```
13C-NMR c1115b(1H)
thiosoman in ca 0.7ml CDCl3
214195126.006 jrn.342;139/200
 Solvent: CDCl3
 Temp. 30.0 C / 303.1 K
User: pml
File: c1115b
VXR-400S "pmlvxr"
PULSE SEQUENCE
 Relax. delay 1.000 sec
 Pulse 60.0 degrees
 Acq. time 1.598 sec
 Width 20502.3 Hz
 6000 repetitions
OBSERVE  C13, 100.5688005 MHz
DECOUPLE  H1, 399.9571862 MHz
 Power 44 dB
 continuously on
 WALTZ-16 modulated
DATA PROCESSING
 Line broadening 0.2 Hz
FT size 262144
Total time 4.3 hours
```

SPECTRAL LINES for th-3.0

rfl- 8393.3 rfp- 7754.6

CDCl3 internal=77.1ppm

nr	Hz	ppm	intensity
1	8511.52	84.626	6.2
2	8510.27	84.613	5.8
3	8503.07	84.542	6.2
4	8501.98	84.531	5.7
5	8429.87	83.814	9.7
6	8428.15	83.797	9.8
7	8421.11	83.727	9.4
8	8419.54	83.711	9.8

SPECTRAL LINES for th-3.0

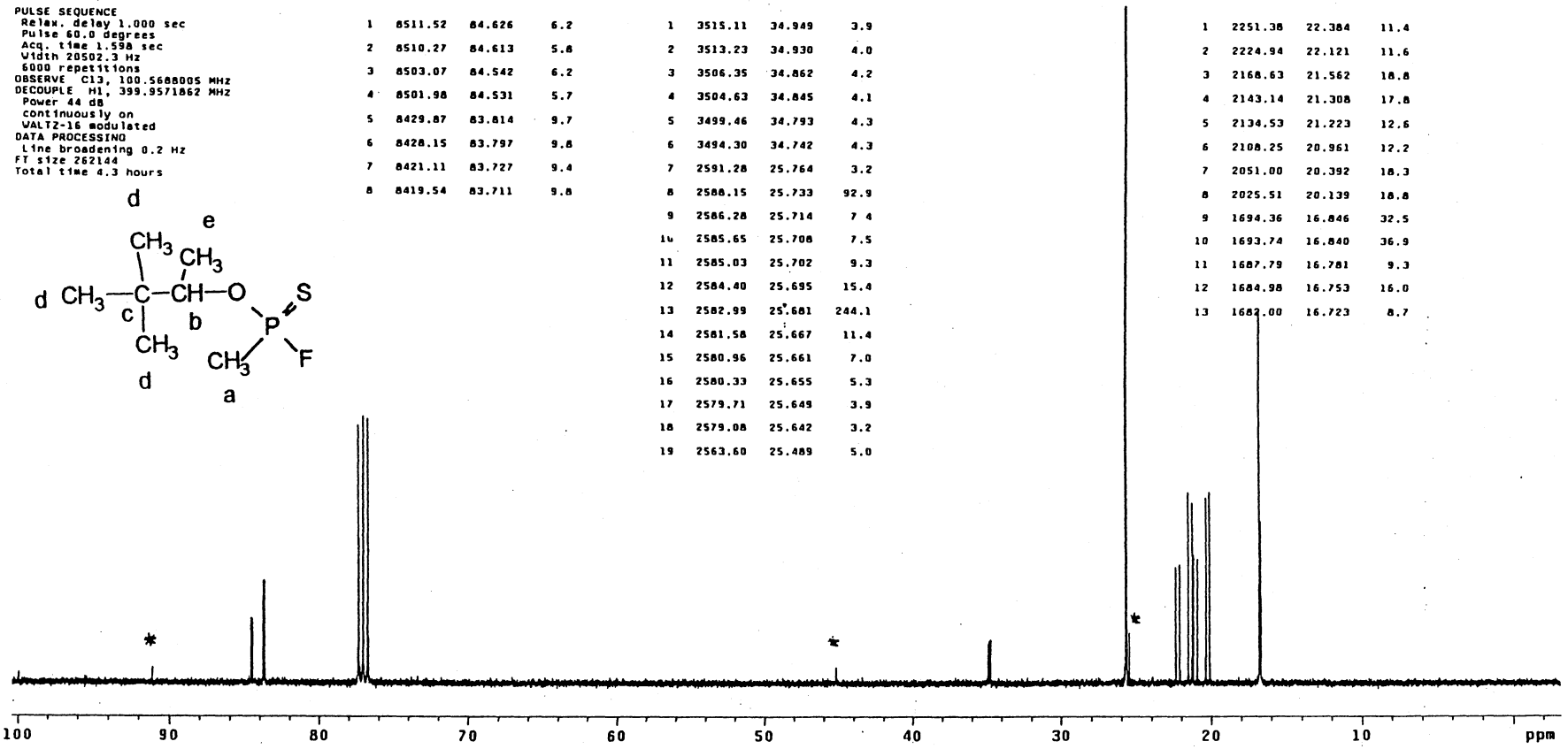
rfl- 8393.3 rfp- 7754.6

nr	Hz	ppm	intensity
1	3515.11	34.949	3.9
2	3513.23	34.930	4.0
3	3506.35	34.862	4.2
4	3504.63	34.845	4.1
5	3499.46	34.793	4.3
6	3494.30	34.742	4.3
7	2591.28	25.764	3.2
8	2588.15	25.733	92.9
9	2586.28	25.714	7.4
10	2585.65	25.708	7.5
11	2585.03	25.702	9.3
12	2584.40	25.695	15.4
13	2582.99	25.681	244.1
14	2581.58	25.667	11.4
15	2580.96	25.661	7.0
16	2580.33	25.655	5.3
17	2579.71	25.649	3.9
18	2579.08	25.642	3.2
19	2563.60	25.489	5.0

SPECTRAL LINES for th-4.6

rfl- 8393.3 rfp- 7754.6

nr	Hz	ppm	intensity
1	2251.38	22.384	11.4
2	2224.94	22.121	11.6
3	2168.63	21.562	18.8
4	2143.14	21.308	17.8
5	2134.53	21.223	12.6
6	2108.25	20.961	12.2
7	2051.00	20.392	18.3
8	2025.51	20.139	18.8
9	1694.36	16.846	32.5
10	1693.74	16.840	36.9
11	1687.79	16.781	9.3
12	1684.98	16.753	16.0
13	1682.00	16.723	8.7



1,2,2-trimethylpropyl methylthiophosphonofluoridate
(2 diastereomers I and II) CAS 97931-17-4

Nucleus :	$^{13}C\{^{1}H\}$
Frequency :	100.6 MHz
Concentration	ca. 34 mg/0.7 ml $CDCl_3$
Reference $CDCl_3$ int 77.1 ppm. Res. :	0.6 Hz (20.1 ppm)
Instrument :	Varian VXR 400S

Temperature :	30 °C
Spectral width :	20502.3 Hz
Data point (FID) :	64 K
Pulse angle :	13.0 µs(60°)
Number of pulses :	6000
Repetition time :	2.6 s
Line broadening :	0.2 Hz
Data points (spec) :	256 K

	I / II		I / II		I / II
a:	20.8/21.6 ppm	J(aP) :	117.6/116.8 Hz	J(aF) :	25.5/26.4 Hz
b:	83.7/84.5 ppm	J(bP) :	8.7/8.2 Hz	J(bF) :	1.6/1.3 Hz
c:	34.8/34.7 ppm	J(cP) :	8.7/5.0 Hz	J(cF) :	1.8/0.0 Hz
d:	25.6/25.7 ppm	J(eP) :	0.6/2.8 Hz	J(eF) :	0.0/2.8 Hz
e:	16.8/16.7 ppm				