

Supplementary Information For:

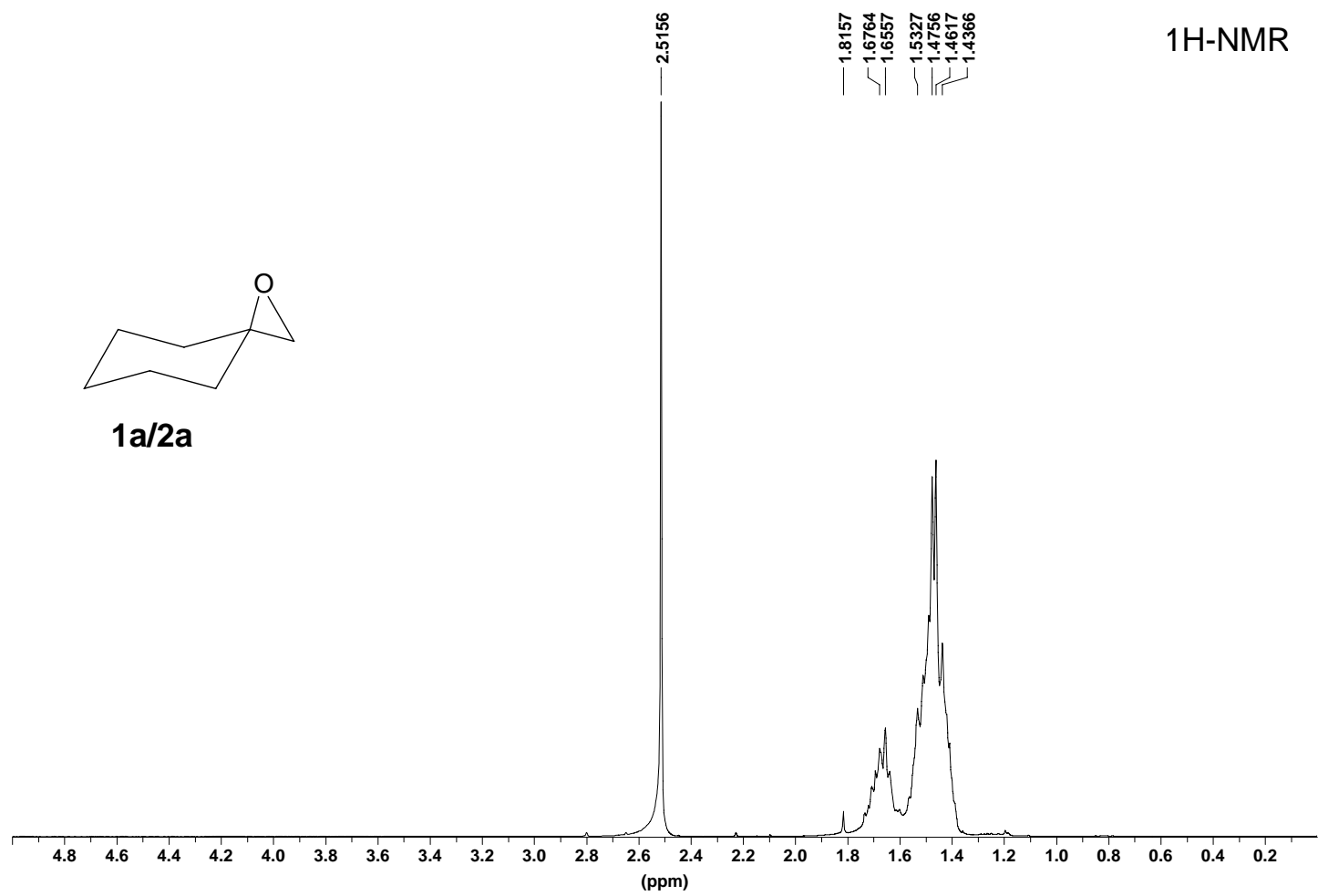
**Stereochemical preference of yeast epoxide hydrolase
for the *O*-axial C3 epimers of 1-oxaspiro[2.5]octanes**

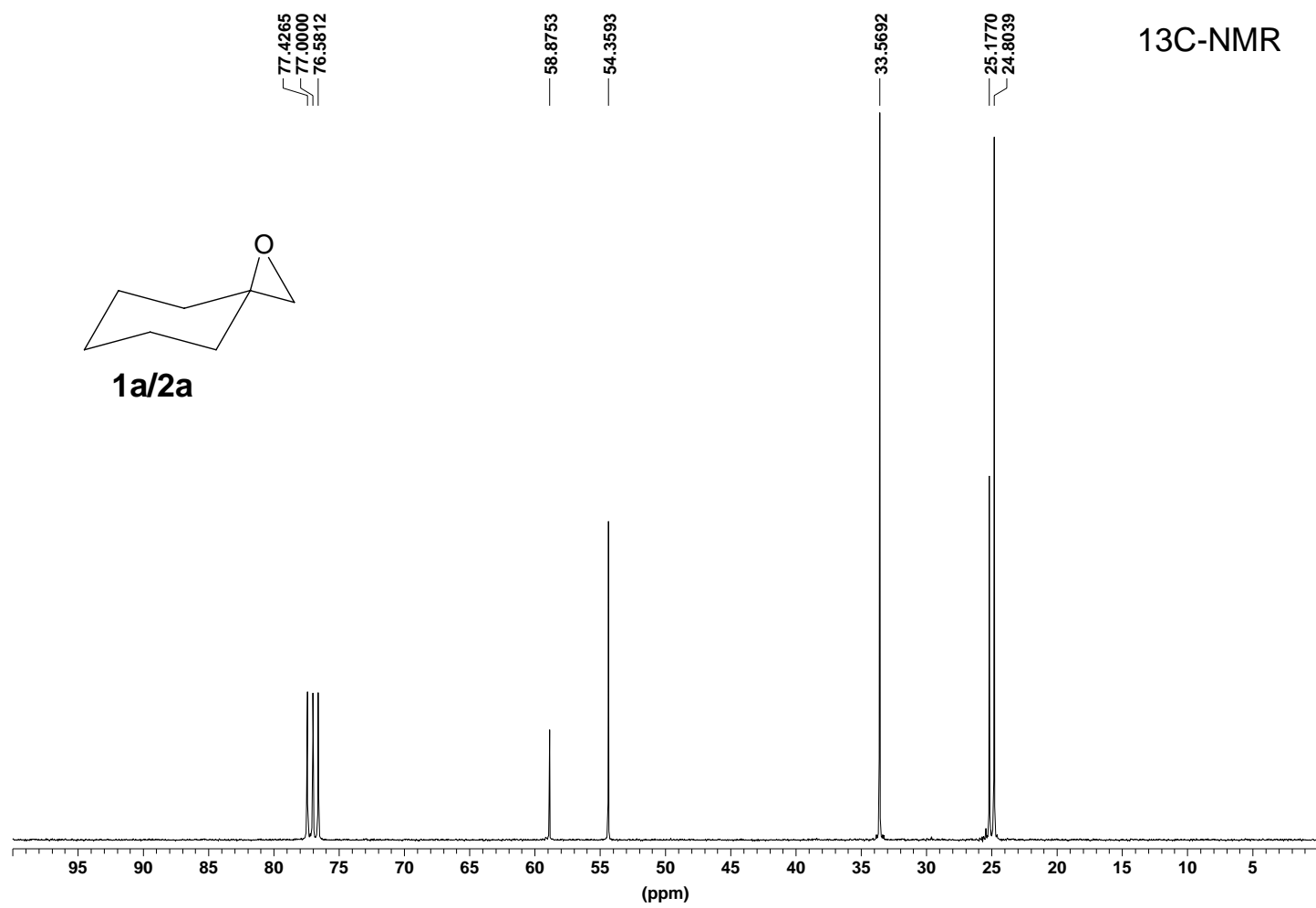
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Maurice C.R. Franssen* and Ernst J.R. Sudhölter

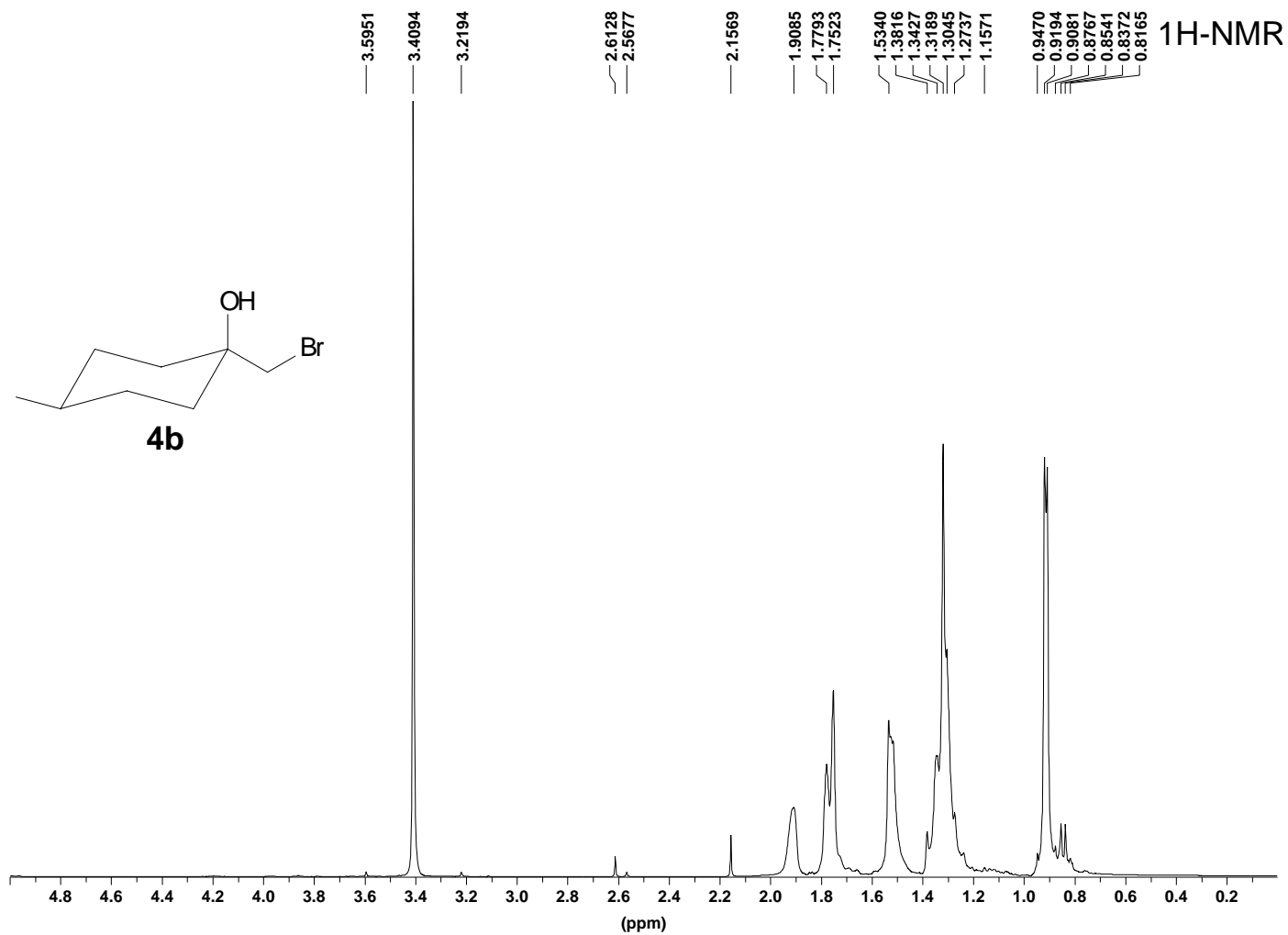
Laboratory of Organic Chemistry, Wageningen University,
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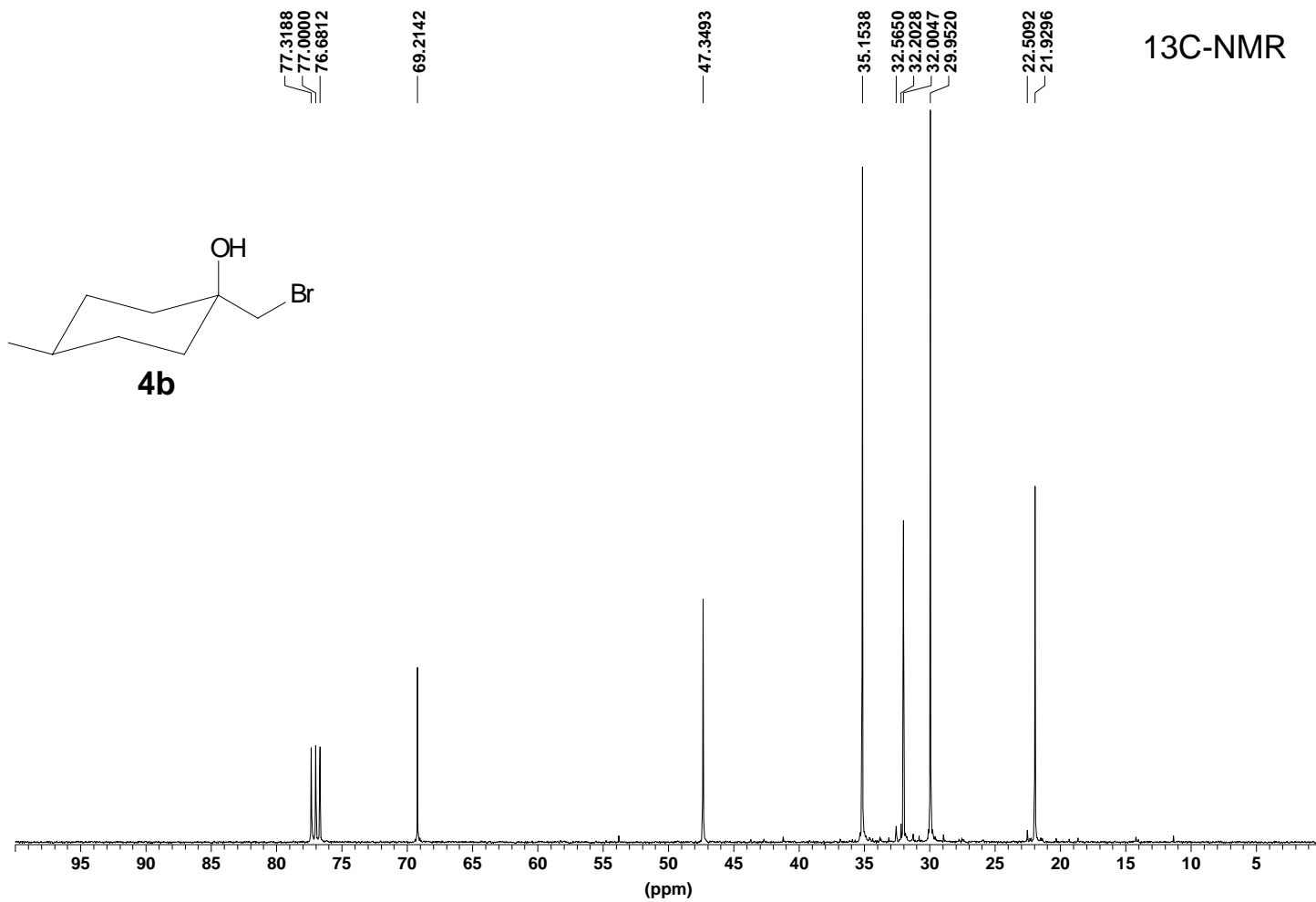
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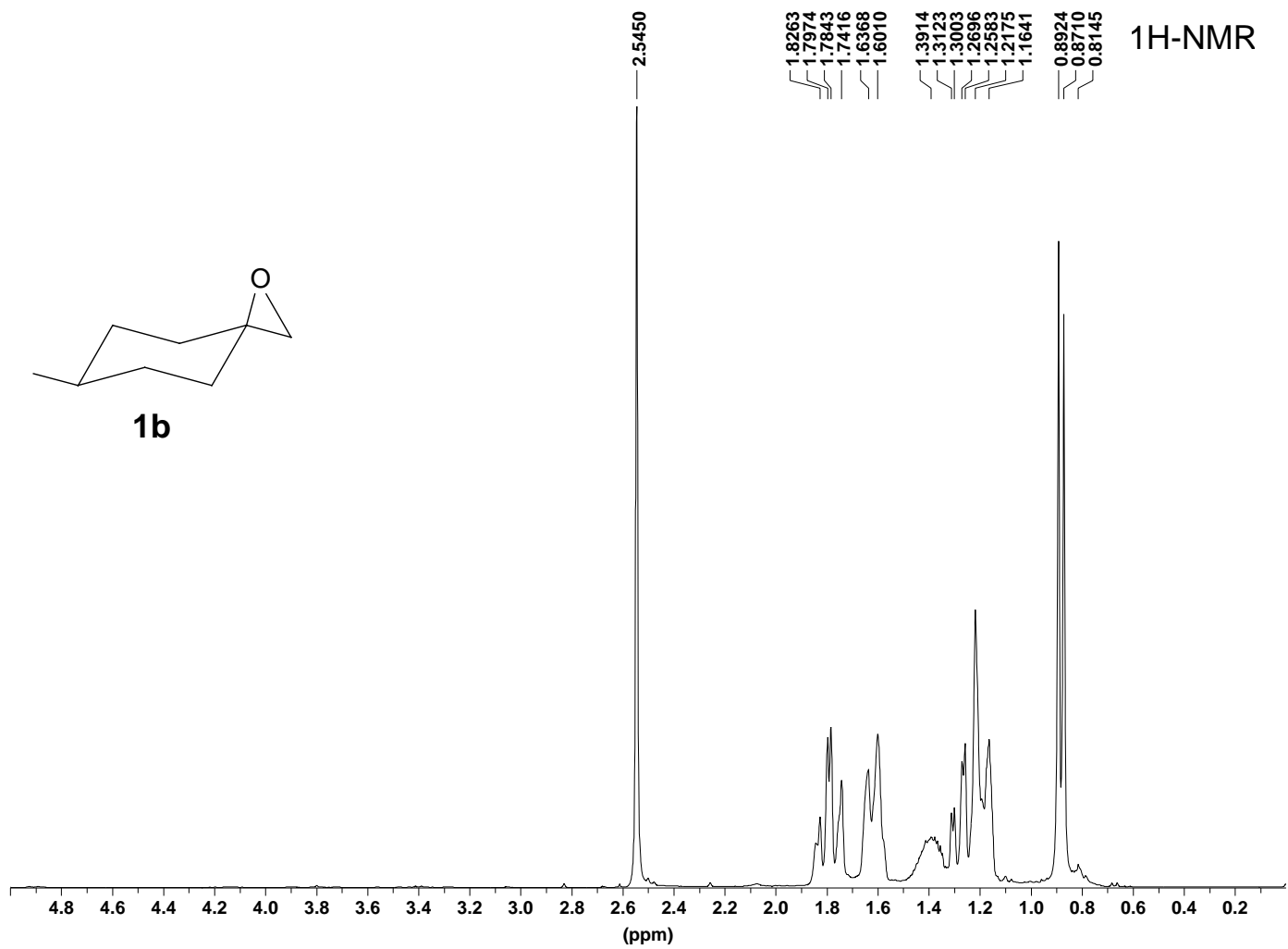
S2	¹ H NMR of substrate 1a/2a
S3	¹³ C NMR of substrate 1a/2a
S4	¹ H NMR of β -bromohydrin 4b
S5	¹³ C NMR of β -bromohydrin 4b
S6	¹ H NMR of substrate 1b
S7	¹³ C NMR of substrate 1b
S8	¹ H NMR of β -bromohydrin 5b
S9	¹³ C NMR of β -bromohydrin 5b
S10	¹ H NMR of substrate 2b
S11	¹³ C NMR of substrate 2b
S12	¹ H NMR of β -bromohydrin 4c
S13	¹³ C NMR of β -bromohydrin 4c
S14	¹ H NMR of substrate 1c
S15	¹³ C NMR of substrate 1c
S16	¹ H NMR of β -bromohydrin 5c
S17	¹³ C NMR of β -bromohydrin 5c
S18	¹ H NMR of substrate 2c
S19	¹³ C NMR of substrate 2c
S20	¹ H NMR of ketone <i>cis</i> - 3d
S21	¹³ C NMR of ketone <i>cis</i> - 3d
S22	¹ H NMR of β -bromohydrin 4d
S23	¹³ C NMR of β -bromohydrin 4d
S24	¹ H NMR of substrate 1d
S25	¹³ C NMR of substrate 1d
S26	¹ H NMR of β -bromohydrin 5d
S27	¹³ C NMR of β -bromohydrin 5d
S28	¹ H NMR of substrate 2d
S29	¹³ C NMR of substrate 2d
S30	¹ H NMR of β -bromohydrin 4e
S31	¹³ C NMR of β -bromohydrin 4e
S32	¹ H NMR of substrate 1e
S33	¹³ C NMR of substrate 1e
S34	¹³ C NMR of substrate 2e
S35	Table S1, conditions GC analysis

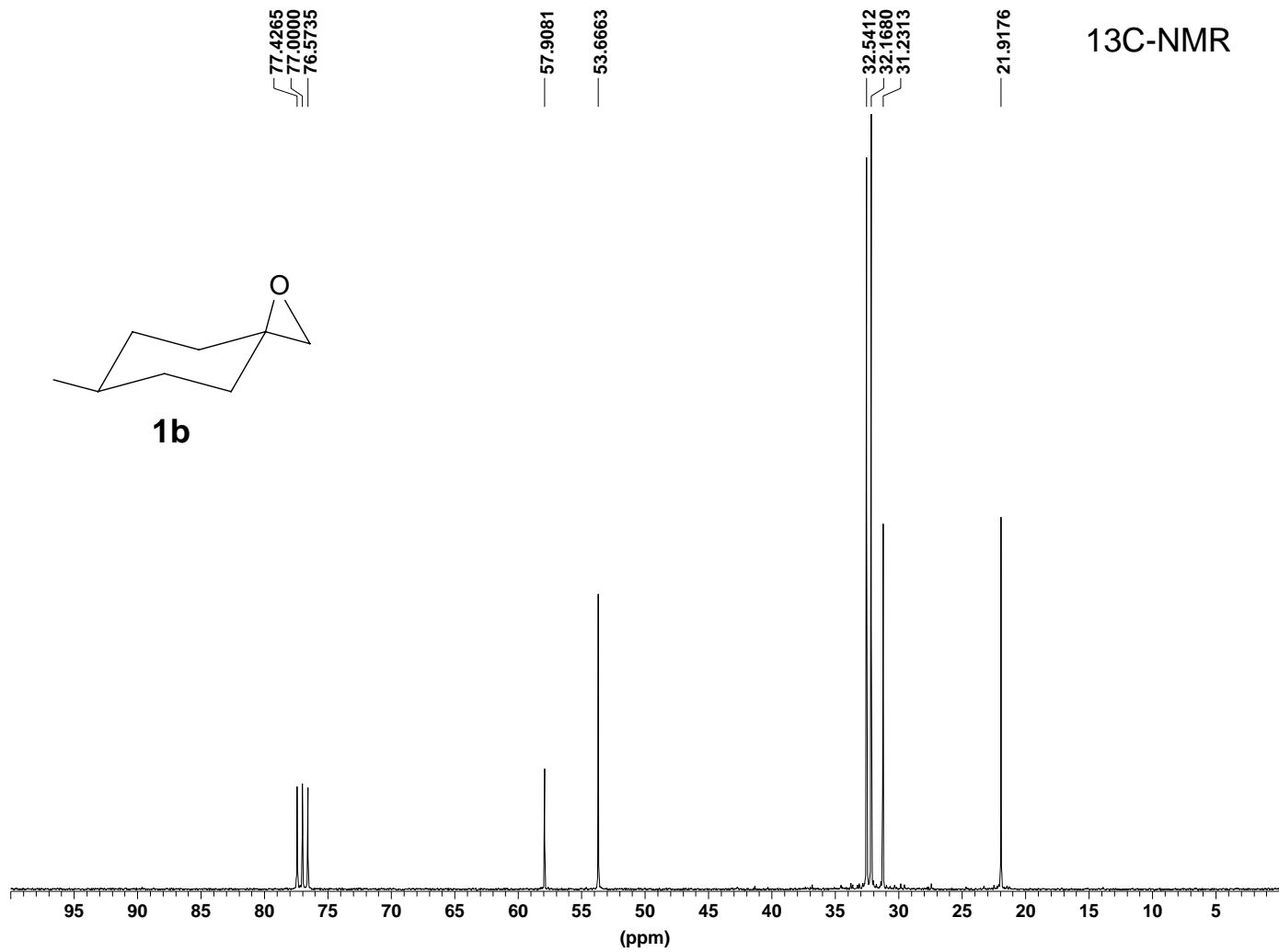


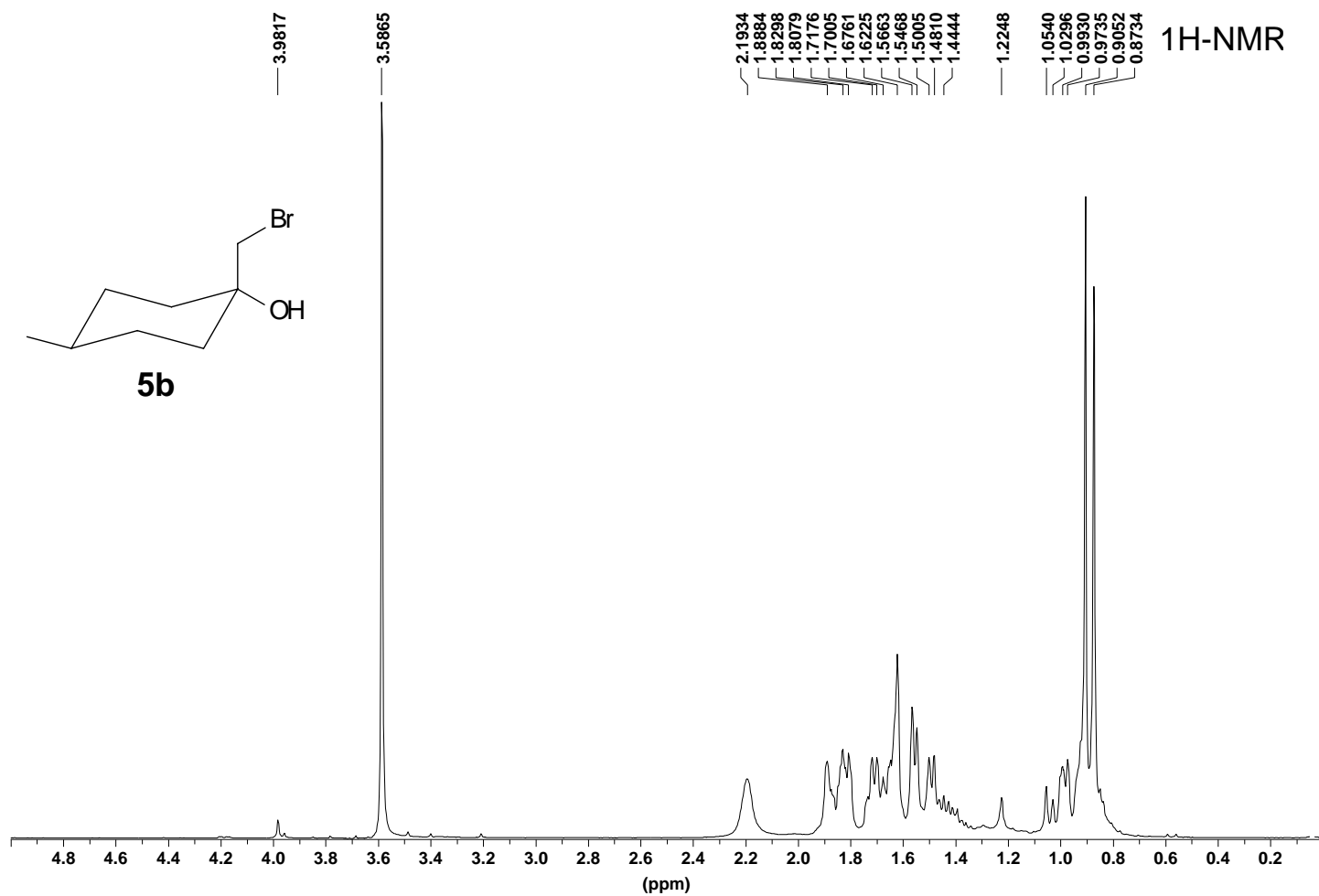


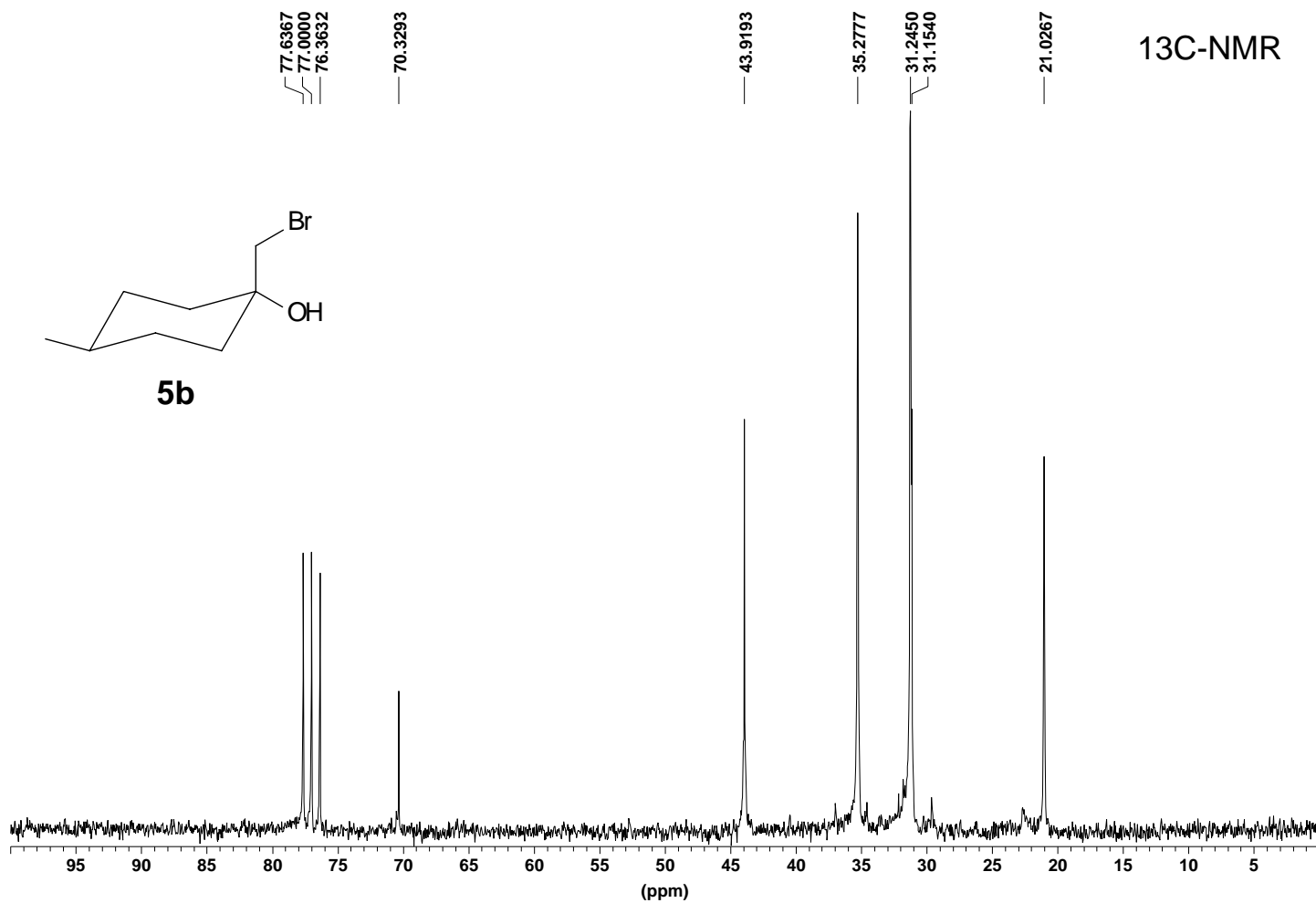


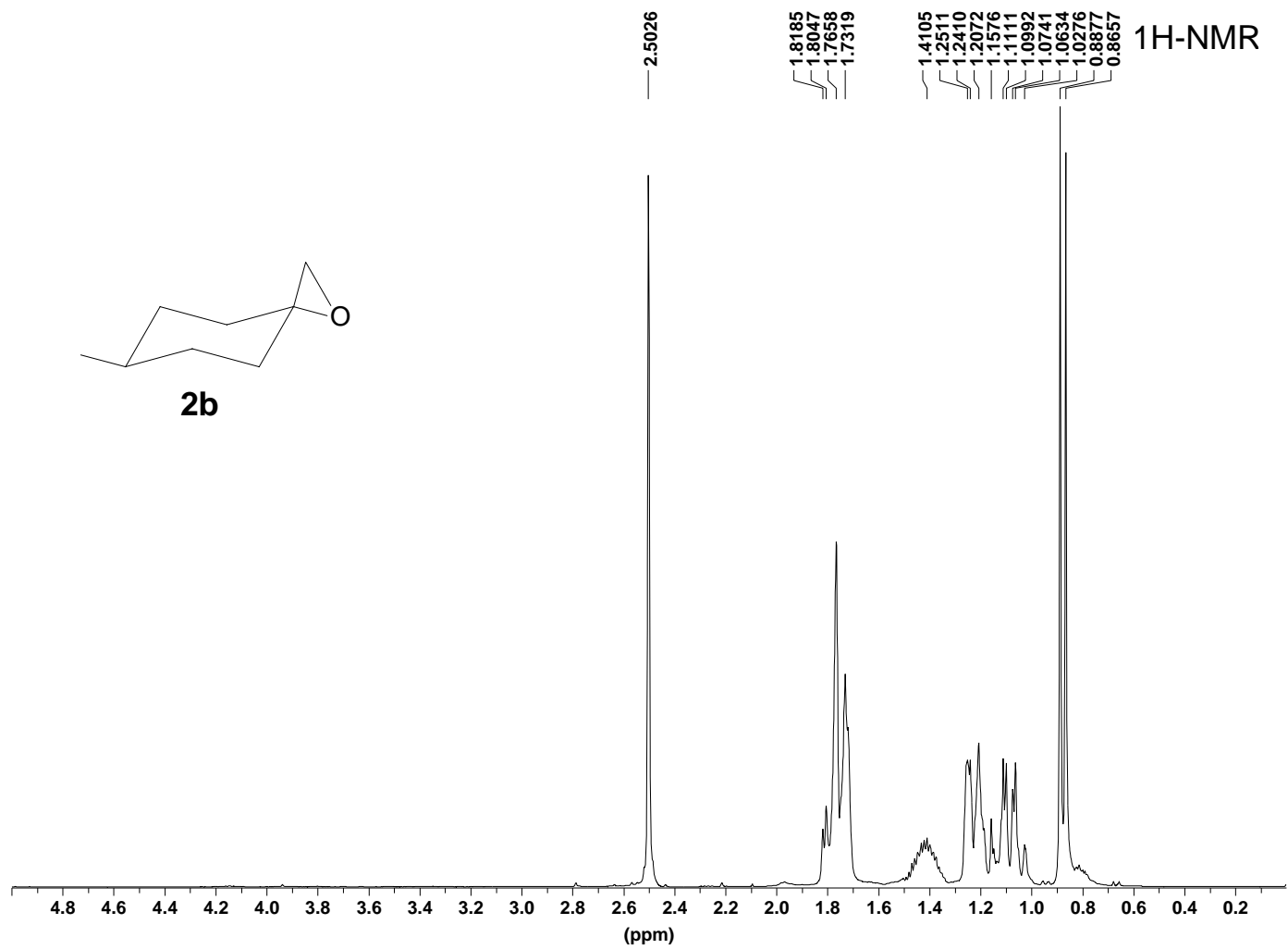


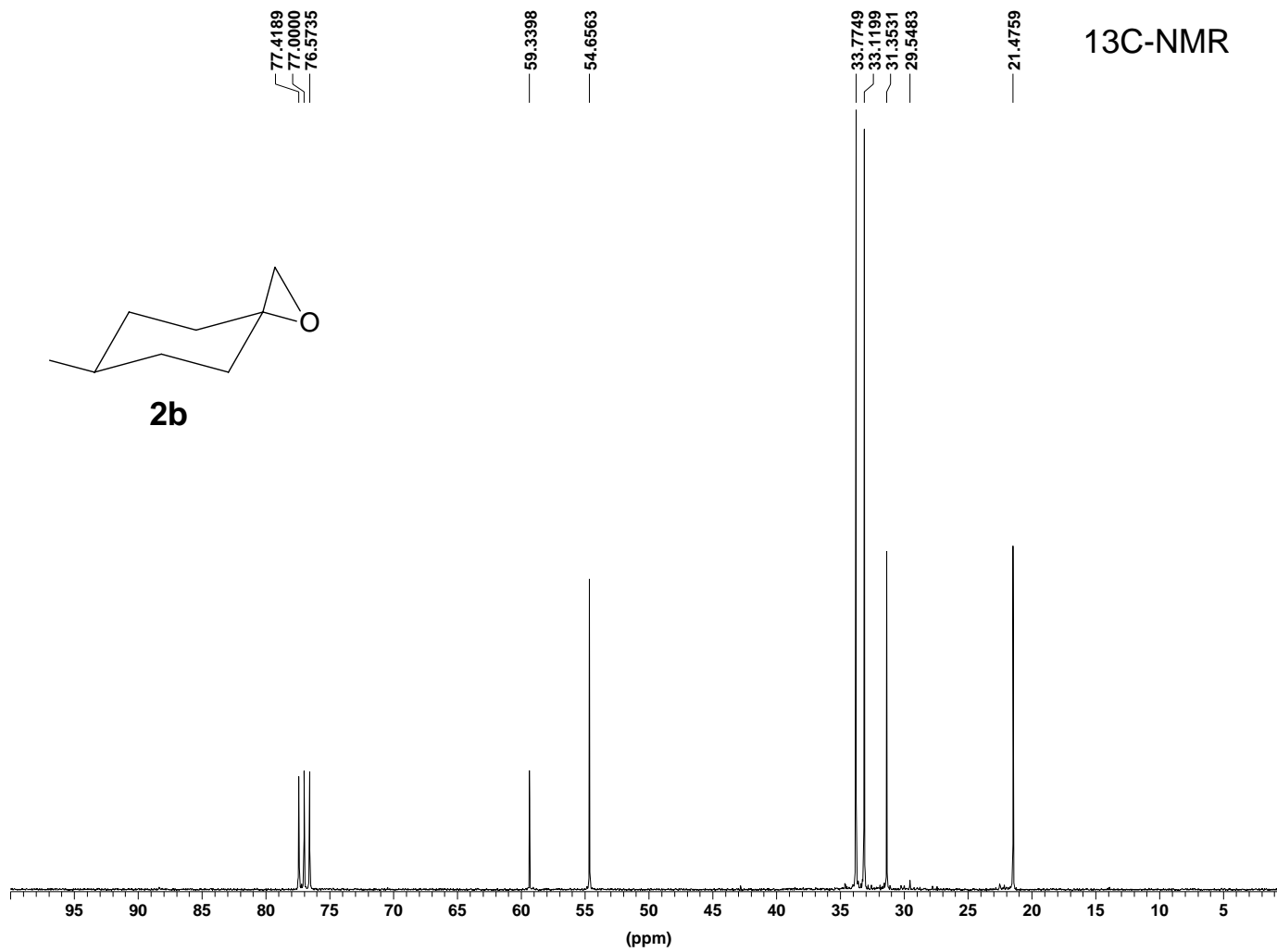


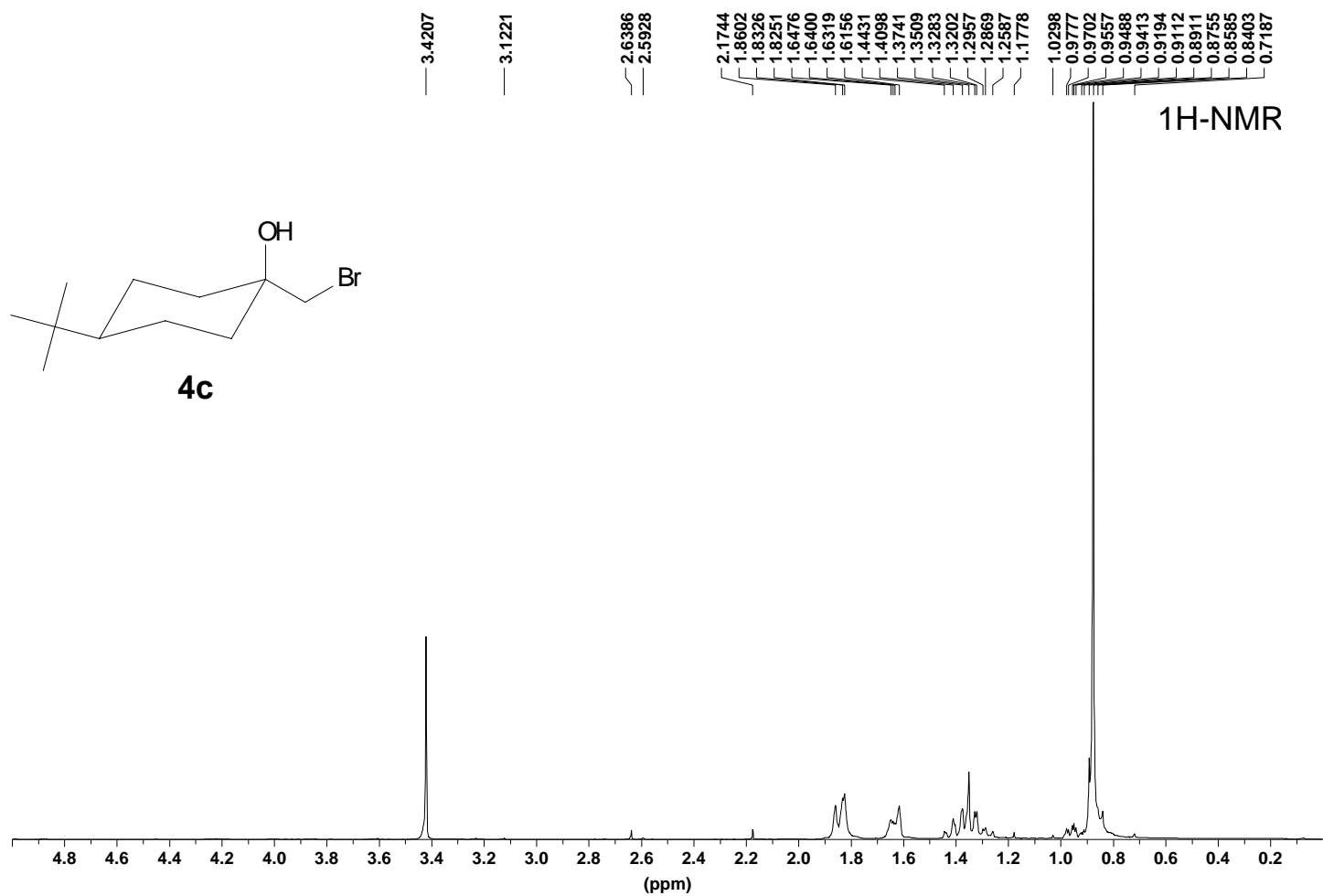


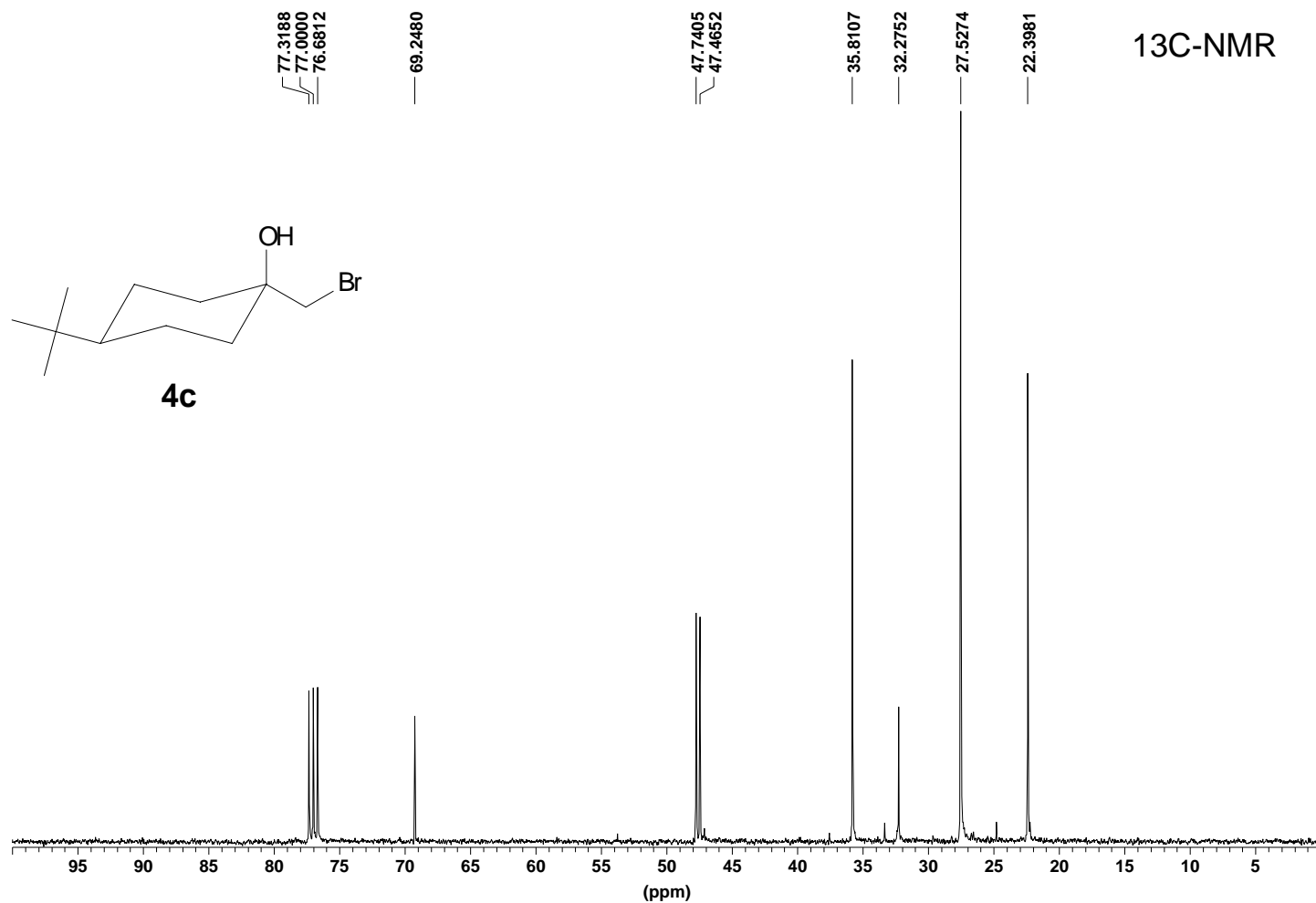


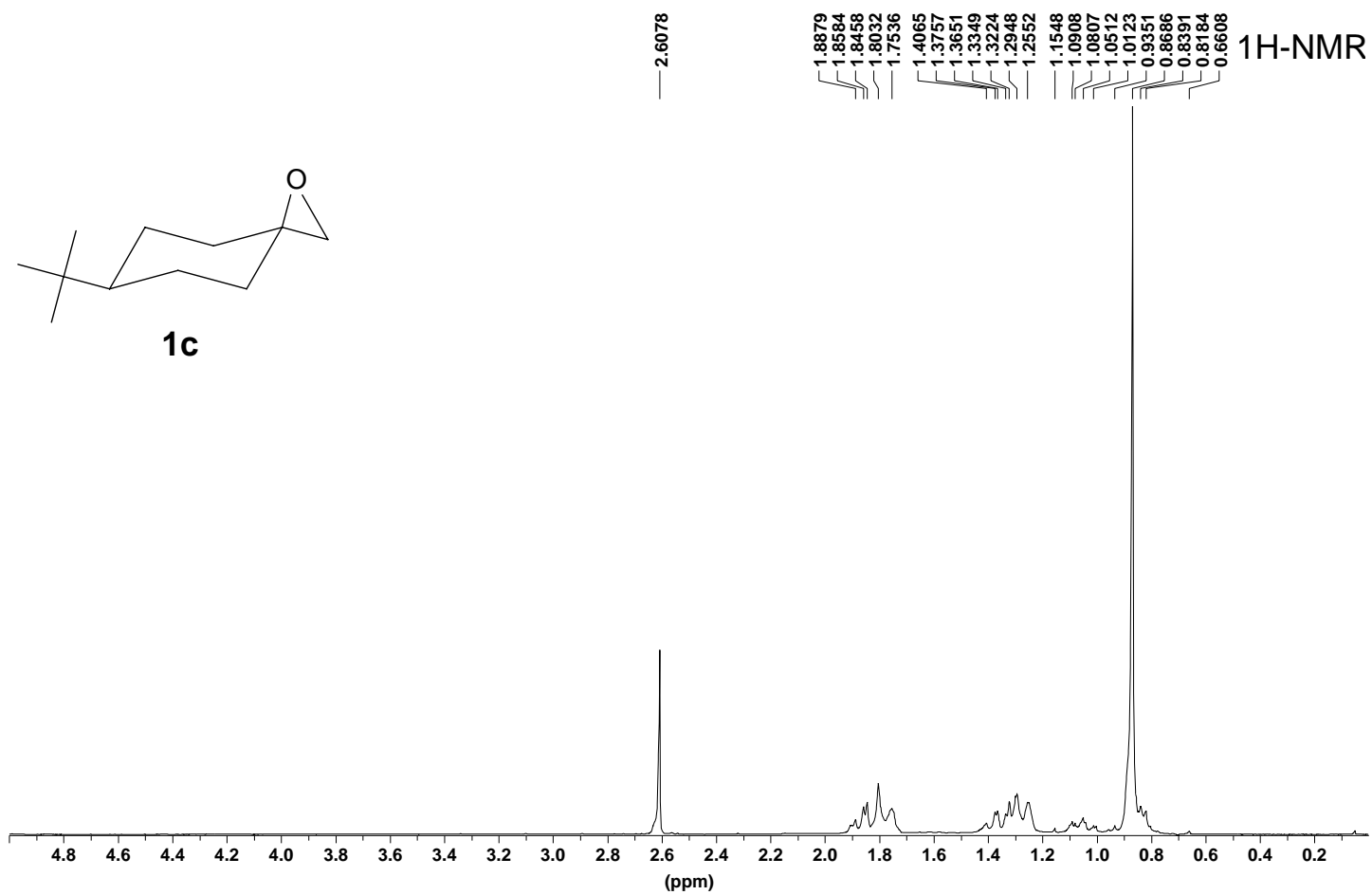


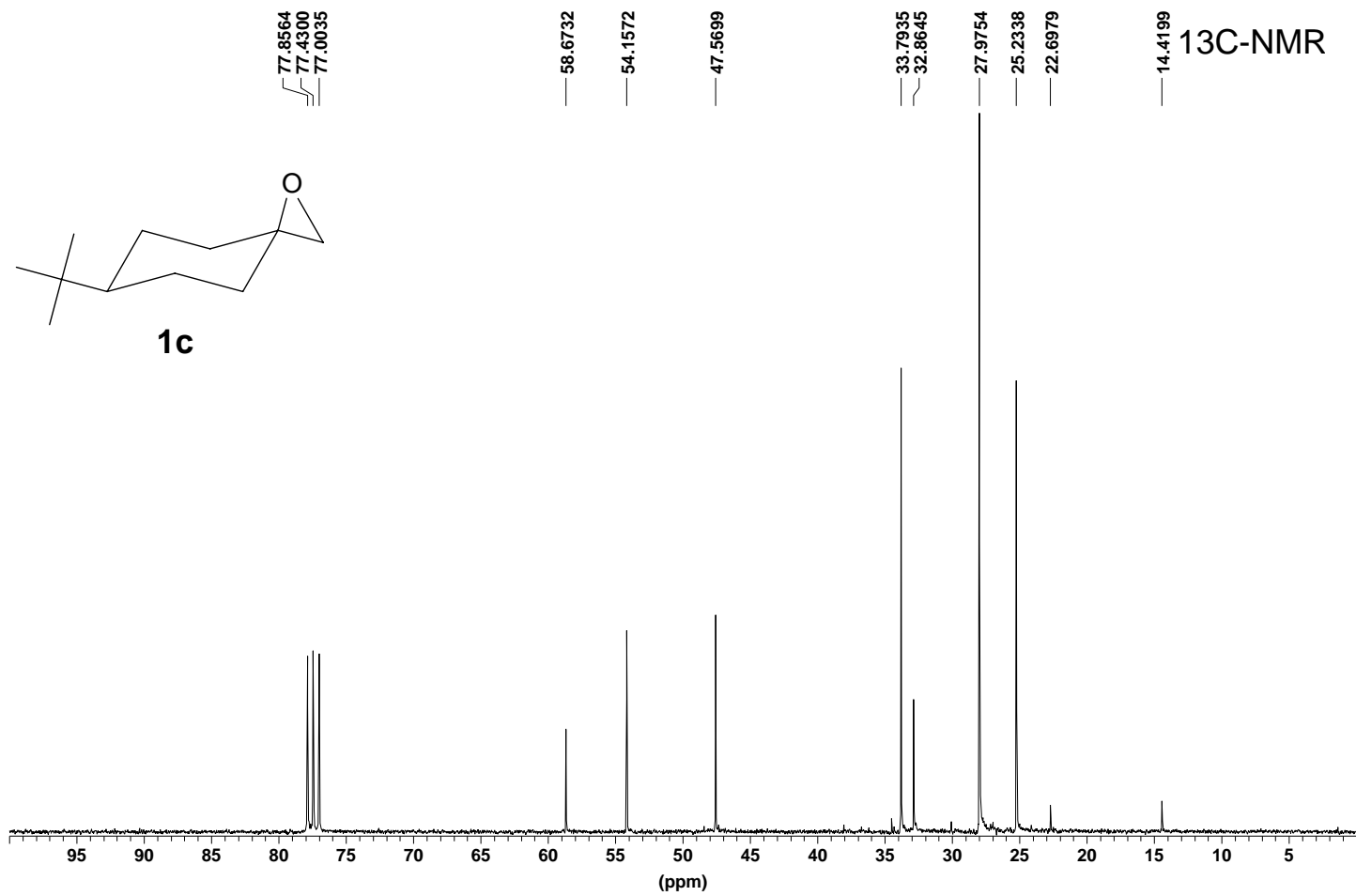


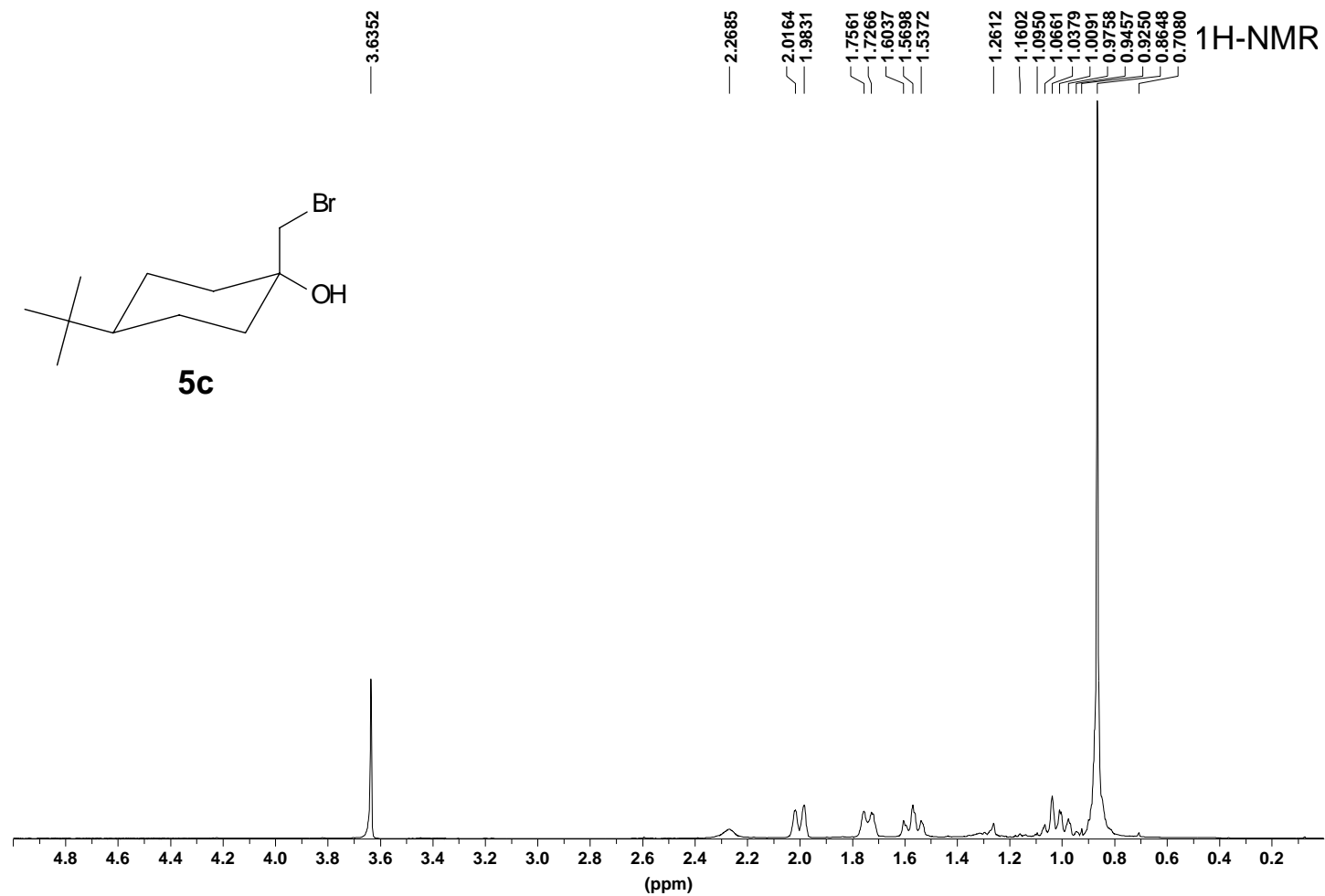


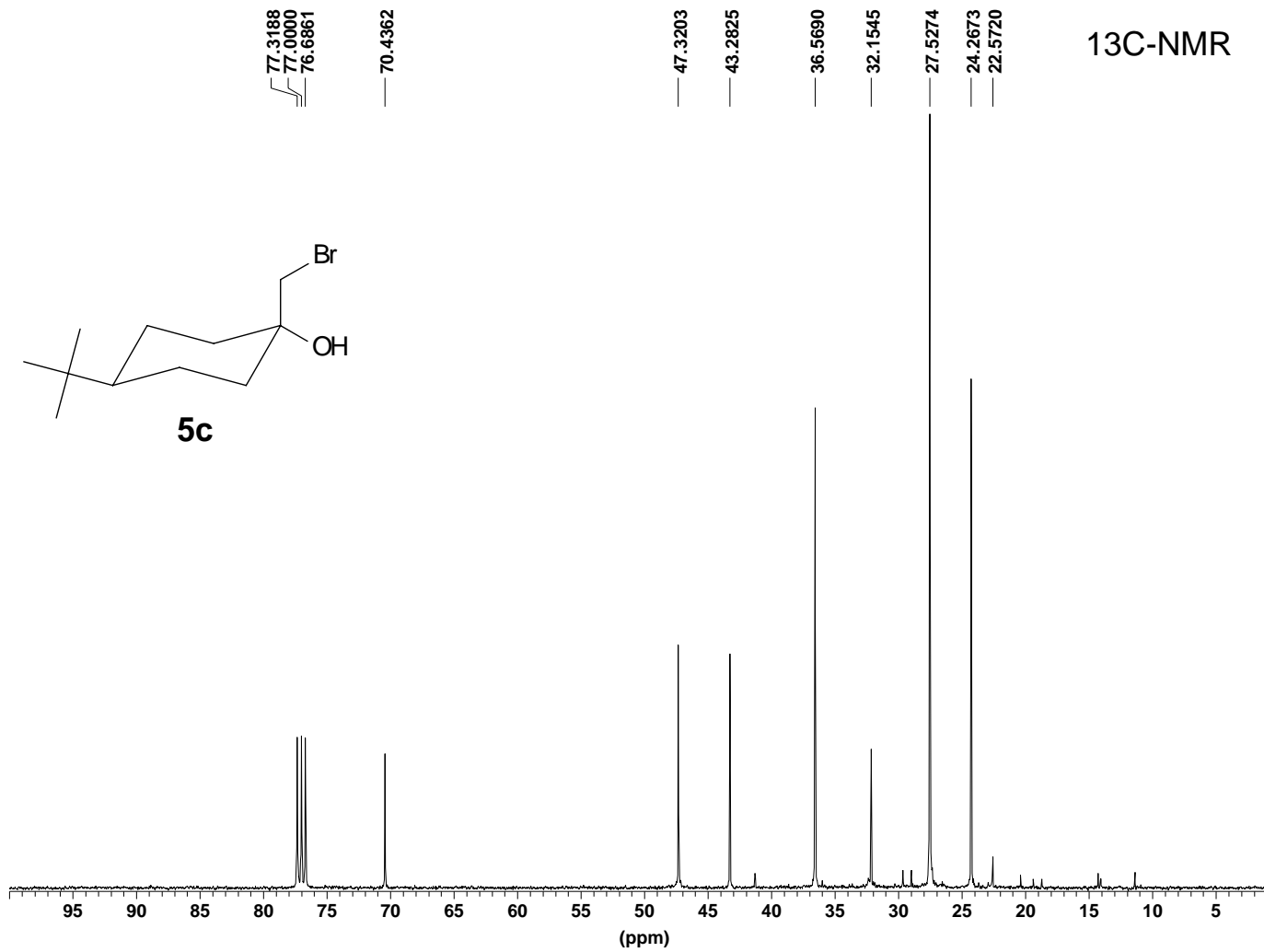


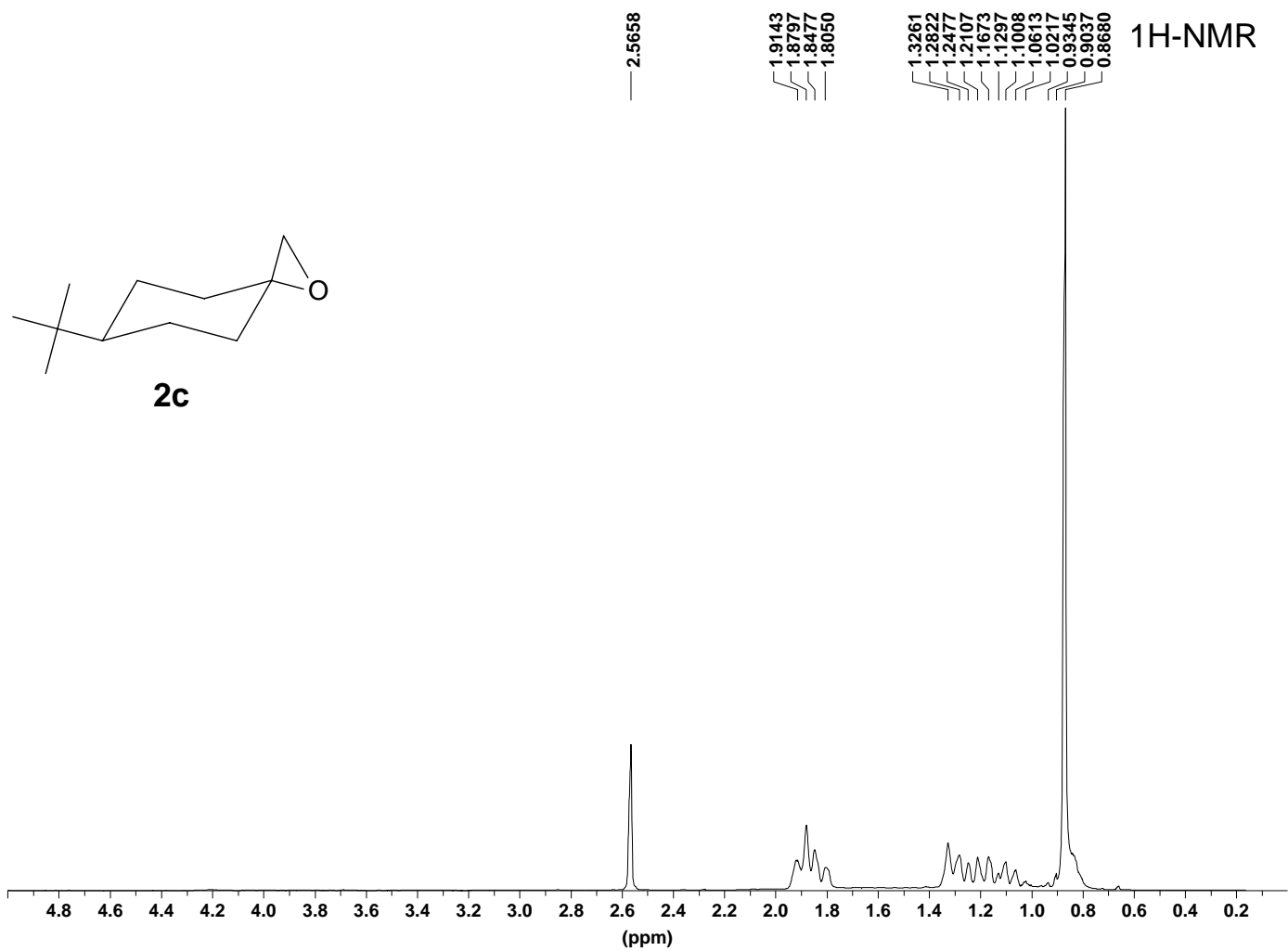


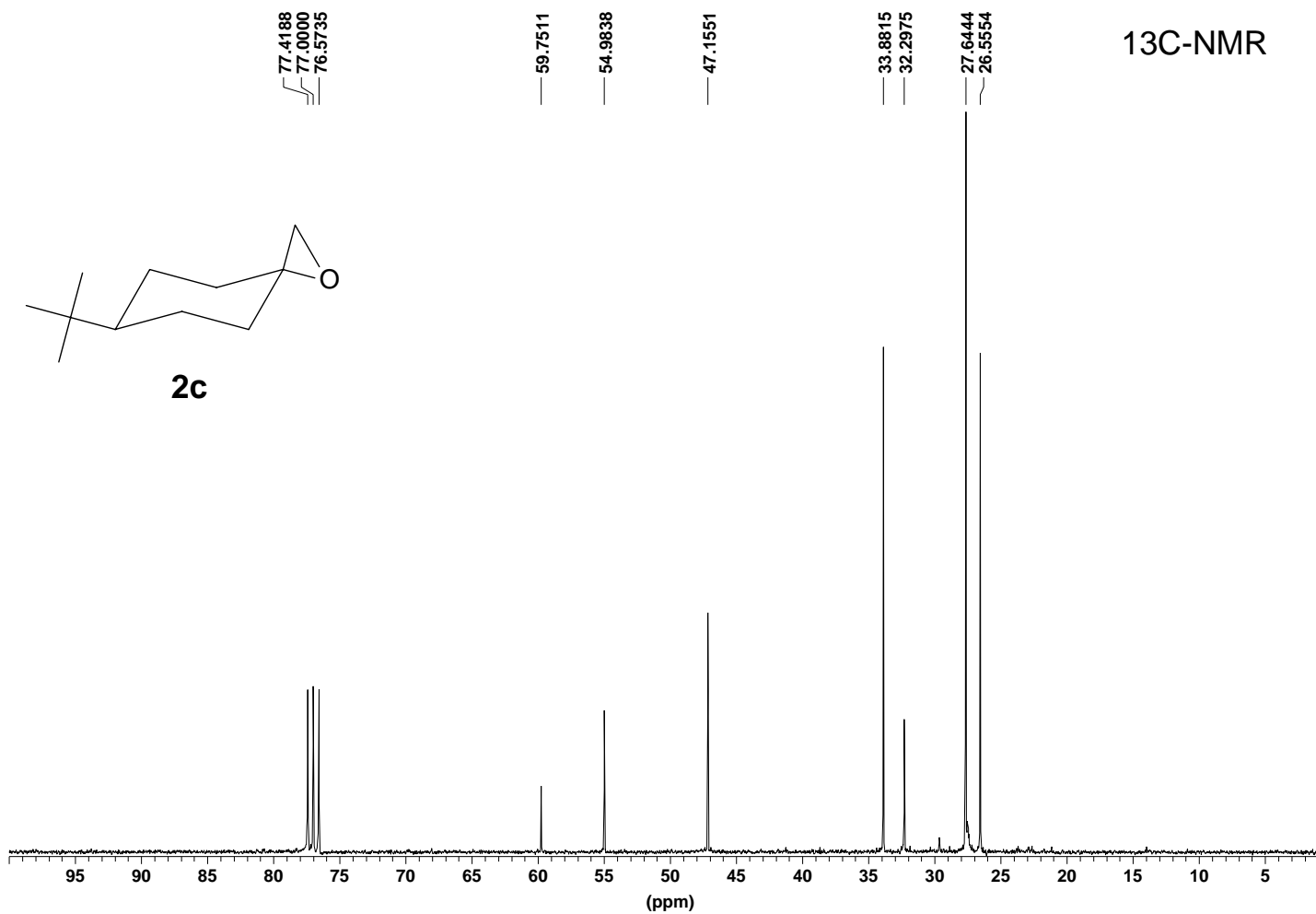


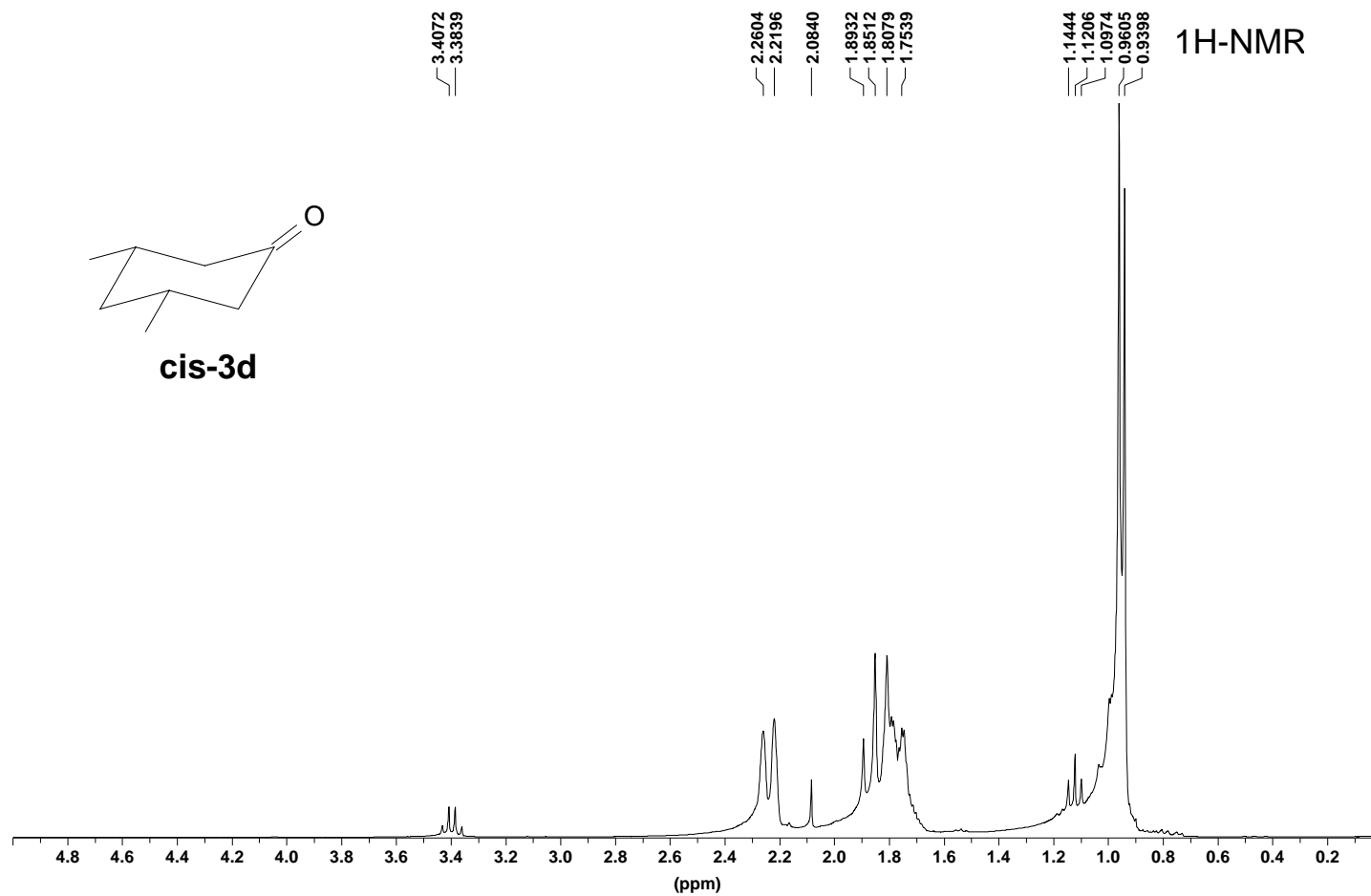


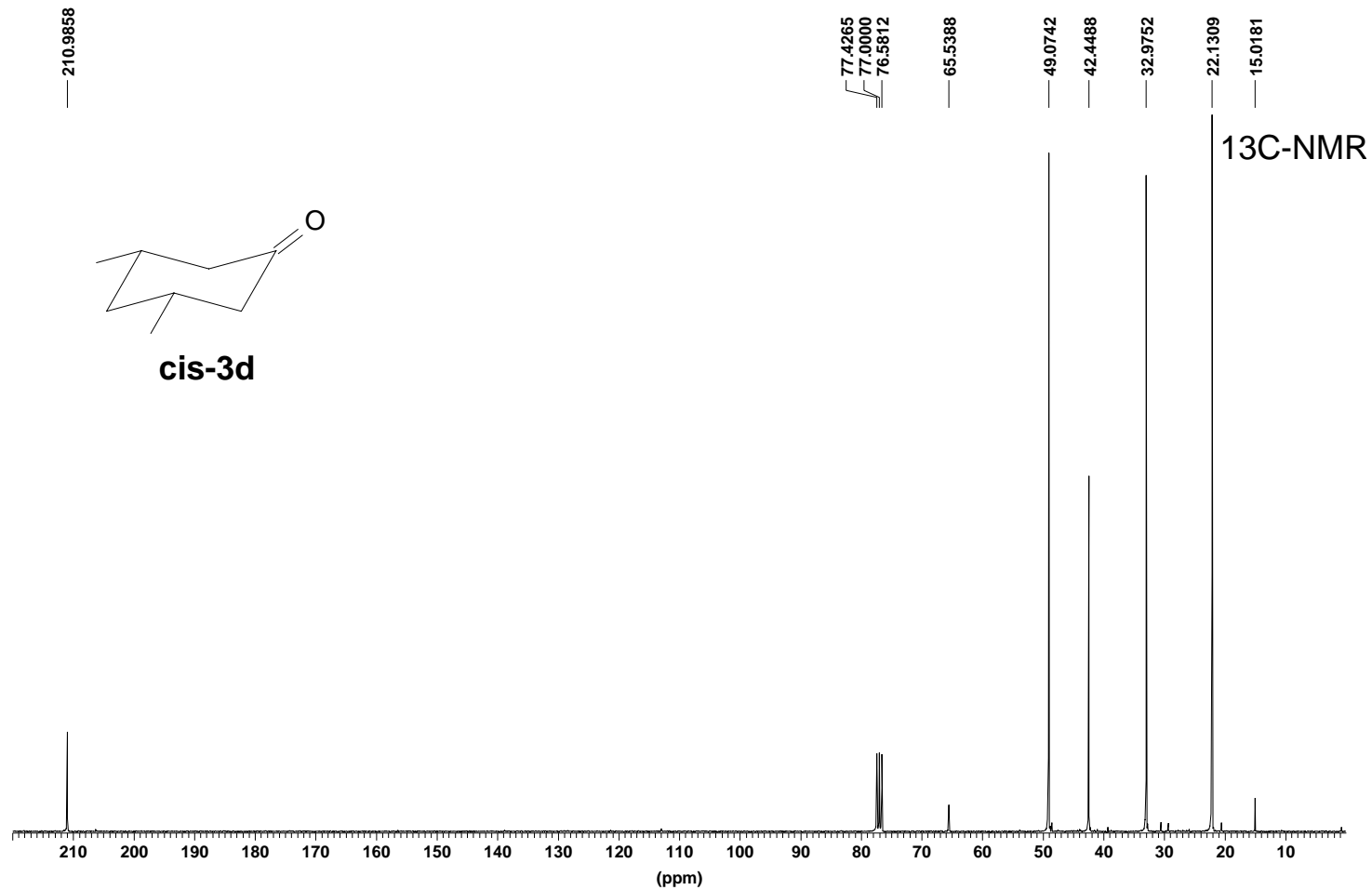


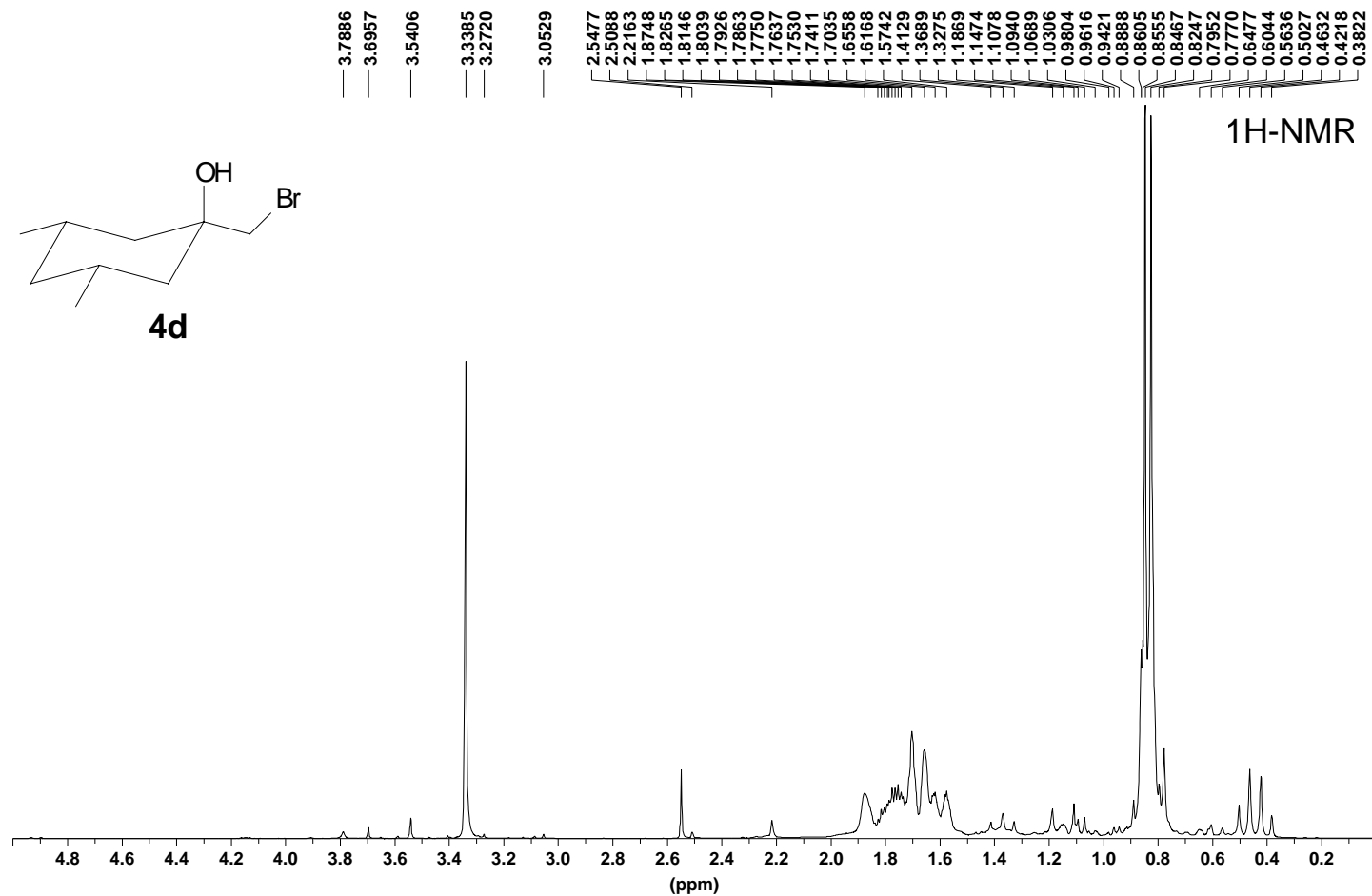


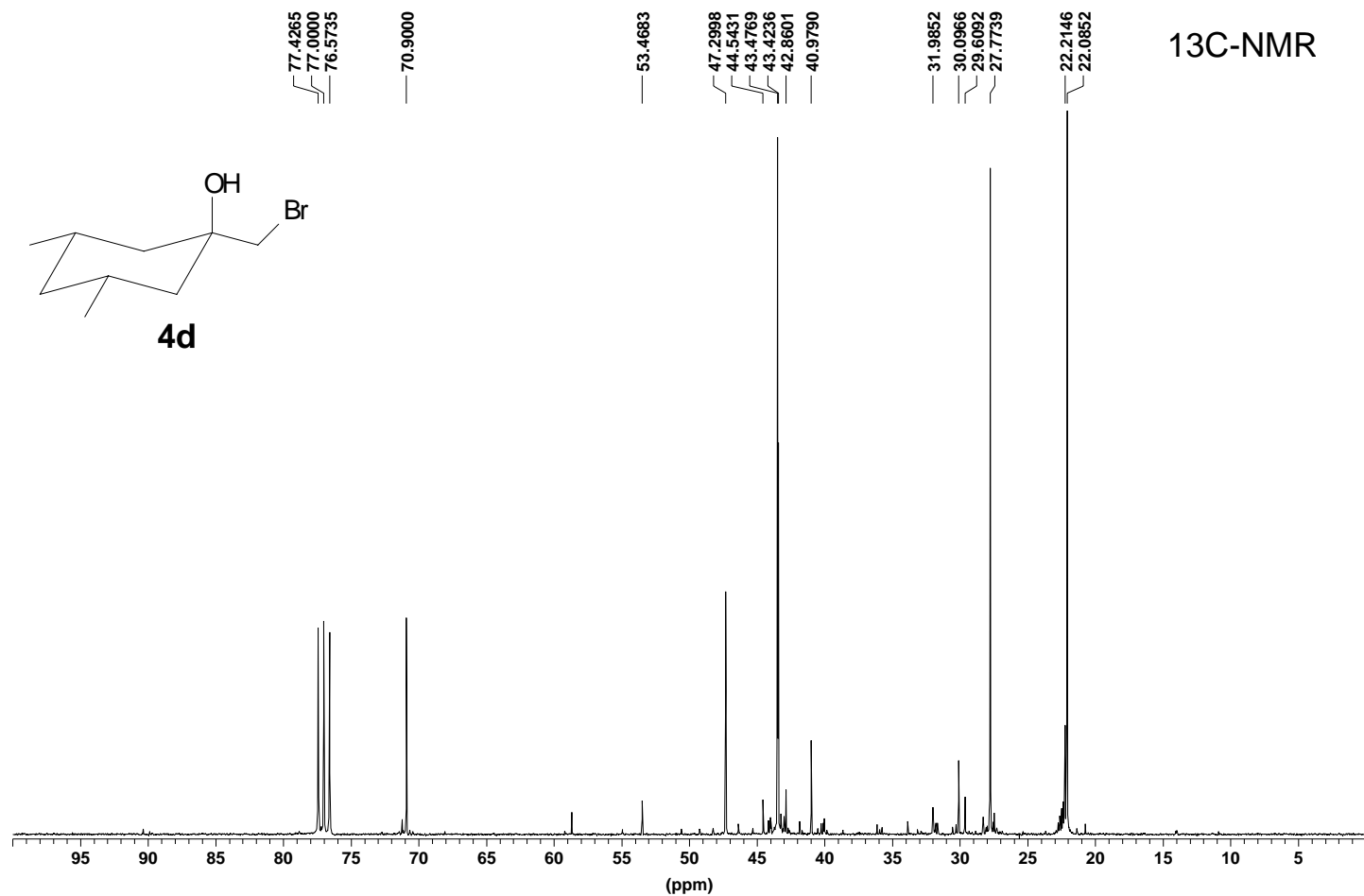


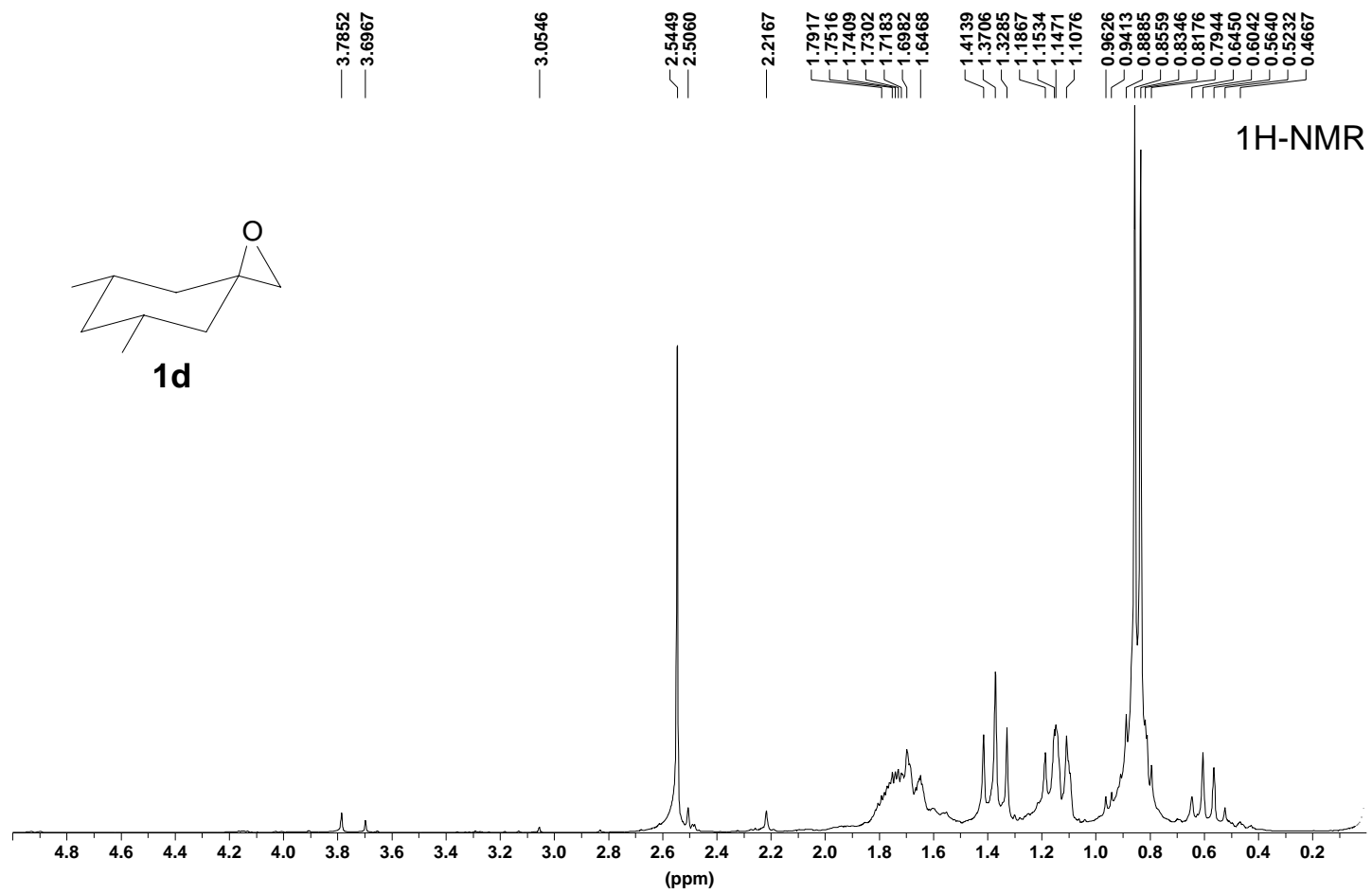


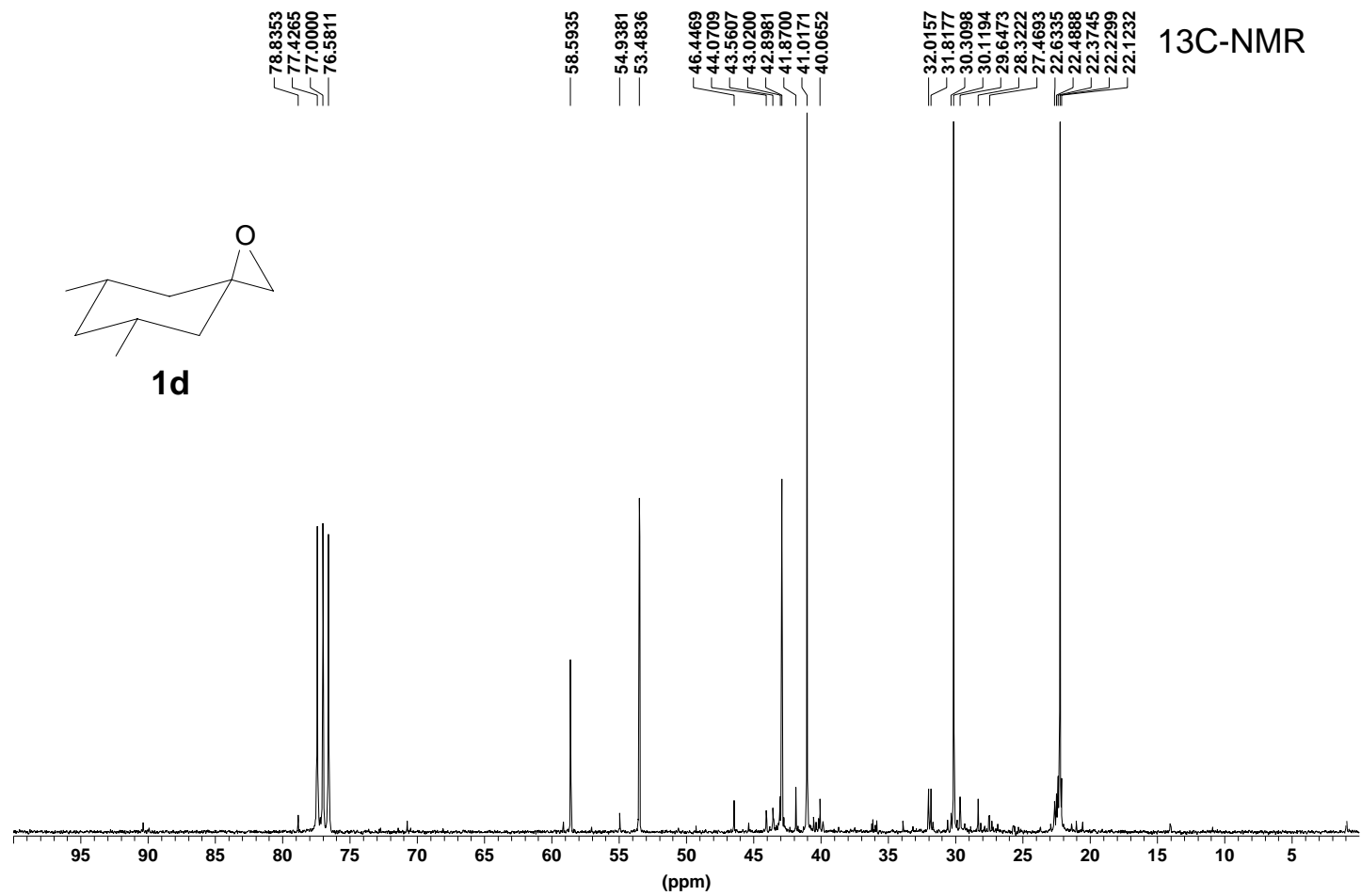


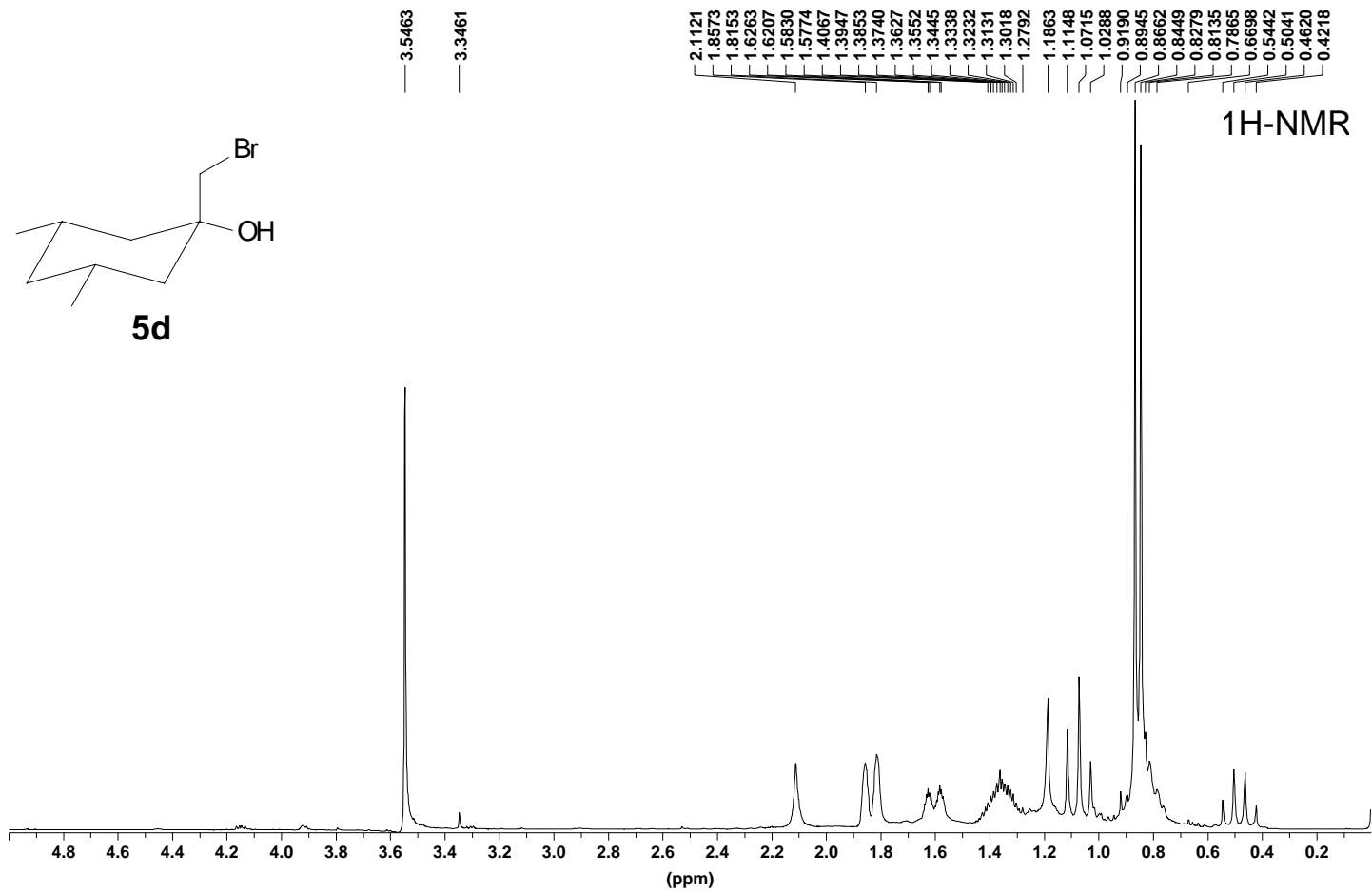


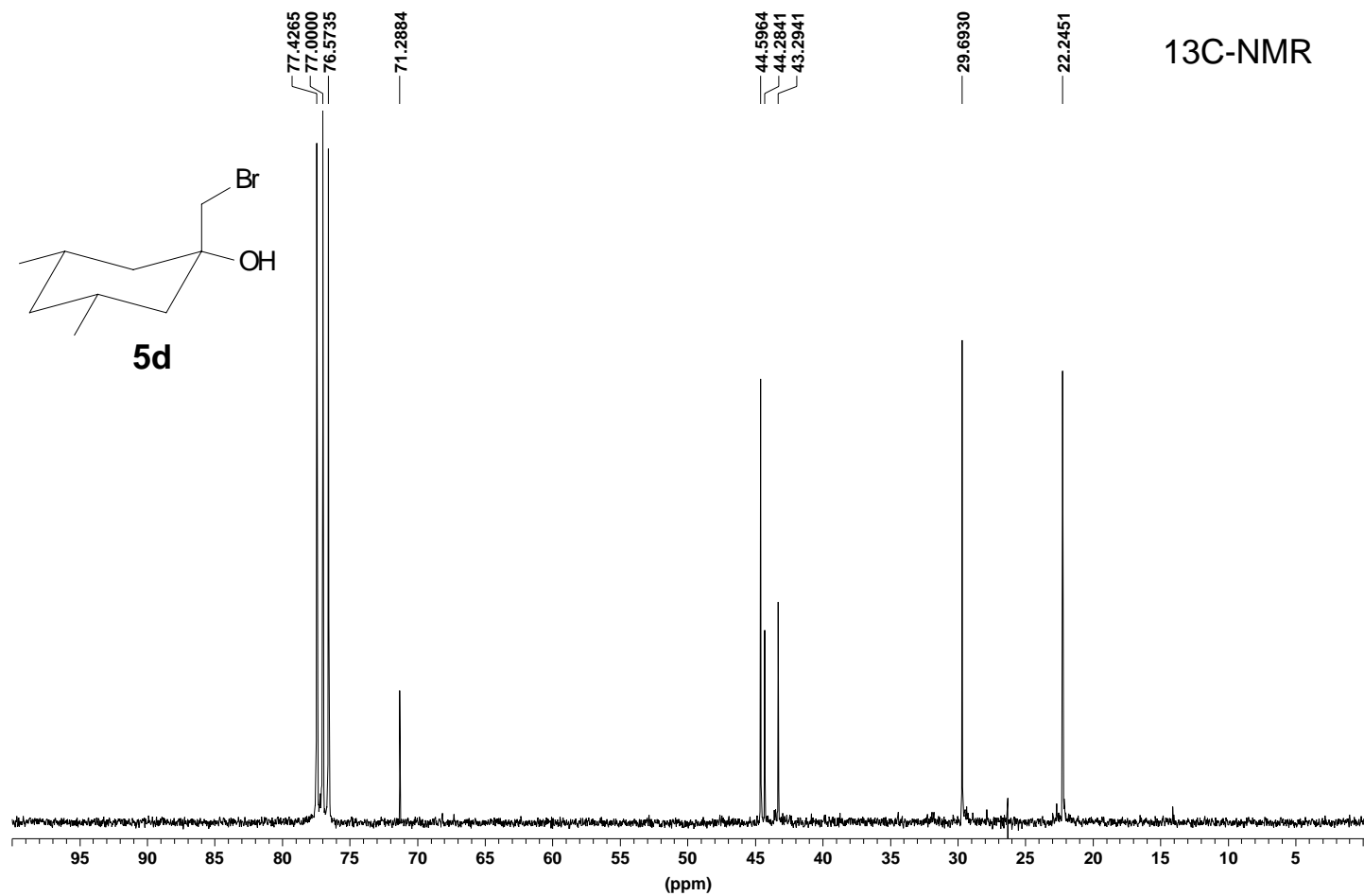


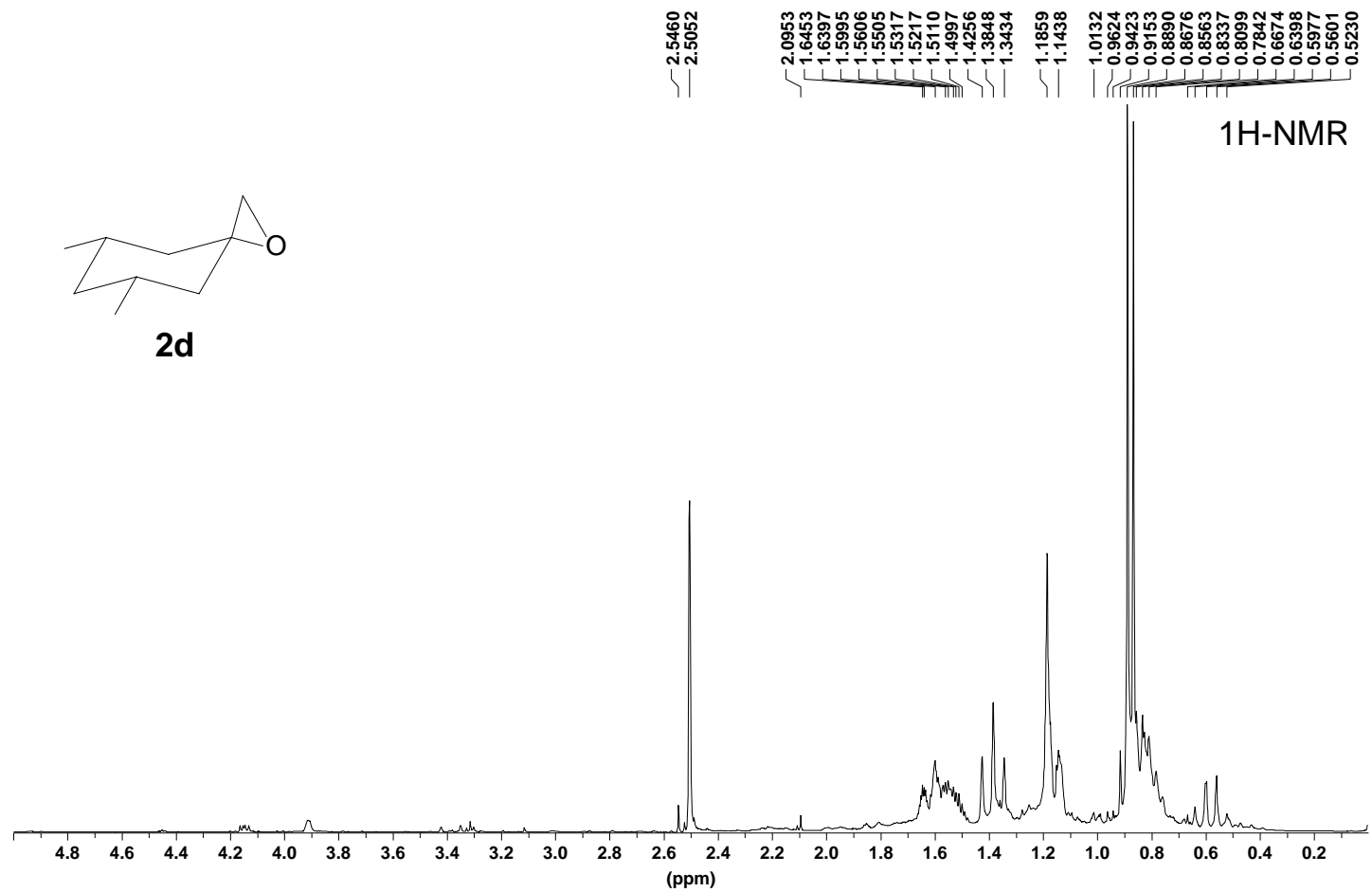


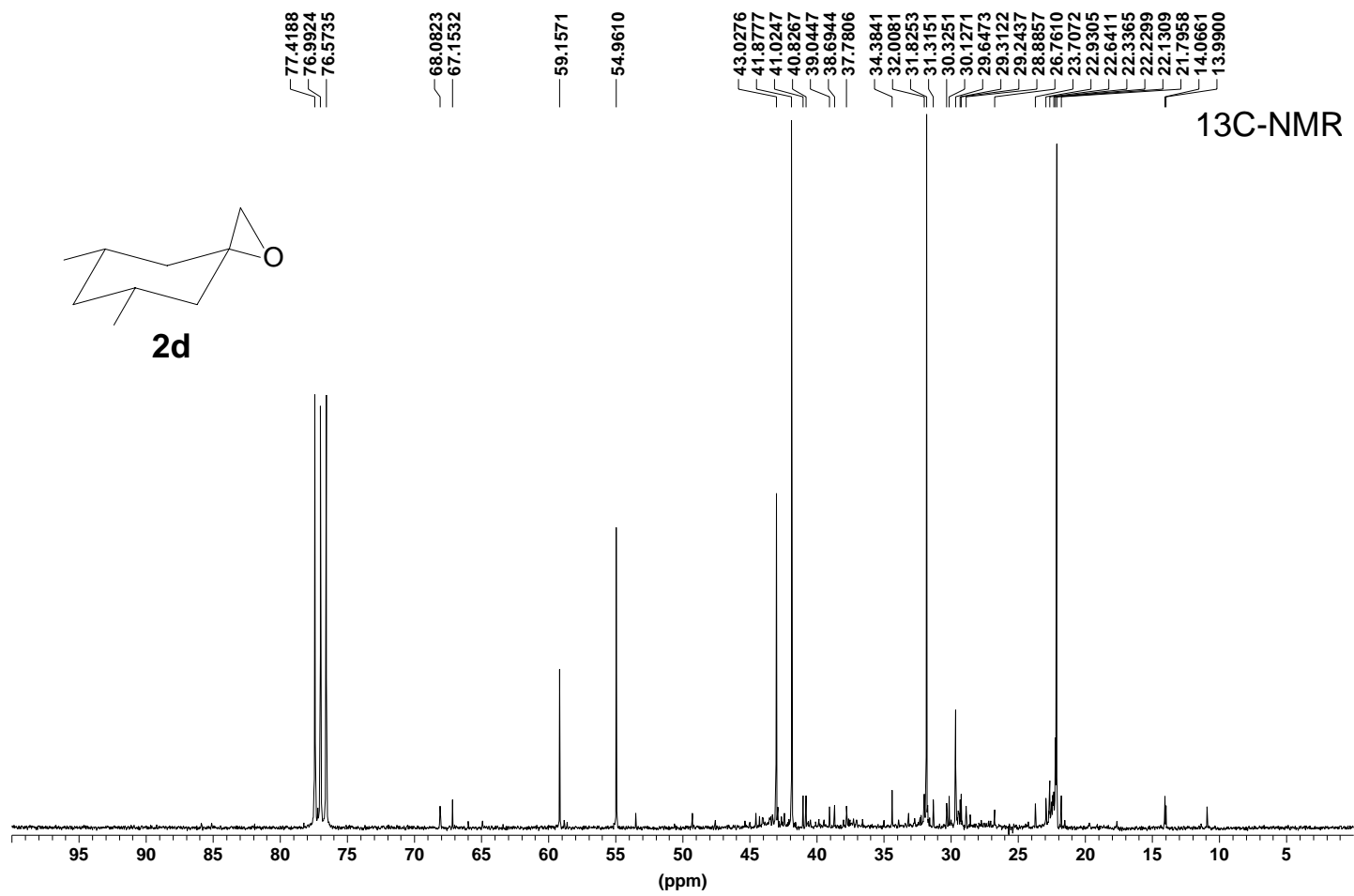


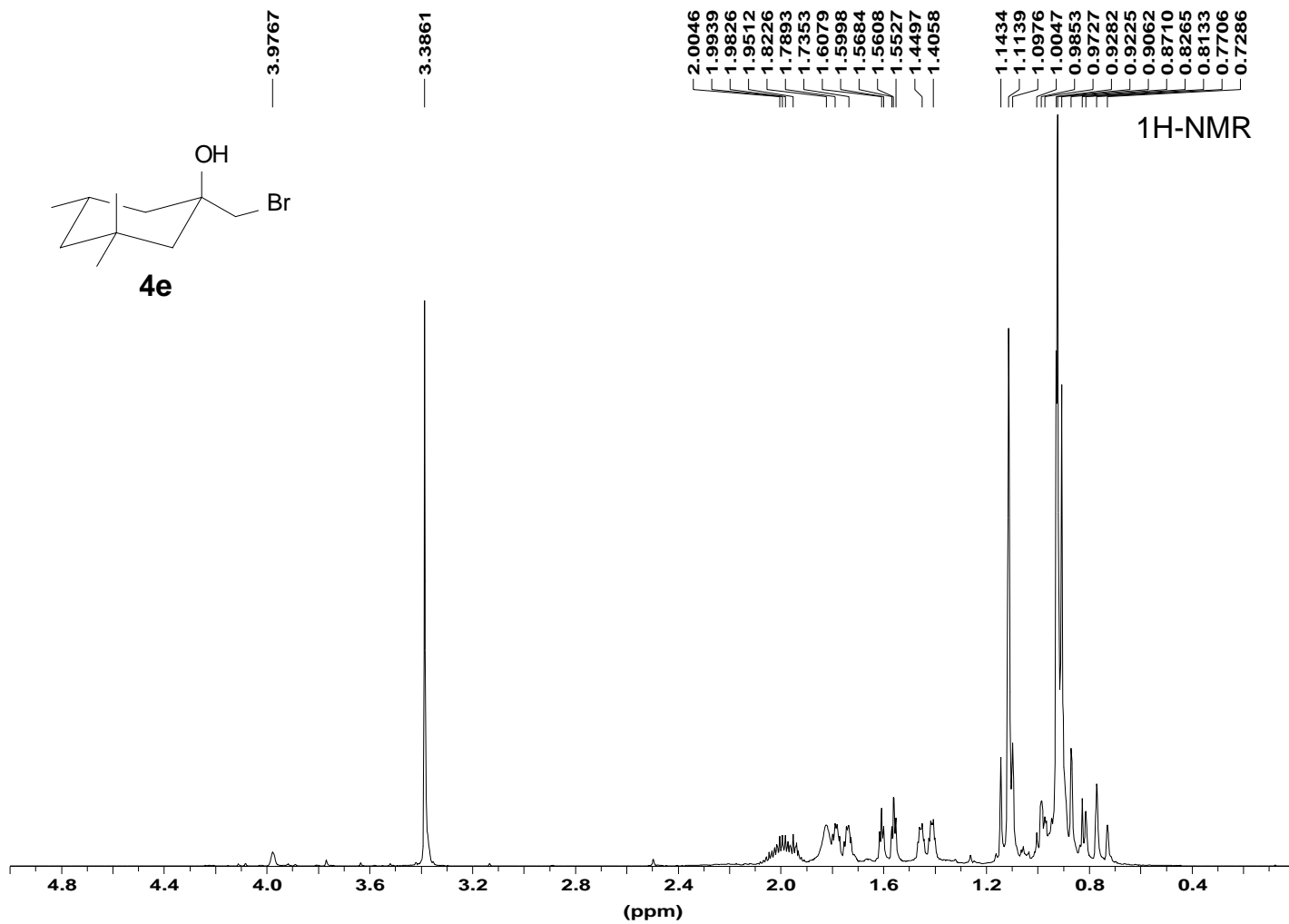


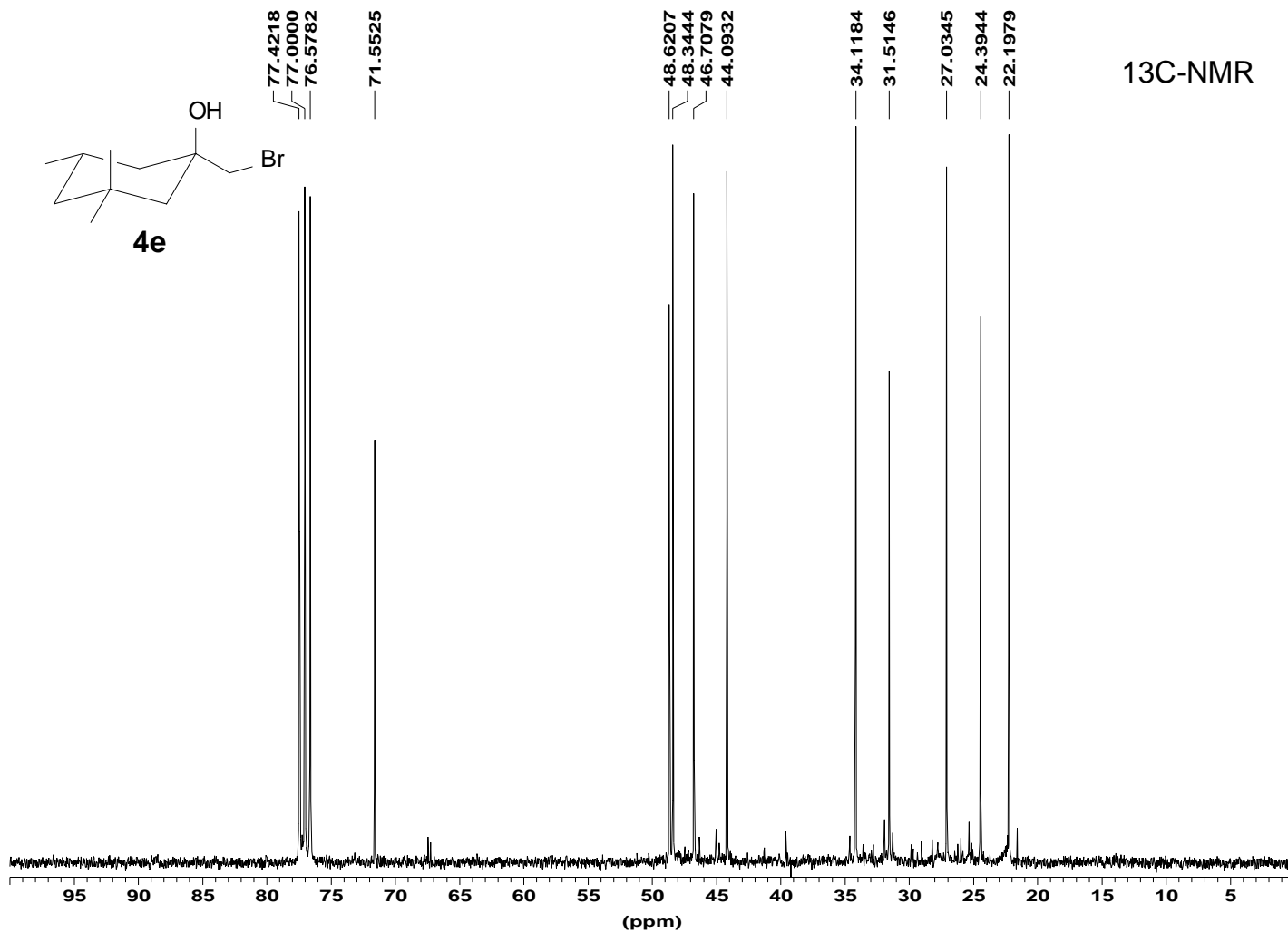


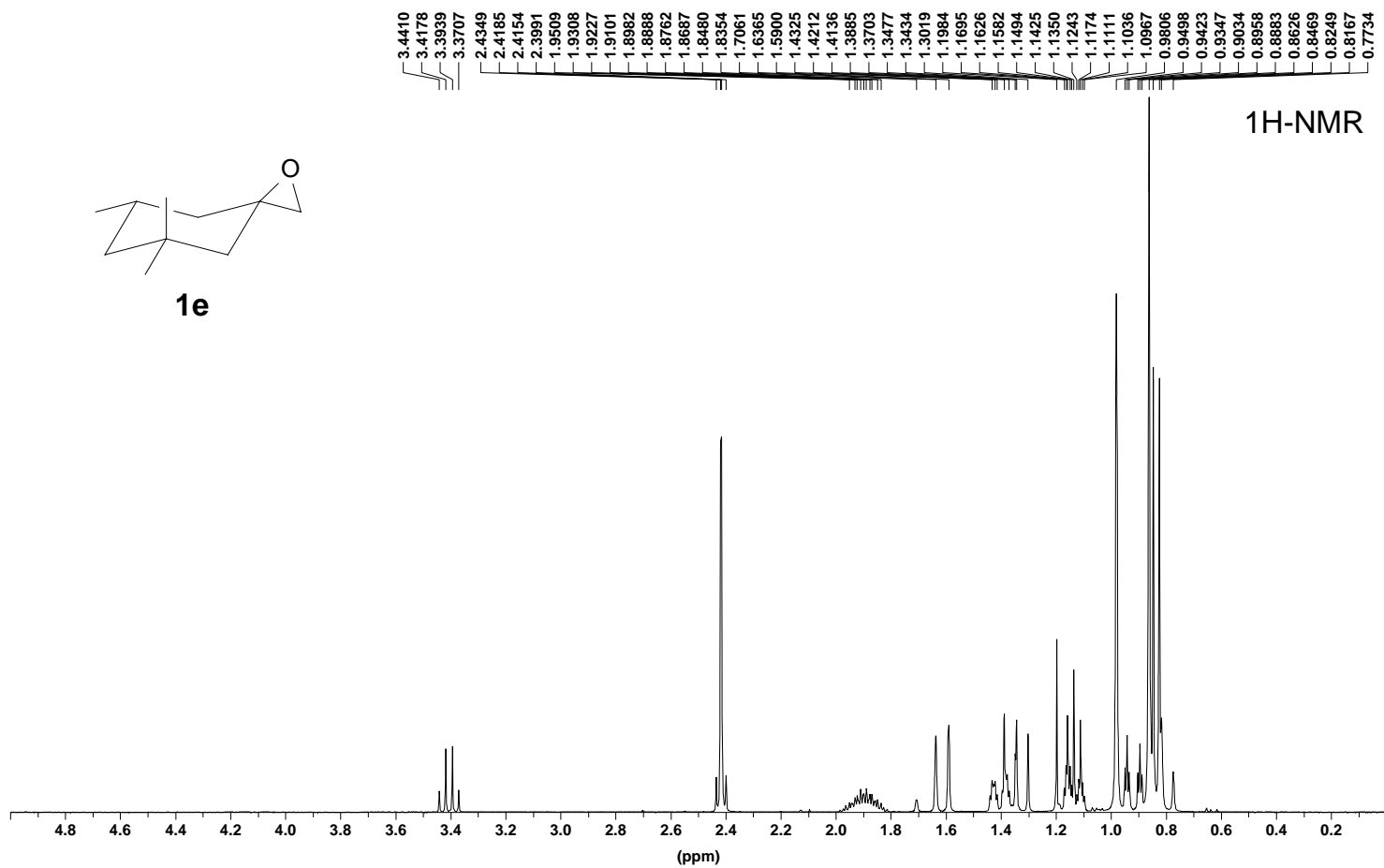


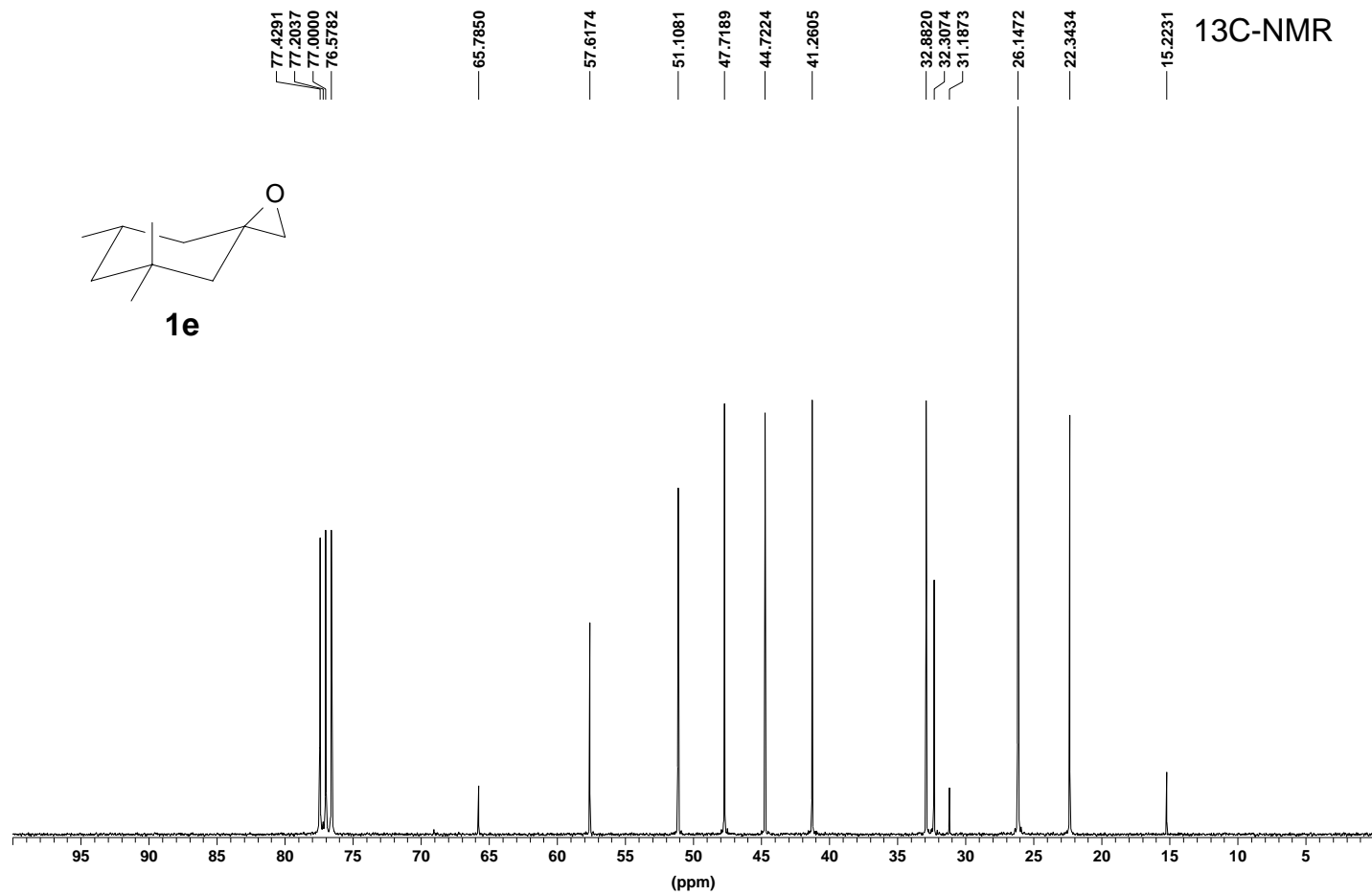












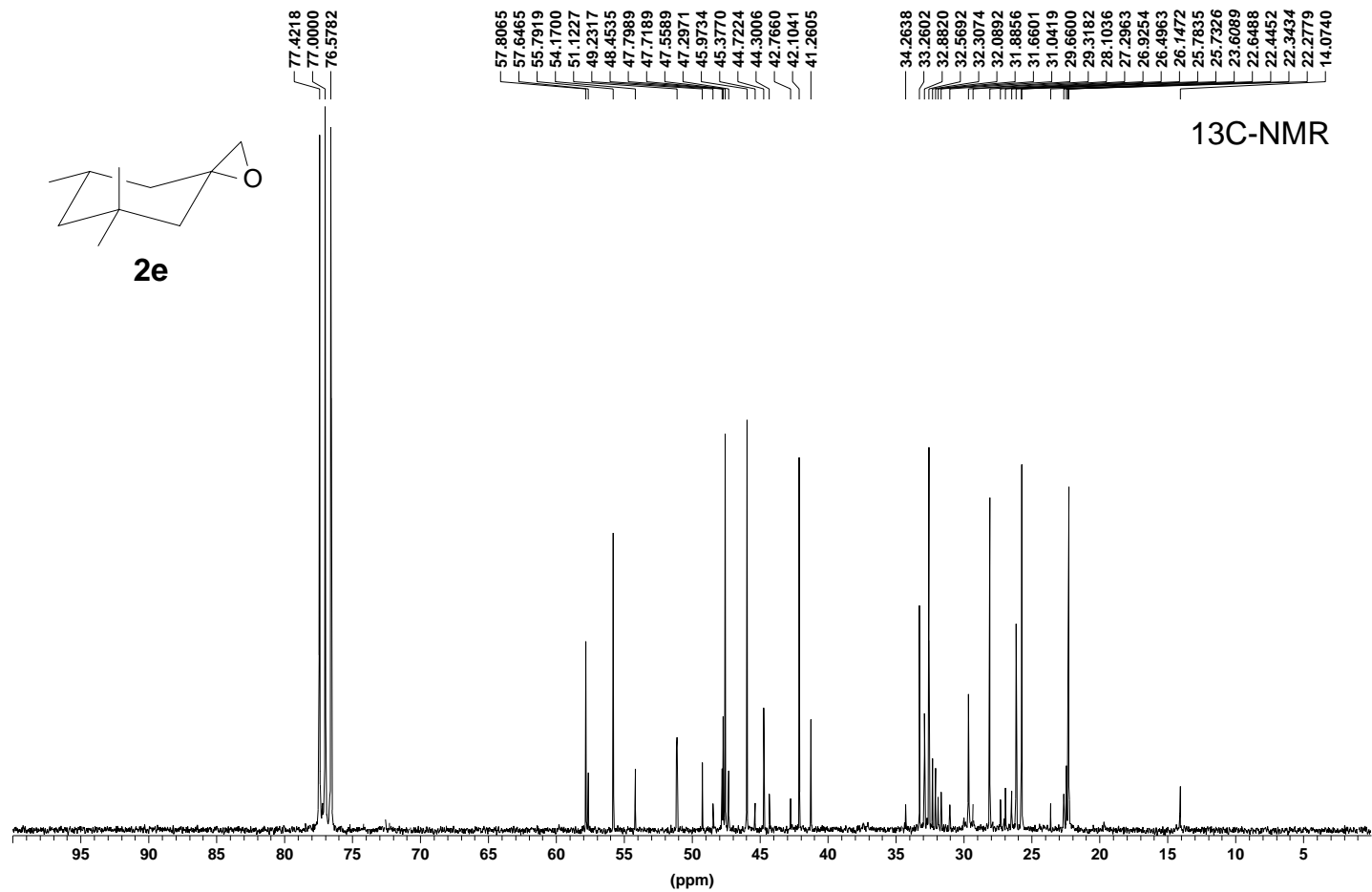


TABLE S1 Gas chromatography using a β -DEX 120 fused silica cyclodextrin capillary column

compound	oven temperature	carrier gas	k^{\S}	peak elution order
1a/2a	100 °C	N ₂	3.25	one peak
1b/2b	100 °C	N ₂	3.90, 5.05	1b, 2b
1c/2c	120 °C	H ₂	3.55, 4.45	1c, 2c
1d/2d	100 °C	N ₂	4.25, 5.30	1d, 2d
1e/2e	100 °C	N ₂	3.76, 4.05, 5.14, 5.76	(3 <i>S</i> ,7 <i>R</i>)- 1e , (3 <i>R</i> ,7 <i>S</i>)- 1e (3 <i>S</i> ,7 <i>S</i>)- 2e , (3 <i>R</i> ,7 <i>R</i>)- 2e
3d	70 °C	H ₂	8.05, 9.85	<i>cis</i> , <i>trans</i>
3e	100 °C	N ₂	5.10, 5.35	(5 <i>S</i>), (5 <i>R</i>)
4b/5b	120 °C	H ₂	7.90, 8.10	4b, 5b
4c/5c	145 °C	H ₂	8.58, 11.00	5c, 4c
4d/5d	90 °C	H ₂	37.8, 39.5	4d, 5d
4e/5e	110 °C	H ₂	12.05, 12.42, 14.32, 15.00	enantiomers- 4e , enantiomers- 5e
6e	55 °C	N ₂	8.05, 8.45	enantiomers- 6e

[§] Capacity factor $k = (t_R - t_M) / t_M$
 (t_R = retention time, t_M = t_R of mobile phase)