

## Kelthane–Dicofol Technical Mixture (500 ppm)

40 Years After The Ban: DDT–Related Compounds Accumulating in  
Southern California Bottlenose Dolphins

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Web Reference: <http://OrgMassSpec.github.io>

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SpecLibDDT version

OrgMassSpecR version 0.4–4

R version 3.1.0 (2014–04–10)

Name: chlorodiphenyl-methanone

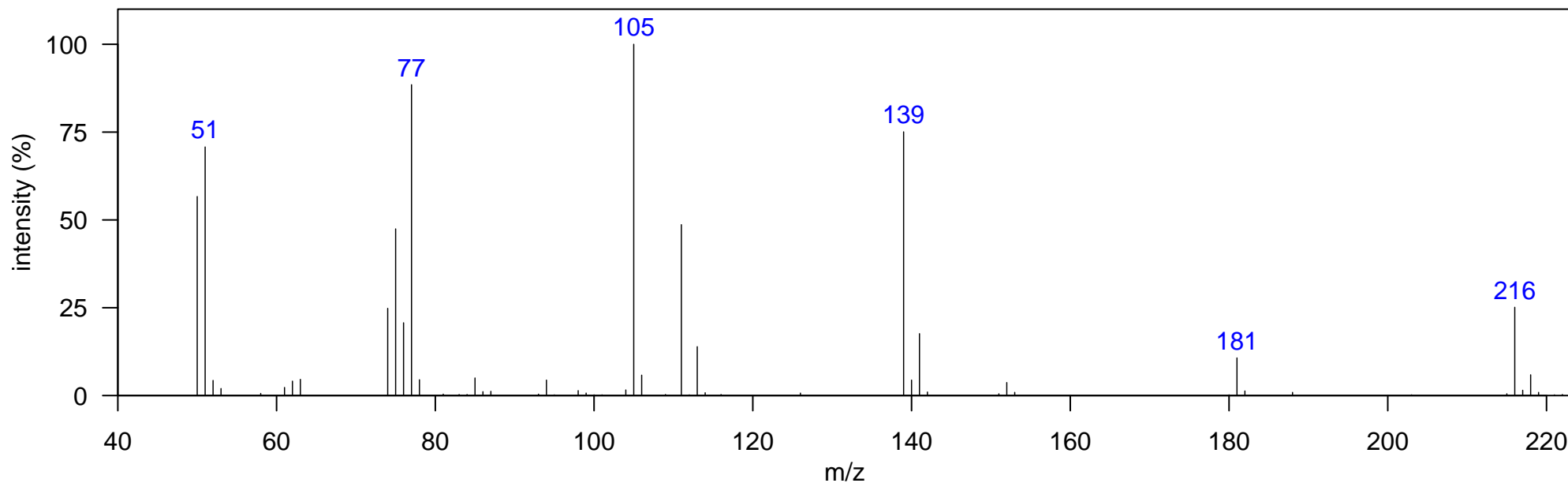
Technical Mixture: Kelthane 500PPM

Compound Class: other

Elemental Formula: C<sub>13</sub>H<sub>9</sub>ClO

Instrument: GCxGC-TOF, EI, 70 eV

Comment: NIST I.D. (4-chlorophenyl)phenyl-methanone



Isomer Information	m/z [Fragment]				
	139	[M-C <sub>6</sub> H <sub>5</sub> Cl] <sup>+</sup>			
	181	[M-Cl] <sup>+</sup>			
	216	M <sup>+</sup>			
	Isomer	InDolphin	Monitored	RT1D	RT2D
	1 chlorodiphenyl-methanone	FALSE	FALSE	1177.17	1.135

m/z [Fragment]				
139	[M-C <sub>6</sub> H <sub>5</sub> Cl] <sup>+</sup>			
181	[M-Cl] <sup>+</sup>			
216	M <sup>+</sup>			

Name: DDM

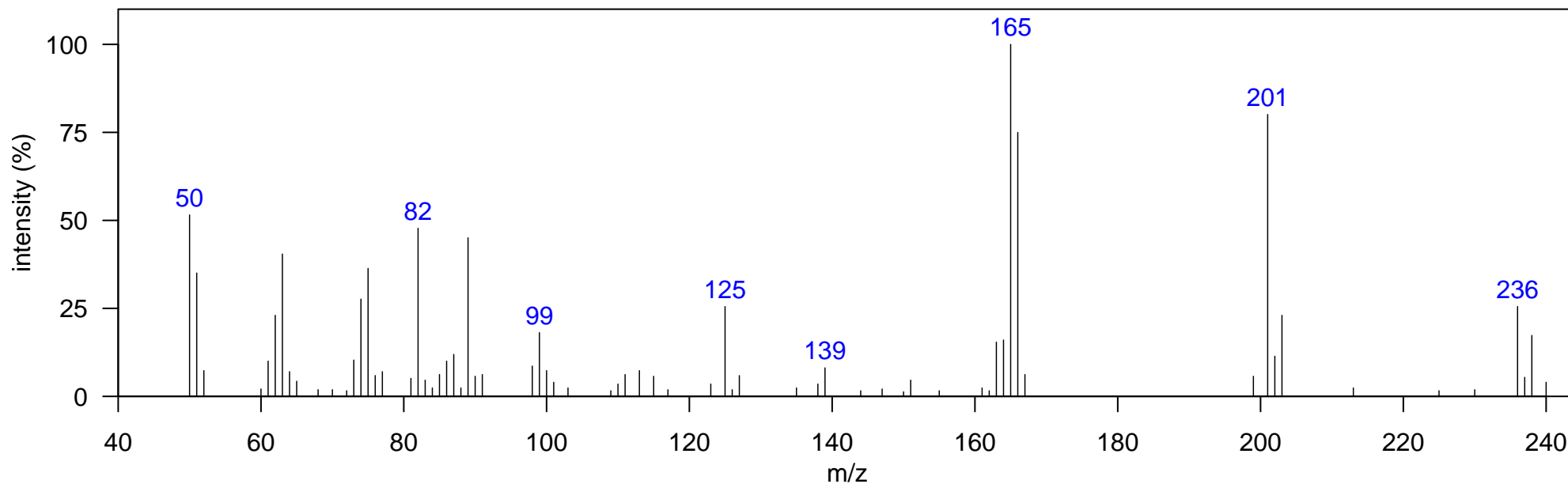
Technical Mixture: Kelthane 500PPM

Compound Class: known DDT degradation product

Elemental Formula: C<sub>13</sub>H<sub>10</sub>Cl<sub>2</sub>

Instrument: GCxGC-TOF, EI, 70 eV

Comment: NIST I.D. bis(p-chlorophenyl)-methane



Isomer Information

Isomer	InDolphin	Monitored	RT1D	RT2D
1 p,p'-DDM	TRUE	FALSE	1208.65	1.109

m/z [Fragment]

236 [M]<sup>+</sup>  
201 [M-Cl]<sup>+</sup>  
165 [M-HCl<sub>2</sub>]<sup>+</sup>

Name: DBP

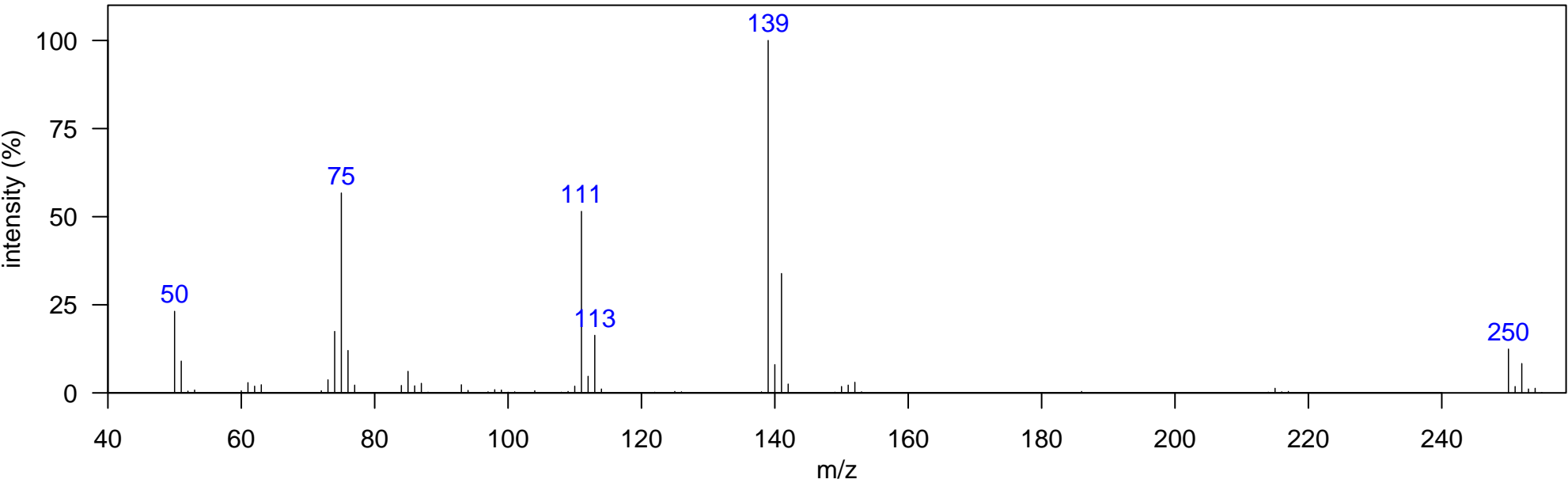
Technical Mixture: Kelthane 500PPM

Compound Class: known DDT degradation product

Elemental Formula: C<sub>13</sub>H<sub>8</sub>Cl<sub>2</sub>O

Instrument: GCxGC-TOF, EI, 70 eV

Comment: Potential GC-inlet degradation product of dicofol.



Isomer Information

	Isomer	InDolphin	Monitored	RT1D	RT2D
1	o,p'-DBP	FALSE	FALSE	1254.13	1.195
2	DBP 1	FALSE	FALSE	1275.11	1.155
3	p,p'-DBP	TRUE	FALSE	1289.11	1.181
4	DBP 2	FALSE	FALSE	1338.08	1.089

m/z [Fragment]

75 [M-C<sub>7</sub>H<sub>5</sub>Cl<sub>2</sub>O]<sup>+</sup>  
111 [M-C<sub>7</sub>H<sub>4</sub>ClO]<sup>+</sup>  
139 [M-C<sub>6</sub>H<sub>4</sub>Cl]<sup>+</sup>  
250 M<sup>+</sup>

Name: DDOH

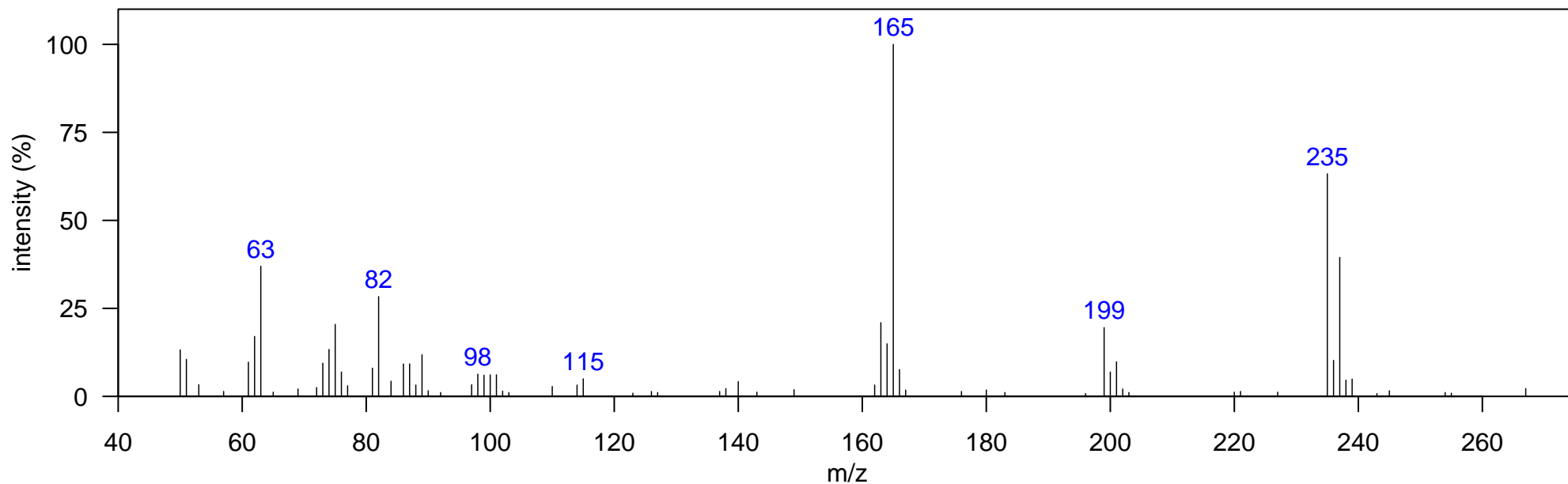
Technical Mixture: Kelthane 500PPM

Compound Class: known DDT degradation product

Elemental Formula: C<sub>14</sub>H<sub>12</sub>Cl<sub>2</sub>O

Instrument: GCxGC-TOF, EI, 70 eV

Comment: NIST I.D. 2,2-Bis(p-chlorophenyl)ethanol

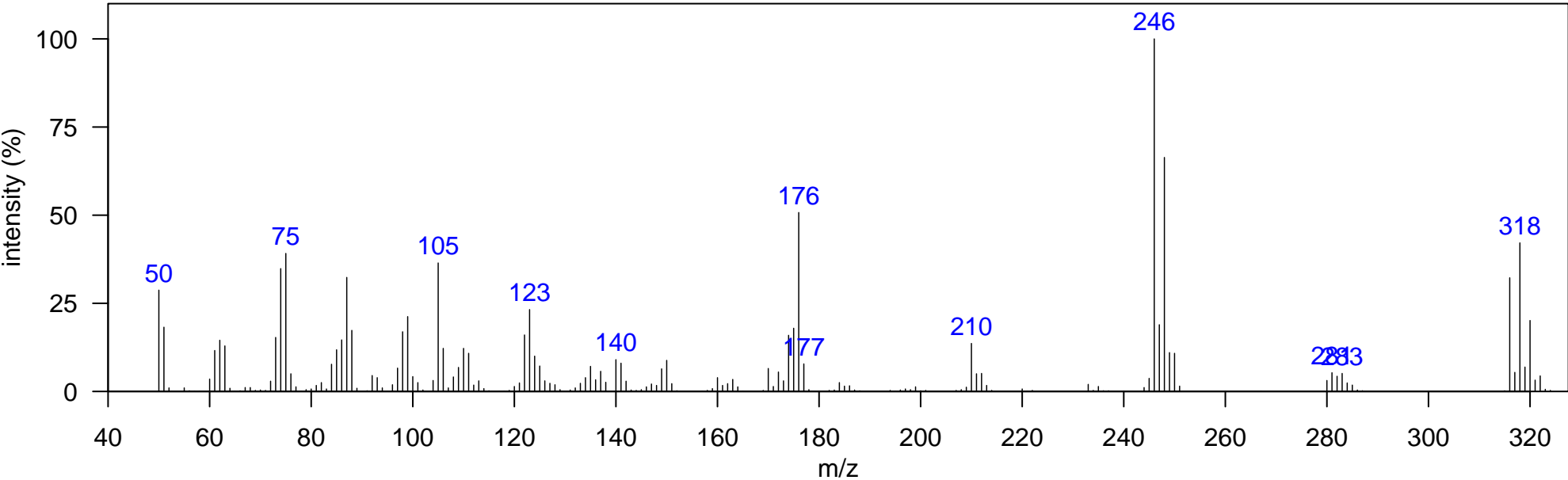


Isomer Information

Isomer	InDolphin	Monitored	RT1D	RT2D
1	DDOH	FALSE	FALSE	1334.58 1.188

m/z [Fragment]

165 [M-CH<sub>4</sub>Cl<sub>2</sub>O]<sup>+</sup>  
199 [M-CH<sub>4</sub>ClO]<sup>+</sup>  
235 [M-CH<sub>3</sub>O]<sup>+</sup>  
266 M<sup>+</sup>

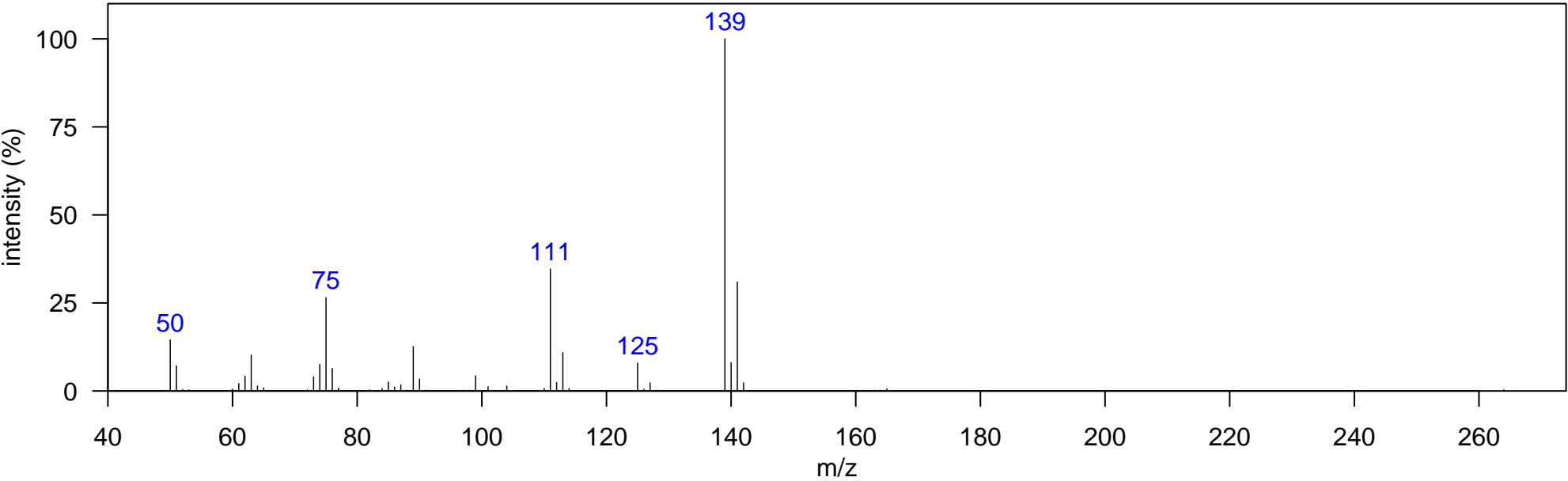


Isomer Information

	Isomer	InDolphin	Monitored	RT1D	RT2D
1	o,p'-DDE	TRUE	TRUE	1352.07	1.168
2	DDE 1	FALSE	FALSE	1369.56	1.155
3	p,p'-DDE	TRUE	TRUE	1383.55	1.168
4	DDE 2	FALSE	FALSE	1408.04	1.135
5	DDE 3	FALSE	FALSE	1551.46	1.016

m/z [Fragment]

- 176 [M-Cl4]+
- 211 [M-Cl3]+
- 246 [M-Cl2]+
- 281 [M-Cl]+
- 316 M+



Isomer Information

	Isomer	InDolphin	Monitored	RT1D	RT2D
1	unknown 1-1	FALSE	FALSE	1359.07	1.214
2	unknown 1-2	FALSE	FALSE	1390.55	1.168
3	unknown 1-3	FALSE	FALSE	1415.03	1.188
4	unknown 1-4	FALSE	FALSE	1418.53	1.129
5	unknown 1-5	FALSE	FALSE	1418.53	1.234
6	unknown 1-6	FALSE	FALSE	1422.03	1.181

m/z [Fragment]

Name: unknown 2

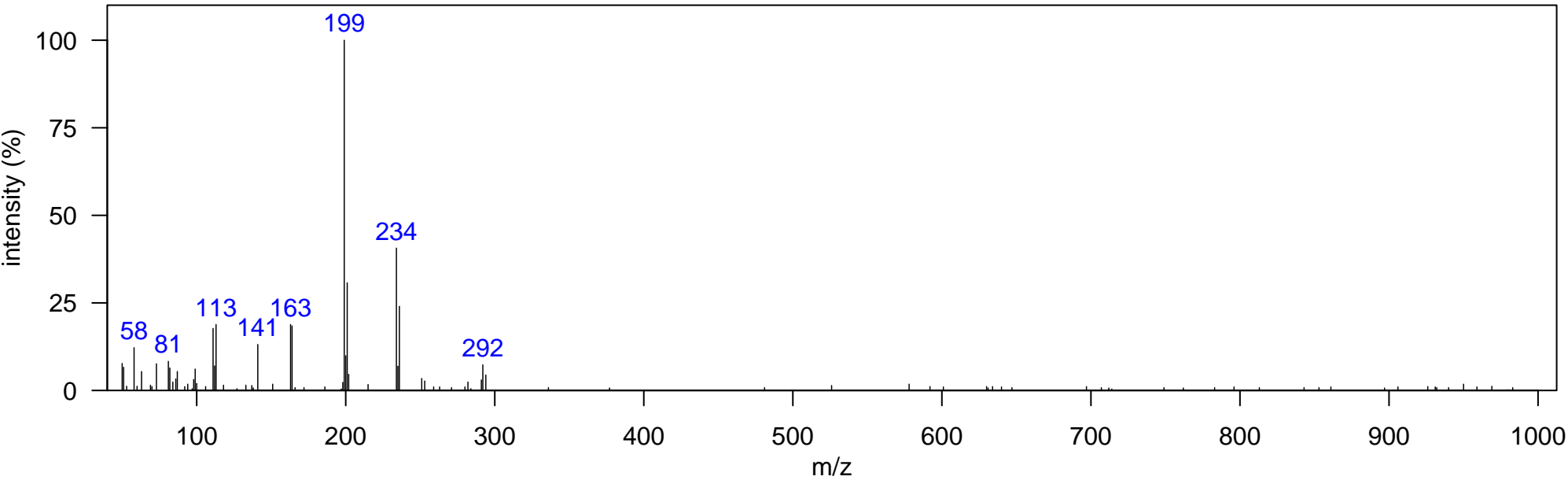
Technical Mixture: Kelthane 500PPM

Compound Class: other

Elemental Formula:

Instrument: GCxGC-TOF, EI, 70 eV

Comment:



Isomer Information

Isomer	InDolphin	Monitored	RT1D	RT2D
1 unknown 2	FALSE	FALSE	1422.03	1.168

m/z [Fragment]



Name: DDMU

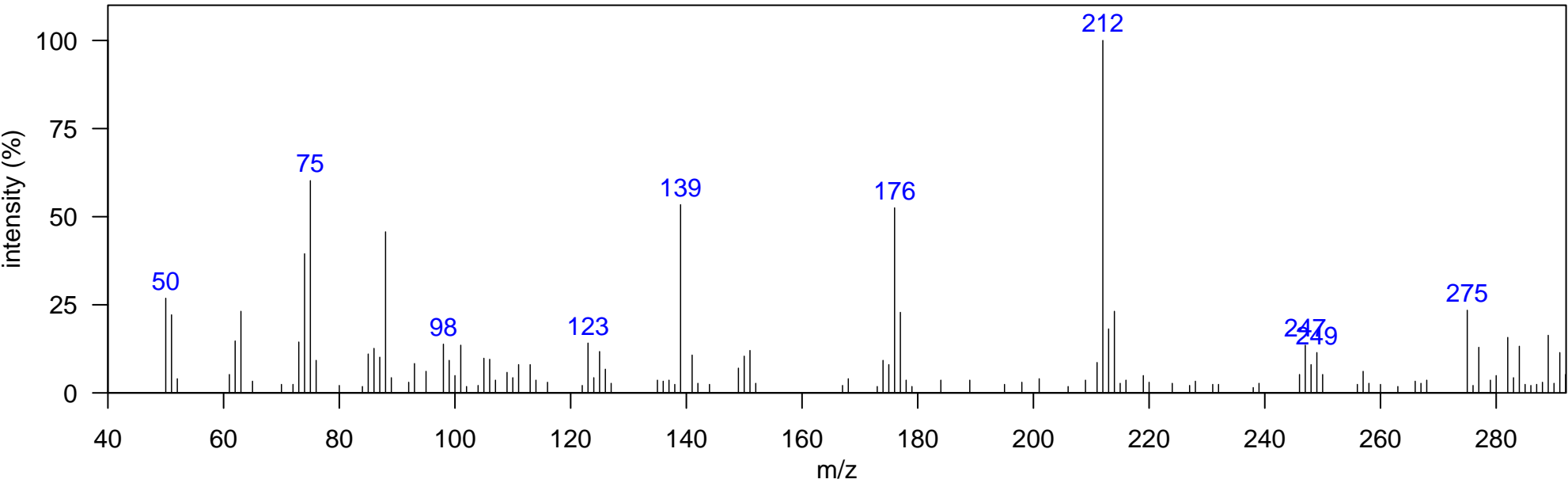
Technical Mixture: Kelthane 500PPM

Compound Class: known DDT degradation product

Elemental Formula: C14H9Cl3

Instrument: GCxGC-TOF, EI, 70 eV

Comment:

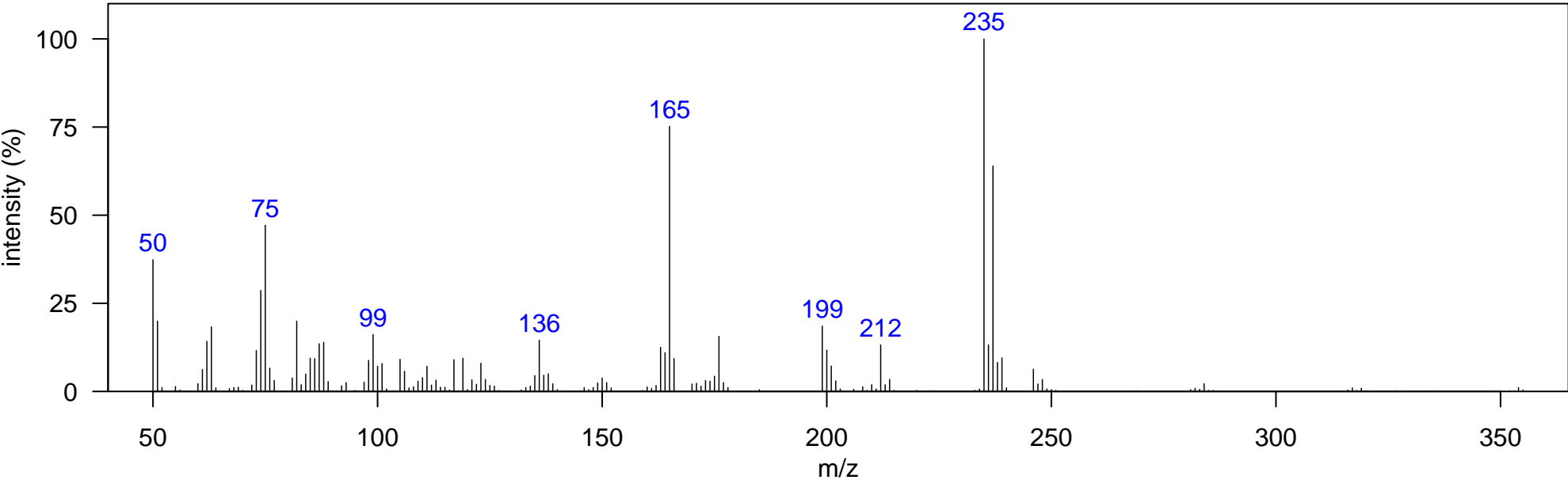


Isomer Information

Isomer	InDolphin	Monitored	RT1D	RT2D
1	DDMU	FALSE	FALSE	1425.53 1.214

m/z [Fragment]

- 176 [M-HCl3]+
- 212 [M-Cl2]+
- 247 [M-Cl]+
- 282 M+



Isomer Information

Isomer	InDolphin	Monitored	RT1D	RT2D
1 o,p'-DDT	TRUE	TRUE	1436.02	1.228
2 p,p'-DDT	TRUE	TRUE	1471.00	1.234

m/z [Fragment]

235 [M-CH2Cl3]+  
354 M+