

'79- #342-#

# LONG LAC MINERAL EXPLORATION LIMITED

SUITE 1680 - 1050 WEST PENDER STREET  
VANCOUVER, B.C. V6E 3S7  
(604) 685-0531

## DRILLING REPORT

M.A. Claims, #1 - #3, Francois Lake Area

22.5 Kilometres S.S.E. of Burns Lake, B.C.

Omineca Mining Division

93 K/4

Latitude:  $54^{\circ} - 03'$

Longitude:  $125^{\circ} - 40'$

Owner: Long Lac Mineral Exploration Ltd.

Operator: Long Lac Mineral Exploration Ltd.

R.S. Pegg, BA Sc.,  
Long Lac Mineral Exploration Ltd.  
1680 - 1050 West Pender St.,  
Vancouver,  
B.C.



'79- #34.2- #

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Vancouver,  
B.C.

July 1, 1979

MINERAL RESOURCES BRANCH ASSESSMENT REPORT 7446 NO.
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## Introduction

The following report is on a Diamond Drill Program carried out on the M.A. claims, Francois Lake area, Burns Lake, B.C. This report was written by Rex Pegg under the supervision of Mr. John Hogan, P. Eng. for Long Lac Mineral Exploration Ltd.

## Location

The claim group is situated approximately 22.5 kilometres S.S.E. of Burns Lake, at latitude  $54^{\circ} - 03'$  and longitude  $125^{\circ} - 40'$  on map 93 K/4, Edition 2 MCE, Series A 721.

## Access

A dirt, all weather road, which is approximately 1 - 500 metres south of the claims, runs along the north shore of Francois Lake. Several old, rough roads traverse through the claims. The best access to the property is via the new drill road built by Long Lac Mineral Exploration in the spring of 1979 (see Road Construction map, in pocket).

## Previous Work

In the late 1940's Western Gypsum Products Ltd. worked the Francois, Francois No. 2 and Francois Fraction claims (L6946, L6948 and L6947) for perlite. Several pits were found within the M.A. claims and it is assumed that this work was done by Western Gypsum Products Ltd. in their search for perlite.

During the summer and fall of 1978, Long Lac Mineral Exploration carried out line cutting, geophysical (scintillometer) and geochemical surveys on the M.A. claims.

## General Geology and Topography

The major rock types in the area are shallow to medium dipping, banded rhyolites, spherulitic rhyolites and tuffs. J.E. Armstrong (1948) mapped the claim area to be Eocene or Oligocene acid volcanics with minor basic volcanics (G.S.C., map 907 A). Recent mapping (Preliminary Map No. 11, Buck Creek Area) to the west by Dr. B.N. Church of B.C.D.M. has revealed large differences in the determination of rock types and evaluation of their ages. It is assumed that the rocks exposed within the M.A. group of claims are of Tertiary age due to the presence of the perlite.

The topography is fairly "gentle" (maximum relief of 213 metres), although there are a few cliffs in the eastern half of the claim group. The land is mostly wooded, with several swamps and "windfall" areas, but "open" fields are prevalent in the western portion of M.A. #2.







Work Completed

During the period of May 8 to 12, 1979, Mr. John Hogan travelled to Burns Lake (return) and supervised the completion of a Diamond Drill road, from Francois Lake, north into the MA#1 claim. A cat was contracted from a Mr. Larry Palmer of Francois Lake from May 10 to 11, 1979. The road is approximately 2.5 metres wide and 543 metres long.

A vertical diamond drill (BQ wireline) hole was drilled to a depth of 212.14 metres by Shepherd Enterprises Ltd. under the supervision of Long Lac Mineral Exploration Ltd. during the period of May 30 to June 7, 1979.

Summary and Conclusions

The diamond drill hole did not intersect any minerals of economic importance. The major rock type was a devitrified rhyolite which is believed to be too soft to outcrop. These acidic rocks are shallow to medium dipping and highly altered.

No perlite was observed in the core and if uranium was present, at one time, it has been leached out.

Respectfully submitted,



Rex S. Pegg, B.A.Sc.

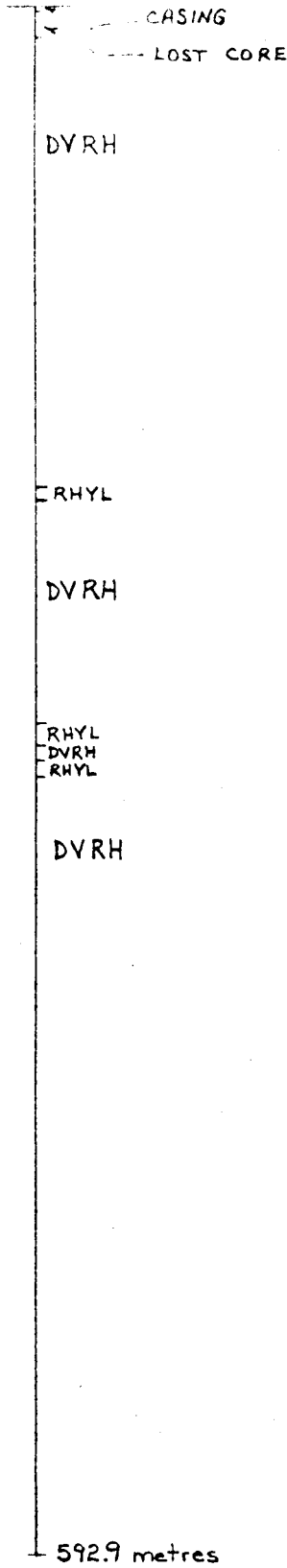
Long Lac Mineral Exploration Ltd.

4.

# DIAMOND DRILL HOLE

COLLAR ELEVATION = 805 metres

MA/1

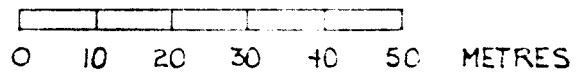


## LEGEND

DVRH devitrified rhyolite

RHYL rhyolite

Scale 1:100



## Appendix 1

### Statement of Qualifications

- Mr. John Hogan : B.A.Sc., P. Eng.
- Mr. Rex Pegg : B.A.Sc. (University of Toronto, 1976)
- 1977-1979 LONG LAC MINERAL EXPLORATION LTD.  
geological engineer in B.C. doing geochemical and geologic reconnaissance and detail work.
- 1976 Winter WILLROY MINES LTD.  
mine geologist at Willroy Mines, Manitouwadge, Ont. doing geological mapping, sampling, core logging, compilation and drafting.
- 1976 Summer UNITED KENO EXPLORATION LTD.  
geological party chief in the Mayo area, Yukon looking for base and precious metals using geological reconnaissance and geochemistry.
- 1975 Summer LITTLE LONG LAC MINES LTD.  
geological assistant in the Bathurst Trench area, N.W.T. looking for uranium, gold and base metals using geophysics (scintillometers, Mag., E.M.) geological reconnaissance, staking and geochemical sampling.
- 1974 Summer MATTAGAMI LAKE MINES LTD.  
geological assistant in Ontario looking for base metals using geological mapping and geochemical sampling.
- 1974 Winter LITTLE LONG LAC MINES LTD.  
geophysics (V.L.F.) near Sturgeon Lake, Ont.
- 1973 Summer DOME EXPLORATION LTD.  
geological assistant in B.C., Manitoba, Ont. and Quebec, looking for gold, base metals, using prospecting, trenching and geochemistry.
- 1973 Winter TOM GLEDHILL AND ASSOCIATES LTD.  
geophysical operator in Ontario and Quebec, looking for base metals using mag., E.M. and I.P.
- 1972 Summer BARYMIN EXPLORATIONS LTD.  
geological assistant in Quebec, looking for base metals using geochemical sampling, some mapping and prospecting.



1971 Summer CANADA TUNGSTEN MINES LTD.  
geological assistant in the Yukon, N.W.T. and B.C.  
looking for tungsten using geochemical sampling  
(stream and rock), staking and U.V. lamping.

1969 Summer LEITCH GOLD MINES LTD.  
geological assistant in Quebec, looking for  
base metals using geochemistry, geophysics (E.M.  
and Mag.), line cutting and staking.

1968 Summer LEITCH GOLD MINES LTD.  
geological assistant in Quebec, looking for  
base metals using geochemistry, geophysics  
(E.M. and Mag.), line cutting and staking.

Mr. A. Weston-Student - 2.5 years of geology at Douglas College, Surrey, B.C.

1978 Summer LONG LAC MINERAL EXPLORATION LTD.  
&9 geological assistant in B.C.  
doing geochemical sampling, geophysics (scint.)  
, staking and line cutting.

APPENDIX 2

MA #1

Diamond Drill Hole MA/1

May 30 - June 7, 1979

Total footage = 696

a)	7 feet BW	(\$17.50/foot)	=	\$122.50
	493 feet BQ	(\$17.50/foot)	=	\$8,627.50
	196 feet BQ	(\$19.00/foot)	=	\$3,724.00
	Total cost for footage			= \$12,474.00

b) Hourly charges

May 30	11 hours moving (\$58/hour)	=	\$ 638.00
May 31	12 hours moving (\$58/hour)	=	\$ 696.00
June 1	8 hours moving (\$58/hour)	=	\$ 464.00
June 2	2 hours setting casing (\$58/hour)	=	\$ 116.00
	1 hour waterline install (\$20/hour)	=	\$ 20.00
June 5	11 hours moving (\$58/hour)	=	\$638.00
	3 hours waiting (\$50/hour)	=	\$150.00
June 6	12 hours moving (\$58/hour)	=	\$696.00
June 7	4 hours moving (\$58/hour)	=	\$232.00
	8 hours extra labour (\$20/hour)	=	\$160.00
	Total hourly charges	=	\$3,810.00

c) Casings

1.0 BW casing (5 feet)	
1.0 BW casing (2 feet)	= \$ 85.36

d) Casing	1.0 BW shoe	=	\$ 91.81
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e) Drill Road Construction (D-6 Cat) May 10 - 11/79		=	\$1,072.00
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f) Company Expenditures

May 8 - 12/79 J. Hogan (\$70/day)		=	\$350.00
Accommodation and food (\$35/day)		=	\$105.00
Transport (vancouver to Burnslake, return)		=	\$235.00

(MA continued)

* Transport (to and from property)	=	\$ 80.00
May 30 - June 7, 1979		
R. Pegg (\$50/day)	=	\$450.00
A. Weston (\$29/day)	=	\$261
May 29 - June 5, 1979		
J. Hogan (\$70/day)	=	\$500.00
* Transport (Vancouver to Burns Lake, return)	=	\$610.00
Accommodation and food (at Burns Lake)	=	\$395.00
* Transport to and from property	=	\$ 84.15
* Note: Truck rental is: (\$22.60/day) for each truck		
Total Company Expenditures	=	3130.15
g) Report (drafting, compilation, writing and printing)	=	\$300.00
Total Expenditures	=	20,963.32

APPENDICES

# GEOLOG

## DRILL HOLE GEOLOGIC LOG

HOLE NUMBER MA/1

COMPANY LONG LAC MINERAL EXPLORATION PROPERTY: MA

LOGGED BY R. Pegg DATE: June 2/79

PAGE 1 OF 3

Elevation: 805 metres

0.0 - 0.6 metres

overburden

0.6 - 4.3 metres

Casing: Had to use tri-cone because there is no adaptor for the casing

4.3 - 10.9 metres

Tuff-Rhyolite: Banded grey rock, mostly darker and lighter grey bands with minor pink bands (at 9.5 metres 50° - and 30°), soft altered matrix; glassy quartz grains (10%); zeolites and translucent feldspars (3-5%), biotite (1%); core is broken and ground locally

10.9 - 11.6 metres

White Tuff-Rhyolite: White, very soft matrix; glassy quartz grains (10%), fine-to medium-grained zeolites (transparent-translucent) (5%)

11.6 - 127.4 metres

Devitrified Rhyolite: Greyish-greenish white rock (to almost a clay), a few narrow sections and fragments of purple (harder) rhyolite which appears to have the same texture and phenocrysts as the devitrified rhyolite; the white coloured sections are softer than the green (same phenocrysts and minor chlorite); bleaching increases to bottom (not less fragmental appearance and softer)

at 27.4 metres pink rhyolite constitutes half the core (bands 0° - 50°)

at 32.0 metres narrow pink bands (35°)

at 35.4 metres narrow pink bands (12°)

at 39.3 metres narrow pink bands (25° - 35°)

limonite (afew scattered grains, yellow discolouration surrounding) with hematite (trace - 1%); black (massive) patches of soft (dull brownish streak), possibly Fe-rich chlorite (after biotite)

at 42.1 metres pink bands (40°)

at 46.6 metres pink bands (50°)

at 50.6 metres pink bands (10°)

at 53.6 metres pink bands (30°)

length of core pieces increases but rock is still fairly soft, with a few vuggy sections

at 54.9 metres pink bands (20°)

at 56.8 metres feldspar-sericite - quartz vein (35°)

at 59.7 metres pink bands (50°)

a light pink margin is found on the purple rhyolite; veins of tan coloured feldspar-sericite-quartz some altered zones; from 54.3 metres down, of a light green colour which are slighter more siliceous than the grey devitrified rhyolite

at 65.8 - 67.4 metres purple rhyolite dominates with coarse patches (elongated and rounded) of devitrified greenish grey rhyolite with pink margins (some interstitial)

at 72.5 metres white bleached narrow section of devitrified rhyolite (55°)

at 74.1 metres pink rhyolite (20°)

at 75.9 metres white rhyolite (30°)

at 78.0 metres iron-rich chlorite band (20°)

at 81.1 metres iron-rich chlorite band (35°)

at 83.2 metres iron-rich chlorite band (40°)

afew narrow sections where the iron-rich chlorite disseminations and fracture fillings are concentrated

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EXPLORATION REPORT  
7446  
NO

Part 1882



# GEOLOG

## DRILL HOLE GEOLOGIC LOG

MA/1

HOLE NUMBER

PAGE 2 OF 3

COMPANY LONG LAC MINERAL EXPLORATION

PROPERTY: MA

LOGGED BY

R. Pegg

R.P.

DATE: June 2/79

- at 81.1 - 85.0 metres the iron-rich chlorite increases to 5-7% and the darker, green sections increase in number
- at 85.0 - 87.9 metres light greenish grey devitrified rhyolite, very little purple rhyolite; back into pink-grey-purple devitrified rhyolite
- at 91.1 metres > medium-grained patches of black iron-rich chlorite beginning (minor pitting)
- at 91.7 metres banding (0°) (at 94.2 metres narrow veinlet (30°))
- at 98.1 - 101.1 metres purple rhyolite with relatively minor alteration (10-20%) and devitrification (soft, pink and light brownish grey); fracture (24°) at 99.1 metres; back into devitrified rhyolite-purple rhyolite (5:1 to 1:1)
- at 103.2 - 105.5 metres purple rhyolite and minor devitrified rhyolite
- at 102.0 metres banding (25°)
- at 104.9 metres fracture (30°)
- at 107.6 metres banding (33°)
- at 109.1 metres banding (45°)
- at 110.0 metres fracture (50°)
- at 111.9 metres banding (30°)
- there are a few sections where the iron-rich chlorite is concentrated in fractures.
- at 112.8 metres banding (45°)
- at 115.2 metres banding (35°)
- at 116.6 metres banding (40°)
- at 118.9 metres fracture (30°)
- at 120.5 metres banding (35°)
- at 122.2 metres banding (40°)
- at 123.7 metres start getting small grains of quartz-feldspar (vesicule filling, yellowish grey) (trace - 1%)
- at 126.5 metres fracture (20°)
- 127.4 - 212.1 metres Grey rhyolite and devitrified: Find quartz feldspar grains with green margins and as fracture filling (1%); very light grey rhyolite
- at 127.7 metres banding (25°)
- at 132.0 metres banding (30°)
- at 134.1 metres fracture (15°)
- at 136.7 metres fracture (45°)
- at 139.9 metres banding (60°)
- the amount of iron-rich chlorite has diminished but fractures now found as cavities (fracture filling material removed)
- at 142.6 metres banding (45°)
- at 143.6 metres banding (0° - 10°)
- at 146.8 metres banding (20°)
- at 148.9 metres fracture (25°)

MINERAL SERVICES BRANCH  
ACCOUNTING REPORT

7446  
1002

# GEOLOG

## DRILL HOLE GEOLOGIC LOG

COMPANY: LONG LAC MINERAL EXPLORATION

PROPERTY: MA

LOGGED BY: R. Pegg RP

DATE: June 4/79

HOLE NUMBER MA/1

PAGE 3 of 3

at 151.4 metres banding (60°)

at 152.6 metres fracture (40°)

at 155.5 metres slip (20°)

at 157.1 metres fracture (25°)

at 158.8 metres banding (0° - 5°)

at 160.9 metres fracture (25°)

at 166.4 metres banding (30°)

afew vugs and open tensional fractures are filled with golden biotite and a soft resinous cubic-rhombedral mineral (?)

afew of the devitrified (very light grey) rhyolite zones contain lenses of grey rhyolite which appear almost like fragments

devitrified grey material appears in 2 forms: A dense, soft material and a more granular (phenocrysts of feldspar, quartz, glass and biotite) soft material

at 171.5 metres fracture (15°)

at 176.0 metres fracture (30°)

at 180.1 metres banding (20°)

at 182.3 metres banding (35°)

at 185.0 metres fracture (15°)

now find grey rhyolite and very light grey devitrified rhyolite (2:1) bands of devitrified rhyolite up to

0.2 metres bands of devitrified rhyolite versus patches of devitrified rhyolite (1:1) - a few pitted areas

at 188.4 metres white, dense, soft porcelain band (25°)

at 196.6 metres devitrified bands (30°); minor clots of iron-rich chlorite

at 203.6 metres fracture (15°)

at 206.0 metres devitrified bands (25°)

trace of dark rounded, siliceous fragments

at 209.1 metres devitrified bands (25°)

- trace of dark rounded, siliceous fragments

at 211.8 metres devitrified bands (25°) and low angle fractures

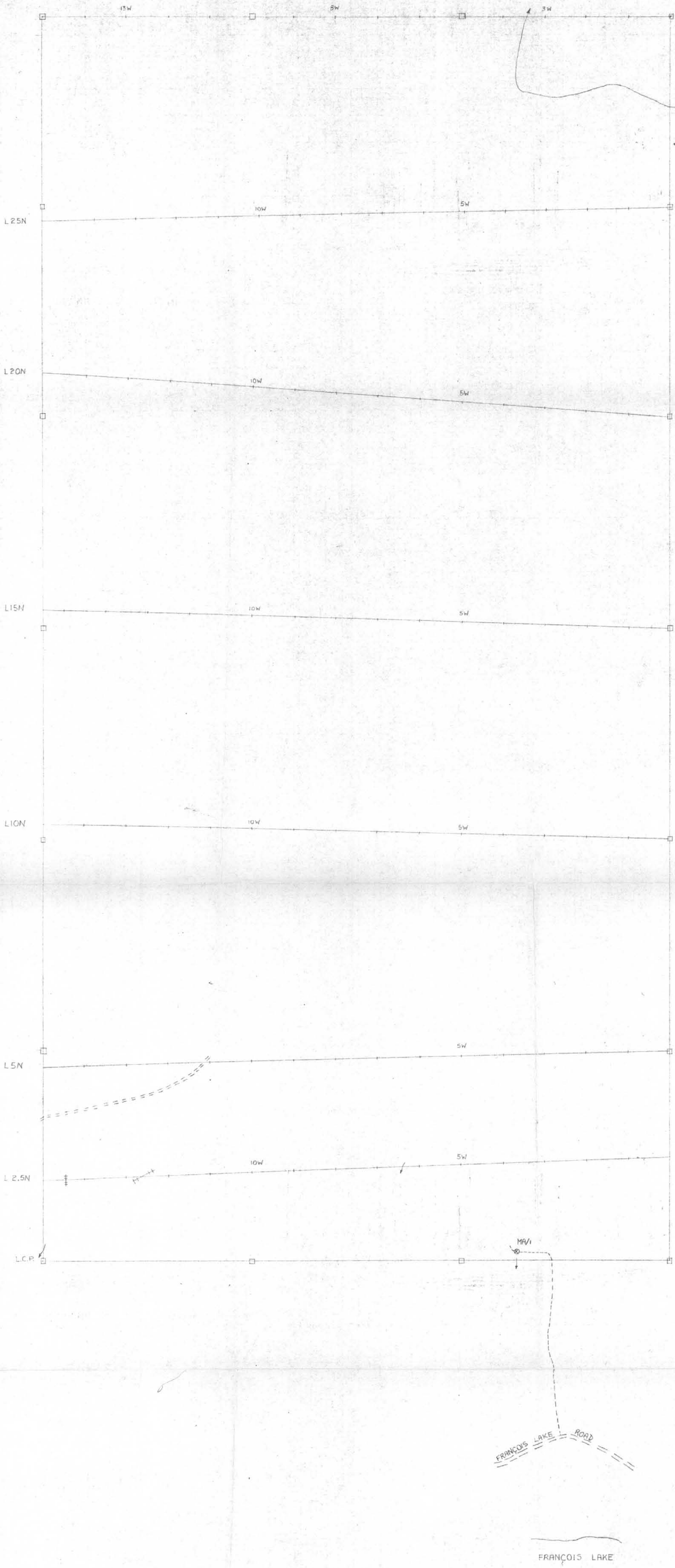
END OF HOLE - at 212.1 metres

left in casing; drill bit still good

MINERAL EXPLORATION  
LABORATORY REPORT  
7446  
NO.

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LEGEND

- Stream
- Claim Post
- === Road
- Drill Road
- ⊗ Diamond Drill Collar

Staking by compass and chain

To accompany Assessment Report by R.S. Pegg, B.A.Sc. on the MA Claims, François Lake Area, Burns Lake Omineca M.D.; dated July 1, 1979

LONG LAC MINERAL EXPLORATION LTD.

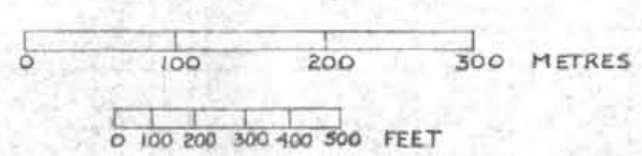
DIAMOND DRILL HOLE and ROAD PLAN  
MA #1 CLAIM

FRANÇOIS LAKE, B.C.

DATE: June 25, 1979

*Rex Pegg*  
REX PEGG

SCALE 1:5000



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