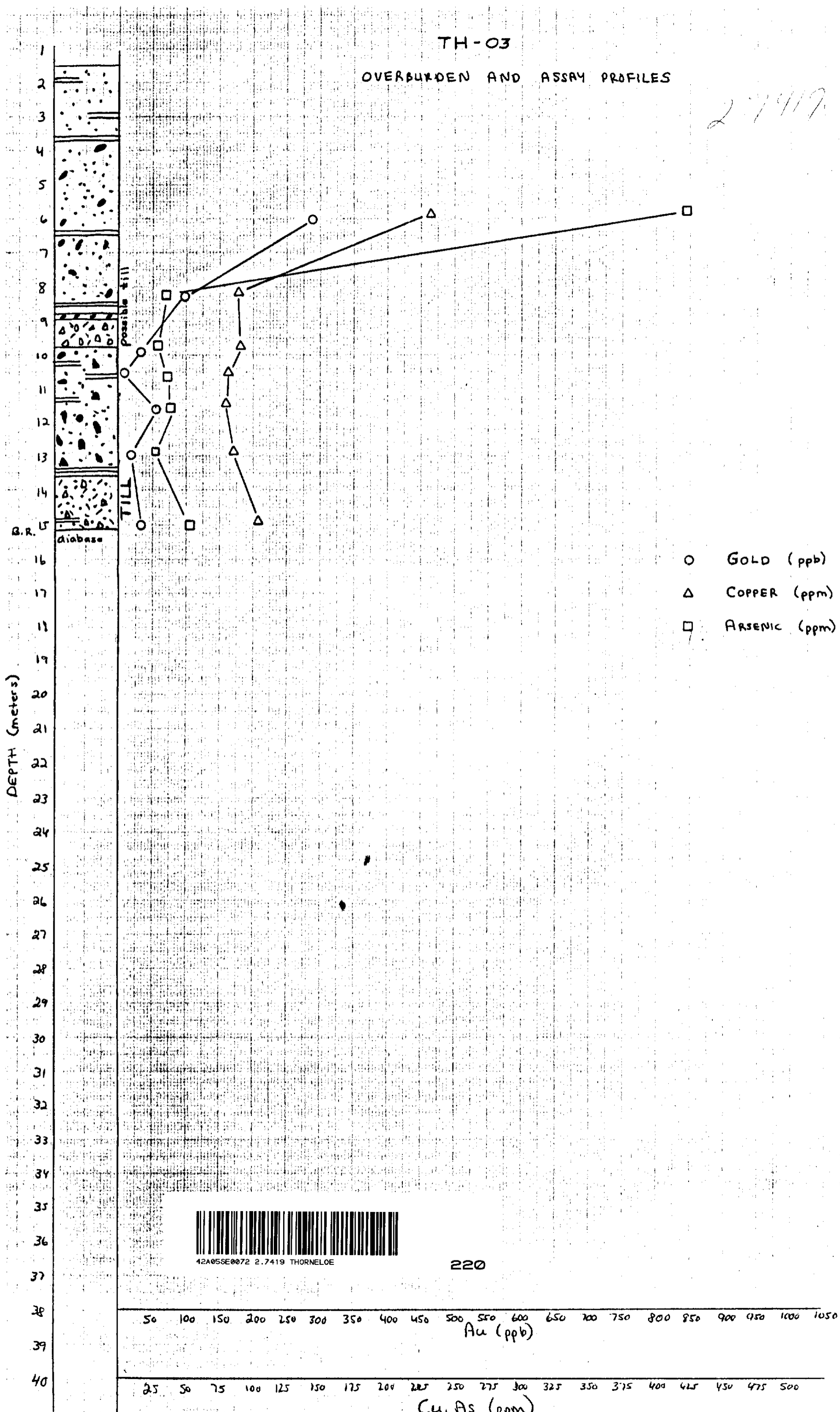
50 100 150 200 250 300 350 400 450 500 550 600 650 700 750 800 850 900 950 1000 1050 1100
Au (ppb)

25 50 75 100 125 150 175 200 225 250 275 300 325 350 375 400 425 450 475 500 525 550
As, Cu (ppm)

TH-03

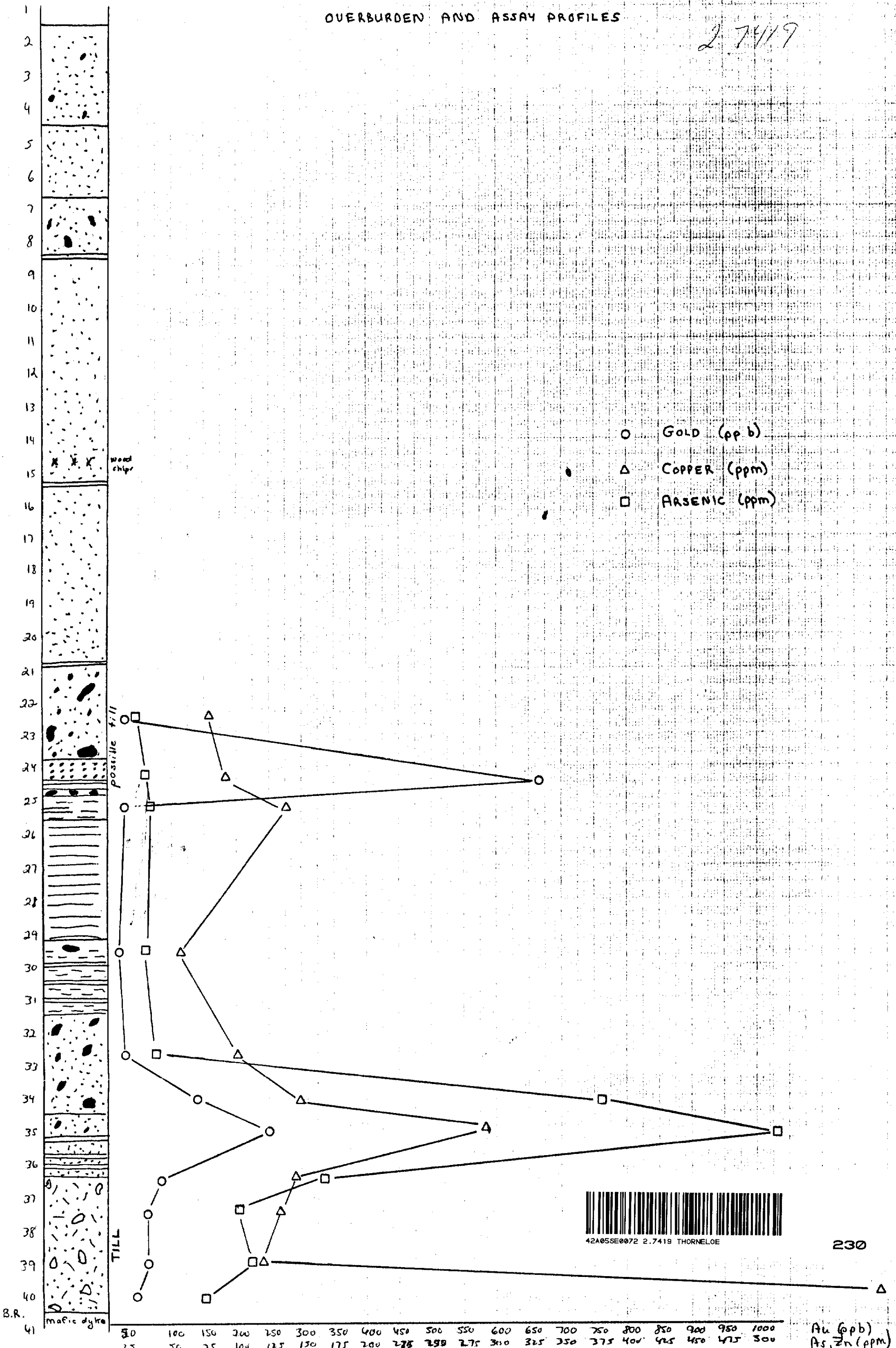
OVERBURDEN AND ASSAY PROFILES

27919



OVERBURDEN AND ASSAY PROFILES

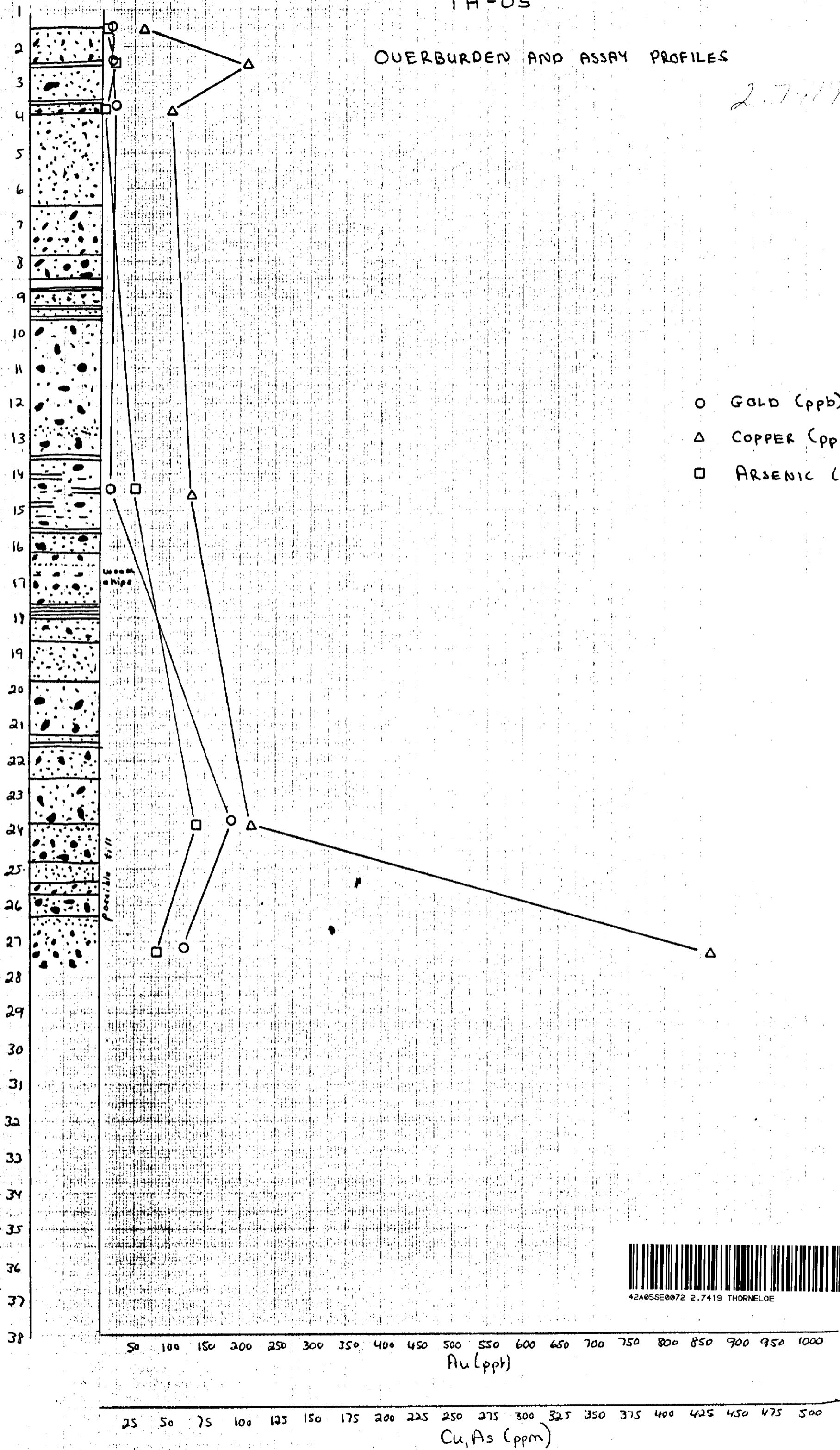
2.7419



TH-05

OVERBURDEN AND ASSAY PROFILES

2.7.19

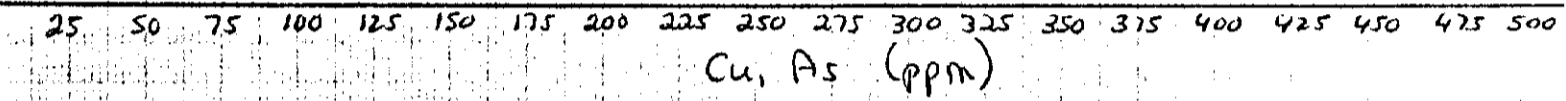
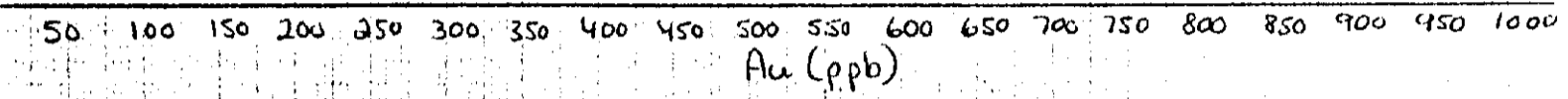
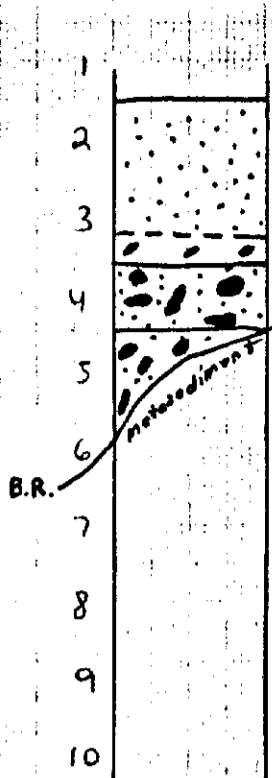


42A055E0072 2.7419 THORNELOE

TH-06

27419

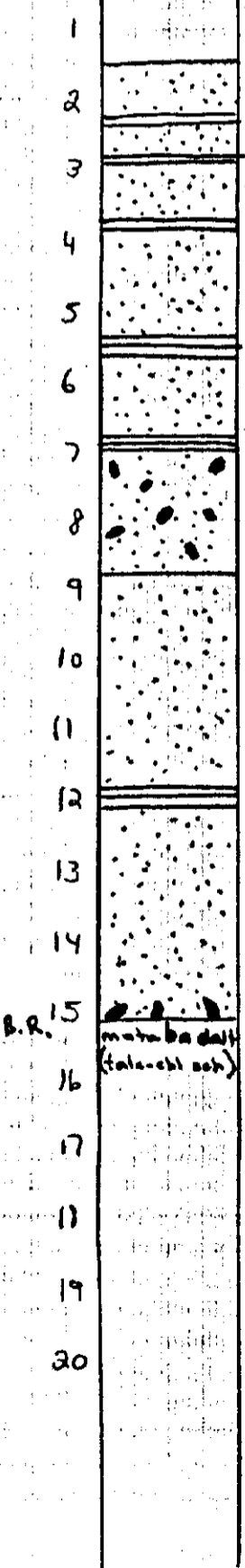
OVERBURDEN AND ASSAY PROFILES



- GOLD (ppb)
- △ COPPER (ppm)
- ARSENIC (ppm)

TH-07

OVERBURDEN AND ASSAY PROFILES



- GOLD (ppb)
- △ COPPER (ppm)
- ARSENIC (ppm)

