Brazilian Bottlenose Dolphin Blubber

Non–targeted screening of halogenated organic compounds in bottlenose dolphins (Tursiops truncatus) from Rio de Janeiro, Brazil.

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Chemicals previously identified in other regions are specified as follows:
1) In N. Atlantic: indicates if the compound was found in dolphin blubber from the North Atlantic (Hoh et al., Environ. Sci. Technol., 2012, 46, 8001–8008.
2) In N. Pacific: indicates if the compound was found in dolphin blubber from the Southern California Bight (Shaul et al., Environ. Sci. Technol., 2015, 49, 1328–1338.

SpecLibDolphin2016 version 0.2
OrgMassSpecR version 0.4–8
png version 0.1–7
R version 3.3.1 (2016–06–21)
Name: oxychlordane

Class: Chlordane–related

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: TRUE
Comment:

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1303.1, 0.944
Quantitative Ion m/z: 389

Elemental Formula: C10H4Cl8O
Source: anthropogenic
Identification: Reference Database MS

m/z [Fragment]

<table>
<thead>
<tr>
<th>m/z</th>
<th>Fragment</th>
</tr>
</thead>
<tbody>
<tr>
<td>235</td>
<td>[C5Cl5]+</td>
</tr>
<tr>
<td>261</td>
<td>[C7H2Cl5]+</td>
</tr>
<tr>
<td>349</td>
<td>[M−HCl2]+</td>
</tr>
<tr>
<td>385</td>
<td>[M−Cl]+</td>
</tr>
<tr>
<td>420</td>
<td>M+</td>
</tr>
</tbody>
</table>

Filename: oxychlordane_MQ429, Page: 2
Name: trans nonachlor

Class: Chlordane–related

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: TRUE

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1352.07, 0.95

Quantitative Ion m/z: 409

Elemental Formula: C10H5Cl9
Source: anthropogenic
Identification: Authentic MS RT

Comment:

m/z [Fragment]
261 [M–H4Cl5]+
409 [M–Cl]+
Name: heptachlor epoxide

Class: Heptachlor–related

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: TRUE

Comment:

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1303.1, 0.97
Quantitative Ion m/z: 353

Elemental Formula: C10H5Cl7O
Source: anthropogenic
Identification: Authentic MS RT

m/z [Fragment]

351 [M–Cl]+
Name: o,p'-DDE

Class: DDT-related

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: TRUE

Instrument: GCxGC-TOF, EI, 70 eV
1D RT, 2D RT (s): 1327.58, 0.99
Quantitative Ion m/z: 246

Elemental Formula: C14H8Cl4
Source: anthropogenic
Identification: Authentic MS RT

Comment:

m/z [Fragment]
- 246 [M−Cl2]+
- 281 [M−Cl]+
- 316 M+

Filename: DDT_related_11b_MQ447, Page: 5
Name: DDT related 1  
Class: DDT–related  
Matrix: South Atlantic Dolphin Blubber  
In N. Atlantic: TRUE, In N. Pacific: TRUE  
Typically Monitored: FALSE  
Comment: DDT related 13 (Pacific Library)  
Instrument: GCxGC–TOF, EI, 70 eV  
1D RT, 2D RT (s): 1348.57, 0.997  
Quantitative Ion m/z: 235  
Elemental Formula: C14H11Cl3  
Source: anthropogenic  
Identification: Reference Database MS  

m/z [Fragment]  
235 [M–CH2Cl]+  
284 M+
Name: p,p'-DDE
Class: DDT-related

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: FALSE
Typically Monitored: TRUE

Instrument: GCxGC-TOF, EI, 70 eV
1D RT, 2D RT (s): 1362.56, 1.01
Quantitative Ion m/z: 246

Elemental Formula: C14H8Cl4
Source: anthropogenic
Identification: Authentic MS RT

Comment:

Elemental Formula: C14H8Cl4

m/z [Fragment]
246 [M-CHCl2]+
316 M+

Filename: pp_DDE_MQ447, Page: 7
**Name:** DDT related 2  
**Class:** DDT–related

<table>
<thead>
<tr>
<th>Matrix</th>
<th>Instrument</th>
<th>Elemental Formula</th>
<th>Source</th>
<th>Identification</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Atlantic Dolphin Blubber</td>
<td>GCxGC–TOF, EI, 70 eV</td>
<td></td>
<td>anthropogenic</td>
<td>Manual</td>
</tr>
<tr>
<td>In N. Atlantic: TRUE, In N. Pacific: FALSE</td>
<td>1D RT, 2D RT (s): 1380.05, 0.977</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Typically Monitored: FALSE</td>
<td>Quantitative Ion m/z: 246</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Comment:** Suggested DDE isomer

**m/z [Fragment]:**
- 246 [M–CHCl2]+
- 281 [M–Cl]+
- 316 M+

**Filename:** op_DDE_MQ447, Page: 8
Name: p,p'-DDD

Class: DDT-related

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: TRUE

Instrument: GCxGC-TOF, EI, 70 eV
1D RT, 2D RT (s): 1411.54, 1.082
Quantitative Ion m/z: 237

Elemental Formula: C14H10Cl4
Source: anthropogenic
Identification: Authentic MS RT

Comment:

![Chemical Structure](image)

m/z [Fragment]

235 [M-CHCl2]^+

Filename: op_DDD_MQ425, Page: 9
Name: DDT related 3
Class: DDT−related

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: DDT related 10 (Pacific Library)

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1460.51, 1.195
Quantitative Ion m/z: 235

Elemental Formula: anthropogenic
Identification: Reference Database MS

<table>
<thead>
<tr>
<th>m/z [Fragment]</th>
</tr>
</thead>
<tbody>
<tr>
<td>63</td>
</tr>
<tr>
<td>86</td>
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<tr>
<td>100</td>
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<tr>
<td>137</td>
</tr>
<tr>
<td>164</td>
</tr>
<tr>
<td>200</td>
</tr>
<tr>
<td>235</td>
</tr>
</tbody>
</table>

Filename: pp_DDD_MQ429, Page: 10
Name: DDT related 4  
Class: DDT−related  
Matrix: South Atlantic Dolphin Blubber  
Instrument: GCxGC−TOF, EI, 70 eV  
Elemental Formula: C14H5Cl7  
In N. Atlantic: TRUE, In N. Pacific: TRUE  
1D RT, 2D RT (s): 1544.46, 1.102  
Typically Monitored: FALSE  
Quantitative Ion m/z: 420  
Source: anthropogenic  
Identification: Manual−Congener Group  
Comment: DDT related 18 (Pacific Library). Suggested DDE backbone structure, but containing 7 chlorines  

m/z [Fragment]  
278 [M−Cl4]+  
348 [M−Cl2]+  
383 [M−Cl]+  
418 M+  

Filename: DDT_related_18a_MQ447, Page: 11
Name: DDT related 5

Class: DDT−related

Matrix: South Atlantic Dolphin Blubber

In N. Atlantic: FALSE, In N. Pacific: FALSE

Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV

1D RT, 2D RT (s): 1554.95, 1.142

Quantitative Ion m/z: 420

Elemental Formula: C14H5Cl7

Source: anthropogenic

Identification: Manual−Congener Group

Comment: Suggested DDE backbone structure, but containing 7 chlorines

m/z [Fragment]

<table>
<thead>
<tr>
<th>m/z</th>
<th>Fragment</th>
</tr>
</thead>
<tbody>
<tr>
<td>278</td>
<td>[M−Cl4]+</td>
</tr>
<tr>
<td>348</td>
<td>[M−Cl2]+</td>
</tr>
<tr>
<td>383</td>
<td>[M−Cl]+</td>
</tr>
<tr>
<td>418</td>
<td>M+</td>
</tr>
</tbody>
</table>

Filename: DDT_related_18_MQ429, Page: 12
Name: DDT related 6
Class: DDT−related

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1558.45, 1.155
Quantitative Ion m/z: 420

Elemental Formula: C14H5Cl7
Source: anthropogenic
Identification: Manual−Congener Group

Comment: DDT related 19 (Pacific Library). Suggested DDE backbone structure, but containing 7 chlorines

m/z [Fragment]
278 [M−Cl4]+
348 [M−Cl2]+
383 [M−Cl]+
418 M+

X=5Cl, 5H
Name: DDT related 7  
Class: DDT−related

Matrix: South Atlantic Dolphin Blubber  
Instrument: GCxGC−TOF, EI, 70 eV

In N. Atlantic: FALSE, In N. Pacific: TRUE  
1D RT, 2D RT (s): 1582.94, 1.188

Typically Monitored: FALSE  
Quantitative Ion m/z: 350

Elemental Formula: C14H5Cl7  
Source: anthropogenic

Identification: Manual−Congener Group

Comment: DDT related 20 (Pacific Library). Suggested DDE backbone structure, but containing 7 chlorines

<table>
<thead>
<tr>
<th>m/z [Fragment]</th>
</tr>
</thead>
<tbody>
<tr>
<td>278 [M−Cl4]+</td>
</tr>
<tr>
<td>348 [M−Cl2]+</td>
</tr>
<tr>
<td>383 [M−Cl]+</td>
</tr>
<tr>
<td>418 M+</td>
</tr>
</tbody>
</table>

Filename: DDT_related_20_MQ429, Page: 14
**Name:** DDT related 8  

**Class:** DDT−related  

**Matrix:** South Atlantic Dolphin Blubber  

In N. Atlantic: FALSE, In N. Pacific: TRUE  

Typically Monitored: FALSE  

**Instrument:** GCxGC−TOF, EI, 70 eV  

1D RT, 2D RT (s): 1656.4, 1.379  

**Quantitative Ion m/z:** 456  

**Elemental Formula:** C14H4Cl8  

**Source:** anthropogenic  

**Identification:** Manual−Congener Group  

**Comment:** DDT related 23 (Pacific Library). Suggested DDE backbone  

**m/z [Fragment]:**  

382 [M−Cl2]+  

417 [M−Cl]+  

452 M+  

Filename: DDT_related_23_MQ447, Page: 15
Name: TCPM 1

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: TCPM 5 (Pacific Library)

Class: TCPM

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1554.95, 1.195
Quantitative Ion m/z: 311

Elemental Formula: C19H13Cl3
Source: anthropogenic
Identification: Authentic MS

m/z [Fragment]
275 [M−HCl2]+
311 [M−Cl]+
346 M+

X=Cl, 4H; X'=Cl, 4H; X''=Cl, 4H
Name: Tris(4−chlorophenyl)methane (TCPM)  
Class: TCPM

Matrix: South Atlantic Dolphin Blubber  
In N. Atlantic: TRUE, In N. Pacific: TRUE  
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV  
1D RT, 2D RT (s): 1596.93, 1.28

Quantitative Ion m/z: 311

Elemental Formula: C19H13Cl3  
Source: anthropogenic

Identification: Authentic MS RT

Comment:

```
50 100 150 200 250 300
0 25 50 75 100
m/z

63 75 99 120 138 165 199 202 235 275 311 348

275 [M−HCl2]+  
311 [M−Cl]+  
346 M+
```

Filename: Tris_4_chlorophenyl_methane_TCPM_MQ429, Page: 17
Name: Tris(4-chlorophenyl)methanol (TCPMOH)  
Class: TCPMOH

Matrix: South Atlantic Dolphin Blubber  
In N. Atlantic: TRUE, In N. Pacific: TRUE  
Typically Monitored: FALSE  

Instrument: GCxGC-TOF, EI, 70 eV  
1D RT, 2D RT (s): 1677.38, 1.538  
Quantitative Ion m/z: 139

Elemental Formula: C₁₉H₁₃Cl₃O  
Source: anthropogenic  
Identification: Authentic MS RT

Comment:

![Chemical Structure](image)

Filename: unknown_2_4b_MQ512, Page: 18
Name: toxaphene 1

Class: Toxaphene

Matrix: South Atlantic Dolphin Blubber

In N. Atlantic: TRUE, In N. Pacific: TRUE

Typically Monitored: TRUE

Comment: toxaphene 17 (Pacific Library)

Instrument: GCxGC−TOF, EI, 70 eV

1D RT, 2D RT (s): 1491.99, 1.043

Quantitative Ion m/z: 339

Elemental Formula: C10H8Cl8

Source: anthropogenic

Identification: Authentic MS RT
Name: mirex 2Cl 1
Class: Mirex–related

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE
Comment:

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1418.53, 1.016
Quantitative Ion m/z: 441

Elemental Formula: C10H2Cl10
Source: anthropogenic
Identification: Manual–Congener Group

m/z [Fragment]
437 [M−Cl]+

Filename: mirex_2Cl_4_MQ447, Page: 20
Name: mirex 2Cl 2
Class: Mirex–related
Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE
Comment:

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1460.51, 1.063
Quantitative Ion m/z: 441

Elemental Formula: C10H2Cl10
Source: anthropogenic
Identification: Manual–Congener Group

m/z [Fragment]
437 [M–Cl]+
Name: photomirex
Class: Mirex-related

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: mirex 1Cl (Pacific Library)

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1495.49, 1.082
Quantitative Ion m/z: 475

Elemental Formula: C10HCl11
Source: anthropogenic
Identification: Authentic MS RT

m/z [Fragment]
- 270 [C5Cl6]+
- 366 [M–Cl4]
- 471 [M–Cl]+
Name: mirex 1Cl 1
Class: Mirex–related

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1516.48, 1.115
Quantitative Ion m/z: 238

Elemental Formula: C10HCl11
Source: anthropogenic
Identification: Manual–Congener Group

Comment:

m/z [Fragment]

<table>
<thead>
<tr>
<th>m/z</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>270</td>
<td>[C5Cl6]+</td>
</tr>
<tr>
<td>366</td>
<td>[M–Cl4]</td>
</tr>
<tr>
<td>471</td>
<td>[M–Cl]+</td>
</tr>
</tbody>
</table>

Filename: mirex_1Cl_2_MQ447, Page: 23
Name: mirex

Class: Mirex-related

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: TRUE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1572.44, 1.247
Quantitative Ion m/z: 272

Elemental Formula: C10Cl12
Source: anthropogenic
Identification: Authentic MS RT

Comment:

m/z [Fragment]

505 [M−Cl]⁺
540 M⁺
Name: dechlorane 602  
Class: Mirex−related

Matrix: South Atlantic Dolphin Blubber  
In N. Atlantic: FALSE, In N. Pacific: FALSE  
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV  
1D RT, 2D RT (s): 1673.89, 1.379  
Quantitative Ion m/z: 513

Elemental Formula: C14H4Cl12O  
Source: anthropogenic  
Identification: Authentic MS RT

Comment:

- m/z [Fragment]:  
  - 270 [C5Cl6]+  
  - 608 M+

File: dechlorane_602_MQ429, Page: 25
Name: mirex related

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: mirex related 1 (Pacific Library)

Class: Mirex–related

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1701.87, 1.459
Quantitative Ion m/z: 272

Elemental Formula: anthropogenic
Identification: Manual

Elemental Formula:
Source: anthropogenic
Identification: Manual

Filename: mirex_related_1_MQ429, Page: 26
Name: BDE–28/33
Class: PBDE

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: TRUE
Comment:

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1404.54, 1.049
Quantitative Ion m/z: 406

Elemental Formula: C12H7Br3O
Source: anthropogenic
Identification: Authentic MS RT

m/z [Fragment]
246 [M–Br2]+
404 M+
Name: BDE-47
Class: PBDE

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: TRUE

Instrument: GCxGC-TOF, EI, 70 eV
1D RT, 2D RT (s): 1530.47, 1.188
Quantitative Ion m/z: 486

Elemental Formula: C12H6Br4O
Source: anthropogenic
Identification: Authentic MS RT

Comment:

<table>
<thead>
<tr>
<th>m/z [Fragment]</th>
</tr>
</thead>
<tbody>
<tr>
<td>324 [M−Br2]+</td>
</tr>
<tr>
<td>482 M+</td>
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</tbody>
</table>

Filename: BDE_47_MQ447, Page: 28
Name: BDE 5Br 1

Class: PBDE

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1593.43, 1.34
Quantitative Ion m/z: 564

Elemental Formula: C12H5Br5O
Source: anthropogenic
Identification: Authentic MS RT

Comment:

[Chemical structure diagram]

m/z [Fragment]
402 [M−Br2]+
560 M+

Filename: BDE_5Br_1_MQ447, Page: 29
Name: BDE–100
Class: PBDE
Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: TRUE
Comment:

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1638.91, 1.558
Quantitative Ion m/z: 564

Elemental Formula: C12H5Br5O
Source: anthropogenic
Identification: Authentic MS RT

m/z [Fragment]
402 [M–Br2]+
560 M+

Filename: BDE_100_MQ447, Page: 30
Name: BDE−99
Class: PBDE

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: TRUE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1670.39, 1.61
Quantitative Ion m/z: 564

Elemental Formula: C12H5Br5O
Source: anthropogenic
Identification: Authentic MS RT

Comment:

<table>
<thead>
<tr>
<th>m/z [Fragment]</th>
<th>402 [M−Br2]+</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>560 M+</td>
</tr>
</tbody>
</table>

Filename: BDE_99_MQ447, Page: 31
**Name:** BDE 5Br 2  
**Class:** PBDE  
**Matrix:** South Atlantic Dolphin Blubber  
In N. Atlantic: FALSE, In N. Pacific: FALSE  
Typically Monitored: FALSE  
**Instrument:** GCxGC−TOF, EI, 70 eV  
1D RT, 2D RT (s): 1680.88, 1.65  
Quantitative Ion m/z: 564  
**Elemental Formula:** C12H5Br5O  
Source: anthropogenic  
Identification: Manual−Congener Group  

**Comment:**

<table>
<thead>
<tr>
<th>m/z [Fragment]</th>
</tr>
</thead>
<tbody>
<tr>
<td>402 [M−Br2]+</td>
</tr>
<tr>
<td>560 M+</td>
</tr>
</tbody>
</table>

Filename: BDE_5Br_2_MQ447, Page: 32
Name: BDE 5Br 3

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Class: PBDE
Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1691.38, 1.65
Quantitative Ion m/z: 564

Elemental Formula: C12H5Br5O
Source: anthropogenic
Identification: Manual−Congener Group

Comment:

m/z [Fragment]

402 [M−Br2]+
560 M+

Filename: BDE_5Br_4_MQ447, Page: 33
Name: BDE 5Br 4

Class: PBDE

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1743.85, 1.551
Quantitative Ion m/z: 564

Elemental Formula: C12H5Br5O
Source: anthropogenic
Identification: Manual−Congener Group

Comment:

m/z [Fragment]

402 [M−Br2]+
560 M+

Filename: BDE_5Br_3_MQ447, Page: 34
**Name: BDE–155**

**Class: PBDE**

Matrix: South Atlantic Dolphin Blubber  
In N. Atlantic: TRUE, In N. Pacific: TRUE  
Typically Monitored: TRUE

**Instrument:** GCxGC–TOF, EI, 70 eV  
1D RT, 2D RT (s): 1750.84, 1.564  
Quantitative Ion m/z: 644

**Elemental Formula:** C12H4Br6O  
Source: anthropogenic  
Identification: Authentic MS RT

**Comment:**

![m/z Values](https://via.placeholder.com/150)

<table>
<thead>
<tr>
<th>m/z [Fragment]</th>
</tr>
</thead>
<tbody>
<tr>
<td>480 [M−Br2]+</td>
</tr>
<tr>
<td>638 M+</td>
</tr>
</tbody>
</table>

Filename: BDE_155_MQ447, Page: 35
Name: BDE−154
Class: PBDE

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: TRUE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1768.33, 1.604
Quantitative Ion m/z: 644

Elemental Formula: C12H4Br6O
Source: anthropogenic
Identification: Authentic MS RT

Comment:

<table>
<thead>
<tr>
<th>m/z [Fragment]</th>
</tr>
</thead>
<tbody>
<tr>
<td>480 [M−Br2]+</td>
</tr>
<tr>
<td>638 M+</td>
</tr>
</tbody>
</table>

Filename: BDE_154_MQ447, Page: 36
Name: BDE−153  
Class: PBDE

Matrix: South Atlantic Dolphin Blubber  
In N. Atlantic: TRUE, In N. Pacific: TRUE  
Typically Monitored: TRUE

Instrument: GCxGC–TOF, EI, 70 eV  
1D RT, 2D RT (s): 1813.81, 1.729  
Quantitative Ion m/z: 644

Elemental Formula: C12H4Br6O  
Source: anthropogenic  
Identification: Authentic MS RT

Comment:

<table>
<thead>
<tr>
<th>m/z [Fragment]</th>
</tr>
</thead>
<tbody>
<tr>
<td>480 [M−Br2]+</td>
</tr>
<tr>
<td>638 M+</td>
</tr>
</tbody>
</table>

Filename: BDE_153_MQ447, Page: 37
Name: BDE 6Br
Class: PBDE

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC-TOF, EI, 70 eV
1D RT, 2D RT (s): 1831.3, 1.874
Quantitative Ion m/z: 644

Elemental Formula: C12H4Br6O
Source: anthropogenic
Identification: Manual–Congener Group

m/z [Fragment]
480 [M−Br2]+
638 M+

Filename: BDE_6Br_MQ425, Page: 38
Name: terphenyl 5Cl 1
Class: PCT

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: terphenyl 5Cl 4 (Pacific Library)

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1719.36, 1.439
Quantitative Ion m/z: 402

Elemental Formula: C18H9Cl5
Source: anthropogenic
Identification: Manual–Congener Group

m/z [Fragment]
330 [M–Cl2]+
400 M+

Filename: terphenyl_5Cl_4_MQ429, Page: 39
Name: terphenyl 6Cl 1

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1628.41, 1.406
Quantitative Ion m/z: 438

Elemental Formula: C18H8Cl6
Source: anthropogenic
Identification: Manual−Congener Group

Comment:

Fingerprint:

| m/z [Fragment] |
|----------------|----------------|
| 364 [M−Cl2]+  | 434 M+          |

X=6Cl, 8H
Name: terphenyl 6Cl 2  
Class: PCT

Matrix: South Atlantic Dolphin Blubber  
In N. Atlantic: FALSE, In N. Pacific: TRUE  
Typically Monitored: FALSE  
Comment: terphenyl 6Cl 1 (Pacific Library)

Instrument: GCxGC−TOF, EI, 70 eV  
1D RT, 2D RT (s): 1694.87, 1.485  
Quantitative Ion m/z: 438  
Elemental Formula: C18H8Cl6  
Source: anthropogenic  
Identification: Manual−Congener Group

![Chemical Structure](image)

m/z [Fragment]
- 364 [M−Cl2]+
- 434 M+

Filename: terphenyl_6Cl_1_MQ447, Page: 41
**Name:** terphenyl 6Cl 3  
**Class:** PCT  

**Matrix:** South Atlantic Dolphin Blubber  
**In N. Atlantic:** FALSE, **In N. Pacific:** FALSE  
**Typically Monitored:** FALSE  
**Comment:**

**Instrument:** GCxGC−TOF, EI, 70 eV  
**1D RT, 2D RT (s):** 1708.87, 1.452  
**Quantitative Ion m/z:** 438  

**Elemental Formula:** C18H8Cl6  
**Source:** anthropogenic  
**Identification:** Manual−Congener Group  

<table>
<thead>
<tr>
<th>m/z [Fragment]</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>364 [M−Cl2]+</td>
<td></td>
</tr>
<tr>
<td>434 M+</td>
<td></td>
</tr>
</tbody>
</table>

*Filename: terphenyl_6Cl_1b_MQ447, Page: 42*
Name: terphenyl 6Cl 4

Class: PCT

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: terphenyl 6Cl 2 (Pacific Library)

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1719.36, 1.386
Quantitative Ion m/z: 438

Elemental Formula: C18H8Cl6
Source: anthropogenic
Identification: Manual−Congener Group

Element: anthrospgenic
Identification: Manual−Congener Group

Filename: MeOCDE_8Cl_1_MQ429, Page: 43
Name: terphenyl 6Cl 5

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: terphenyl 6Cl 3 (Pacific Library)

Class: PCT

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1736.85, 1.393
Quantitative Ion m/z: 438

Elemental Formula: C18H8Cl6
Source: anthropogenic
Identification: Manual−Congener Group

m/z [Fragment]
364 [M−Cl2]+
434 M+

Filename: terphenyl_6Cl_3_MQ429, Page: 44
Name: terphenyl 6Cl 6

Class: PCT

Matrix: South Atlantic Dolphin Blubber

In N. Atlantic: FALSE, In N. Pacific: TRUE

Typically Monitored: FALSE

Comment: terphenyl 6Cl 4 (Pacific Library)

Instrument: GCxGC−TOF, EI, 70 eV

1D RT, 2D RT (s): 1743.85, 1.393

Quantitative Ion m/z: 438

Elemental Formula: C18H8Cl6

Source: anthropogenic

Identification: Manual−Congener Group

Elemental Formula: C18H8Cl6

X=6Cl, 8H

m/z [Fragment]

364 [M−Cl2]+
434 M+

Filename: terphenyl_6Cl_4_MQ447, Page: 45
Name: terphenyl 6Cl 7

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: terphenyl 6Cl 5 (Pacific Library)

Class: PCT

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1768.33, 1.452
Quantitative Ion m/z: 438

Elemental Formula: C18H8Cl6
Source: anthropogenic
Identification: Manual–Congener Group

Elemental formula: 

```
X=6Cl, 8H
```

m/z [Fragment]

- 364 [M−Cl2]+
- 434 M+

Filename: terphenyl_6Cl_5_MQ429, Page: 46
Name: terphenyl 6Cl 8

Class: PCT

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1778.83, 1.525
Quantitative Ion m/z: 438

Elemental Formula: C18H8Cl6
Source: anthropogenic
Identification: Manual–Congener Group

Comment:

m/z [Fragment]

<table>
<thead>
<tr>
<th>m/z</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>364</td>
<td>[M–Cl2]+</td>
</tr>
<tr>
<td>434</td>
<td>M+</td>
</tr>
</tbody>
</table>

Filename: terphenyl_6Cl_5b_MQ429, Page: 47
Name: terphenyl 6Cl 9

Class: PCT

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: terphenyl 6Cl 6 (Pacific Library)

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1782.32, 1.518
Quantitative Ion m/z: 438

Elemental Formula: C18H8Cl6
Source: anthropogenic
Identification: Manual−Congener Group

m/z [Fragment]
364 [M−Cl2]+
434 M+

Filename: terphenyl_6Cl_6_MQ429, Page: 48
Name: terphenyl 6Cl 10
Class: PCT

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: terphenyl 6Cl 7 (Pacific Library)

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1789.32, 1.564
Quantitative Ion m/z: 438

Elemental Formula: C18H8Cl6
Source: anthropogenic
Identification: Manual–Congener Group

Elemental Formula: C18H8Cl6
Source: anthropogenic
Identification: Manual–Congener Group

m/z [Fragment]
364 [M–Cl2]+
434 M+

Filename: terphenyl_6Cl_7_MQ429, Page: 49
Name: terphenyl 6Cl 11

Class: PCT

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Comment:

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1799.81, 1.485
Quantitative Ion m/z: 438

Elemental Formula: C18H8Cl6
Source: anthropogenic
Identification: Manual–Congener Group

m/z [Fragment]
364 [M–Cl2]+
434 M+

Filename: terphenyl_6Cl_7b_MQ447, Page: 50
Name: terphenyl 6Cl 12

Class: PCT

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE
Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1806.81, 1.485
Quantitative Ion m/z: 438
Elemental Formula: C18H8Cl6
Source: anthropogenic
Identification: Manual–Congener Group

Comment:

m/z [Fragment]

<table>
<thead>
<tr>
<th>m/z</th>
</tr>
</thead>
<tbody>
<tr>
<td>364 [M−Cl2]+</td>
</tr>
<tr>
<td>434 M+</td>
</tr>
</tbody>
</table>

X=6Cl, 8H
Name: terphenyl 6Cl 13
Class: PCT

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1827.8, 1.637
Quantitative Ion m/z: 438

Elemental Formula: C18H8Cl6
Source: anthropogenic
Identification: Manual−Congener Group

Comment:

<table>
<thead>
<tr>
<th>m/z [Fragment]</th>
</tr>
</thead>
<tbody>
<tr>
<td>364 [M−Cl2]+</td>
</tr>
<tr>
<td>434 M+</td>
</tr>
</tbody>
</table>

Filename: terphenyl_6Cl_8a_MQ429, Page: 52
Name: terphenyl 6Cl 14

Class: PCT

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: terphenyl 6Cl 8 (Pacific Library)

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1838.29, 1.67
Quantitative Ion m/z: 438

Elemental Formula: C18H8Cl6
Source: anthropogenic
Identification: Manual−Congener Group

Filename: terphenyl_6Cl_8_MQ429, Page: 53
Name: terphenyl 7Cl 1

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: terphenyl 7Cl 2 (Pacific Library)

Class: PCT

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1785.82, 1.478
Quantitative Ion m/z: 470

Elemental Formula: C18H7Cl7
Source: anthropogenic
Identification: Manual−Congener Group

m/z [Fragment]

398 [M−Cl2]+
468 M+

Filename: terphenyl_7Cl_2_MQ429, Page: 54
Name: terphenyl 7Cl 2
Class: PCT

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1813.81, 1.584
Quantitative Ion m/z: 470

Elemental Formula: C18H7Cl7
Source: anthropogenic
Identification: Manual−Congener Group

Comment:

m/z [Fragment]

398 [M−Cl2]+
468 M+

m/z

intensity (%)

m/z

Filename: terphenyl_7Cl_3b_MQ447, Page: 55
Name: terphenyl 7Cl 3

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: terphenyl 7Cl 4 (Pacific Library)

Class: PCT

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1820.8, 1.597
Quantitative Ion m/z: 470

Elemental Formula: C18H7Cl7
Source: anthropogenic
Identification: Manual–Congener Group

Elemental formula: C18H7Cl7

m/z [Fragment]

398 [M−Cl2]+
468 M+
Name: terphenyl 7Cl 4
Class: PCT
Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: terphenyl 7Cl 8 (Pacific Library)

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1887.26, 1.769
Quantitative Ion m/z: 470

Elemental Formula: C18H7Cl7
Source: anthropogenic
Identification: Manual–Congener Group

m/z [Fragment]
398 [M–Cl2]+
468 M+

Filename: terphenyl_7Cl_8_MQ429, Page: 57
Name: terphenyl 7Cl 5

Class: PCT

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: terphenyl 7Cl 9 (Pacific Library)

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1890.76, 1.894
Quantitative Ion m/z: 470

Elemental Formula: C18H7Cl7
Source: anthropogenic
Identification: Manual−Congener Group

Elemental Formula: C18H7Cl7
Source: anthropogenic
Identification: Manual−Congener Group

m/z [Fragment]
398 [M−Cl2]+
468 M+

Filename: terphenyl_7Cl_9_MQ429, Page: 58
**Name:** methylsulfonylPCB 5Cl 1  
**Class:** Methylsulfonyl–PCB  

<table>
<thead>
<tr>
<th>Matrix: South Atlantic Dolphin Blubber</th>
<th>Instrument: GCxGC–TOF, EI, 70 eV</th>
</tr>
</thead>
<tbody>
<tr>
<td>In N. Atlantic: FALSE, In N. Pacific: FALSE</td>
<td>1D RT, 2D RT (s): 1491.99, 1.063</td>
</tr>
<tr>
<td>Typically Monitored: FALSE</td>
<td>Quantitative Ion m/z: 404</td>
</tr>
<tr>
<td>Comment: 2',4,4',5,5'–Pentachloro–2–methylsulfonylbiphenyl</td>
<td>Identification: Reference Database MS</td>
</tr>
</tbody>
</table>

**Elemental Formula:** C13H7Cl5O2S  
**Source:** anthropogenic  

**m/z [Fragment]**  
- 288 [M–SO2CH3Cl]+  
- 367 [M–CH2SO]+  
- 402 M+  

**Filename:** methylsulfonylPCB_5Cl_0_MQ447, Page: 59
Name: methylsulfonylPCB−101  
Class: Methylsulfonyl−PCB  
Matrix: South Atlantic Dolphin Blubber  
In N. Atlantic: FALSE, In N. Pacific: TRUE  
Typically Monitored: FALSE  
Instrument: GCxGC−TOF, EI, 70 eV  
1D RT, 2D RT (s): 1687.88, 1.597  
Quantitative Ion m/z: 404  
Elemental Formula: C13H7Cl5O2S  
Source: anthropogenic  
Identification: Authentic MS RT  
Comment:

[Graph showing m/z intensities]  

- m/z [Fragment]  
  - 288 [M−SO2CH3Cl]+  
  - 340 [M−CH2SO]+  
  - 402 M+
Name: methylsulfonylPCB 5Cl 2

Class: Methylsulfonyl−PCB

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: methylsulfonylPCB 5Cl 1 (Pacific Library)

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1708.87, 1.584
Quantitative Ion m/z: 404

Elemental Formula: C13H7Cl5O2S
Source: anthropogenic
Identification: Authentic MS

m/z [Fragment]
288 [M−SO2CH3Cl]+
340 [M−CH2SO]+
402 M+

Filename: methylsulfonylPCB_5Cl_1_MQ447, Page: 61
**Name:** methylsulfonylPCB 5Cl 3  
**Class:** Methylsulfonyl−PCB

Matrix: South Atlantic Dolphin Blubber  
In N. Atlantic: FALSE, In N. Pacific: TRUE  
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV  
1D RT, 2D RT (s): 1729.85, 1.61  
Quantitative Ion m/z: 404

Elemental Formula: C13H7Cl5O2S  
Source: anthropogenic  
Identification: Authentic MS

Comment: methylsulfonylPCB 5Cl 2 (Pacific Library)

**m/z [Fragment]**
- 288 [M−SO2CH3Cl]+  
- 340 [M−CH2SO]+  
- 402 M+

Filename: methylsulfonylPCB_5Cl_2_MQ447, Page: 62
Name: 1,2,4-trichlorobenzene
Class: Chlorinated benzene

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: TRUE
Typically Monitored: FALSE
Instrument: GCxGC-TOF, EI, 70 eV
1D RT, 2D RT (s): 687.45, 0.772
Quantitative Ion m/z: 182

Elemental Formula: C₆H₃Cl₃
Source: anthropogenic
Identification: Authentic MS RT

Comment:

<table>
<thead>
<tr>
<th>m/z [Fragment]</th>
</tr>
</thead>
<tbody>
<tr>
<td>145 [M−Cl]+</td>
</tr>
<tr>
<td>180 M+</td>
</tr>
</tbody>
</table>

Filename: 124_trichlorobenzene_MQ429, Page: 63
Name: tetrachlorobenzene

Class: Chlorinated benzene

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment:

Instrument: GCxGC-TOF, EI, 70 eV
1D RT, 2D RT (s): 820.374, 0.792
Quantitative Ion m/z: 216

Elemental Formula: C6H2Cl4
Source: anthropogenic
Identification: Authentic MS

### Elemental Formula

<table>
<thead>
<tr>
<th>m/z</th>
<th>Fragment</th>
</tr>
</thead>
<tbody>
<tr>
<td>179</td>
<td>[M−Cl]+</td>
</tr>
<tr>
<td>214</td>
<td>M⁺</td>
</tr>
</tbody>
</table>

Elemental Formula: C6H2Cl4
Source: anthropogenic
Identification: Authentic MS

Filename: 1234_tetrachlorobenzene_MQ425, Page: 64
Name: hexachlorobenzene

Class: Chlorinated benzene

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: TRUE
Comment:

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1100.21, 0.878
Quantitative Ion m/z: 284

Elemental Formula: C6Cl6
Source: anthropogenic
Identification: Authentic MS RT

Filename: hexachlorobenzene_MQ447, Page: 65
Name: beta HCH

Class: HCH–related

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: TRUE
Typically Monitored: TRUE
Comment: beta BHC (Pacific Library)

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1124.7, 1.01
Quantitative Ion m/z: 219

Elemental Formula: C6H6Cl6
Source: anthropogenic
Identification: Authentic MS RT

Element: Cl

m/z [Fragment]
252 [M–HCl]+
Name: polychlorinated styrene 6Cl
Class: Chlorinated styrene

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1068.73, 0.858
Quantitative Ion m/z: 310

Elemental Formula: C8H2Cl6
Source: anthropogenic
Identification: Authentic MS

Comment:

[Chemical Structure Image]

$m/z$ [Fragment]
273 [M−Cl]+
308 M+

Filename: polychlorinated_styrene_6Cl_MQ429, Page: 67
### Name: polychlorinated styrene 7Cl

**Class:** Chlorinated styrene

**Matrix:** South Atlantic Dolphin Blubber

In N. Atlantic: TRUE, In N. Pacific: TRUE

Typically Monitored: FALSE

**Comment:**

<table>
<thead>
<tr>
<th>m/z [Fragment]</th>
</tr>
</thead>
<tbody>
<tr>
<td>307 [M−Cl]+</td>
</tr>
<tr>
<td>342 M+</td>
</tr>
</tbody>
</table>

**Instrument:** GCxGC−TOF, EI, 70 eV

1D RT, 2D RT (s): 1184.17, 0.891

**Elemental Formula:** C₈HCl₇

**Source:** anthropogenic

**Identification:** Authentic MS

Filename: polychlorinated_styrene_7Cl_MQ429, Page: 68
Name: di−MeOBB−Br3Cl

Class: 2MeO−Biphenyl−U

Matrix: South Atlantic Dolphin Blubber

In N. Atlantic: FALSE, In N. Pacific: FALSE

Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV

1D RT, 2D RT (s): 1530.47, 1.115

Quantitative Ion m/z: 486

Elemental Formula: C14H10Br3ClO2

Source: unknown

Identification: NA

Comment:

<table>
<thead>
<tr>
<th>m/z [Fragment]</th>
</tr>
</thead>
<tbody>
<tr>
<td>373 [M−CH3−CH3−Br]+</td>
</tr>
<tr>
<td>388 [M−CH3−Br]+</td>
</tr>
<tr>
<td>482 M+</td>
</tr>
</tbody>
</table>

Filename: unknown_36_SWAtlantic_MQ447, Page: 69
Name: di-MeOPBB–80

Class: 2MeO–Biphenyl–N

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1582.94, 1.274
Quantitative Ion m/z: 530

Elemental Formula: C14H10Br4O2
Source: natural
Identification: Authentic MS RT

Comment:

50 100 150 200 250 300 350 400 450 500

tensity (%)

m/z [Fragment]

417 [M–CH3–CH3–Br]+
432 [M–CH3–Br]+
526 M+

Filename: di_MeOPBB_80_MQ447, Page: 70
Name: MeOBCDE Br3Cl 1
Class: MeO−B/CDE

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: unknown–33 (Pacific Library)

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1544.46, 1.241
Quantitative Ion m/z: 472

Elemental Formula: C13H8Br3ClO2
Source: natural
Identification: Manual−Congener Group

Elemental Formula: C13H8Br3ClO2

m/z [Fragment]
374 [M−Br−CH3]+
468 M+

Filename: MeOBCDE_Br3Cl_MQ429, Page: 71
Name: MeOBCDE Br3Cl 2
Class: MeO−B/CDE

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: MeOBCDE Br3Cl (Pacific Library)

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1547.96, 1.221
Quantitative Ion m/z: 472

Elemental Formula: C13H8Br3ClO2
Source: natural
Identification: Manual–Congener Group

[m/z Fragment] Table:
- 354 [M−BrCl]+
- 374 [M−Br–CH3]+
- 468 M+

Filename: MeOBCDE_Br3Cl_2_MQ447, Page: 72
Name: MeOBDE 3Br
Class: MeO–BDE
Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE
Instrument: GCxGC-TOF, EI, 70 eV
1D RT, 2D RT (s): 1457.01, 1.129
Quantitative Ion m/z: 438
Elemental Formula: C13H9Br3O2
Source: natural
Identification: Authentic MS
Comment:

![Graphical representation of the compound with m/z values and fragment ions.]

- m/z [Fragment]
  - 276 [M−Br2]⁺
  - 340 [M−Br−CH₃]⁺
  - 434 M⁺

Filename: MeOBDE_3Br_MQ447, Page: 73
Name: MeOBDE 4Br  
Class: MeO–BDE

Matrix: South Atlantic Dolphin Blubber  
In N. Atlantic: TRUE, In N. Pacific: TRUE  
Typically Monitored: FALSE

Instrument: GCxGC–TOF, EI, 70 eV  
1D RT, 2D RT (s): 1561.95, 1.294  
Quantitative Ion m/z: 516

Elemental Formula: C13H8Br4O2  
Source: natural  
Identification: Authentic MS

Comment:

<table>
<thead>
<tr>
<th>m/z [Fragment]</th>
</tr>
</thead>
<tbody>
<tr>
<td>418 [M–Br–CH3]+</td>
</tr>
<tr>
<td>512 M+</td>
</tr>
</tbody>
</table>

Filename: MeOBDE_4Br_MQ429, Page: 74
Name: 2'-MeOBDE–68

Class: MeO–BDE

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1579.44, 1.28
Quantitative Ion m/z: 516

Elemental Formula: C13H8Br4O2
Source: natural
Identification: Authentic MS RT

Comment:

<table>
<thead>
<tr>
<th>m/z [Fragment]</th>
</tr>
</thead>
<tbody>
<tr>
<td>354 [M–Br2]</td>
</tr>
<tr>
<td>418 [M–Br–CH3]+</td>
</tr>
<tr>
<td>512 M+</td>
</tr>
</tbody>
</table>

Filename: 2_MeOBDE_68_MQ512, Page: 75
Name: 6−MeOBDE−47

Class: MeO−BDE

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1600.43, 1.399
Quantitative Ion m/z: 516

Elemental Formula: C13H8Br4O2
Source: natural
Identification: Authentic MS RT

Comment:

<table>
<thead>
<tr>
<th>m/z [Fragment]</th>
</tr>
</thead>
<tbody>
<tr>
<td>354 [M−Br2]</td>
</tr>
<tr>
<td>418 [M−Br−CH3]+</td>
</tr>
<tr>
<td>512 M+</td>
</tr>
</tbody>
</table>

Filename: 6_MeOBDE_47_MQ512, Page: 76
Name: MeOBDE 5Br

Class: MeO–BDE

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1684.38, 1.637
Quantitative Ion m/z: 596

Elemental Formula: C13H7Br5O2
Source: natural
Identification: Manual–Congener Group

Comment:

[Graph showing m/z values and corresponding intensities]

<table>
<thead>
<tr>
<th>m/z [Fragment]</th>
</tr>
</thead>
<tbody>
<tr>
<td>432 [M−Br2]+</td>
</tr>
<tr>
<td>496 [M−Br−CH3]+</td>
</tr>
<tr>
<td>590 M+</td>
</tr>
</tbody>
</table>

Filename: MeOBDE_5Br_MQ429, Page: 77
**Name:** 6'-MeOBDE-99  

**Class:** MeO-BDE

**Matrix:** South Atlantic Dolphin Blubber  
In N. Atlantic: TRUE, In N. Pacific: TRUE  
Typically Monitored: FALSE

**Instrument:** GCxGC-TOF, EI, 70 eV  
1D RT, 2D RT (s): 1733.35, 1.564  
Quantitative Ion m/z: 596

**Elemental Formula:** C13H7Br5O2  
Source: natural  
Identification: Authentic MS RT

**Comment:**

**m/z [Fragment]**
- 432 [M−Br2]+  
- 496 [M−Br−CH3]+  
- 590 M+
Name: DMBP 6Cl
Class: DMBP
Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: TRUE
Typically Monitored: FALSE
Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1411.54, 1.043
Quantitative Ion m/z: 366
Elemental Formula: C10H6Cl6N2
Source: natural
Identification: Authentic MS RT

Comment:

<table>
<thead>
<tr>
<th>m/z [Fragment]</th>
</tr>
</thead>
<tbody>
<tr>
<td>294 [M−Cl2]+</td>
</tr>
<tr>
<td>329 [M−Cl]+</td>
</tr>
<tr>
<td>364 M+</td>
</tr>
</tbody>
</table>

Filename: DMBP_6Cl_MQ429, Page: 79
Name: DMBP Br3Cl2
Class: DMBP

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: DMBP Br3Cl2 1 (Pacific Library)

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1432.52, 1.056
Quantitative Ion m/z: 466

Elemental Formula: C10H7Br3Cl2N2
Source: natural
Identification: Authentic MS RT

m/z [Fragment]
- 304 [M−Br2]+
- 342 [M−BrCNCH3]+
- 462 M+

X=3Br, 2Cl, H
Name: DMBP BrCl5

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: unknown−4–8 (Pacific Library)

Class: DMBP

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1453.51, 1.076
Quantitative Ion m/z: 410

Elemental Formula: C10H6Cl5BrN2
Source: natural
Identification: Manual−Congener Group

m/z [Fragment]
288 [M−BrCNCH3]+
373 [M−Cl]+
408 M+

Filename: unknown_4_8_MQ425, Page: 81
Name: DMBP Br2Cl4 1

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: DMBP Br2Cl4 (Pacific Library)

Class: DMBP

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1488.49, 1.115
Quantitative Ion m/z: 458

Elemental Formula: C10H6Br2Cl4N2
Source: natural
Identification: Authentic MS RT

m/z [Fragment]
332 [M−BrCNCH3]+
452 M+

Filename: DMBP_Br2Cl4_1_MQ429, Page: 82
Name: DMBP Br2Cl4 2
Class: DMBP
Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE
Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1498.99, 1.148
Quantitative Ion m/z: 458
Elemental Formula: C10H6Br2Cl4N2
Source: natural
Identification: Manual−Congener Group

**Comment:**

**m/z [Fragment]**

- 332 [M−BrCNCH3]+
- 452 M+

Filename: DMBP_Br2Cl4_2_MQ429, Page: 83
Name: DMBP Br2Cl4 3

Class: DMBP

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1509.48, 1.188
Quantitative Ion m/z: 458

Elemental Formula: C10H6Br2Cl4N2
Source: natural
Identification: Manual–Congener Group

Comment:

m/z [Fragment]
332 [M–BrCNCH3]+
452 M+

X=2Br, 4Cl
Name: DMBP Br3Cl3

Class: DMBP

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: TRUE
Typically Monitored: FALSE

Instrument: GCxGC-TOF, EI, 70 eV
1D RT, 2D RT (s): 1537.46, 1.221
Quantitative Ion m/z: 500

Elemental Formula: C10H6Br3Cl3N2
Source: natural
Identification: Authentic MS RT

Comment:

<table>
<thead>
<tr>
<th>m/z [Fragment]</th>
</tr>
</thead>
<tbody>
<tr>
<td>338 [M−Br2]+</td>
</tr>
<tr>
<td>376 [M−BrCNCH3]+</td>
</tr>
<tr>
<td>496 M+</td>
</tr>
</tbody>
</table>

Filename: DMBP_Br3Cl3_MQ429, Page: 85
**Name:** DMBP Br4Cl2  
**Class:** DMBP  

**Matrix:** South Atlantic Dolphin Blubber  
In N. Atlantic: TRUE, In N. Pacific: TRUE  
Typically Monitored: FALSE  

**Instrument:** GCxGC–TOF, EI, 70 eV  
1D RT, 2D RT (s): 1586.44, 1.393  

**Elemental Formula:** C10H6Cl2Br4N2  
Source: natural  
Identification: Authentic MS RT  

**Quantitative Ion m/z:** 546  

**Comment:**

**m/z [Fragment]**

<table>
<thead>
<tr>
<th>m/z</th>
<th>Fragment</th>
</tr>
</thead>
<tbody>
<tr>
<td>382</td>
<td>[M−Br2]+</td>
</tr>
<tr>
<td>420</td>
<td>[M−BrCNCH3]+</td>
</tr>
<tr>
<td>540</td>
<td>M+</td>
</tr>
</tbody>
</table>

**Filename:** DMBP_Br4Cl2_MQ447, Page: 86
Name: DMBP 6Br

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment:

Class: DMBP

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1722.86, 1.683
Quantitative Ion m/z: 634

Elemental Formula: C10H6Br6N2
Source: natural
Identification: Authentic MS RT

m/z [Fragment]
470 [M–Br2]+
508 [M–BrCNCH2]+
628 M+

Filename: DMBP_6Br_MQ429, Page: 87
Name: MBP 6Cl 1

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE

Class: MBP
Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1240.13, 0.911
Quantitative Ion m/z: 352

Elemental Formula: C9H4Cl6N2
Source: natural
Identification: Authentic MS

Comment:

Intensity (%)

m/z [Fragment]

245 [M−Cl3]+  
280 [M−Cl2]+  
315 [M−Cl]+  
350 M+

Filename: MBP_6Cl_1_MQ447, Page: 88
Name: MBP 6Cl 2
Class: MBP

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1254.13, 0.917
Quantitative Ion m/z: 352

Elemental Formula: C9H4Cl6N2
Source: natural
Identification: Authentic MS

Comment:

m/z [Fragment]
- 245 [M−Cl3]+
- 280 [M−Cl2]+
- 315 [M−Cl]+
- 350 M+

X=6Cl, H

Filename: MBP_6Cl_2_MQ447, Page: 89
Name: MBP 6Cl 3

Class: MBP

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1292.6, 0.931
Quantitative Ion m/z: 352

Elemental Formula: C9H4Cl6N2
Source: natural
Identification: Authentic MS

Comment:

m/z [Fragment]
245 [M–Cl3]+  
280 [M–Cl2]+  
315 [M–Cl]+  
350 M+

Filename: MBP_6Cl_3_MQ447, Page: 90
Name: MBP 6Cl 4

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: MBP 6Cl 3 (Pacific Library)

Class: MBP

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1299.6, 0.97
Quantitative Ion m/z: 352

Elemental Formula: C9H4Cl6N2
Source: natural
Identification: Manual–Congener Group

m/z [Fragment]
- 245 [M−Cl3]+
- 280 [M−Cl2]+
- 315 [M−Cl]+
- 350 M+

Filename: MBP_6Cl_4_MQ447, Page: 91
Name: MBP 6Cl 5

Class: MBP

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1334.58, 0.964
Quantitative Ion m/z: 352

Elemental Formula: C9H4Cl6N2
Source: natural
Identification: Manual−Congener Group

Comment:

```
<table>
<thead>
<tr>
<th>m/z</th>
<th>Fragment</th>
</tr>
</thead>
<tbody>
<tr>
<td>245</td>
<td>[M−Cl3]+</td>
</tr>
<tr>
<td>280</td>
<td>[M−Cl2]+</td>
</tr>
<tr>
<td>315</td>
<td>[M−Cl]+</td>
</tr>
<tr>
<td>350</td>
<td>M+</td>
</tr>
</tbody>
</table>
```

Filename: MBP_6Cl_5_MQ447, Page: 92
Name: MBP 7Cl

Class: MBP

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1341.58, 0.997
Quantitative Ion m/z: 388

Elemental Formula: C9H3Cl7N2
Source: natural
Identification: Authentic MS RT

Comment:

m/z [Fragment]
- 314 [M−Cl2]+
- 349 [M−Cl]+
- 384 M+

Filename: MBP_7CI_MQ447, Page: 93
Name: 5-bromoindole

Class: Brominated indole

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1040.75, 1.003
Quantitative Ion m/z: 195

Elemental Formula: C8H6BrN
Source: natural
Identification: Authentic MS RT

Comment:

m/z [Fragment]
89 [M−Br−CNH]+
116 [M−Br]+
195 M+

Filename: 5_bromoindole_MQ429, Page: 94
Name: 4,6-dibromoindole

Class: Brominated indole

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment:

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1261.12, 1.129
Quantitative Ion m/z: 275

Elemental Formula: C8H5Br2N
Source: natural
Identification: Authentic MS RT

m/z [Fragment]
194 [M−Br]+
273 M+

Filename: 46_dibromoindole_MQ429, Page: 95
Name: 2,4,6-tribromo anisole

Class: Brominated anisole

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment:

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1033.75, 0.898
Quantitative Ion m/z: 331

Elemental Formula: C7H5Br3O
Source: mixed
Identification: Authentic MS RT

m/z [Fragment]

<table>
<thead>
<tr>
<th>m/z</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>299</td>
<td>[M–CH3–CO]+</td>
</tr>
<tr>
<td>327</td>
<td>[M–CH3]+</td>
</tr>
<tr>
<td>342</td>
<td>M+</td>
</tr>
</tbody>
</table>

Filename: 246_tribromo_anisole_MQ447, Page: 96
Name: bromophenol

Class: Bromophenol–M

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE
Comment:

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 799.386, 0.858
Quantitative Ion m/z: 172

Elemental Formula: C6H5BrO
Source: mixed
Identification: Reference Database MS

m/z [Fragment]
172 [M]+
Name: tribromophenol

Class: Bromophenol–M

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: FALSE
Typically Monitored: FALSE

Typical Elements: C, H, Br, O

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1051.24, 0.937
Quantitative Ion m/z: 330

Elemental Formula: C₆H₃Br₃O
Source: mixed
Identification: Reference Database MS

Comment:

m/z [Fragment]

248 [M–Br2]+
330 [M–Br3]+
Name: dibromophenol

Class: Bromophenol–U

Matrix: South Atlantic Dolphin Blubber

In N. Atlantic: FALSE, In N. Pacific: FALSE

Typically Monitored: FALSE

Instrument: GCxGC–TOF, EI, 70 eV

1D RT, 2D RT (s): 834.366, 0.865

Quantitative Ion m/z: 252

Elemental Formula: C6H4Br2O

Source: unknown

Identification: Reference Database MS

Comment:

![Molecular structure of dibromophenol]

m/z [Fragment]

250 [M–Br2]+
Name: methoxy chlorophenol

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 781.896, 0.832
Quantitative Ion m/z: 143

Elemental Formula: C7H7ClO2
Source: mixed
Identification: Reference Database MS

Comment:

m/z [Fragment]
143 [M−Cl]+
158 M+

X=Cl, OH, OMe, 3H
Name: dichlorophenol

Class: Chlorophenol–U

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE
Comment:

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 715.434, 1.082
Quantitative Ion m/z: 162

Elemental Formula: C₆H₄Cl₂O
Source: unknown
Identification: Reference Database MS

m/z [Fragment]
126 [M–HCl]+
162 M+

X=2Cl, OH, 3H
Name: PBCDE Br3Cl 1

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1355.57, 0.997
Quantitative Ion m/z: 442

Elemental Formula: C12H6Br3ClO
Source: unknown
Identification: Manual−Congener Group

Comment:

m/z [Fragment]
- 245 [H−Br2−Cl]
- 280 [M−Br2]+
- 359 [M−Br]+
- 403 [M−Cl]+
- 438 M+

Filename: PBCDE_Br3Cl_1_MQ429, Page: 102
Name: unknown−1–1
Class: Unknown−1

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: unknown−3–1 (Pacific Library)

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1264.62, 1.003
Quantitative Ion m/z: 406

Elemental Formula: C9H6OBr3Cl
Source: unknown
Identification: NA

Filename: unknown_3_1_MQ429, Page: 103
Name: unknown−1−2
Class: Unknown−1

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
 Typically Monitored: FALSE
Comment:

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1275.11, 1.01
Quantitative Ion m/z: 406

Elemental Formula: C9H6OBr3Cl
Source: unknown
Identification: NA

m/z [Fragment]
288 [M−BrCl]+
323 [M−Br]+
367 [M−Cl]+
402 M+

Filename: unknown_3_1b_MQ429, Page: 104
Name: unknown−1−3
Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: unknown−3−2 (Pacific Library)

Class: Unknown−1
Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1376.56, 1.096
Quantitative Ion m/z: 484
Elemental Formula: C9H5OBr4Cl
Source: unknown
Identification: NA

m/z [Fragment]
- 322 [M−Br2]+
- 366 [M−BrCl]+
- 401 [M−Br]+
- 445 [M−Cl]+
- 480 M+

Filename: unknown_3_2_MQ429, Page: 105
Name: unknown−1–4
Class: Unknown−1

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE
Comment:

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1401.04, 1.036
Quantitative Ion m/z: 484

Elemental Formula: C9H6OBr4Cl
Source: unknown
Identification: NA

Filename: unknown_3_3a_MQ447, Page: 106
Name: unknown−1−5

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: unknown−3−3 (Pacific Library)

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1429.03, 1.135
Quantitative Ion m/z: 484

Elemental Formula: C9H5OBr4Cl
Source: unknown
Identification: NA

m/z [Fragment]

<table>
<thead>
<tr>
<th>m/z</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>401</td>
<td>[M−Br]+</td>
</tr>
<tr>
<td>445</td>
<td>[M−Cl]+</td>
</tr>
<tr>
<td>480</td>
<td>M+</td>
</tr>
</tbody>
</table>

Filename: unknown_3_3_MQ429, Page: 107
Name: unknown−2−1

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1436.02, 1.003

Quantitative Ion m/z: 376

Elemental Formula: C12H4Cl6O
Source: unknown
Identification: NA

Comment: unknown−4−3 (Pacific Library). Hypothesized PCDE or OH−PCB

m/z [Fragment]
- 304 [M−Cl2]+
- 374 M+

Filename: unknown_4_3_MQ425, Page: 108
Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: unknown−4−9 (Pacific Library). Hypothesized PCDE or OH–PCB

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1457.01, 1.076
Quantitative Ion m/z: 410

Elemental Formula: C12H3Cl7O
Source: unknown
Identification: NA

m/z [Fragment]
360 PCB Interference
373 [M−Cl]+
408 M+
Name: unknown−2−3

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: unknown−4−10 (Pacific Library). Hypothesized PCDE or OH−PCB

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1509.48, 1.049
Quantitative Ion m/z: 410
Elemental Formula: C12H3Cl7O
Source: unknown
Identification: NA

m/z [Fragment]
- 290 PCB Interference
- 360 PCB Interference
- 338 [M−Cl2]+
- 408 M+

Filename: unknown_4_10_MQ447, Page: 110
Name: unknown−2−4
Class: Unknown−2
Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE
Comment:
Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1519.97, 1.036
Quantitative Ion m/z: 410
Elemental Formula: C12H3Cl7O
Source: unknown
Identification: NA

m/z [Fragment]

338 [M−Cl2]+
408 M+

Filename: unknown_4_11a_MQ447, Page: 111
Name: unknown−2−5  
Class: Unknown−2

Matrix: South Atlantic Dolphin Blubber  
In N. Atlantic: TRUE, In N. Pacific: TRUE  
Typically Monitored: FALSE  
Comment: unknown−4−11 (Pacific Library). Hypothesized PCDE or OH−PCB

Instrument: GCxGC−TOF, EI, 70 eV  
1D RT, 2D RT (s): 1530.47, 1.076  
Quantitative Ion m/z: 410  
Elemental Formula: C12H3Cl7O  
Source: unknown  
Identification: NA

![Mass spectrum graph](image-url)

- m/z [Fragment]
  - 324 PCB Interference
  - 396 PCB Interference
  - 338 [M−Cl2]+
  - 408 M+

Filename: unknown_4_11_MQ447, Page: 112
Name: unknown−2−6
Class: Unknown−2

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE
Comment:

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1533.97, 1.089
Quantitative Ion m/z: 410

Elemental Formula: C12H3Cl7O
Source: unknown
Identification: NA

m/z [Fragment]
- 324 PCB Interference
- 396 PCB Interference
- 338 [M−Cl2]+
- 408 M+

Filename: unknown_4_11b_MQ429, Page: 113
Name: unknown−2–7

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: unknown−4–13 (Pacific Library). Hypothesized PCDE or OH–PCB

Class: Unknown–2

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1586.44, 1.254
Quantitative Ion m/z: 410
Elemental Formula: C12H3Cl7O
Source: unknown
Identification: NA

Elemental Formula: C12H3Cl7O

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1586.44, 1.254
Quantitative Ion m/z: 410
Elemental Formula: C12H3Cl7O
Source: unknown
Identification: NA

Comment: unknown−4–13 (Pacific Library). Hypothesized PCDE or OH–PCB

Filename: unknown_4_13_MQ429, Page: 114
Name: unknown−2−8
Class: Unknown−2

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1607.42, 1.267
Quantitative Ion m/z: 446

Elemental Formula: C12H2Cl8O
Source: unknown
Identification: NA

Comment:

m/z [Fragment]

392 PCB Interference
372 [M−Cl2]+
442 M+

Filename: unknown_4_14a_MQ429, Page: 115
Name: unknown−2−9
Class: Unknown−2

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1614.42, 1.287
Quantitative Ion m/z: 446

Elemental Formula: C12H2Cl8O
Source: unknown
Identification: NA

Comment: unknown−4−14 (Pacific Library). Hypothesized PCDE or OH−PCB

Filename: unknown_4_14_MQ447, Page: 116
**Name:** unknown–2–10

**Class:** Unknown–2

**Matrix:** South Atlantic Dolphin Blubber  
**In N. Atlantic:** TRUE, **In N. Pacific:** TRUE  
**Typically Monitored:** FALSE

**Instrument:** GCxGC–TOF, EI, 70 eV  
**1D RT, 2D RT (s):** 1621.42, 1.28  
**Quantitative Ion m/z:** 446

**Elemental Formula:** C$_{12}$H$_2$Cl$_8$O  
**Source:** unknown  
**Identification:** NA

**Comment:** unknown–4–15 (Pacific Library). Hypothesized PCDE or OH–PCB

<table>
<thead>
<tr>
<th>m/z [Fragment]</th>
</tr>
</thead>
<tbody>
<tr>
<td>372 [M–Cl2]+</td>
</tr>
<tr>
<td>442 M+</td>
</tr>
</tbody>
</table>

[Graph showing m/z values and intensity]
Name: unknown−2−11
Class: Unknown−2

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1638.91, 1.366

Quantitative Ion m/z: 446

Elemental Formula: C12H2Cl8O
Source: unknown
Identification: NA

Comment: unknown−4−16 (Pacific Library). Hypothesized PCDE or OH−PCB

<table>
<thead>
<tr>
<th>m/z [Fragment]</th>
</tr>
</thead>
<tbody>
<tr>
<td>372 [M−Cl2]+</td>
</tr>
<tr>
<td>442 M+</td>
</tr>
</tbody>
</table>
Name: unknown−2−12
Class: Unknown−2

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1715.86, 1.36
Quantitative Ion m/z: 480

Elemental Formula: C12HCl9O
Source: unknown
Identification: NA

Comment:

Filename: unknown_17_SWAtlantic_MQ447, Page: 119
Name: unknown−2−13

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: TRUE
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1729.85, 1.393
Quantitative Ion m/z: 480

Elemental Formula: C12HCl9O
Source: unknown
Identification: NA

Comment: unknown−4−17 (Pacific Library). Hypothesized PCDE or OH−PCB

Filename: unknown_4_17_MQ429, Page: 120
Name: unknown-2-14

Class: Unknown-2

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC-TOF, EI, 70 eV
1D RT, 2D RT (s): 1750.84, 1.333
Quantitative Ion m/z: 480

Elemental Formula: C12HCl9O
Source: unknown
Identification: NA

Comment:

m/z [Fragment]
406 [M-Cl2]+
476 M+

Filename: unknown_50_MQ429, Page: 121
<table>
<thead>
<tr>
<th>Name: unknown−3–1</th>
<th>Class: Unknown−3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Matrix:</strong> South Atlantic Dolphin Blubber</td>
<td><strong>Instrument:</strong> GCxGC−TOF, EI, 70 eV</td>
</tr>
<tr>
<td>In N. Atlantic: TRUE, In N. Pacific: TRUE</td>
<td>1D RT, 2D RT (s): 1484.99, 1.069</td>
</tr>
<tr>
<td>Typically Monitored: FALSE</td>
<td>Quantitative Ion m/z: 449</td>
</tr>
<tr>
<td>Comment: unknown−5−2 (Pacific Library)</td>
<td><strong>Elemental Formula:</strong></td>
</tr>
<tr>
<td><strong>Source:</strong> unknown</td>
<td><strong>Identification:</strong> NA</td>
</tr>
</tbody>
</table>

![Graph of m/z values](image_url)
Name: unknown−4–1

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1593.43, 1.399
Quantitative Ion m/z: 370

Elemental Formula:
Element: unknown
Source: unknown
Identification: NA

Comment:

Filename: unknown_6_1a_MQ429, Page: 123
Name: unknown−4−2  
Class: Unknown−4

Matrix: South Atlantic Dolphin Blubber  
In N. Atlantic: FALSE, In N. Pacific: TRUE  
Typically Monitored: FALSE  
Comment: unknown−6−1 (Pacific Library)

Instrument: GCxGC−TOF, EI, 70 eV  
1D RT, 2D RT (s): 1610.92, 1.492  
Quantitative Ion m/z: 370

Elemental Formula:  
Source: unknown  
Identification: NA

Filename: unknown_6_1_MQ447, Page: 124
### Name: unknown−5−1

Matrix: South Atlantic Dolphin Blubber  
In N. Atlantic: FALSE, In N. Pacific: FALSE  
Typically Monitored: FALSE

### Class: Unknown−5

Instrument: GCxGC−TOF, EI, 70 eV  
1D RT, 2D RT (s): 1799.81, 1.531  
Quantitative Ion m/z: 448

Elemental Formula:  
Source: unknown  
Identification: NA

#### Comment:

![m/z Chart]

- m/z [Fragment]

---

Filename: unknown_22_SWAtlantic_MQ447, Page: 125
Name: unknown−5−2

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1862.78, 1.828
Quantitative Ion m/z: 448

Elemental Formula: 
Source: unknown
Identification: NA

Comment:

![Mass Spectrogram]

Filename: unknown_19_SWAtlantic_MQ447, Page: 126
Name: unknown−5−3

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1869.77, 1.703
Quantitative Ion m/z: 448

Elemental Formula:
Source: unknown
Identification: NA

Comment:
Name: unknown-6
Class: Unknown

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC-TOF, EI, 70 eV
1D RT, 2D RT (s): 725.928, 0.825
Quantitative Ion m/z: 172

Elemental Formula: Source: unknown
Identification: NA

Comment:

Filename: unknown_1_SWAtlantic_MQ447, Page: 128
<table>
<thead>
<tr>
<th>Name: unknown−7</th>
<th>Class: Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matrix: South Atlantic Dolphin Blubber</td>
<td>Instrument: GCxGC−TOF, EI, 70 eV</td>
</tr>
<tr>
<td>In N. Atlantic: FALSE, In N. Pacific: FALSE</td>
<td>1D RT, 2D RT (s): 876.342, 0.832</td>
</tr>
<tr>
<td>Typically Monitored: FALSE</td>
<td>Quantitative Ion m/z: 150</td>
</tr>
</tbody>
</table>

**Elemental Formula:** Source: unknown

**Identification:** NA

**Comment:**

![Mass Spectrum Graph](attachment:unknown_3_SWAtlantic_MQ447.png)

- m/z 85
- m/z 115
- m/z 128
- m/z 150
- m/z 171

**Filename:** unknown_3_SWAtlantic_MQ447, Page: 129
Name: unknown–8

Class: Unknown

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: FALSE
Typically Monitored: FALSE
Comment: unknown–6 (N Atlantic Library)

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1145.69, 0.924
Quantitative Ion m/z: 309

Elemental Formula: unknown
Source: unknown
Identification: NA
Name: unknown−9
Class: Unknown

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: FALSE
Typically Monitored: FALSE
Comment: unknown−8 (N Atlantic Library)

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1212.15, 0.904
Quantitative Ion m/z: 317

Elemental Formula:
Source: unknown
Identification: NA

m/z [Fragment]
- 315 [M−CHCl2]+
- 398 [M−Cl8]+

Filename: unknown_8_NWAtlantic_MQ429, Page: 131
Name: unknown–10

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1306.6, 0.957
Quantitative Ion m/z: 396

Elemental Formula: Source: unknown
Identification: NA

Comment:

File: unknown_8_SWAtlantic_MQ447, Page: 132
Name: unknown-11

Class: Unknown

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC-TOF, EI, 70 eV
1D RT, 2D RT (s): 1310.09, 1.01
Quantitative Ion m/z: 276

Elemental Formula:
Source: unknown
Identification: NA

Comment:

Filename: unknown_33_SWAtlantic_MQ447, Page: 133
Name: unknown−12  
Class: Unknown

Matrix: South Atlantic Dolphin Blubber  
In N. Atlantic: FALSE, In N. Pacific: TRUE  
Typically Monitored: FALSE  
Comment: unknown−17 (Pacific Library)

Instrument: GCxGC−TOF, EI, 70 eV  
1D RT, 2D RT (s): 1317.09, 0.95  
Quantitative Ion m/z: 369

Elemental Formula:  
Source: unknown  
Identification: NA

Filename: unknown_17_MQ447, Page: 134
Name: unknown−13
Class: Unknown

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE
Comment:

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1324.09, 1.142
Quantitative Ion m/z: 201

Elemental Formula:
Source: unknown
Identification: NA

m/z [Fragment]
Name: unknown−14  
Class: Unknown

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1348.57, 1.043
Quantitative Ion m/z: 432

Elemental Formula: 
Source: unknown
Identification: NA

Comment: unknown−12 (N Atlantic Library); PM = Potential Molecular Ion; Frag = Fragment Ion

m/z [Fragment]

177 [Frag]+ containing 2Cl
305 [Frag]+ containing 2Cl
349 [Frag]+ containing 2Cl
432 [PM]+ containing 2Cl
Name: unknown−15
Class: Unknown

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: FALSE
Typically Monitored: FALSE
Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1376.56, 0.931
Quantitative Ion m/z: 173
Elemental Formula:
Source: unknown
Identification: NA

Comment: unknown−3−2 (N Atlantic Library); PM = Possible Molecular Ion; Frag = Fragment Ion

m/z [Fragment]
137 [Frag−HCl]+
173 [Frag]+ containing 2Cl
347 [PM]+ containing 4Cl
Name: unknown–16
Class: Unknown

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE
Comment:

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1380.05, 0.997
Quantitative Ion m/z: 413

Elemental Formula: 
Source: unknown
Identification: NA

Filename: unknown_16_SWAtlantic_MQ447, Page: 138
Name: unknown−17

Class: Unknown

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE
Comment:

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1390.55, 0.99
Quantitative Ion m/z: 316

Elemental Formula: 
Source: unknown
Identification: NA

m/z [Fragment]
395 PCB interference
432 PCB interference

Filename: unknown_6_SWAtlantic_MQ429, Page: 139
Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1394.05, 1.023
Quantitative Ion m/z: 388

Elemental Formula: unknown
Source: unknown
Identification: NA

Comment:

m/z [Fragment]

349 [M−Cl]+
384 [M]+;
Name: unknown−19
Class: Unknown
Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE
Comment:
Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1397.54, 1.003
Quantitative Ion m/z: 316
Elemental Formula:
Source: unknown
Identification: NA

m/z [Fragment]
360 PCB interference
395 PCB interference
432 PCB interference
Name: unknown-20

Class: Unknown

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC-TOF, EI, 70 eV
1D RT, 2D RT (s): 1436.02, 1.036
Quantitative Ion m/z: 403

Elemental Formula: NA
Source: unknown
Identification: NA

Comment:

Filename: unknown_10_SWAtlantic_MQ425, Page: 142
Name: unknown–21
Class: Unknown

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: TRUE
Typically Monitored: FALSE
Comment: unknown–22 (Pacific Library)

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1467.5, 1.063
Quantitative Ion m/z: 342

Elemental Formula: unknown
Source: unknown
Identification: NA
Name: unknown–22

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1481.5, 1.082
Quantitative Ion m/z: 413

Elemental Formula:
Source: unknown
Identification: NA

Comment:

Filename: unknown_13_SWAtlantic_MQ425, Page: 144
Name: unknown–23

Class: Unknown

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1481.5, 1.023
Quantitative Ion m/z: 372

Elemental Formula:
Source: unknown
Identification: NA

Comment:

File: unknown_56_SWAtlantic_MQ447, Page: 145
Name: unknown−24

Class: Unknown

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1526.97, 1.175
Quantitative Ion m/z: 493

Elemental Formula: unknown
Source: unknown
Identification: NA

Comment:

intensity (%)

m/z [Fragment]
Name: unknown–25

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC–TOF, EI, 70 eV
1D RT, 2D RT (s): 1533.97, 1.155
Quantitative Ion m/z: 493

Elemental Formula:
Source: unknown
Identification: NA

Comment:
Name: unknown−26  
Class: Unknown  

Matrix: South Atlantic Dolphin Blubber  
In N. Atlantic: FALSE, In N. Pacific: FALSE  
Typically Monitored: FALSE  
Instrument: GCxGC−TOF, EI, 70 eV  
1D RT, 2D RT (s): 1568.95, 1.34  
Quantitative Ion m/z: 336  
Elemental Formula: 
Source: unknown  
Identification: NA  
Comment: Similar to unknown−29 but different retention time (Pacific Library)

![Mass Spectrogram](attachment://unknown_29b_MQ429.pdf)

<table>
<thead>
<tr>
<th>m/z [Fragment]</th>
</tr>
</thead>
<tbody>
<tr>
<td>51</td>
</tr>
<tr>
<td>75</td>
</tr>
<tr>
<td>110</td>
</tr>
<tr>
<td>122</td>
</tr>
<tr>
<td>150</td>
</tr>
<tr>
<td>185</td>
</tr>
<tr>
<td>220</td>
</tr>
<tr>
<td>243</td>
</tr>
<tr>
<td>334</td>
</tr>
</tbody>
</table>

Filename: unknown_29b_MQ429, Page: 148
Name: unknown−27

Class: Unknown

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1638.91, 1.3
Quantitative Ion m/z: 238

Elemental Formula:
Source: unknown
Identification: NA

Comment:

Filename: unknown_20_SWAtlantic_MQ447, Page: 149
<table>
<thead>
<tr>
<th>Name: unknown-28</th>
<th>Class: Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matrix: South Atlantic Dolphin Blubber</td>
<td>Instrument: GCxGC-TOF, EI, 70 eV</td>
</tr>
<tr>
<td>In N. Atlantic: FALSE, In N. Pacific: FALSE</td>
<td>1D RT, 2D RT (s): 1666.89, 1.419</td>
</tr>
<tr>
<td>Typically Monitored: FALSE</td>
<td>Quantitative Ion m/z: 272</td>
</tr>
<tr>
<td>Comment:</td>
<td>Source: unknown</td>
</tr>
<tr>
<td></td>
<td>Identification: NA</td>
</tr>
</tbody>
</table>

**Diagram**: M/z values and intensity (%)

**Table**: M/z values and their corresponding intensities.

**Filename**: unknown_14_SWAtlantic_MQ429, Page: 150
Name: unknown−29

Class: Unknown

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: TRUE
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1708.87, 1.465

Elemental Formula: C11H5Cl7N4
Quantitative Ion m/z: 440

Source: unknown
Identification: NA

Comment: unknown−47 (Pacific Library). Might be 2−[p−chloroaniline]−4,6−bis(trichloromethyl)−triazine based on some spectral similarity

Filename: unknown_47_MQ429, Page: 151
Name: unknown-30

Class: Unknown

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC-TOF, EI, 70 eV
1D RT, 2D RT (s): 1778.83, 1.558
Quantitative Ion m/z: 444

Elemental Formula: 
Source: unknown
Identification: NA

Comment:

Filename: unknown_11_SWAtlantic_MQ447, Page: 152
### Name: unknown−31

Class: Unknown

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE
Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1876.77, 1.881
Quantitative Ion m/z: 530

Source: unknown
Identification: NA

#### Comment:

<table>
<thead>
<tr>
<th>m/z [Fragment]</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
</tr>
<tr>
<td>76</td>
</tr>
<tr>
<td>157</td>
</tr>
<tr>
<td>107</td>
</tr>
<tr>
<td>137</td>
</tr>
<tr>
<td>205</td>
</tr>
<tr>
<td>232</td>
</tr>
<tr>
<td>274</td>
</tr>
<tr>
<td>326</td>
</tr>
<tr>
<td>370</td>
</tr>
<tr>
<td>434</td>
</tr>
<tr>
<td>530</td>
</tr>
</tbody>
</table>

Filename: unknown_38_SWAtlantic_MQ429, Page: 153
Name: unknown−32
Class: Unknown

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1873.27, 1.709
Quantitative Ion m/z: 512

Elemental Formula: Source: unknown
Identification: NA

Comment:

Filename: unknown_45_SWAtlantic_MQ429, Page: 154
<table>
<thead>
<tr>
<th>Name: unknown−33</th>
<th>Class: Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matrix: South Atlantic Dolphin Blubber</td>
<td>Instrument: GCxGC−TOF, EI, 70 eV</td>
</tr>
<tr>
<td>In N. Atlantic: FALSE, In N. Pacific: FALSE</td>
<td>1D RT, 2D RT (s): 1880.27, 1.802</td>
</tr>
<tr>
<td>Typically Monitored: FALSE</td>
<td>Quantitative Ion m/z: 500</td>
</tr>
<tr>
<td>Comment:</td>
<td>Elemental Formula:</td>
</tr>
<tr>
<td></td>
<td>Source: unknown</td>
</tr>
<tr>
<td></td>
<td>Identification: NA</td>
</tr>
</tbody>
</table>

![Mass Spectrum](image-url)

**m/z [Fragment]**
<table>
<thead>
<tr>
<th>Name: unknown-34</th>
<th>Class: Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Matrix:</strong> South Atlantic Dolphin Blubber</td>
<td><strong>Instrument:</strong> GCxGC-TOF, EI, 70 eV</td>
</tr>
<tr>
<td>In N. Atlantic: FALSE, In N. Pacific: FALSE</td>
<td>1D RT, 2D RT (s): 1901.26, 1.94</td>
</tr>
<tr>
<td>Typically Monitored: FALSE</td>
<td><strong>Elemental Formula:</strong></td>
</tr>
<tr>
<td><strong>Comment:</strong></td>
<td><strong>Source:</strong> unknown</td>
</tr>
<tr>
<td><strong>Identification:</strong> NA</td>
<td></td>
</tr>
<tr>
<td><strong>Elemental Formula:</strong></td>
<td></td>
</tr>
</tbody>
</table>

![Mass Spectrum Image](image_url)

- **m/z [Fragment]**
  - m/z 357
  - m/z 248
  - m/z 191
  - m/z 115
  - m/z 143
  - m/z 174
  - m/z 76
  - m/z 50

Filename: unknown_57_SWAtlantic_MQ447, Page: 156
Name: unknown−35
Class: Unknown

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: FALSE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC−TOF, EI, 70 eV
1D RT, 2D RT (s): 1936.24, 1.828
Quantitative Ion m/z: 263

Elemental Formula:
Source: unknown
Identification: NA

Comment:

Filename: unknown_27_SWAtlantic_MQ429, Page: 157
Name: unknown–36

Matrix: South Atlantic Dolphin Blubber
In N. Atlantic: TRUE, In N. Pacific: FALSE
Typically Monitored: FALSE

Instrument: GCxGC-TOF, EI, 70 eV
1D RT, 2D RT (s): 1974.71, 2.963
Quantitative Ion m/z: 610

Elemental Formula: Source: unknown
Identification: NA

Comment: unknown–4–4 (N Atlantic Library); PM = Possible Molecular Ion

m/z [Fragment]
512 [PM–Br–CH3]+
527 [PM–Br]+
563 [PM–C3H7]+
591 [PM–CH3]+
606 [PM]+ containing 4Br
<table>
<thead>
<tr>
<th>Name: unknown–37</th>
<th>Class: Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matrix: South Atlantic Dolphin Blubber</td>
<td>Instrument: GCxGC–TOF, EI, 70 eV</td>
</tr>
<tr>
<td>In N. Atlantic: FALSE, In N. Pacific: FALSE</td>
<td>1D RT, 2D RT (s): 1988.71, 2.066</td>
</tr>
<tr>
<td>Typically Monitored: FALSE</td>
<td>Quantitative Ion m/z: 567</td>
</tr>
<tr>
<td>Comment: Maybe mirex related</td>
<td>Source: unknown</td>
</tr>
<tr>
<td></td>
<td>Identification: NA</td>
</tr>
</tbody>
</table>

![Mass Spectrogram](attachment:unknown_28_SWAtlantic_MQ429.png)

**m/z [Fragment]**