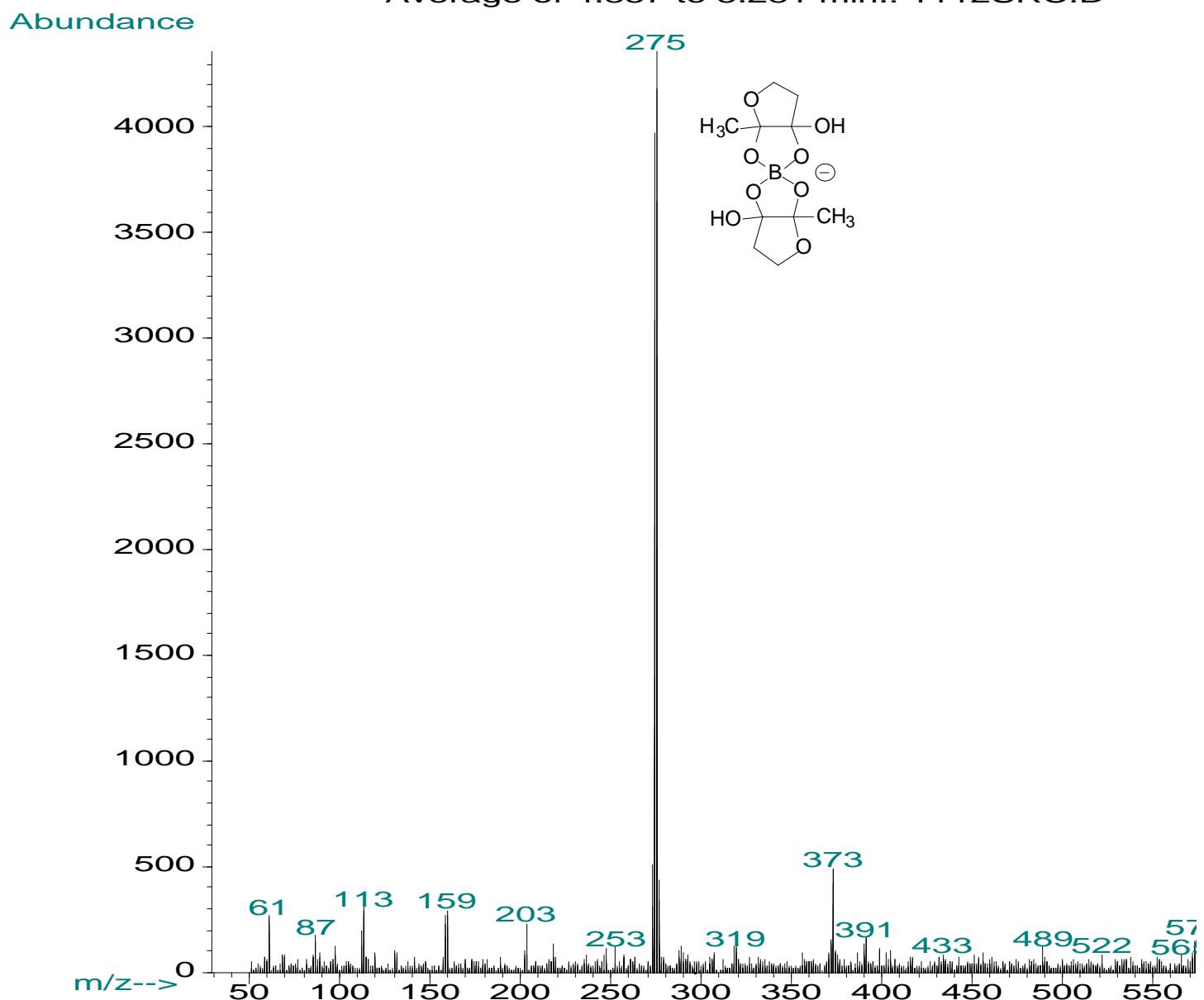


Mass Spectrum for Laurencione in Borate pH 9
Average of 4.857 to 5.281 min.: 1112SRC.D



Calibration ^{11}B NMR spectrum for ribose in borate at pH 7.8

D-Ribose in 1mL D₂O, sat NaHCO₃, Sat BOH₃

Pulse Sequence: s2pul

Solvent: D₂O

Ambient temperature

User: 1-14-87

File: llB_ribose_borate_publishable
INOVA-600 *nmr600v.princeton.edu*

PULSE SEQUENCE

Relax. delay 0.033 sec

Pulse 112.5 degrees

Acq. time 0.217 sec

Width 37735.8 Hz

128 repetitions

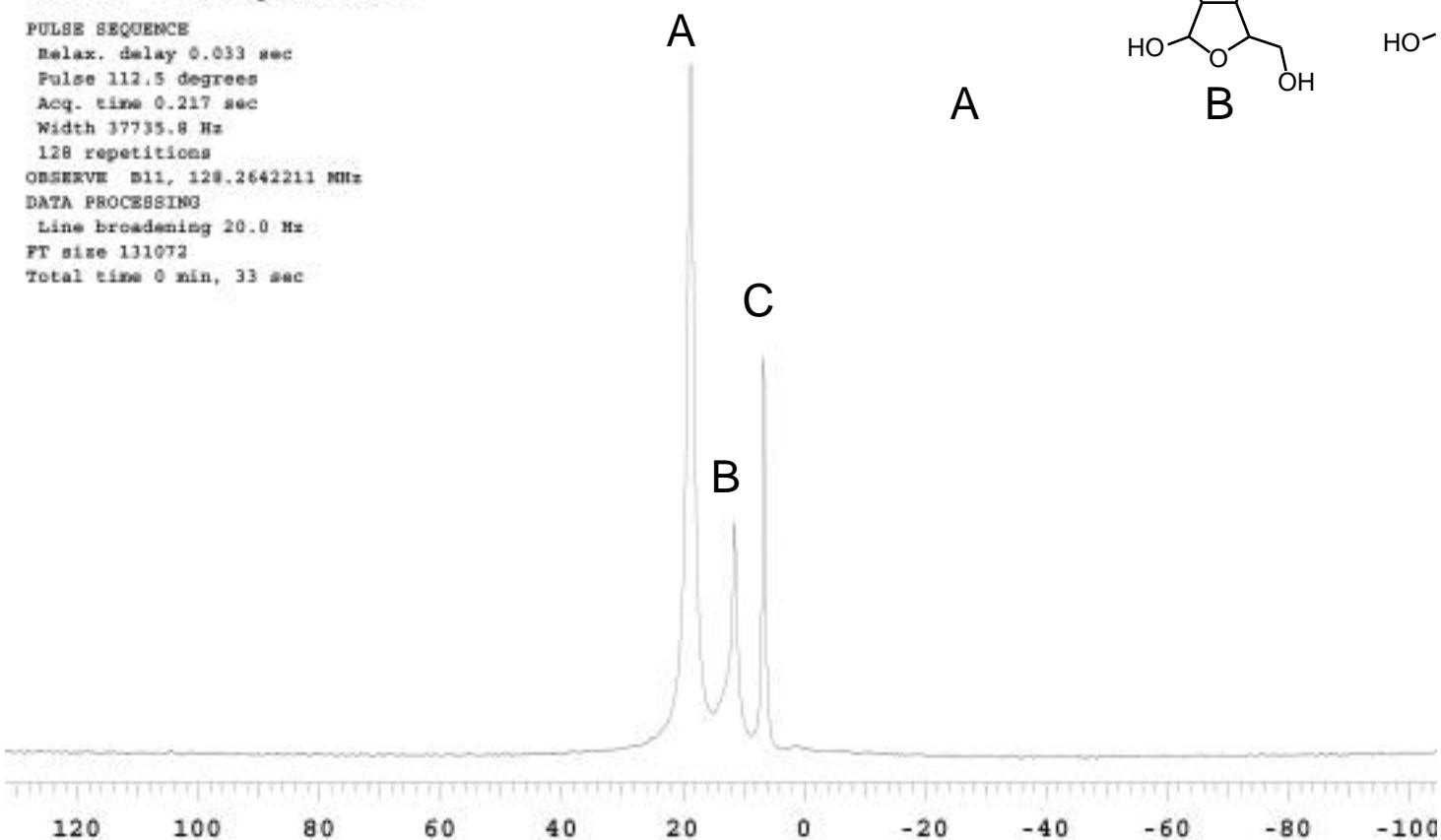
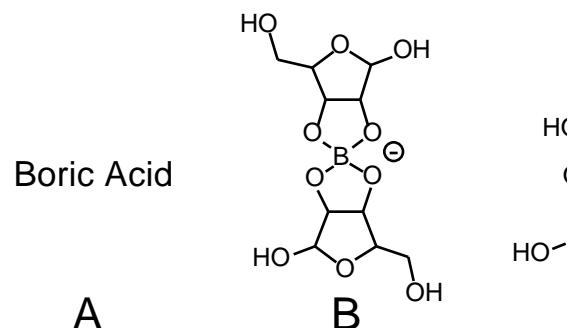
OBSERVE B11, 128.2642211 MHz

DATA PROCESSING

Line broadening 20.0 Hz

FT size 131072

Total time 0 min, 33 sec



Calibration spectrum for borate at pH 7.8, with no correction applied

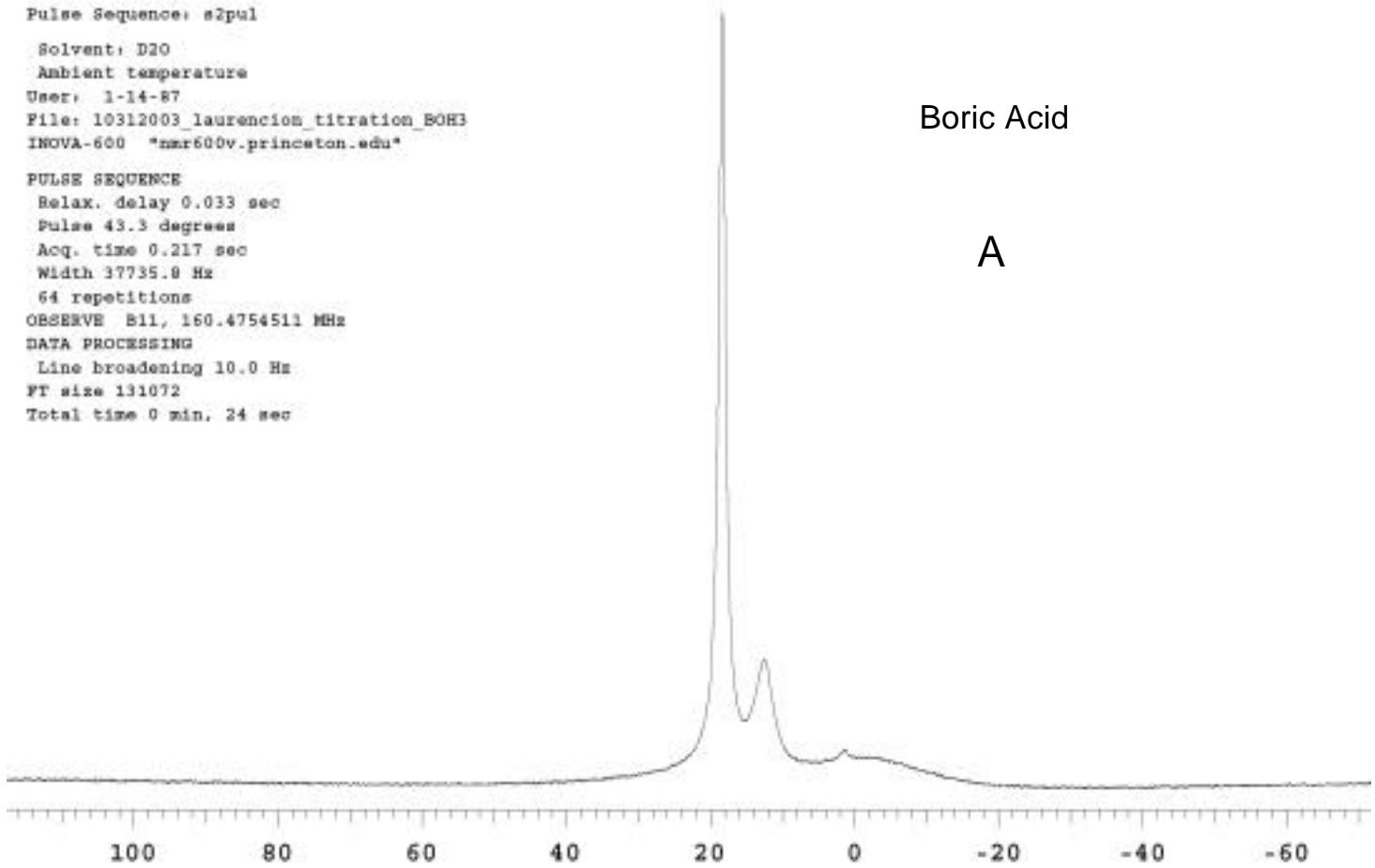
Sat BOH₃ in Sat Bicarb
Pulse Sequence: s2pul
Solvent: D₂O
Ambient temperature
User: I-14-87
File: 10312003_laurenciom_titration_BOH₃
INOVA-600 "nmr600v.princeton.edu"

PULSE SEQUENCE
Relax. delay 0.033 sec
Pulse 43.3 degrees
Acq. time 0.217 sec
Width 37735.0 Hz
64 repetitions
OBSERVE B11, 160.4754511 MHz
DATA PROCESSING
Line broadening 10.0 Hz
FT size 131072
Total time 0 min. 24 sec

A

Boric Acid

A



6 μ L Laurencione titration into borate

Sat BOH3 in Sat Bicarb (1 mL) + 6uL Laurencione

Pulse Sequence: s2pul

Solvent: D2O

Ambient temperature

User: 1-14-87

File: 10312003_laurenciom_titration_BOH3_6uL

INOVA-600 "nmr600v.princeton.edu"

PULSE SEQUENCE

Relax. delay 0.033 sec

Pulse 43.3 degrees

Acq. time 0.217 sec

Width 37735.0 Hz

64 repetitions

OBSERVE B11, 160.4754511 MHz

DATA PROCESSING

Line broadening 10.0 Hz

FT size 131072

Total time 0 min. 24 sec

A

Boric Acid

A

C

100 80 60 40 20 0 -20 -40 -60

9 μ L Laurencione titration into
borate

Sat BOH₃ in Sat Bicarb (1 mL) + 9 μ L Laurencione

Pulse Sequence: s2pul

Solvent: D₂O

Ambient temperature

User: 1-14-87

File: 10312003_Laurencione_titration_BOH₃.9 μ L
INOVA-600 "nmr600v.princeton.edu"

PULSE SEQUENCE

Relax. delay 0.033 sec

Pulse 43.3 degrees

Acq. time 0.217 sec

Width 37735.8 Hz

64 repetitions

OBSERVE H11, 160.4754511 MHz

DATA PROCESSING

Line broadening 10.0 Hz

FT size 131072

Total time 0 min, 24 sec

A

Boric

A

C

100 80 60 40 20 0 -20 -40 -60

15 μ L Laurencione titration into
borate

Sat BOH₃ in Sat Bicarb (1 mL) + 15 μ L Laurencione

Pulse Sequence: s2pul

Solvent: D₂O

Ambient temperature

User: 1-14-87

File: 10312003_Laurencione titration BOH₃ 15 μ L
INOVA-600 "nmr600v.princeton.edu"

PULSE SEQUENCE

Relax. delay 0.033 sec

Pulse 43.3 degrees

Acq. time 0.217 sec

Width 37735.8 Hz

64 repetitions

OBSERVE H11, 160.4754511 MHz

DATA PROCESSING

Line broadening 10.0 Hz

FT size 131072

Total time 0 min, 24 sec

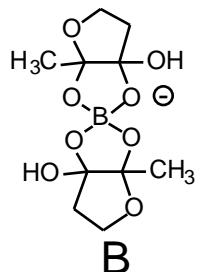
A

Boric

A

B

C



100 80 60 40 20 0 -20 -40 -60

25 μ L Laurencione titration into
borate

Sat BOH₃ in Sat Bicarb (1 mL) + 25 μ L Laurencione

Pulse Sequence: s2pul

Solvent: D₂O

Ambient temperature

User: 1-14-87

File: 10312003_Laurencione titration BOH₃ 25 μ L
INOVA-600 "nmr600v.princeton.edu"

PULSE SEQUENCE

Relax. delay 0.033 sec

Pulse 43.3 degrees

Acq. time 0.217 sec

Width 37735.8 Hz

64 repetitions

OBSERVE H11, 160.4754511 MHz

DATA PROCESSING

Line broadening 10.0 Hz

FT size 131072

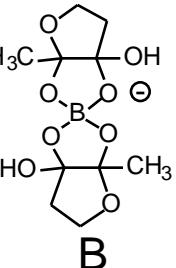
Total time 0 min, 24 sec

A

Boric

A

C



B

100 80 60 40 20 0 -20 -40 -60

25 μ L Laurencione titration into
borate

Sat BOH₃ in Sat Bicarb (1 mL) + 35 μ L Laurencione

Pulse Sequence: s2pul

Solvent: D₂O

Ambient temperature

User: 1-14-97

File: 10312003_Laurencione titration BOH₃ 35 μ L
INOVA-600 "nmr600v.princeton.edu"

PULSE SEQUENCE

Relax. delay 0.033 sec

Pulse 43.3 degrees

Acq. time 0.217 sec

Width 37735.8 Hz

64 repetitions

OBSERVE H11, 160.4754511 MHz

DATA PROCESSING

Line broadening 10.0 Hz

FT size 131072

Total time 0 min, 24 sec

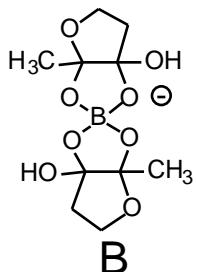
A

Boric

C

A

B



100 80 60 40 20 0 -20 -40 -60

55 μ L Laurencione titration into
borate

Sat BOH₃ in Sat Bicarb (1 mL) + 55 μ L Laurencione

Pulse Sequence: s2pul

Solvent: D₂O

Ambient temperature

User: 1-14-97

File: 10312003_Laurencione titration BOH₃ 55 μ L
INOVA-600 "nmr600v.princeton.edu"

PULSE SEQUENCE

Relax. delay 0.033 sec

Pulse 43.3 degrees

Acq. time 0.217 sec

Width 37735.8 Hz

64 repetitions

OBSERVE H11, 160.4754511 MHz

DATA PROCESSING

Line broadening 10.0 Hz

FT size 131072

Total time 0 min, 24 sec

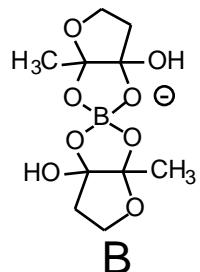
A

C

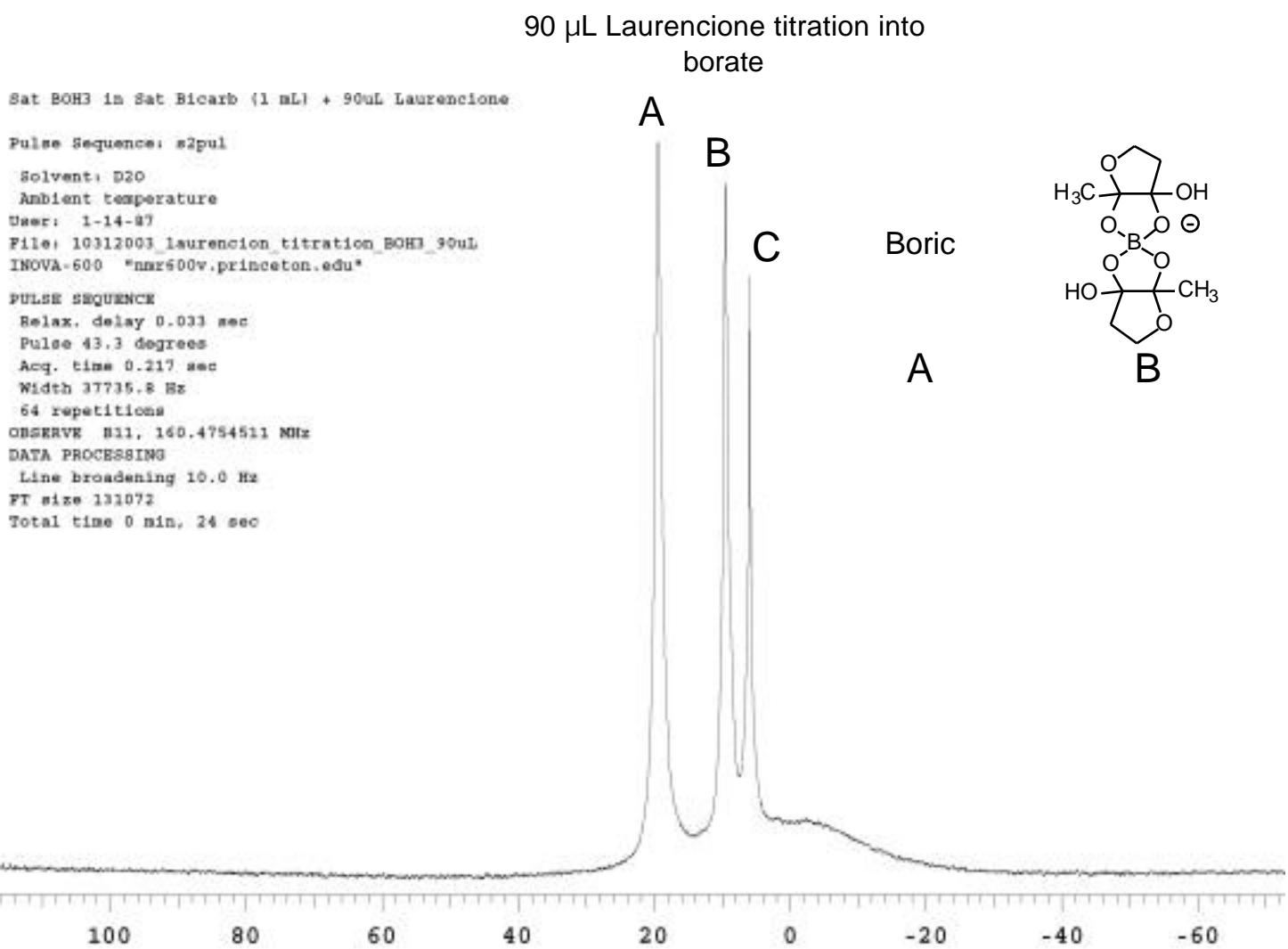
Boric

A

B



100 80 60 40 20 0 -20 -40 -60



125 μ L Laurencione titration into
borate

Sat BOH₃ in Sat Bicarb (1 mL) + 125 μ L Laurencione

Pulse Sequence: s2pul

Solvent: D₂O

Ambient temperature

User: 1-14-97

File: 10312003_Laurencione_titration_BOH₃_125 μ L
INOVA-600 "nmr600v.princeton.edu"

PULSE SEQUENCE

Relax. delay 0.033 sec

Pulse 43.3 degrees

Acq. time 0.217 sec

Width 37735.8 Hz

64 repetitions

OBSERVE H11, 160.4754511 MHz

DATA PROCESSING

Line broadening 10.0 Hz

FT size 131072

Total time 0 min, 24 sec

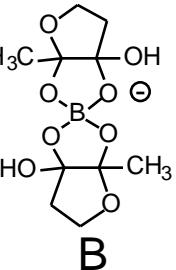
B

Boric

A

C

A



B

100 80 60 40 20 0 -20 -40 -60

160 μ L Laurencione titration into
borate

Sat BOH₃ in Sat Bicarb (1 mL) + 160 μ L Laurencione

Pulse Sequence: s2pul

Solvent: D₂O

Ambient temperature

User: 1-14-97

File: 10312003_Laurencione titration BOH₃ 160 μ L
INOVA-600 "nmr600v.princeton.edu"

PULSE SEQUENCE

Relax. delay 0.033 sec

Pulse 43.3 degrees

Acq. time 0.217 sec

Width 37735.8 Hz

64 repetitions

OBSERVE H11, 160.4754511 MHz

DATA PROCESSING

Line broadening 10.0 Hz

FT size 131072

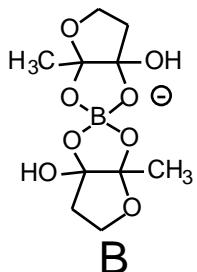
Total time 0 min, 24 sec

B

Boric

A

B



C

A

100 80 60 40 20 0 -20 -40 -60

195 μ L Laurencione titration into
borate

Sat BOH₃ in Sat Bicarb (1 mL) + 195 μ L Laurencione

Pulse Sequence: s2pul

Solvent: D₂O

Ambient temperature

User: 1-14-87

File: 10312003_Laurencione titration BOH₃ 195 μ L
INOVA-600 "nmr600v.princeton.edu"

PULSE SEQUENCE

Relax. delay 0.033 sec

Pulse 43.3 degrees

Acq. time 0.217 sec

Width 37735.8 Hz

64 repetitions

OBSERVE H11, 160.4754511 MHz

DATA PROCESSING

Line broadening 10.0 Hz

FT size 131072

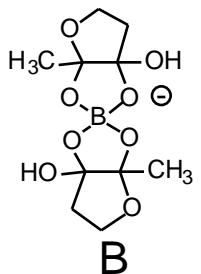
Total time 0 min, 24 sec

B

Boric

A

B



C
A

100 80 60 40 20 0 -20 -40 -60

230 μ L Laurencione titration into
borate

Sat BOH₃ in Sat Bicarb (1 mL) + 230 μ L Laurencione

Pulse Sequence: s2pul

Solvent: D₂O

Ambient temperature

User: 1-14-97

File: 10312003_Laurencione titration BOH₃ 230 μ L
INOVA-600 "nmr600v.princeton.edu"

PULSE SEQUENCE

Relax. delay 0.033 sec

Pulse 43.3 degrees

Acq. time 0.217 sec

Width 37735.8 Hz

64 repetitions

OBSERVE H11, 160.4754511 MHz

DATA PROCESSING

Line broadening 10.0 Hz

FT size 131072

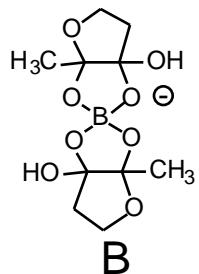
Total time 0 min, 24 sec

B

Boric

A

B



265 μ L Laurencione titration into
borate

Sat BOH₃ in Sat Bicarb (1 mL) + 265 μ L Laurencione

Pulse Sequence: s2pul

Solvent: D₂O

Ambient temperature

User: 1-14-87

File: 10312003_laurencione_titration_BOH₃_260 μ L
INOVA-500 "nmrsun-5.princeton.edu"

Relax. delay 0.033 sec

Pulse 43.3 degrees

Acq. time 0.217 sec

Width 37735.8 Hz

64 repetitions

OBSERVE H11, 160.4754511 MHz

DATA PROCESSING

Line broadening 10.0 Hz

FT size 131072

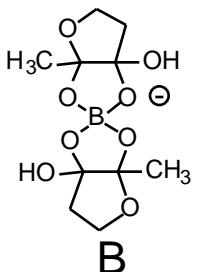
Total time 0 min, 24 sec

B

Boric

A

B



A

C

100 80 60 40 20 0 -20 -40 -60