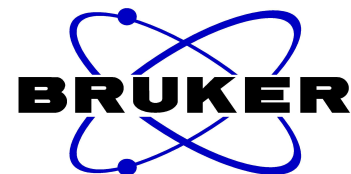


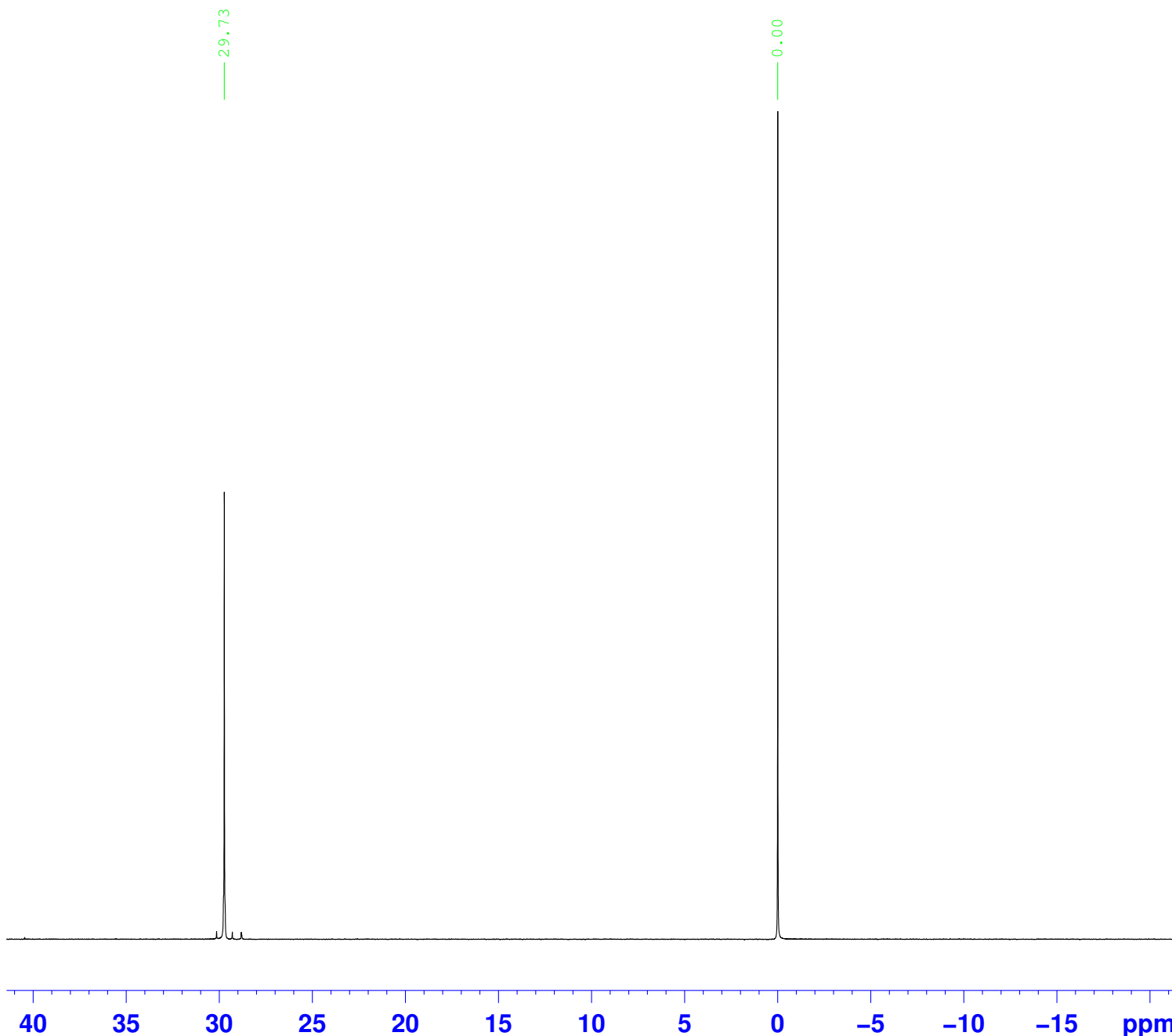
31P{1H} tris(3,5-dimethylphenyl)phosphine oxide in CDCl3 with TMS



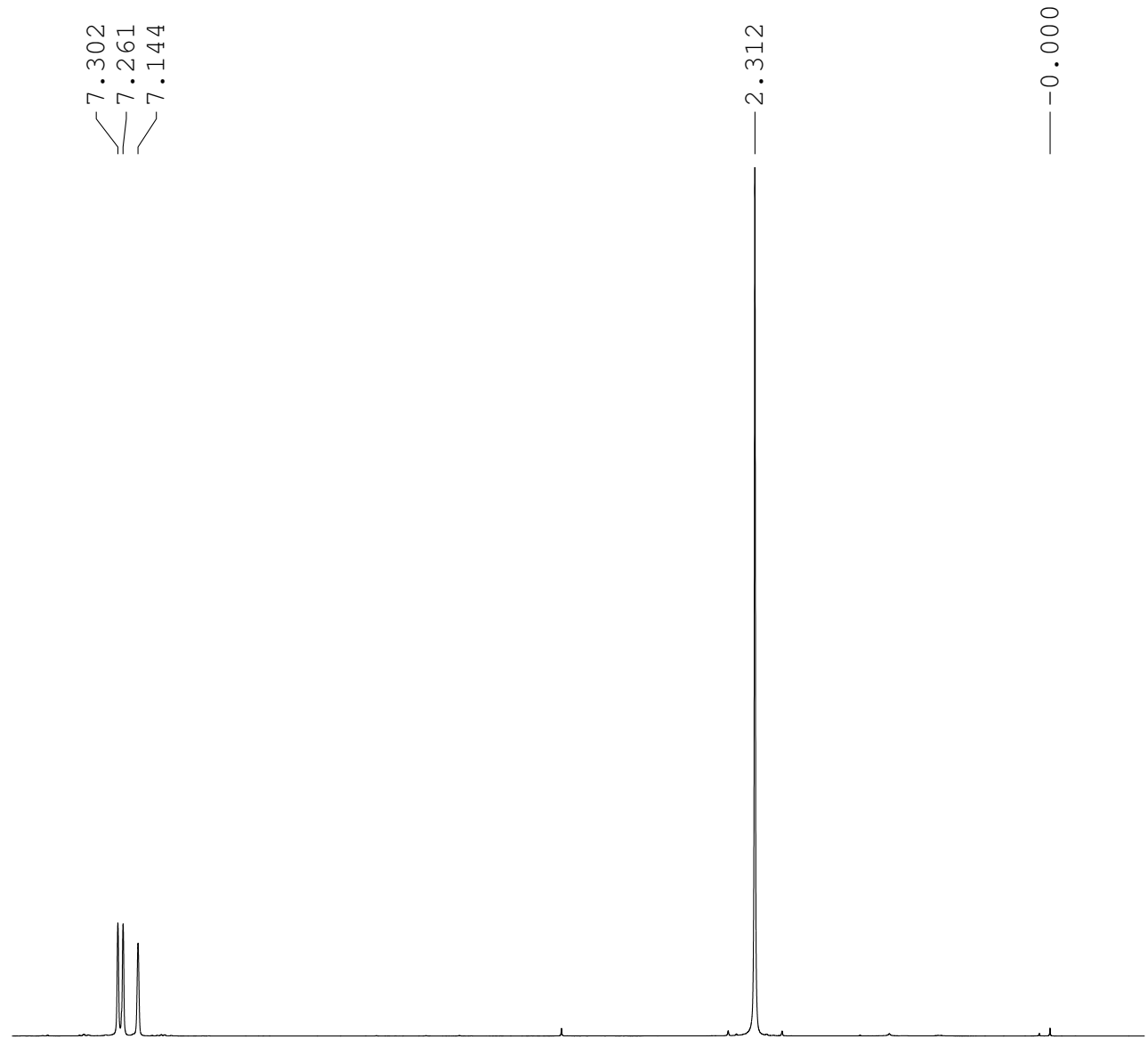
NAME Boere Phosphine Oxides  
EXPNO 6  
PROCNO 1  
Date\_ 20180510  
Time 15.24  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zgpg30  
TD 131072  
SOLVENT CDCl3  
NS 64  
DS 4  
SWH 49019.609 Hz  
FIDRES 0.373990 Hz  
AQ 1.3369844 sec  
RG 1440  
DW 10.200 usec  
DE 6.00 usec  
TE 292.9 K  
D1 2.00000000 sec  
D11 0.03000000 sec  
TD0 1

===== CHANNEL f1 =====  
NUC1 31P  
P1 8.80 usec  
PL1 1.00 dB  
PL1W 34.11898422 W  
SFO1 121.4887760 MHz

===== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 100.00 usec  
PL2 0.00 dB  
PL12 18.13 dB  
PL13 21.05 dB  
PL2W 11.88122272 W  
PL12W 0.18275161 W  
PL13W 0.09329561 W  
SFO2 300.1312000 MHz  
SI 262144  
SF 121.4948577 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40



1H tris(3,5-dimethylphenyl)phosphine oxide in CDCl3 with TMS



7.302  
7.261  
7.144

2.312

0.000

NAME	Boere Phosphine Oxide
EXPNO	2
PROCNO	1
Date_	20180504
Time	13.55
INSTRUM	spect
PROBHD	5 mm PABBO BB-
PULPROG	zg30
TD	131072
SOLVENT	CDCl3
NS	20
DS	0
SWH	6188.119 Hz
FIDRES	0.047212 Hz
AQ	10.5906677 sec
RG	32
DW	80.800 usec
DE	6.00 usec
TE	292.4 K
D1	1.00000000 sec
TD0	1

==== CHANNEL f1 =====

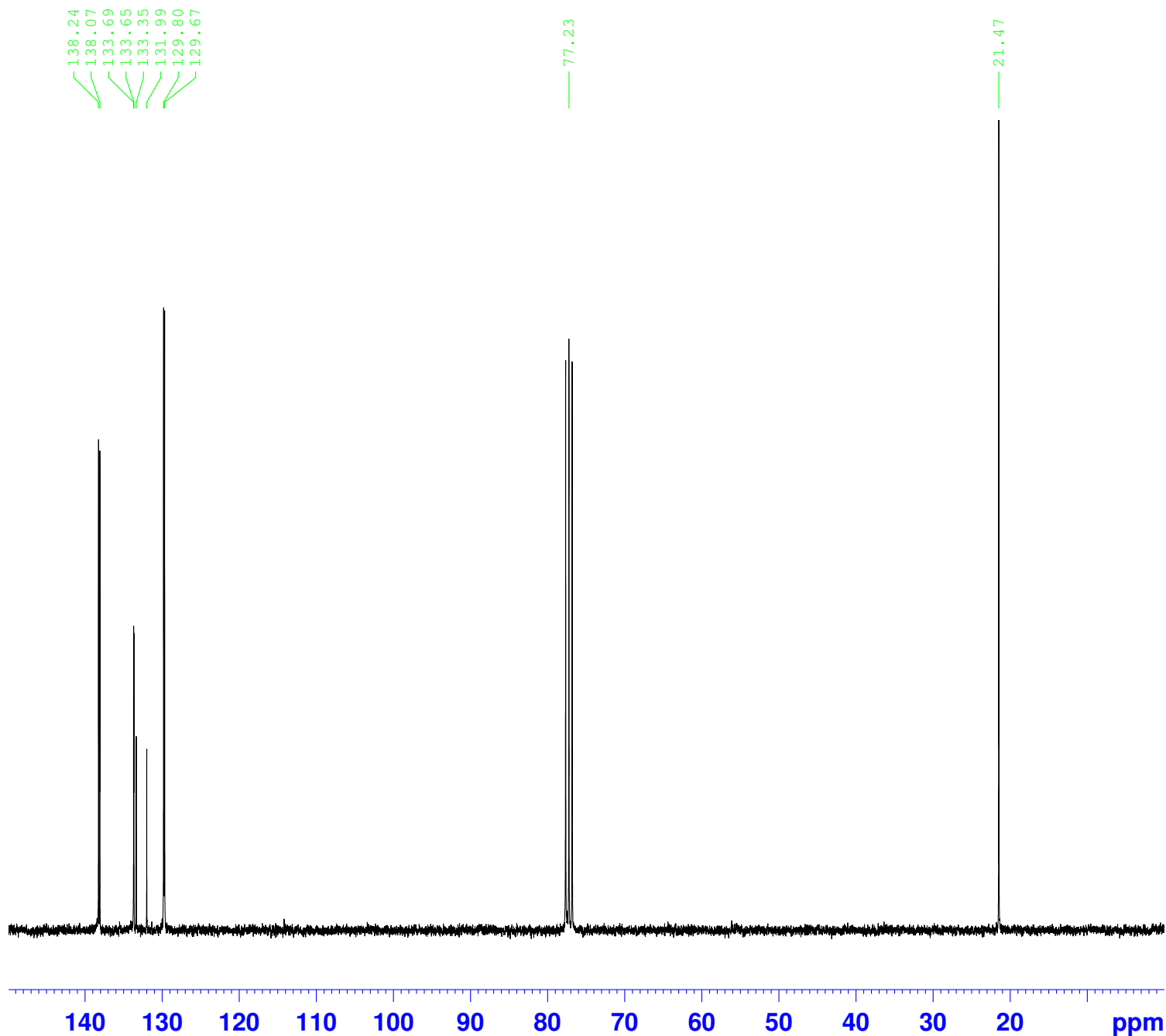
NUC1	1H
P1	12.40 usec
PL1	0.00 dB
PL1W	11.88122272 W
SFO1	300.1318534 MHz
SI	262144
SF	300.1300018 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00

8 7 6 5 4 3 2 1 0 ppm

6.14  
2.96

18.00

$^{13}\text{C}\{^1\text{H}\}$  tris(3,5-dimethylphenyl)phosphine oxide in  $\text{CDCl}_3$  with TMS



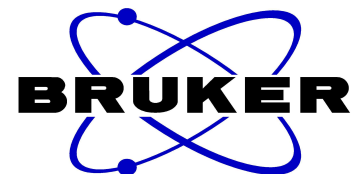
```

NAME      Boere Phosphine Oxides
EXPNO      4
PROCNO     1
Date_      20180504
Time       13.47
INSTRUM    spect
PROBHD     5 mm PABBO BB-
PULPROG    zgpg30
TD         131072
SOLVENT    CDCl3
NS         200
DS         2
SWH        18028.846 Hz
FIDRES     0.137549 Hz
AQ         3.6351135 sec
RG         2050
DW         27.733 usec
DE         6.00 usec
TE         292.7 K
D1         5.00000000 sec
D11        0.03000000 sec
TD0        1

===== CHANNEL f1 =====
NUC1       13C
P1         7.60 usec
PL1        -3.00 dB
PL1W       62.14721680 W
SFO1       75.4752950 MHz

===== CHANNEL f2 =====
CPDPRG2    waltz16
NUC2       1H
PCPD2      100.00 usec
PL2        0.00 dB
PL12       18.13 dB
PL13       21.05 dB
PL2W       11.88122272 W
PL12W      0.18275161 W
PL13W      0.09329561 W
SFO2       300.1312000 MHz
SI         262144
SF         75.4677399 MHz
WDW        EM
SSB        0
LB         1.00 Hz
GB         0
PC         1.40
    
```

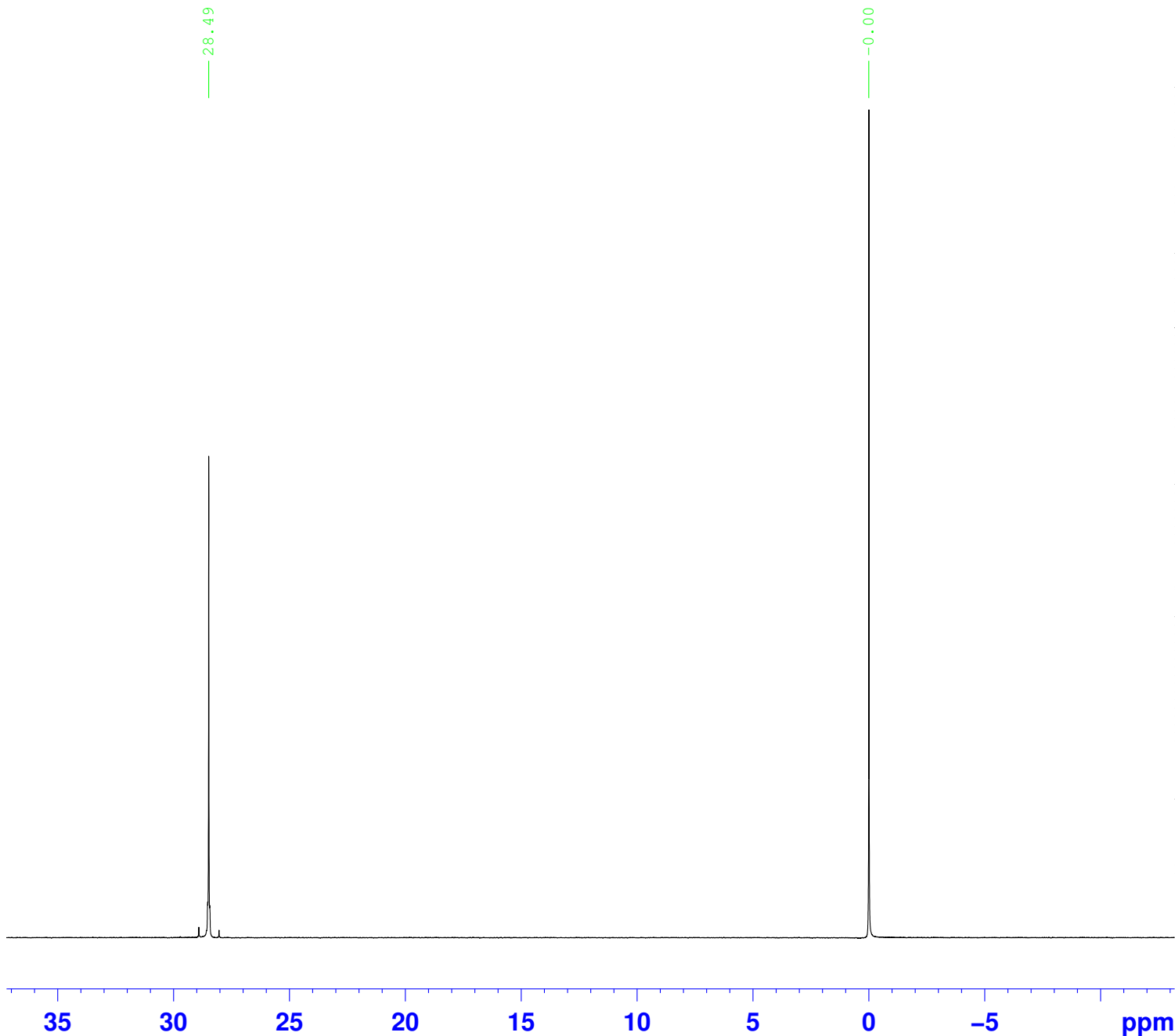
31P{1H} tris(4-methoxy-3,5-dimethylphenyl)phosphine oxide in CDCl3 with TMS



NAME Boere Phosphine Oxides  
EXPNO 5  
PROCNO 1  
Date\_ 20180510  
Time 15.13  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zgpg30  
TD 131072  
SOLVENT CDCl3  
NS 64  
DS 4  
SWH 49019.609 Hz  
FIDRES 0.373990 Hz  
AQ 1.3369844 sec  
RG 1820  
DW 10.200 usec  
DE 6.00 usec  
TE 292.9 K  
D1 2.00000000 sec  
D11 0.03000000 sec  
TD0 1

==== CHANNEL f1 =====  
NUC1 31P  
P1 8.80 usec  
PL1 1.00 dB  
PL1W 34.11898422 W  
SFO1 121.4887760 MHz

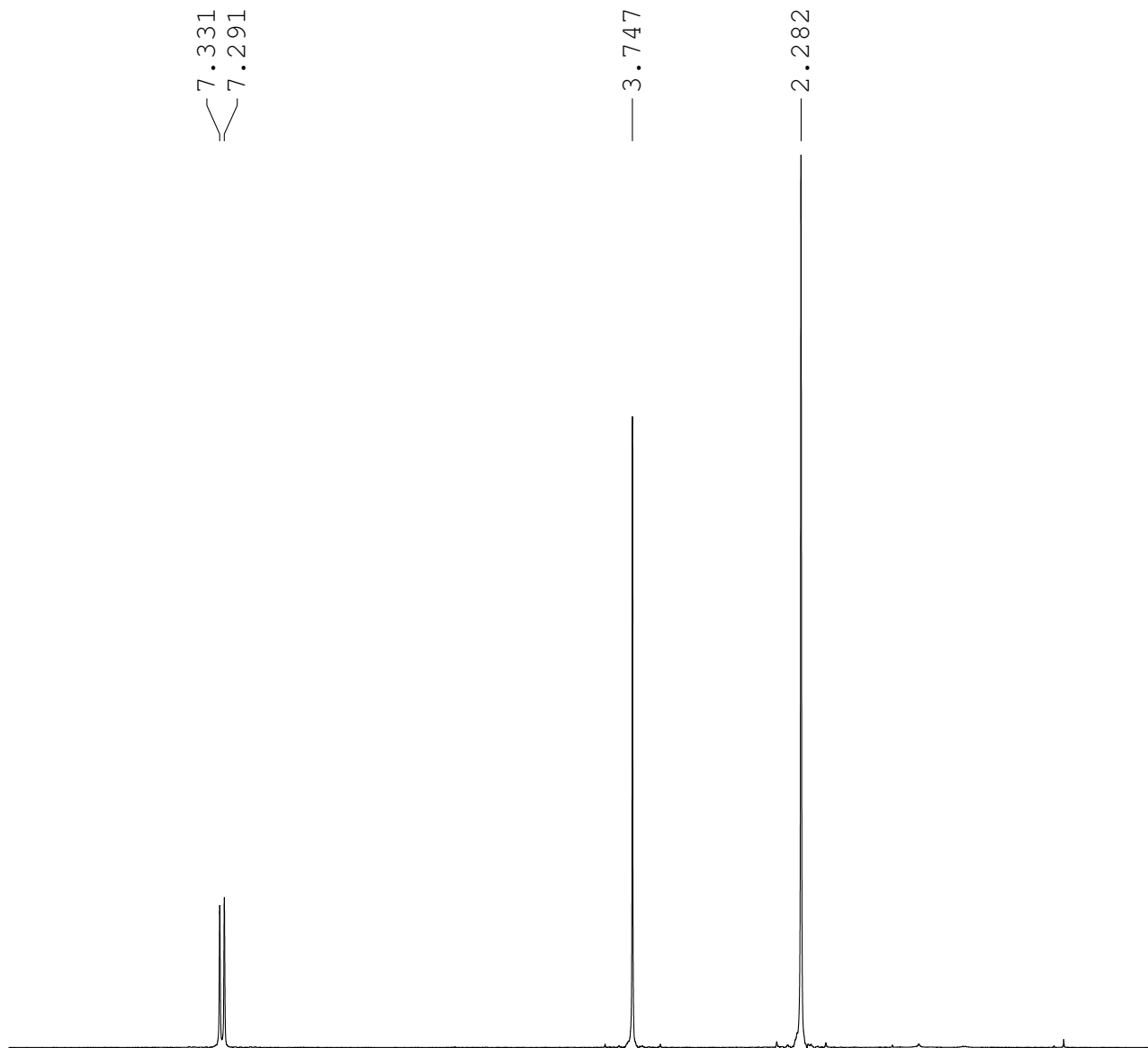
==== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 100.00 usec  
PL2 0.00 dB  
PL12 18.13 dB  
PL13 21.05 dB  
PL2W 11.88122272 W  
PL12W 0.18275161 W  
PL13W 0.09329561 W  
SFO2 300.1312000 MHz  
SI 262144  
SF 121.4948568 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40



1H tris(4-methoxy-3,5-dimethylphenyl)phosphine oxide in CDCl3 with TMS

NAME Boere Phosphine Oxide  
EXPNO 1  
PROCNO 1  
Date\_ 20180504  
Time 12.28  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 131072  
SOLVENT C6D6  
NS 20  
DS 0  
SWH 6188.119 Hz  
FIDRES 0.047212 Hz  
AQ 10.5906677 sec  
RG 28.5  
DW 80.800 usec  
DE 6.00 usec  
TE 292.3 K  
D1 1.00000000 sec  
TD0 1

==== CHANNEL f1 =====  
NUC1 1H  
P1 12.40 usec  
PL1 0.00 dB  
PL1W 11.88122272 W  
SFO1 300.1318534 MHz  
SI 262144  
SF 300.1300100 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.00



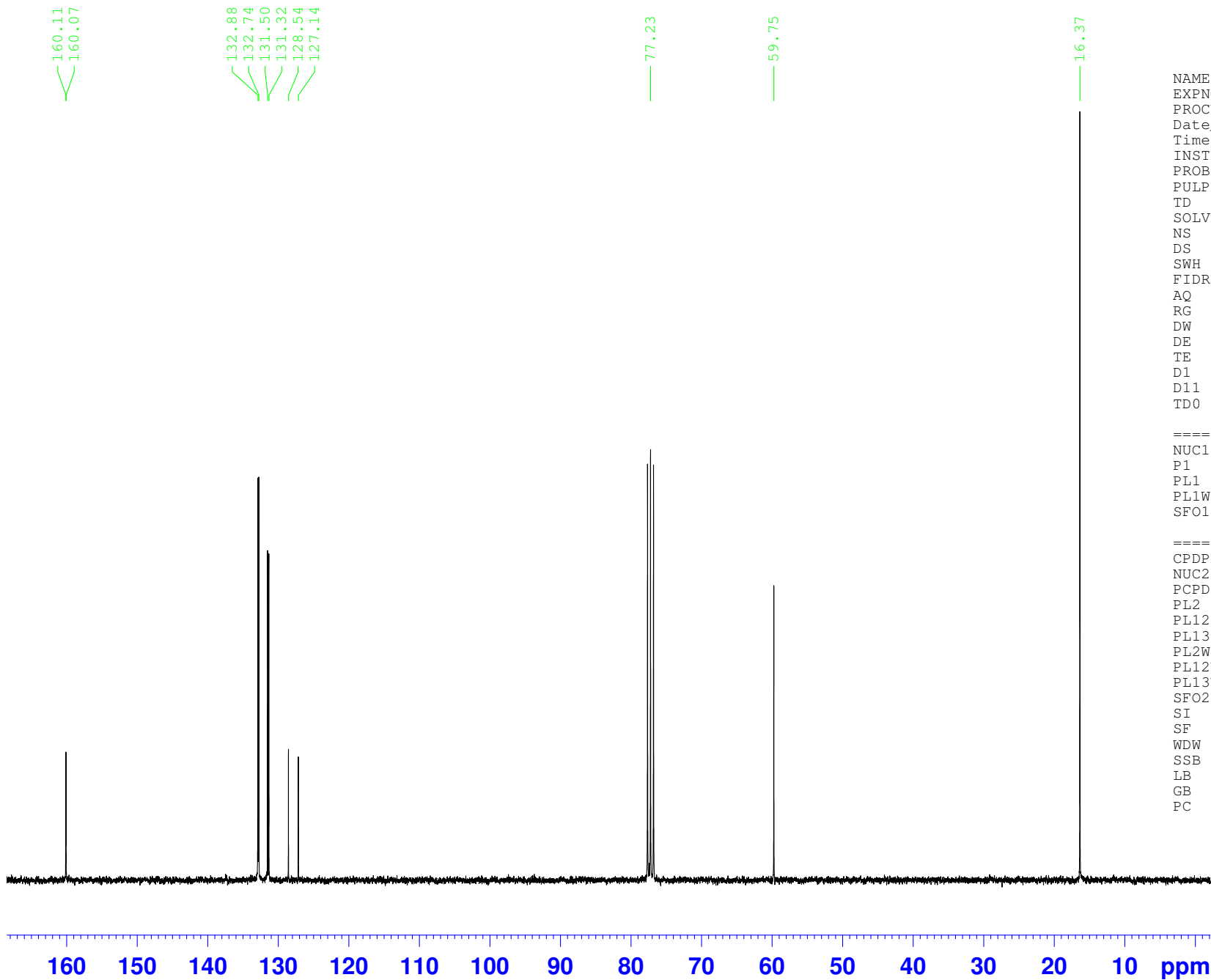
9 8 7 6 5 4 3 2 1 0 ppm

6.12

9.00

18.24

$^{13}\text{C}\{^1\text{H}\}$  tris(4-methoxy-3,5-dimethylphenyl)phosphine oxide in  $\text{CDCl}_3$  with TMS



```

NAME      Boere Phosphine Oxides
EXPNO     3
PROCNO    1
Date_     20180504
Time      13.10
INSTRUM   spect
PROBHD    5 mm PABBO BB-
PULPROG   zgpg30
TD         131072
SOLVENT   C6D6
NS         235
DS         2
SWH       18028.846 Hz
FIDRES    0.137549 Hz
AQ        3.6351135 sec
RG         2050
DW         27.733 usec
DE         6.00 usec
TE         292.7 K
D1         5.00000000 sec
D11        0.03000000 sec
TD0        1
    
```

```

===== CHANNEL f1 =====
NUC1      13C
P1        7.60 usec
PL1       -3.00 dB
PL1W      62.14721680 W
SFO1      75.4752950 MHz
    
```

```

===== CHANNEL f2 =====
CPDPRG2   waltz16
NUC2      1H
PCPD2     100.00 usec
PL2        0.00 dB
PL12       18.13 dB
PL13       21.05 dB
PL2W      11.88122272 W
PL12W     0.18275161 W
PL13W     0.09329561 W
SFO2      300.1312000 MHz
SI         262144
SF         75.4677430 MHz
WDW        EM
SSB         0
LB          1.00 Hz
GB          0
PC          1.40
    
```