

GM 38515

REPORT ON WORK CARRIED OUT IN 1981-82

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Énergie et Ressources
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Québec 

MONOPROS LIMITED

REPORT ON

WORK CARRIED OUT IN 1981-82

ON 350 MINING CLAIMS

IN GUIGUES AND BABY TOWNSHIPS

TEMISCAMINGUE COUNTY, QUEBEC

**Ministère de l'Énergie et des Ressources
Gouvernement du Québec
Service du Potentiel minéral**

DATE: 25 MAI 1982

No G.M.: 38515

by J. E. Brunet, Geologist

APRIL 6, 1982

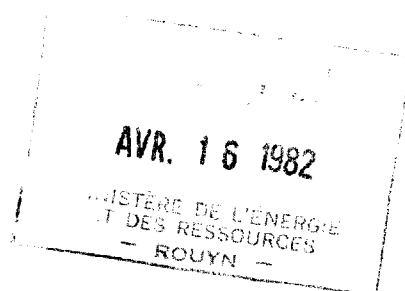


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FIGURE 1	GENERAL LOCATION MAP
FIGURE 2	BABY LAKE CLAIMS (Odd Lots) GENERAL
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FIGURE 4	BABY LAKE CLAIMS (Odd Lots) DETAIL

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SUMMARY:

The Monopros claims are located in Guigues and Baby Townships in the County of Temiscamingue, Quebec.

THE claims were staked in March, April and May, 1980 and March, 1981 by Services Exploration Enrg. of Noranda and subsequently transferred to Monopros Limited.

Field work in the summer of 1981 consisted of:

A diamond drilling programme, geochemical surveys and ground magnetometer surveys

Two additional ground magnetometer surveys were conducted in late winter.

INTRODUCTION:

This report is a presentation of the work done on the mining claims held by Monopros Limited during the 2nd year following the recording of the claims, in fulfilment of the assessment work requirements of the Mining Act of the Province OF Quebec.

Three hundred and forty-eight (348) claims were staked during March, April and May, 1980; two (2) additional claims were staked in March, 1981, for a total of 350 claims, all of which lie in one contiguous group.

Field work was carried out between May, 16th, 1981 and November 2nd, 1981, under the supervision of J. Brunet (Geologist), assisted by D. Boucher (Sept.-Nov.) (Geologist) and G. Fournier (Prospector).

Dr. M. Perttunen worked for Monopros Limited in the capacity of Consultant (Glacial Geologist).

The following students were also employed from time to time on the Ville-Marie Project:

W. Kasowski	C.P. 60, Rock Forest, Quebec
D. Taillefer	2 - 65 Langevin Ave., Ottawa, Ont.
E. Jager	345 Laurier Ave. E., Ottawa, Ont.
A. Howkins	C.P. 28, Toronto-Dominion Centre, Toronto, Ont.

J. Brunet and G. Fournier are permanent employees of Monopros Limited, 118 Springfield Road, Ottawa, Ontario.

D. Boucher is employed by Hudson Bay Mining & Smelting Co. Ltd.; C.P. 28, Toronto-Dominion Centre, Toronto, Ont.

Dr. M. Perttunen was on leave from her permanent position with The Geological Survey of Finland in Helsinki, Finland.

Work done on the claims consisted of:

- (i) Broad reconnaissance geochemical sampling programme over portions of the claim block (Brunet & Fournier)
- (ii) Detailed geochemical sampling of basal till or other sediments overlying bedrock.
These samples were obtained by overburden drilling.
(Longstreet Drilling Company Ltd.)
- (iii) Diamond drilling programme in Northwestern portion of claim block. (Terraphysics Ltd.)
- (iv) Ground magnetometer surveys in Northwestern portion of claim block. (Contracted to Services Exploration Enrg.)
- (v) Ground magnetometer surveys in Southern part of claim block.
- (vi) Glacial geology study (M. Perttunen)

PROPERTY:

The property consists of three hundred and fifty (350) contiguous claims in Guigues and Baby Townships in the County of Temiscamingue, Quebec.

The area is surveyed and subdivided into lots, most of which are 200 acres in area (40 HECTARES).

The claim block covers the following lots:

Guigues Township	Range 7, Lots 1 to 66
	Range 8, Lots 1 to 58
	Range 9, Lots 1 to 58
Baby Township	Range 1, Lots 1 to 66*
	Range 2, Lots 1 to 66
	Range 3, Lots 1 to 25

*with the exception of Lot 58 in Range 1, Baby Township

A portion of Range 1 in Baby Township (covering part of Baby Lake) equivalent to Lots 32 through 39 inclusive has been subdivided into 17 claims.

Three hundred and forty-eight (348) claims were staked by Services Exploration Enrg. of Noranda, Quebec, between March 20th and May 21st, 1980. Two additional claims were staked in March, 1981 by the same contractor.

The claims were transferred to Joseph Brunet on June 16th, 1980, and subsequently transferred on December 12th to Monopros Limited, the present holders.

The additional two (2) claims were transferred to Monopros Limited in March, 1982.

ACCESSIBILITY AND TOPOGRAPHY:

The Monopros Limited claim block lies between Lake Timiskaming and Lac Des Quinze near the Quebec-Ontario border. The Village of St. Eugene-de-Guigues is situated near the geographic centre of the claim block, and is approximately 78 miles south of the City of Noranda. Other nearby communities include Notre-Dame-du-Nord, Angliers, Laverlochere, Lorrainville and Ville-Marie.

The area is mostly forested with some farms along the North-South roads.

The topography is gently rolling and is dominated by one large lake (Baby Lake); whereas a few smaller lakes are located in the Northwestern and Southeastern portions of the area.

GENERAL GEOLOGY:

Most of the area is underlain by metavolcanic trondhjemite porphyry and metasediments (mainly metagrauwacke) of lower precambrian age, the westernmost portion is underlain by upper precambrian sedimentary rocks (sandstone, conglomerate, grauwacke). One large diabase dyke of late precambrian age trends southwest from Ile Submergee. The surficial geology consists of extensive glacio-lacustrine clays and silts of Lake Ojibway, Barlow time, that cover the topographically lower terrain.

Where outcrop stands above the clay, a thin veneer of glacial till is commonly found and is usually reworked by lake-beach actions.

Two main North-South eskers were identified, one crossing the Riviere des Quinze between Rapides des Iles and the dam at Rapide des Quinze, the other extending along the western side of Baby Lake. A few isolated glacio-fluvial deposits occur and are probably the tops of buried eskers.

GEOCHEMICAL SURVEYS:

Two geochemical sampling programmes were carried out in the summer of 1981.

(1) A reconnaissance sampling programme along the Eastern and Northeastern portion of the claim block involved the collection of 128 soil samples. Most of the samples were in the "B" Horizon of glacial till or glacio-lacustrine material.

The soil samples were submitted to Bondar-Clegg And Company Ltd., 764 Belfast Road, Ottawa, Ontario. The samples were analysed for nickel, chromium, niobium and titanium. The sample sites are shown on the accompanying set of 1:10,000 maps.

The collection of the samples occupied 2 men (Brunet and Fournier) for 12 days.

(2) A more detailed geochemical sampling programme was initiated in the Northwestern corner of the claim block. A series of overburden borings were initiated to collect a geochemical sample at the overburden-bedrock interface and to determine the thickness of overburden. The drilling was performed by Longstreet Drilling Company Limited, Matheson, Ontario. Drilling costs were fixed at \$12.00 per foot.

Twenty-eight (28) holes were drilled. The total footage thereof was 1,531 feet, at a cost of $1,531 \times \$12.00 = \$18,372.00$.

DIAMOND DRILLING PROGRAMME (WINKIE):

A diamond drilling programme, consisting of 14 holes on claims 389034-2 and 388939-1 was carried out during July, August and September, 1981 by Terraphysics Ltd., R.R. #1, Pass Lake, Ontario, POT 2M0. The drilling was supervised by W. Kasowski over a period of 22 days.

The 14 holes herein submitted for credit, represent the useable portion of the total 22 hole drill programme.

The cost of the drilling submitted was determined by working out the average cost per foot for the total number of holes, and then calculating the useable footage charges:

Contractor's billing	Aug. 20-81	22,280.00
" " " " "	Sept. 28-81	22,175.00
Accommodations (Motel)	Drill Crew	<u>5,621.24</u>
		\$50,076.24

Total footage drilled 2,159

Average cost per foot \$ 23.19

Cost of Supervision (W. Kasowski)

Salary - \$1,700/month	\$ 56.66/day
Food and accommodation	<u>\$ 28.72/day</u>
	85.38
Charges for 22 days	1,878.36
Charges per foot drilled	\$ 1.41

Drilling Charges Submitted:

14 holes, total footage 1,333 @ (23.19 + 1.41) = \$24.60/ft.
 1,333 X \$24.60 = \$32,791.80

The drilling costs were spread over 11 contiguous claims according to Division 1X Section 75 of The Mining Act.

Lot #58	54 Hectares	Claim # 389034-2
" 57	61 "	" 388939-1
" 56	40 "	" 388938-2
" 55	40 "	" 388938-1
" 54	40 "	" 388937-2
" 53	40 "	" 388937-1
" 52	40 "	" 388936-2
" 51	40 "	" 388936-1
" 50	40 "	" 388935-B
" 49	40 "	" 388910-1
" 48	40 "	" 388909-2

The above grouping represents 475 Hectares.

The required expenditures on the group is \$4,750.00.

The total expenditures are \$32,791.80, thus leaving an excess of \$28,041.80 to be carried forth in successive years.

Details of the drilling will be found on the appended "Diamond Drill Record" forms.

The drill cores are stored at the Monopros Limited Office in New Liskeard, Ontario, and are available for inspection by Geologists of the "Ministere des Richesses Naturelles".

The core will be offered to the Ministry's core library in Noranda, Quebec.

DIAMOND DRILL HOLE SUMMARY (WINKIE)

Drill Hole #	Depth to bedrock ft.	Core length ft.	Total depth ft.
WH-1	62	10	72
WH-2	25	10	35
WH-3	84	10	94
WH-4	84	10	94
WH-9	108	13	121
WH-10	104	10	114
WH-11	94	15	109
WH-12	89	16	105
WH-14	91	10	101
WH-15	115	14	129
WH-19	80	10	90
WH-20	24	20	44
WH-21	81	10	91
WH-22	117	17	134

Total footage drilled: 1,333 ft.

GROUND MAGNETOMETER SURVEYS:

(1) Two (2) ground magnetometer surveys of 51.5 km (32 mi) and 96.5 km (60 mi) for a total line length of 148.0 km (92 mi) were carried out by Services Exploration Enrg. of Noranda, Quebec. Line spacing was 50 meters with readings taken at 12.5 meter intervals. The instrument used was a Geometrics G-816 Magnetometer. The mag. maps thus produced are 1:2,500 scale.

The contractor's interpretation reports are herein appended.

(2) Detail ground magnetometer surveys were conducted by D. Boucher and assistants over three (3) selected targets in the Southern portion of the claim block. The surveys were located as follows:

Anomaly "D"	Claims 388944-1 388945-1 & 2	3.3 Line Kilometers
Anomaly "E"	Claims 388954-1 & 2	6.3 Line Kilometers
Anomaly "N"	Claims 388994-1 & 2 " 388995-1 & 2	6.3 Line Kilometers

The total line length is thus 15.9 kilometers and cost \$7,432.92.
(See Appendix B)

GLACIAL GEOLOGY STUDY:

A glacial geology study was undertaken by Dr. M. Perttunen, a Geologist on leave from The Geological Survey of Finland, Helsinki, Finland. Dr. Perttunen was hired as a consultant at a salary of \$200/day and was assigned the task of interpreting the glacial geology (history) of the Ville-Marie project area. Emphasis was put on the following points:

- (a) Description of surficial material (mapping).
- (b) Study of direction of glacial movement
- (c) Distance of transport

The above studies occupied Dr. Perttunen for 30 days.

Thus, the cost of the glacial study was arrived at as follows:

Salary	30 days at \$200.00/day	6,000.00
Living expenses (room & board)	30 X \$28.72	<u>861.60</u>
		\$ 6,861.60

A condensation of her work is hereby found in Appendix "A" titled "Glacial Geology".

RESULTS--- RECONNAISSANCE GEOCHEMICAL SURVEY:

Of the four (4) elements reported, Nickel and Niobium would seem to suggest an anomaly along the Cameron River, between Lac Baby and St Eugene-de-Guigues. Other isolated high values occur within the claim block area (some occurring outside) but are not considered meaningful.

Samples collected outside the claim block are shown on accompanying 1:20,000 scale maps for comparison purposes. The cost of work outside the claim block was of course not claimed for assessment purposes.

DISCUSSION AND CONCLUSION:

It should be noted that 1981-82 was the second year of work on this claim block. The Geochemical sampling was done to confirm results obtained from the 299 samples reported on in the 1980-81 filing. That is, the 1981 work covered, in part, areas which were insufficiently sampled in the 1st year of work.

The poor results thus obtained have caused the relinquishing of a substantial portion of the original claim block, 168 claims are thus being given up.

Further Geochemical sampling is planned for the 1982-83 season on the remaining ground.

RESULTS--- DETAILED GEOCHEMICAL SURVEY

Twenty-eight (28) overburden borings (drill holes) were located in the the Northwestern portion of the claim block. A Geochemical sample was collected at the bottom of each hole.

This method was necessitated by the overlying deposits of glacio-lacustrine clays, the thickness of which ranged from 3 ft. to 85 ft. See appendix .

The values obtained are somewhat higher than those obtained from the surface soil samples. This is probably due to the fact that material lying below a thick cover of clay has not been leached or chemically altered since deposition.

DISCUSSION AND CONCLUSION:

The results for the four (4) element analysed would appear to suggest the proximity of either lamprophyre or carbonatite intrusives lying somewhere to the north, probably under the clay cover. As a result of the ground mag. survey subsequently done in the same area, potential magnetic anomalies should be drilled in 1982.

RESULTS ----- GROUND MAGNETOMETER SURVEY:

Two surveys conducted by Services Exploration Enrg. in the Northwestern portion of the claim block have outlined potential drill targets that will be investigated in 1982 (see contactors report).

RESULTS----- DIAMOND DRILLIND PROGRAMME:

Although none of the 14 holes hit bedrock that might be considered "source material" for the Geochemical anomalies outlined in the 1980-81 work, they did confirm the rock type as metasedimentary in each case, bedrock was penetrated to a depth of 10 ft.. Minor sulphide mineralization was identified (pyrite) in some of the core, but was not considered significant; thus no assays were undertaken(see drill hole logs). All holes were drilled into bedrock for a minimum depth of 10 ft. to ensure that the hole had not terminated in a boulder. A secondary effect of the drilling was to establish the thickness of overburden (clay-sand - gravel) throughout the drill area. It should be noted that all holes were vertical.

DISCUSSION AND CONCLUSION.

Drilling on the basis of Geochemical anomalies is somewhat risky, and should only be done in conjunction with Geophysics. Now that a magnetometer survey has been done, additional drilling will be undertaken in 1982.

RESULTS --- DETAILED GROUND MAGNETOMETER SURVEYS

Of the three (3) small magnetometer surveys run in the Southern area, "D", "E" and "N"; anomaly "E" is caused by gabbro, no outcrop was seen on the other anomalies. Anomalies "D" and "N" were considered to be too small and too low in intensity to warrant further work.

GROUPING OF CLAIMS:

Not all of the 350 claims were worked on during the 1981-82 season and part of the claim block is being relinquished.

One hundred and sixty-eight (168) claims are being dropped, thus Monopros Limited's holdings are reduced to 182 claims.

The diamond drilling expenses were spread over 11 contiguous claims (475 hectares), see page 11 of this report.

The drilling expenses required are \$4,750 on the 475 hectares, total spent on drilling the claims is \$32,791.80 , thus leaving an excess of \$28,041.80 to be carried forth.

The other surveys' costs have been spread over the remaining 171 claims (6,678 hectares).

In addition to the expenses incurred in 1981-82, an excess of \$10,581.94 is carried over from the previous year.

FIELD LIVING EXPENSES:

A ten (10) man field party spent the summer of 1981 prospecting the New Liskeard, Ville-Marie area of Ontario and Quebec. Towards the end of the field season, some of the departing students were replaced by personnel hitherto working outside of the area.

The field party was accommodated in cottages near New Liskeard and on Baby Lake.

At New Liskeard (Glen-Aura Cottages), two small houses and three cabins were rented for most of the season. At Baby Lake (Kent Urbassik's Cabins), one cabin was rented for three months.

Room and board costs were averaged out over the periods; May-September (Accommodations), June-September (food).
(See attached Bills/Receipts)

Accommodations	Costs: \$21,297.00	or	\$18.62/man/day
Food	Costs: 9,707.92	or	10.10/man/day

Thus, living costs in field were \$28.72/man/day.

Since only a portion of the manpower was expended on the Monopros claims, expenses claimed on behalf of the work done are submitted on a pro-rata basis.

DEPLOYMENT OF PERSONNEL, DAYS IN FIELD 1981

	May	June	July	Aug.	Sept.	Oct.	Nov.
BRUNET	16	25	27	31	12	3	9
FOURNIER	24	28	21	29	20	13	10
JAEGER	28	30	31	27	21	30	
McBRIEN	28	30	29	31	5		
RUSHFORTH	27	30	24	30			
FYSON	27	30	31	31			
TAILLEFER	28	27	27	26	20	29	
CARIS	28	28	29	31	3		
PERTTUNEN	5	15	15	24	30		
KASOWSKI		21	30	30	21		
BOUCHER					4	31	2
SETOSTA					4	31	2
HOWKINS					3	31	5
TOTALS	183	264	264	290	143	168	28

TAKING THE PERIOD MAY-SEPTEMBER

A total of 1,144 man/days were expended
 Accommodation costs: \$21,297 or \$18.62/man/day
 Food costs (June-Sept.) 9,707.92 or \$10.10/man/day
 Cost of Food & Accommodation = \$28.72/man/day

MONOPROS LIMITED
3 Mutual Street
Toronto, Ontario
M5B 2A7

March 2, 1982

TO WHOM IT MAY CONCERN:

The following personnel were employed by DIAPROS CANADA LIMITED during the 1981 Field Season, at the monthly salaries (including benefits) listed below:

J. Brunet	\$2,566.35
G. Fournier	1,627.76
E. Jager	1,457.50
D. McBrien	1,457.50
J. Caris	1,380.14
M. Fyson	1,457.50
P. Rushforth	1,533.85
D. Taillefer	1,457.50
W. Kusowski	1,700.00

Signed:



P.J.B. Woods
Senior Vice-President

PJEW:qb

SUMMARY OF EXPENSES:Reconnaissance Geochemical Sampling

Salaries of 2 man team (12 days)

Brunet 1,026.54

Fournier 651.10

Food & Accommodations (12 days) 689.26

(\$28.72/man/day)

Geochemical analysis (128 samples) 1,484.80

(\$11.60/sample)

3,851.70

3,851.70

Detailed Geochemical Sampling

Overburden drilling (1,531 ft.) 18,372.00

Geochemical analysis (31 samples) 348.90

18,720.90

18,720.90

Ground Mag. Survey (Grid-A)

Line cutting 8,000.00

Mag. Survey 3,840.00

11,840.00

11,840.00

Ground Mag. Survey (Grid-B)

Line cutting 15,000.00

Mag. Survey 7,200.00

22,200.00

22,200.00

Ground Mag. Survey (Detail)

(4 man crew for 18 days)

Salaries 243.86/day	4,389.48	
Food & Accommodations \$28.72/man/day	2,067.84	
Magnetometer Rental	<u>1,155.60</u>	
	7,612.92	7,612.92

Diamond Drilling Programme (Winkie Drill)

14 holes, total footage 1,333 (\$24.60/ft.)		32,791.80
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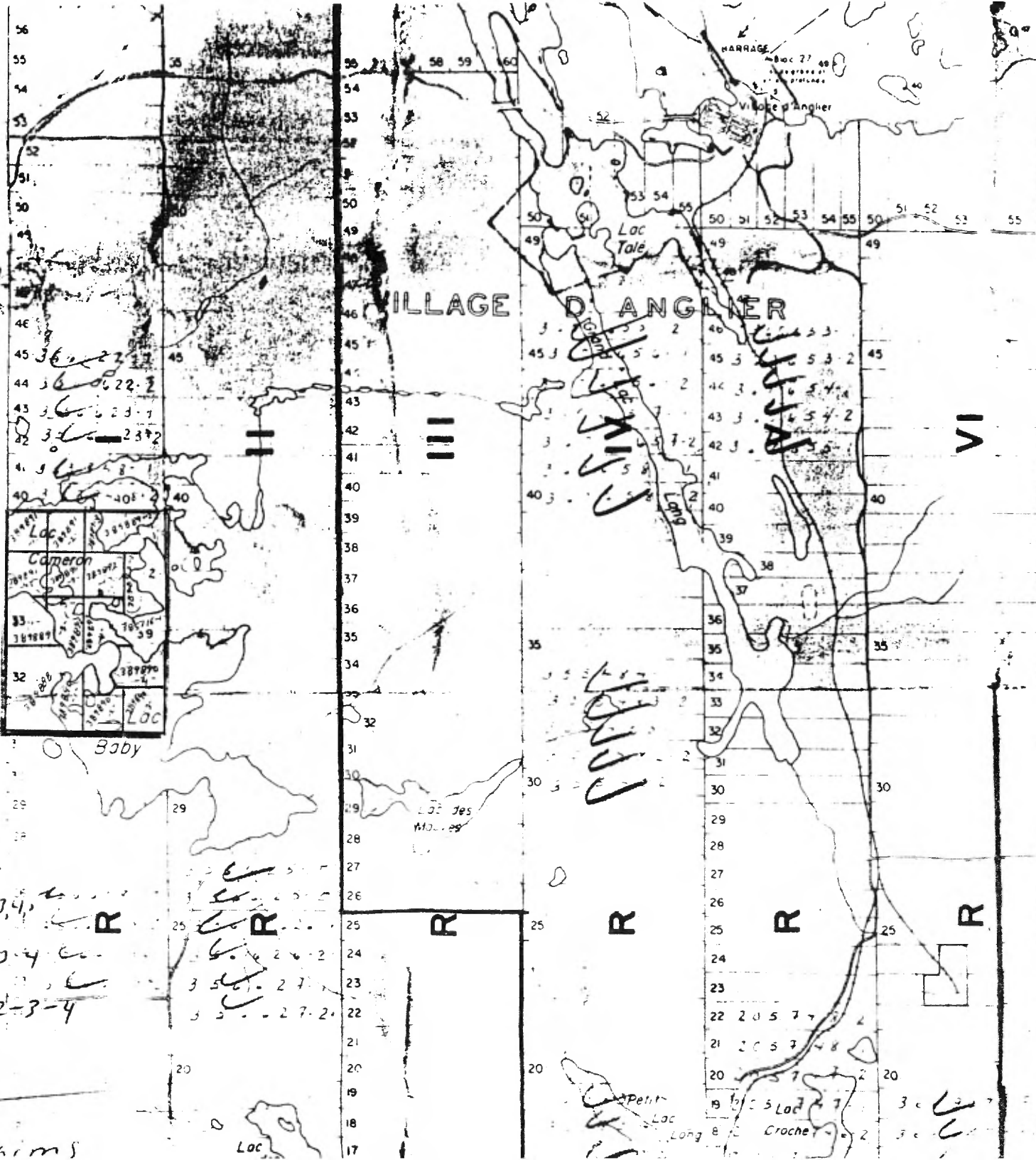
Glacial Geology Study

Salary - 30 days @ \$200.00/day	6,000.00	
Food & Accommodations 30 days @ \$28.72/day	861.60	
Vehicle Rental	<u>363.04</u>	
	7,194.64	7,194.64

N.B..... An excess credit of \$10,581.94
is carried over from previous year. 10,581.94

TOTAL AVAILABLE CREDITS..... \$114,793.90

GUIGUES



R X
 R X
 R X
 R X
 R X
 R X
 R X
 R X

- 389888-1
- 389889-122
- 389891-1,2,3,4
- 389892-1,2,3,4
- 389890-1,2-3-4
- 385716-1

17 claims

FIGURE-2.

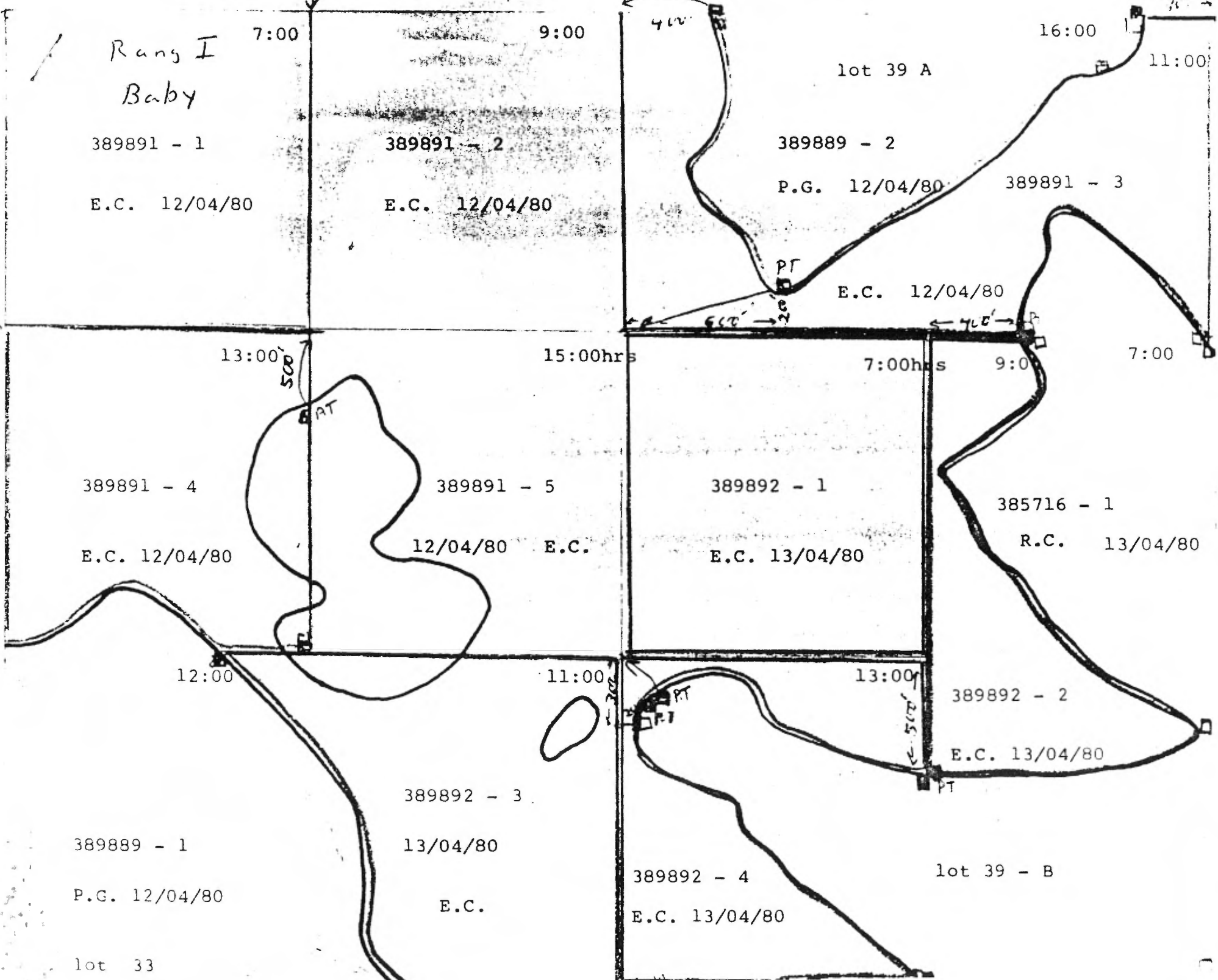


FIGURE B-

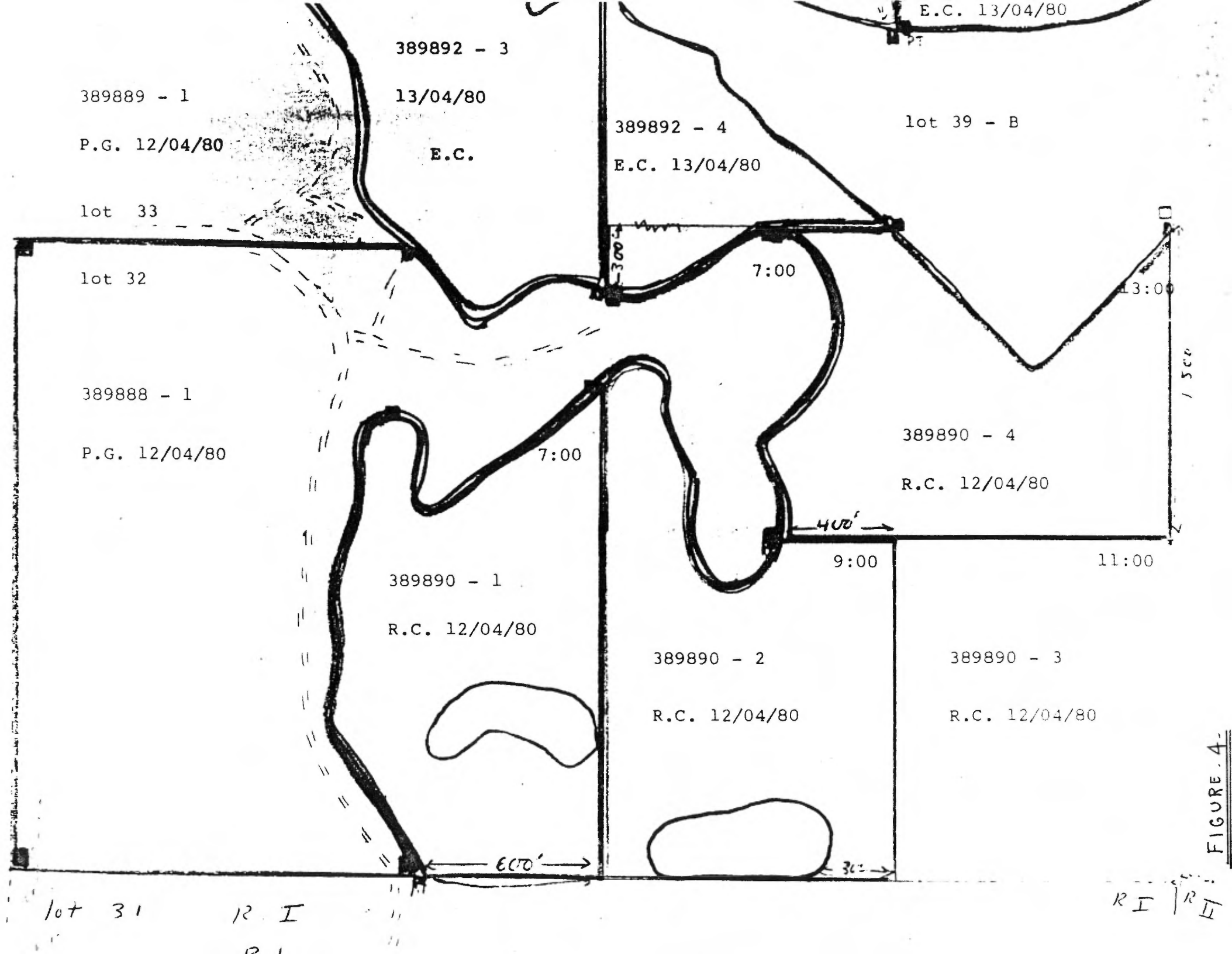


FIGURE 4-

GLACIAL GEOLOGY

In order to determine the direction and distances of glacial transport of the surficial deposits, a general study of the glacial geology was made at Ville-Marie in 1981, under the direction of M. Perttunen of the Finnish Geological Survey, on contract to Monopros Limited.

Glacial sediments were mapped in the field, assisted by air-photo interpretation, for which a complete set of air photos was purchased at scale 1:10,000. The map (fig. 1) shows a thin (0.2-1 m.) discontinuous till cover overlying bedrock in the northern and eastern areas which gives way westwards to thick lacustrine sediments. Two large eskers enter the area from the north and join into one at Lac Baby.

Prospecting was carried out in both the till and esker deposits. Transport directions of these deposits were determined by mapping glacial striae and measuring the orientations of the long axes of stones in till (fig.). Striae directions show a main stage ice flow towards 195° with a late stage advance towards 265° around Lac Baby. Till fabrics at 1, 2, 3 support this conclusion, while fabrics at 4, 5, 6 and 7 have a preferred orientation approximately in the 350° - 170° axis. However, owing to the wide scatter of stone orientations in the till in this area, the striae must be considered as the more reliable indicator of the ice flow direction.

An attempt was made to determine glacial transport distances by studying the lithologic relationship between the bedrock and the overlying glacial deposits. Two profiles of till samples were taken south of Lac Baby; one overlying thick glacial overburden (samples 17-23) and one of thin till overlying bedrock (samples 24-29). Both profiles begin at their northern ends at the proximal boundary of Trondhjemite and Syenodiorite type bedrock and are aligned approximately towards 195° (the assumed glacier flow direction). Both profiles reach their maximum proportion of locally derived pebbles within 3 km., although the proportion of far travelled erratic pebbles is three times greater in the thin till (samples 24-29) than in the other samples in thick glacial overburden (samples 17-23).

Ministère de l'Énergie et des Ressources
Gouvernement du Québec
Service du Potentiel minéral

DATE: 25 MAI 1982

No G.M.: 38515

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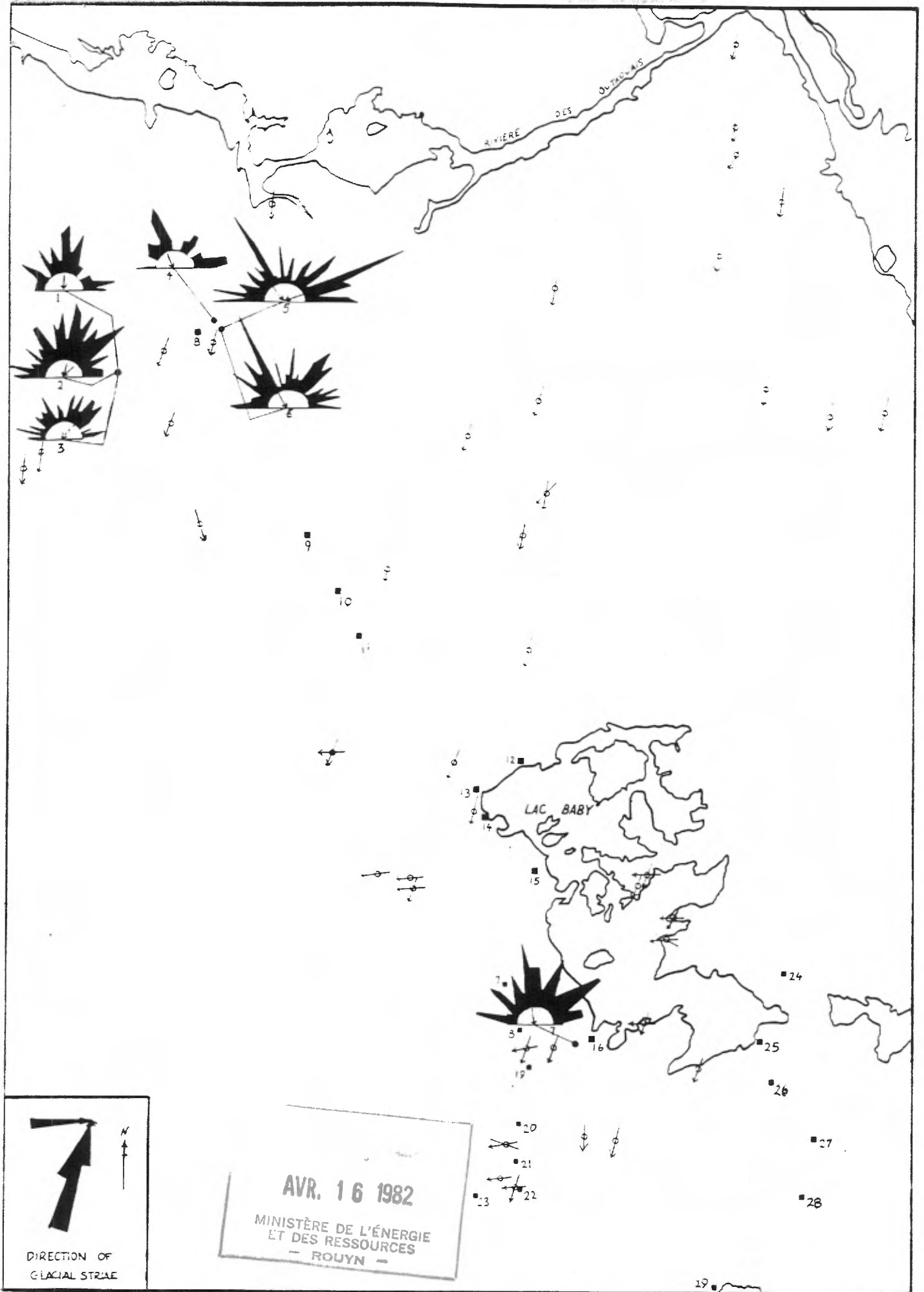
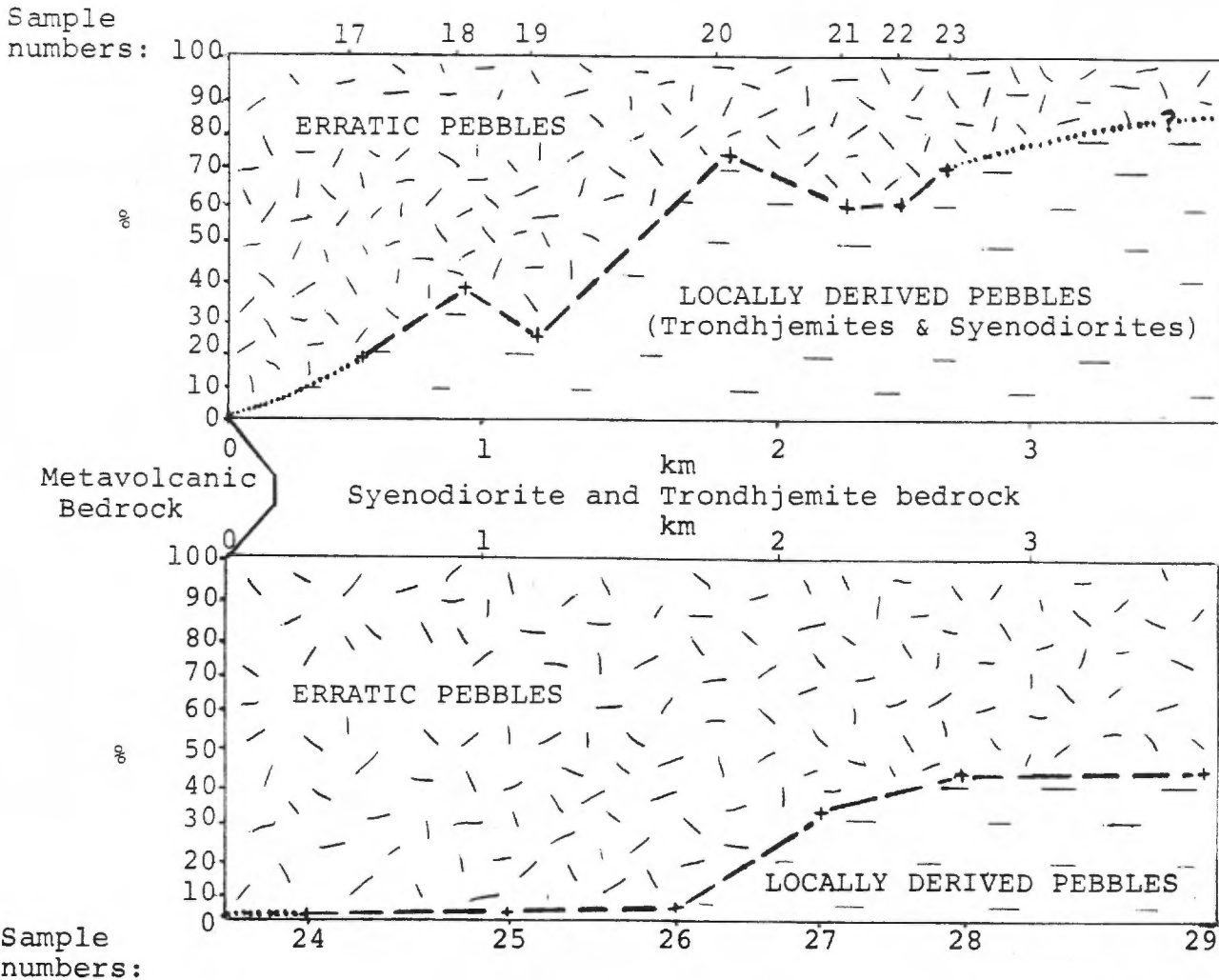
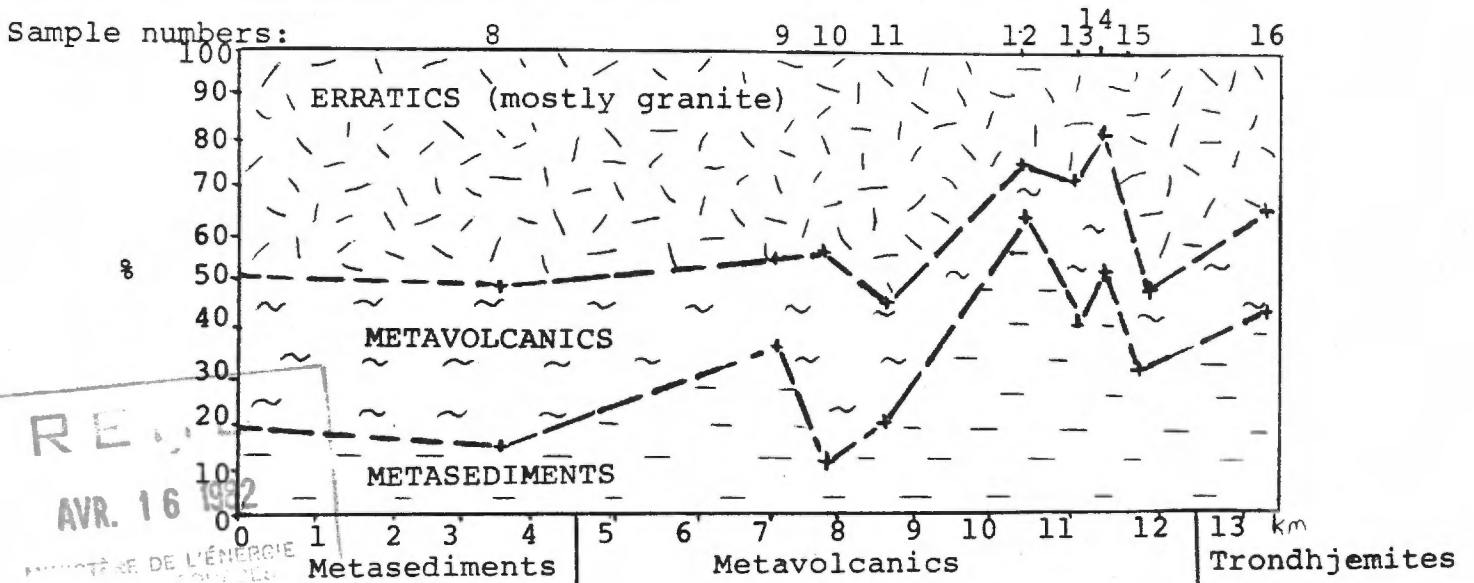


Fig. Stone orientations in till, sample locations and glacial striae.

PROPORTION OF LOCAL TO ERRATIC PEBBLES IN TILL SAMPLES, PLOTTED AGAINST DISTANCE DOWNGLACIER OVER TWO BEDROCK TYPES



PROPORTION OF PEBBLE TYPES IN FLUVIOGLACIAL SEDIMENTS PLOTTED AGAINST DISTANCE DOWNGLACIER OVER DIFFERENT BEDROCK TYPES



RE
 AVR. 16 1982
 MINISTÈRE DE L'ÉNERGIE
 POUIN

2.

Pebble counts in esker deposits overlying 3 different bedrock types seem to indicate longer transport distances. The maximum proportion of metasediment pebbles in the esker deposits occurs 6 km. south of the zone of metasediment bedrock. Also the proportion of metavolcanic pebbles drops in the zone of metavolcanic bedrock but begins to rise again moving southwards into the zone of trondhjemite bedrock. From this, average transport distances in the eskers are tentatively assumed to be 6-10 km. in this area, although further sampling is needed to substantiate this.

BH:gb

Brian Horsfield

DIAMOND DRILL HOLE SUMMARY (WINKIE)

Drill Hole #	Depth to bedrock ft.	Core length ft.	Total depth ft.
WH-1	62	10	72
WH-2	25	10	35
WH-3	84	10	94
WH-4	84	10	94
WH-9	108	13	121
WH-10	104	10	114
WH-11	94	15	109
WH-12	89	16	105
WH-14	91	10	101
WH-15	115	14	129
WH-19	80	10	90
WH-20	24	20	44
WH-21	81	10	91
WH-22	117	17	134

Total footage drilled: 1,333 ft.

Ministère de l'Énergie et des Ressources
Gouvernement du Québec
Service du Potentiel minéral

DATE: 25 MAI 1982

No G.M.: 38515

16 1982
MINISTÈRE DE L'ÉNERGIE
ET DES RESSOURCES
— RGL/111 —

DIAMOND DRILL RECORD

NAME OF PROPERTY VILLE-MARIE PROJECT (RIDGE AREA)
 HOLE NO. WH-1 LENGTH BR (62') + CORE (10') = 72'
 LOCATION LOT 58 C RANGE VIII GUIGUES TWP. QUE.
 LATITUDE _____ DEPARTURE _____
 ELEVATION _____ AZIMUTH _____ DIP V
 STARTED 25/7/81 FINISHED 25/7/81

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
72					

HOLE NO. WH-1 SHEET NO. _____
 REMARKS _____
 LOGGED BY W. J. K.

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS					
FROM	TO		NO.	% SULPHIDES	FOOTAGE			%	%	OZ/TON	OZ/TON
					FROM	TO	TOTAL				
0	62	YELLOW CLAY / BLUE CLAY									
62	72	CORE - BEDROCK - METASEDIMENTARY ROCK, HIGHLY SHEARED, CONTAINS MUCH CHLORITIZED MATERIAL APPEARS TO BE NEAR CONTACT BETWEEN METAVOLCANICS TO THE SOUTH AND METASEDIMENTS TO THE NORTH. SOME DISSEMINATED MAGNETITE SEEN, NO SULPHIDES. ESTIMATED DIP OF BEDROCK, 70-75°									
BR	62										
CORE	10										
T.D.	72'										

Ministère de l'Énergie et des Ressources
Gouvernement du Québec
Service du Potentiel minéral
 DATE: 25 MAI 1982
 No G.M.: 38515

- 11 -
AVR. 16 1982
 MINISTÈRE DE L'ÉNERGIE
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DIAMOND DRILL RECORD

NAME OF PROPERTY VILLE-MARIE PROJECT (RIDGE AREA)
 HOLE NO. WH-2 LENGTH BR. (25') + CORE. (10') = 35'
 LOCATION LOT 50C RANGE VIII, GUIGUES TWP. QUEBEC
 LATITUDE _____ DEPARTURE _____
 ELEVATION _____ AZIMUTH _____ DIP V.
 STARTED 26/7/81 FINISHED 26/7/81

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
35'					

HOLE NO. WH-2 SHEET NO. _____

REMARKS _____

LOGGED BY W. J. K.

FOOTAGE		DESCRIPTION	SAMPLE				ASSAYS			
FROM	TO		NO.	% SULPHIDES	FOOTAGE		%	%	OZ/TON	OZ/TON
					FROM	TO				
0	25	YELLOW CLAY / BLUE GRAY CLAY MINOR AMOUNT OF COARSE MATERIAL OVERLYING BED ROCK.								
25	35	BEDROCK - METASEDIMENTARY ROCK (METAGRAYWACKE) HIGHLY SHEARED MATERIAL, CHLORITIZED (SOAPY IN TEXTURE) MINOR DISSEMINATED MAGNETITE, NO SULPHIDES SEEN SIMILAR TO HOLE WH-1 CONTACT ZONE BETWEEN METAGRAYWACKE AND METAVOLCANICS TO THE SOUTH. ESTIMATED DIP OF BEDROCK 70-75°								
B.R.	25									
CORE	10									
TOTAL DEPTH	35									

DIAMOND DRILL RECORD

NAME OF PROPERTY VILLE-MARIE PROJECT (RIDGE AREA)
 HOLE NO. WH-3 LENGTH BR 84' + 10 CORE = 94'
 LOCATION LOT 58C RANGE VIII GUILDS TWP. QUE.
 LATITUDE _____ DEPARTURE _____
 ELEVATION _____ AZIMUTH _____ DIP V.
 STARTED 27/7/81 FINISHED 27/7/81

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
95'					

HOLE NO. WH-3 SHEET NO. _____

REMARKS _____

LOGGED BY W.J.K.

FOOTAGE		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		NO.	% SULPHIDES	FOOTAGE			%	%	OZ/TON	OZ/TON
					FROM	TO	TOTAL				
0	28	YELLOW CLAY									
28	64	BLUE CLAY									
64	84	SAND & GRAVEL, ~ 2 FT. DIAMETER BOULDER AT 66 FT. DEPTH									
84	94	BEDROCK - METAGRAYWACKE, STEEPLY DIPPING 70°-75° - MINOR SULPHIDES (PYRITE)									
B. ROCK	84										
CORE	10										
TOTAL DEPTH	94 FT.										

DIAMOND DRILL RECORD

NAME OF PROPERTY VILLE-MARIE PROJECT (RIDGE AREA)
 HOLE NO. WM-4 LENGTH BR(84) + Core(10) = 94'
 LOCATION LOT 58C RANGE VIII GUILGES TWP. QUE.
 LATITUDE _____ DEPARTURE _____
 ELEVATION _____ AZIMUTH _____ DIP V
 STARTED 28/7/81 FINISHED 29/7/81

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
94					

HOLE NO. WM-4 SHEET NO. _____
 REMARKS _____
 LOGGED BY WJK

FOOTAGE		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		NO.	% SULPHIDES	FOOTAGE		%	%	OZ/TON	OZ/TON	
					FROM	TO	TOTAL				
0	59	yellow clay / blue-grey clay									
59	60	granite boulder									
60	68	yellow clay / blue grey clay									
68	69	boulder, water lost									
69	79	'soft' porous zone, gravel? drill ceased, all casing pulled & hole redrilled									
BR	84										
Core	10										
TD	94										
		BR (meta sed, pyrite & quartz mineral ⁿ) STEEP DIP \wedge 75°-80°									

DIAMOND DRILL RECORD

NAME OF PROPERTY VILLE-MARIE PROJECT (RIDGE AREA)
 HOLE NO. WM-9 LENGTH BR(108) + core (13) = 121
 LOCATION LOT 58C RANGE VIII GULGUES TWP QUE.
 LATITUDE _____ DEPARTURE _____
 ELEVATION _____ AZIMUTH _____ DIP V.
 STARTED 8/8/81 FINISHED 9/8/81

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
121					

HOLE NO. WM-9 SHEET NO. _____

REMARKS _____

LOGGED BY WJK

FOOTAGE		DESCRIPTION	SAMPLE				ASSAYS					
FROM	TO		NO.	% SULPHIDES	FOOTAGE			%	%	OZ/TON	OZ/TON	
					FROM	TO	TOTAL					
0	60	yellow clay / blue-grey clay										
	60	pebble										
60	76	yellow clay / blue-grey clay										
	76	pebble										
76	97	yellow clay / blue-grey clay										
97	108	unsorted boulder - gravel										
		sand zone										
BR	108											
core	13											
TD	121	BR (meta sed, pyrite mineral ⁿ)										

DIAMOND DRILL RECORD

NAME OF PROPERTY VILLE-MARIE PROJECT (RIDGE AREA)
 HOLE NO. WH-10 LENGTH BR (101-102) ore (12-13)
 LOCATION LOT 58C RANGE VIII TWP GUIGUES QUE
 LATITUDE _____ DEPARTURE _____
 ELEVATION _____ AZIMUTH _____ DIP V.
 STARTED 14/8/81 FINISHED 14/8/81

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
114					

HOLE NO. WH-10 SHEET NO. _____

REMARKS _____

LOGGED BY WJK

FOOTAGE		DESCRIPTION	SAMPLE			ASSAYS				
FROM	TO		NO.	% SULPHIDES	FOOTAGE		%	%	OZ/TON	OZ/TON
					FROM	TO				
0	88	yellow clay / blue-grey clay unsorted boulder - gravel - sand zone								
88	101									
BR	101 102	BR (meta-sed , pyrite mineral)								
ore	12/13									
TD	114									

DIAMOND DRILL RECORD

NAME OF PROPERTY VILLE-MARIE PROJECT (RIDGE AREA)
 HOLE NO. WH-14 LENGTH BR(91) core (~10)
 LOCATION LOT 58 C RANGE VIII GUIGUES TWP. QUB.
 LATITUDE _____ DEPARTURE _____
 ELEVATION _____ AZIMUTH _____ DIP V.
 STARTED 19/8/81 FINISHED 20/8/81

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
101					

HOLE NO. WH-14 SHEET NO. _____

REMARKS _____

LOGGED BY WJR

FOOTAGE		DESCRIPTION	SAMPLE				ASSAYS					
FROM	TO		NO.	% SULPHIDES	FOOTAGE			%	%	OZ/TON	OZ/TON	
					FROM	TO	TOTAL					
0	81	yellow clay / blue-grey clay {boulder, gravel, sand} zone										
81	91											
BR core	91 ~10	BR (meta-sed, pyrite mineral)										
TD	101											

DIAMOND DRILL RECORD

NAME OF PROPERTY VILLE MARIE PROJECT (RIDGE AREA)
 HOLE NO. WH-19 LENGTH BR. (80) CORE (10)
 LOCATION LOT 58C RANGE VIII GOUQUES TWP. QUE.
 LATITUDE _____ DEPARTURE _____
 ELEVATION _____ AZIMUTH _____ DIP V.
 STARTED 26/8/81 FINISHED 29/8/81

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
90					

HOLE NO. WH-19 SHEET NO. _____

REMARKS _____

LOGGED BY W. J. H.

FOOTAGE		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		NO.	% SULPHIDES	FOOTAGE			%	%	OZ/TON	OZ/TON
					FROM	TO	TOTAL				
0	66	YELLOW CLAY / BLUE-GREY CLAY									
66	70	FINE SAND AND GRAVEL ZONE									
70	80	(BOULDER, GRAVEL, SAND) ZONE									
80	90	BEDROCK - STEEPLY DIPPING METASEDIMENTS MINOR PYRITE (FeS ₂) MINERALIZATION									
BR	80										
CORE	10										
T.D.	90										

DIAMOND DRILL RECORD

NAME OF PROPERTY VILLE MARIE PROJECT (RIDGE AREA)
 HOLE NO. WH-20 LENGTH BR(24) core (20)
 LOCATION LOT 50 A RANGE VIII GUIGUES TWP. QUE.
 LATITUDE _____ DEPARTURE _____
 ELEVATION _____ AZIMUTH _____ DIP V.
 STARTED 31/8/81 FINISHED 31/8/81

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
<u>44</u>					

HOLE NO. WH-20 SHEET NO. _____

REMARKS _____

LOGGED BY WJK

FOOTAGE		DESCRIPTION	SAMPLE				ASSAYS			
FROM	TO		NO.	% SULPHIDES	FOOTAGE		%	%	OZ/TON	OZ/TON
					FROM	TO				
<u>0</u>	<u>24</u>	<u>old lake bottom, peat (no sign of clay, boulders gravel or sand)</u>								
<u>BR</u>	<u>24</u>									
<u>core</u>	<u>20</u>									
<u>TD</u>	<u>44</u>	<u>BR (meta-sed., pyrite mineral^m)</u>								

DIAMOND DRILL RECORD

NAME OF PROPERTY VILLE MARIE PROJECT (RIDGE AREA)
 HOLE NO. WH-21 LENGTH BR(81) core (10)
 LOCATION LOT 584 RANGE VIII GUILGUES TWP. QUE.
 LATITUDE _____ DEPARTURE _____
 ELEVATION _____ AZIMUTH _____ DIP V.
 STARTED 1/9/81 FINISHED 1/9/81

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
91					

HOLE NO. WH-21 SHEET NO. _____
 REMARKS _____
 LOGGED BY WJH

FOOTAGE		DESCRIPTION	SAMPLE				ASSAYS			
FROM	TO		NO.	% SULPHIDES	FOOTAGE		%	%	OZ/TON	OZ/TON
					FROM	TO				
0	74	yellow clay / blue-grey clay								
	74	boulder or rock								
	78	" "								
74	81	except for obs ⁿ at (74) & (78) very little { boulder, gravel, sand } zone cover was present								
BR	81									
core	10									
TD	91	BR (meta-seed, pyrite mineral ⁿ)								

DIAMOND DRILL RECORD

NAME OF PROPERTY VILLE-MARIE
 HOLE NO. WH-22 LENGTH BR (127) core (17)
 LOCATION LOT 59 A RANGE VIII GUIGUES TWP. QUE
 LATITUDE _____ DEPARTURE _____
 ELEVATION _____ AZIMUTH _____ DIP V.
 STARTED 2/9/81 FINISHED 4/9/81

FOOTAGE	DIP	AZIMUTH	FOOTAGE	DIP	AZIMUTH
<u>134</u>					

HOLE NO. WH-22 SHEET NO. _____
 REMARKS _____
 LOGGED BY WJK

FOOTAGE		DESCRIPTION	SAMPLE				ASSAYS				
FROM	TO		NO.	% SULPHIDES	FOOTAGE			%	%	OZ/TON	OZ/TON
					FROM	TO	TOTAL				
<u>0</u>	<u>118</u>	<u>yellow clay / blue grey clay rock or boulders { boulders, gravel, sand } zone</u>									
<u>118</u>	<u>127</u>										
<u>BR</u>	<u>127</u>										
<u>core</u>	<u>7</u>										
<u>TD</u>	<u>134</u>	<u>BR (meta - sed. , pyrite mineral)</u>									



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Geochemical Lab Report

REPORT: 112-0238

FROM: DIAPROS CANADA LIMITED

SUBMITTED BY: J.E. BRUNET

DATE: 17-MAR-82 PROJECT:

ELEMENT	LOWER DETECTION LIMIT	EXTRACTION	METHOD	SIZE FRACTION	SAMPLE TYPE	SAMPLE PREPARATIONS
Ni	2 PPM	HNO3-HCL HOT EXTR	Atomic Absorption		STREAM SEDIMENTS	AS RECEIVED, NO SP
Cr	2 PPM		X-RAY Fluorescence			
Nb	1 PPM		X-RAY Fluorescence			
Ti	.01 PCT		X-RAY Fluorescence			

REPORT COPIES TO: MR. J.E. BRUNET

INVOICE TO: MR. J.E. BRUNET

REMARKS: < MEANS LESS THAN
IS MEANS INSUFFICIENT SAMPLE



BONDAR-CLEGG & COMPANY LTD.

764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: (613) 237-3110 TELEX: 053-4455

Geochemical Lab Report

REPORT: 112-0134

FROM: DIAPROS CANADA LIMITED

SUBMITTED BY: J.E. BRUNET

DATE: 24-FEB-82 PROJECT:

ELEMENT	LOWER DETECTION LIMIT	EXTRACTION	METHOD	SIZE FRACTION	SAMPLE TYPE	SAMPLE PREPARATIONS
Ni	2 PPM	HN03-HCL HOT EXTR	Atomic Absorption	-80 MESH	SOILS	DRY, SEIVE -80
Nb	1 PPM		X-RAY Fluorescence	-80 MESH		
Cr	2 PPM		X-RAY Fluorescence	-80 MESH		
Ti	.01 PCT		X-RAY Fluorescence	-80 MESH		

REPORT COPIES TO: MR. J.E. BRUNET

INVOICE TO: MR. J.E. BRUNET

REMARKS: ND MEANS NOT DETECTED

Ministère de l'Énergie et des Ressources
Gouvernement du Québec
Service du Potentiel minéral

DATE: 25 MAI 1982

No G.M.: 38515

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Geochemical Lab Report

REPORT: 112-0134 PROJECT:

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Ni PPM	Nb PPM	Cr PPM	Ti PCT	NOTES	SAMPLE NUMBER	ELEMENT UNITS	Ni PPM	Nb PPM	Cr PPM	Ti PCT	NOTES
B-1-81		10	4	115	0.58		B-31-81		✓30	ND	239	0.54	
B-2-81		48	2	255	0.65		B-32-81		✓50	ND	263	0.37	
B-3-81		10	2	159	0.63		B-33-81		✓33	ND	262	0.39	
B-4-81		✓3	7	146	0.85		B-34-81		✓8	2	359	0.52	
B-5-81		39	2	781	0.95		B-35-81		✓16	ND	181	0.55	
B-6-81		25	ND	205	0.44		B-36-81		✓35	1	232	0.29	
B-7-81		30	ND	192	0.36		B-37-81		✓32	3	252	0.74	
B-8-81		16	1	303	0.75		B-38-81		✓46	3	279	0.52	
B-9-81		20	1	186	0.49		B-39-81		✓25	ND	190	0.48	
B-10-81		34	ND	219	0.46		B-40-81		✓44	ND	218	0.35	
B-11-81		14	1	184	0.65		B-41-81		✓30	1	181	0.59	
B-12-81		13	ND	176	0.45		B-42-81		✓18	ND	162	0.49	
B-13-81		18	2	134	0.51		B-43-81		✓ND	ND	158	0.65	
B-14-81		46	3	170	0.48		B-44-81		✓38	1	217	0.53	
B-15-81		11	ND	119	0.19		B-45-81		✓10	2	147	0.78	
B-16-81		4	ND	133	0.76		B-46-81		✓30	ND	145	0.47	
B-17-81		36	3	317	0.62		B-47-81		✓20	1	185	0.68	
B-18-81		36	4	287	0.49		B-48-81		✓24	ND	154	0.29	
B-19-81		4	2	125	0.42		B-49-81		✓22	ND	193	0.60	
B-20-81		28	ND	148	0.42		B-50-81		✓32	2	205	0.76	
B-21-81		43	2	366	0.77		B-51-81		✓40	1	156	0.46	
B-22-81		4	5	97	0.62		B-52-81		✓23	1	164	0.48	
B-23-81		19	4	157	0.42		B-53-81		✓19	1	155	0.43	
B-24-81		25	4	168	0.39		B-54-81		✓27	ND	184	0.46	
B-25-81		3	7	151	0.67		B-55-81		✓40	5	142	0.49	
B-26-81		28	3	222	0.72		B-56-81		✓33	ND	188	0.54	
B-27-81		32	ND	171	0.77		B-57-81		✓26	ND	209	0.46	
B-28-81		26	ND	215	0.53		B-58-81		✓10	6	157	0.85	
B-29-81		35	ND	216	0.49		B-59-81		✓31	1	266	0.92	
B-30-81		18	ND	164	0.48		B-60-81		✓44	9	158	0.51	

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Geochemical Lab Report

REPORT: 112-0134 PROJECT:

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SAMPLE NUMBER	ELEMENT UNITS	Ni PPM	Nb PPM	Cr PPM	Ti PCT	NOTES	SAMPLE NUMBER	ELEMENT UNITS	Ni PPM	Nb PPM	Cr PPM	Ti PCT	NOTES
B-61-81		✓27	1	249	0.58		B-91-81		✓45	3	323	0.54	
B-62-81		✓34	1	202	0.37		B-92-81		✓74	ND	322	0.49	
B-63-81		✓40	6	137	0.50		B-93-81		✓52	ND	244	0.41	
B-64-81		✓51	7	138	0.48		B-94-81		✓30	3	194	0.47	
B-65-81		✓44	1	208	0.40		B-95-81		✓12	3	163	0.67	
B-66-81		✓60	ND	195	0.43		B-96-81		✓90	ND	319	0.43	
B-67-81		✓26	2	212	0.49		B-97-81		✓30	ND	202	0.44	
B-68-81		✓18	6	180	1.13		B-98-81		✓28	1	211	0.43	
B-69-81		✓22	1	183	0.60		B-99-81		✓18	1	194	0.66	
B-70-81		✓8	1	121	0.57		B-100-81		✓34	2	287	0.55	
B-71-81		✓24	2	171	0.47		B-101-81		✓28	1	335	0.76	
B-72-81		✓34	ND	204	0.64		B-102-81		✓50	4	324	0.67	
B-73-81		✓28	ND	171	0.26		B-103-81		✓10	4	39	0.53	
B-74-81		✓41	ND	333	0.33		B-104-81		✓4	2	102	0.94	
B-75-81		✓19	4	190	0.51		B-105-81		✓10	ND	103	0.73	
B-76-81		✓25	2	208	0.49		B-106-81		✓38	8	267	0.91	
B-77-81		✓16	ND	183	0.46		B-107-81		✓14	ND	119	0.52	
B-78-81		✓15	2	166	0.51		B-108-81		✓22	ND	174	0.60	
B-79-81		✓26	ND	160	0.39		B-109-81		✓10	ND	172	0.43	
B-80-81		✓14	ND	69	0.50		B-110-81		✓60	7	132	0.68	
B-81-81		✓5	7	79	0.70		B-111-81		✓22	11	137	0.79	
B-82-81		✓27	3	171	0.52		B-112-81		✓17	2	152	0.73	
B-83-81		✓15	ND	127	0.69		B-113-81		✓18	3	163	0.53	
B-84-81		✓41	1	293	0.50		B-114-81		✓12	1	193	0.56	
B-85-81		✓82	4	308	0.70		B-115-81		✓16	ND	165	0.74	
B-86-81		✓56	ND	347	0.44		B-116-81		✓15	2	157	0.47	
B-87-81		✓36	ND	224	0.59		B-117-81		✓24	2	189	0.52	
B-88-81		✓22	ND	200	0.62		B-118-81		✓6	5	93	0.66	
B-89-81		✓26	ND	188	0.44		B-119-81		✓4	7	33	0.73	
B-90-81		✓120	ND	391	0.56		B-120-81		✓5	ND	82	0.47	

LONGSTREET DRILLING COMPANY LIMITED

LARGE DIAMETER DRILLING PROGRAMME (VILLE-MARIE)

HOLE #	THICKNESS OF CLAY	THICKNESS OF SAND & GRAVEL	DEPTH TO BEDROCK
LH-1-A	42'	10'	52'
2	50'	3'	53'
3	62'	0'	62'
4	77'	5'	82'
5	50'	7'	57'
6	47'	4'	51'
7	30'	7'	37'
8	14'	1'	15'
9	43'	7'	50'
10	27'	6'	33'
11	41'	0'	41'
12	71'	0'	71'
13	88'	6'	88'
14	66'	0'	66'
15	50'	5'	55'
16-A	80'	26'	106'
17	23'	0'	23'
18	20'	0'	20'
19	33'	15'	48'
20	3'	0'	3'
21	21'	8'	29'
22	55'	8'	63'
23	27'	4'	31'
24	23'	0'	23'
25	56'	8'	64'
26	83'	10'	93'
28	80'	40'	120'
29	85'	10'	95'

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TOTAL FOOTAGE DRILLED 1531'