

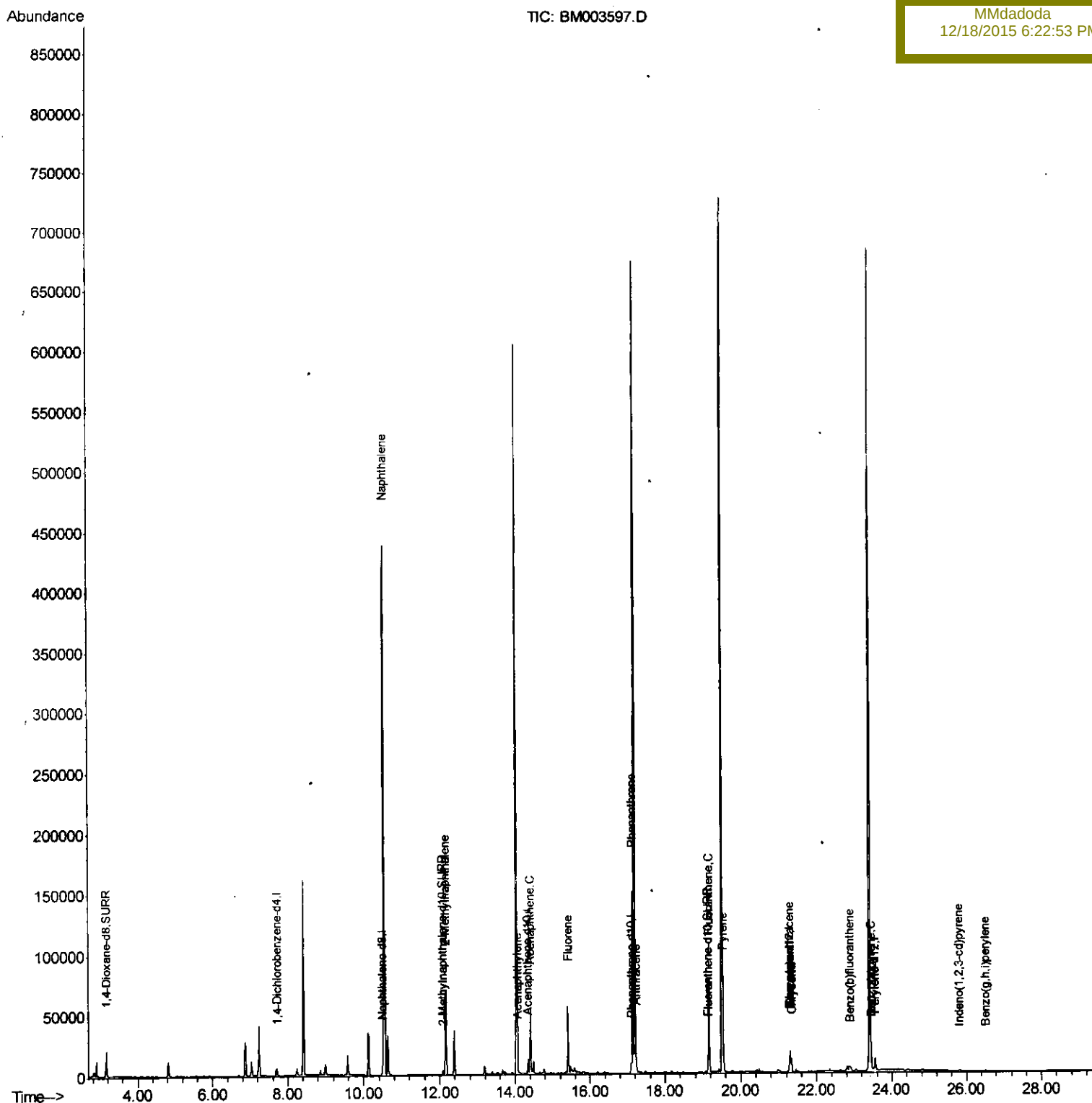
Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM121715\  
Data File : BM003597.D  
Acq On : 17 Dec 2015 13:49  
Operator : UM/12  
Sample : G4767-23  
Misc :  
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Dec 18 00:37:06 2015  
Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-SIM-BM121515.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
Quant Update : Fri Dec 18 00:27:21 2015  
Response via : Initial Calibration

Instrument :  
BNA\_M  
ClientSampleId :  
D9N45

Manual Integrations  
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Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM121715\  
Data File : BM003597.D  
Acq On : 17 Dec 2015 13:49  
Operator : UM/IZ  
Sample : G4767-23  
Misc :  
ALS Vial : 26 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampleId :  
D9N45

Manual Integrations  
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Quant Time: Dec 18 00:37:06 2015  
Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-SIM-BM121515.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Fri Dec 18 00:27:21 2015  
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| Internal Standards        | R.T.  | QIon | Response | Conc | Units  | Dev(Min) |
|---------------------------|-------|------|----------|------|--------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.71  | 152  | 3216     | 0.40 | ng/ul. | 0.00     |
| 4) Naphthalene-d8         | 10.50 | 136  | 12737    | 0.40 | ng/ul  | 0.00     |
| 8) Acenaphthene-d10       | 14.35 | 164  | 7004     | 0.40 | ng/ul  | 0.00     |
| 12) Phenanthrene-d10      | 17.11 | 188  | 14355m   | 0.40 | ng/ul  | 0.02     |
| 18) Chrysene-d12          | 21.31 | 240  | 13694    | 0.40 | ng/ul  | 0.00     |
| 22) Perylene-d12          | 23.56 | 264  | 14491m   | 0.40 | ng/ul  | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 2) 1,4-Dioxane-d8           | 3.17  | 96   | 15985    | 11.63 | ng/uL | 0.00     |
| 6) 2-Methylnaphthalene-d10  | 12.09 | 152  | 5004     | 0.33  | ng/ul | 0.00     |
| 16) Fluoranthene-d10        | 19.14 | 212  | 10414    | 0.34  | ng/ul | 0.00     |

| Target Compounds           | R.T.  | QIon | Response | Conc  | Units  | Qvalue |
|----------------------------|-------|------|----------|-------|--------|--------|
| 5) Naphthalene             | 10.55 | 128  | 660649   | 23.02 | ng/ul  | 100    |
| 7) 2-Methylnaphthalene     | 12.16 | 142  | 51851    | 2.69  | ng/ul  | 99     |
| 9) Acenaphthylene          | 14.07 | 152  | 5587     | 0.21  | ng/ul# | 91     |
| 10) Acenaphthene           | 14.42 | 153  | 34483    | 1.60  | ng/ul  | 96     |
| 11) Fluorene               | 15.41 | 166  | 38695    | 1.62  | ng/ul  | 94     |
| 14) Phenanthrene           | 17.14 | 178  | 165382   | 4.47  | ng/ul  | 96     |
| 15) Anthracene             | 17.23 | 178  | 14192    | 0.44  | ng/ul  | 97     |
| 17) Fluoranthene           | 19.17 | 202  | 88085    | 2.19  | ng/ul  | 92     |
| 19) Pyrene                 | 19.54 | 202  | 59214    | 1.60  | ng/ul  | 94     |
| 20) Benzo(a)anthracene     | 21.29 | 228  | 12822    | 0.38  | ng/ul  | 95     |
| 21) Chrysene               | 21.34 | 228  | 10244    | 0.27  | ng/ul  | 94     |
| 23) Benzo(b)fluoranthene   | 22.88 | 252  | 5972m    | 0.12  | ng/ul  |        |
| 25) Benzo(a)pyrene         | 23.45 | 252  | 2970m    | 0.07  | ng/ul  |        |
| 26) Indeno(1,2,3-cd)pyrene | 25.81 | 276  | 1069m    | 0.02  | ng/ul  |        |
| 28) Benzo(g,h,i)perylene   | 26.51 | 276  | 914m     | 0.02  | ng/ul  |        |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

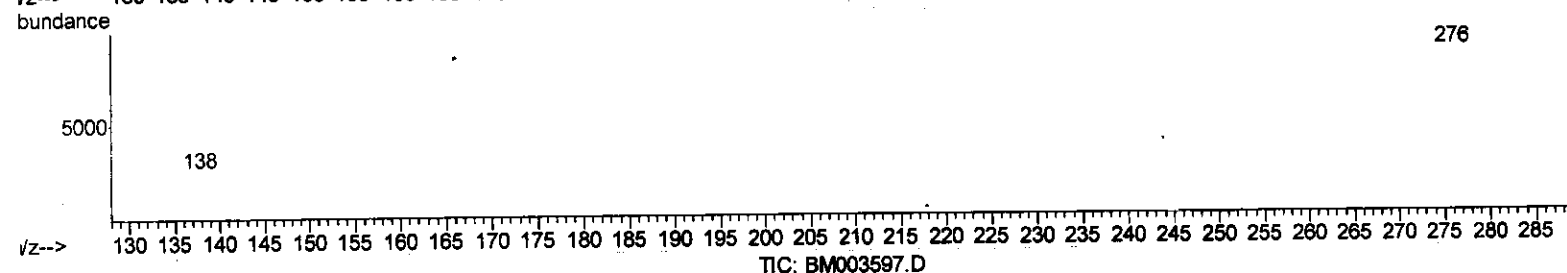
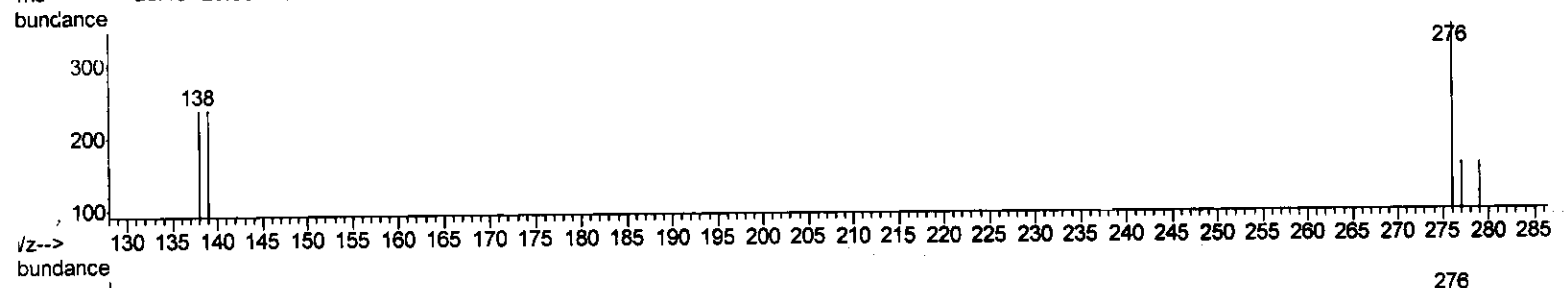
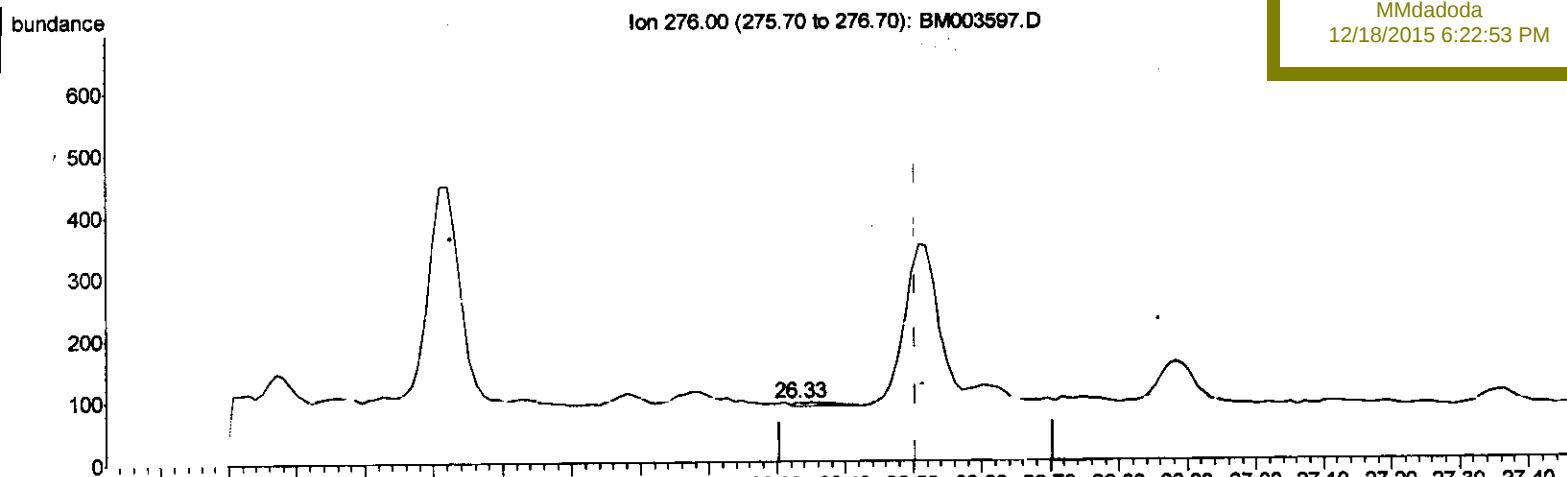
Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM121715\  
 Data File : BM003597.D  
 Acq On : 17 Dec 2015 13:49  
 Operator : UM/IZ  
 Sample : G4767-23  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Dec 18 00:33:14 2015  
 Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-SIM-BM121515.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Dec 18 00:27:21 2015  
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Instrument :  
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Manual Integrations  
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(28) Benzo(g,h,i)perylene

26.332min (-0.174) 0.00ng/ui

response 16

| Ion    | Exp%  | Act%    |
|--------|-------|---------|
| 276.00 | 100   | 100     |
| 277.00 | 23.60 | 101.08# |
| 138.00 | 28.10 | 194.62# |
| 0.00   | 0.00  | 0.00    |

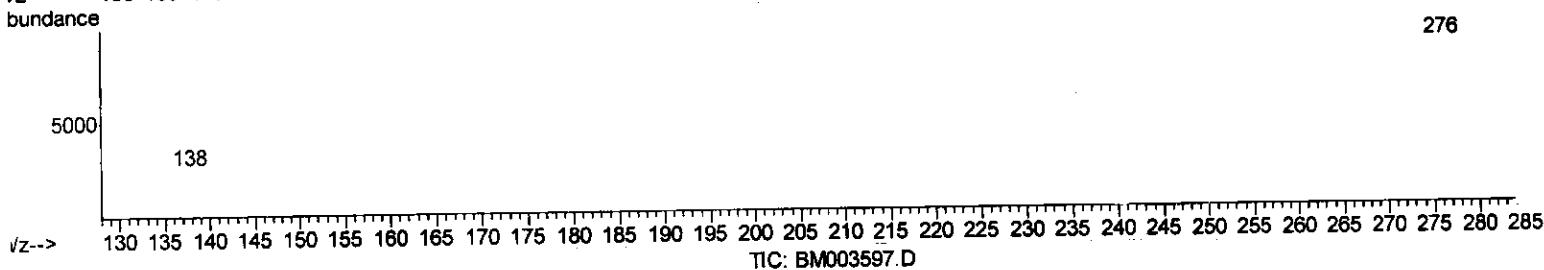
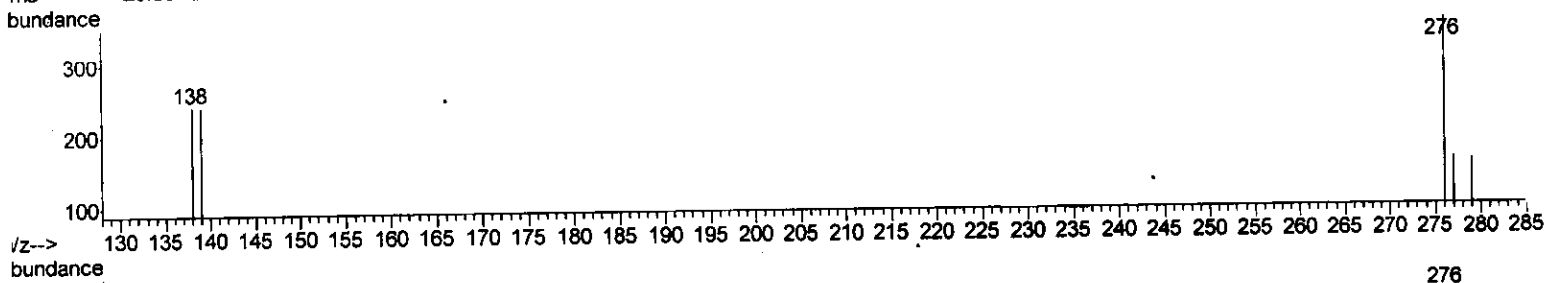
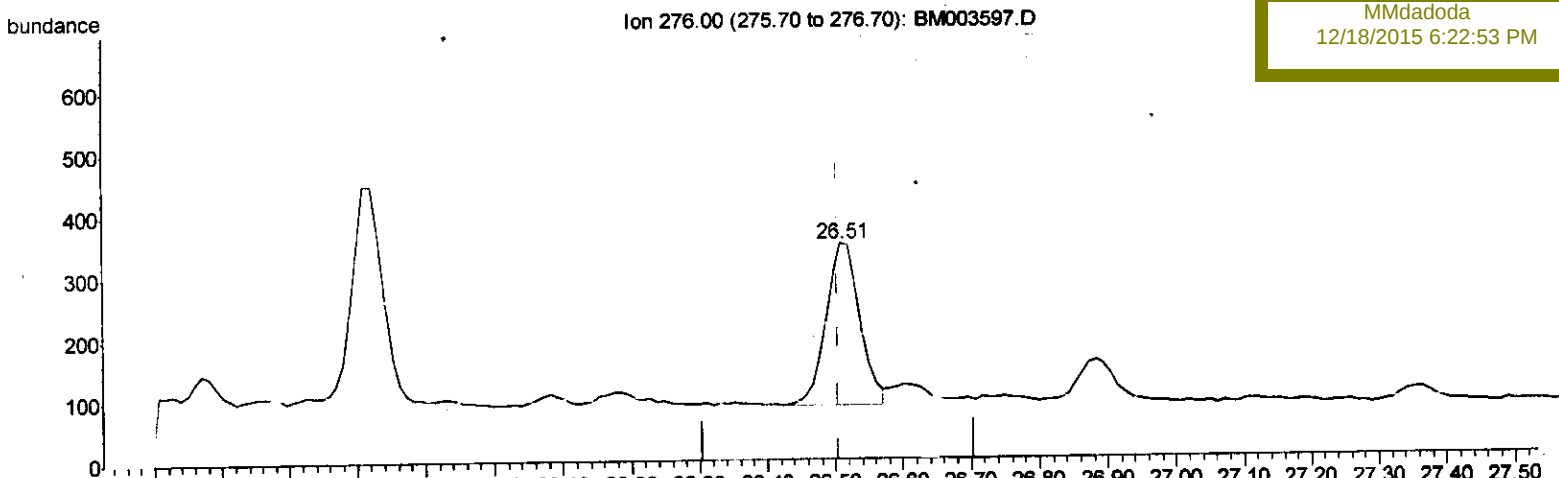
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 Data File : BM003597.D  
 Acq On : 17 Dec 2015 13:49  
 Operator : UM/IZ  
 Sample : G4767-23  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Dec 18 00:33:14 2015  
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Manual Integrations  
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(28) Benzo(g,h,i)perylene

26.509min (+0.003) 0.02ng/ul m

response 914

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| Ion    | Exp%  | Act%   |
|--------|-------|--------|
| 276.00 | 100   | 100    |
| 277.00 | 23.60 | 44.41# |
| 138.00 | 28.10 | 69.34# |
| 0.00   | 0.00  | 0.00   |

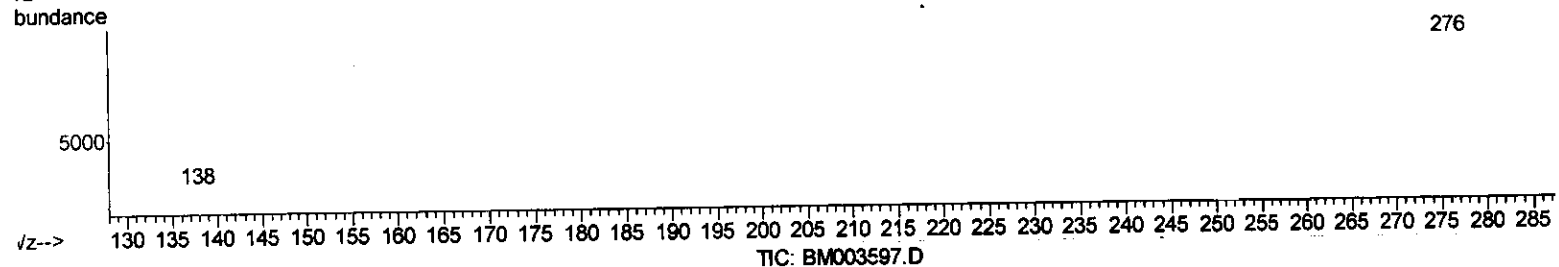
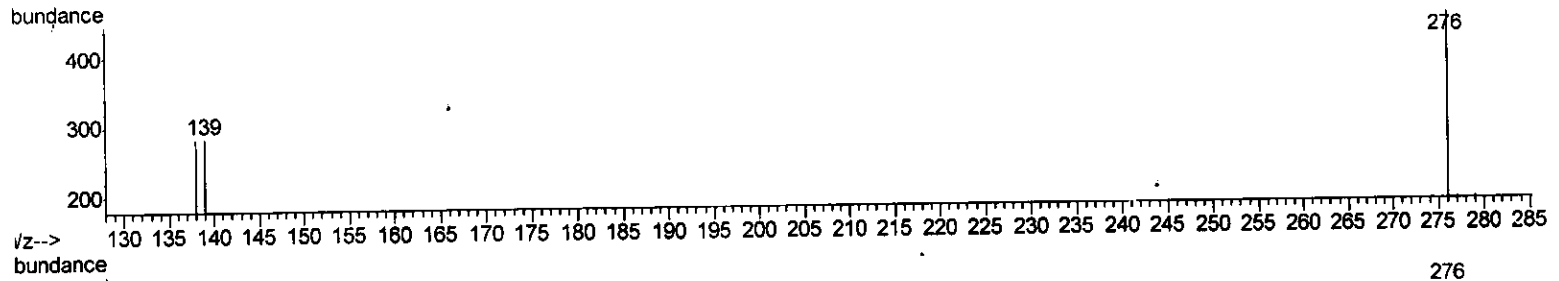
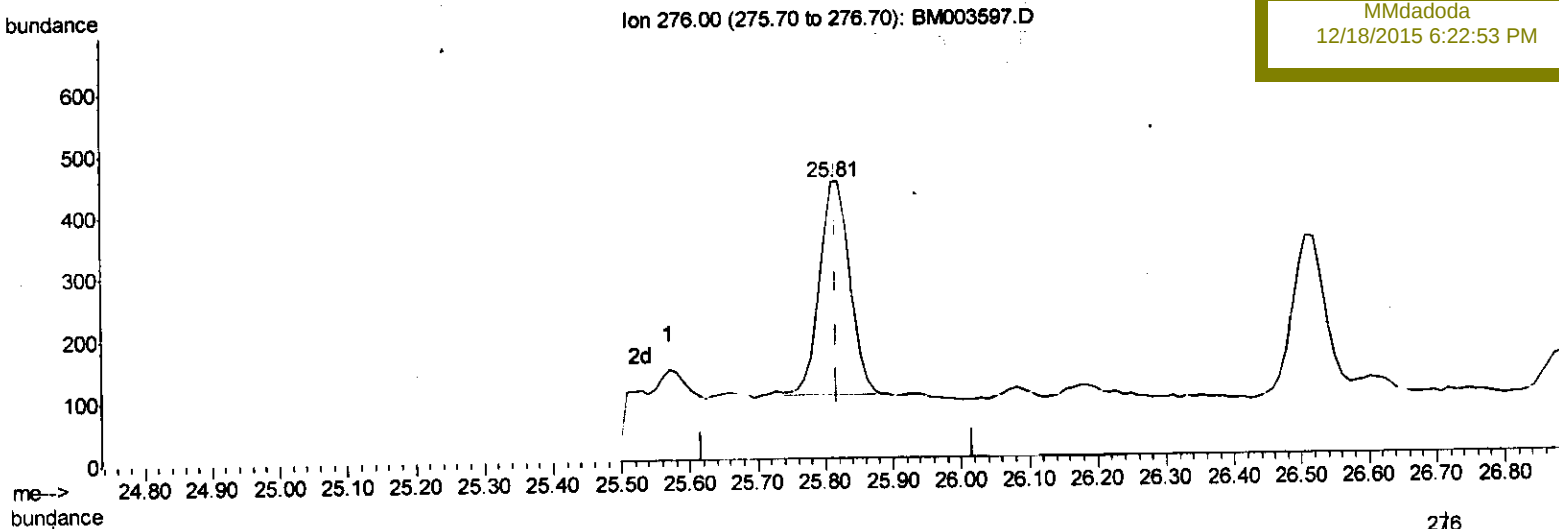
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 Data File : BM003597.D  
 Acq On : 17 Dec 2015 13:49  
 Operator : UM/IZ  
 Sample : G4767-23  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Dec 18 00:33:14 2015  
 Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-SIM-BM121515.M  
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 QLast Update : Fri Dec 18 00:27:21 2015  
 Response via : Initial Calibration

Instrument :  
 BNA\_M  
 ClientSampleId :  
 D9N45

Manual Integrations  
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(26) Indeno(1,2,3-cd)pyrene

25.811min (-0.007) 0.02ng/ul m

response 1069

> U.M  
 25/12/15

| Ion    | Exp%  | Act%  |
|--------|-------|-------|
| 276.00 | 100   | 100   |
| 138.00 | 20.40 | 0.00# |
| 277.00 | 24.80 | 0.00# |
| 0.00   | 0.00  | 0.00  |

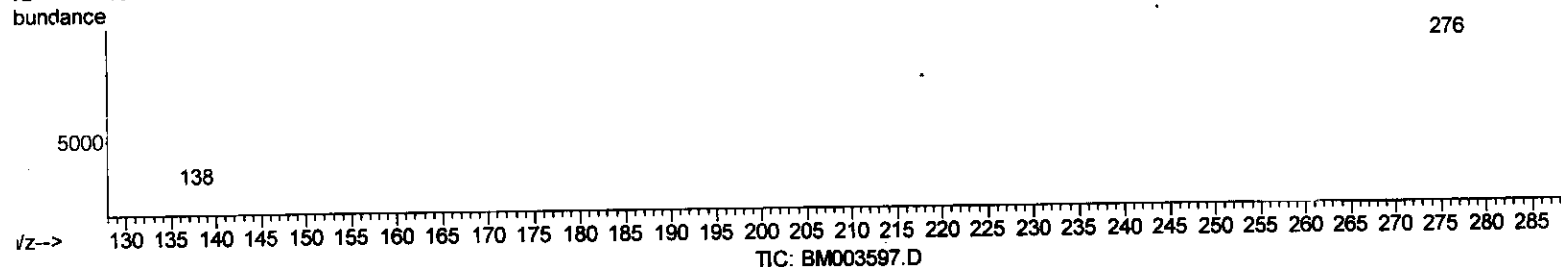
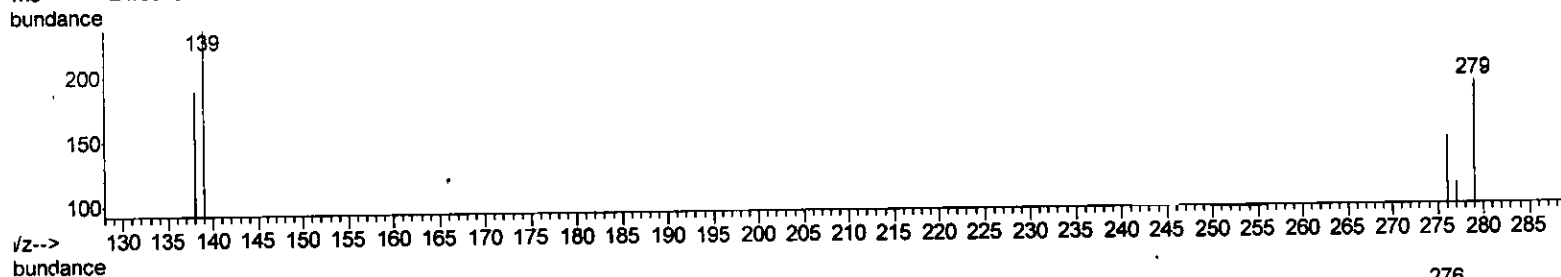
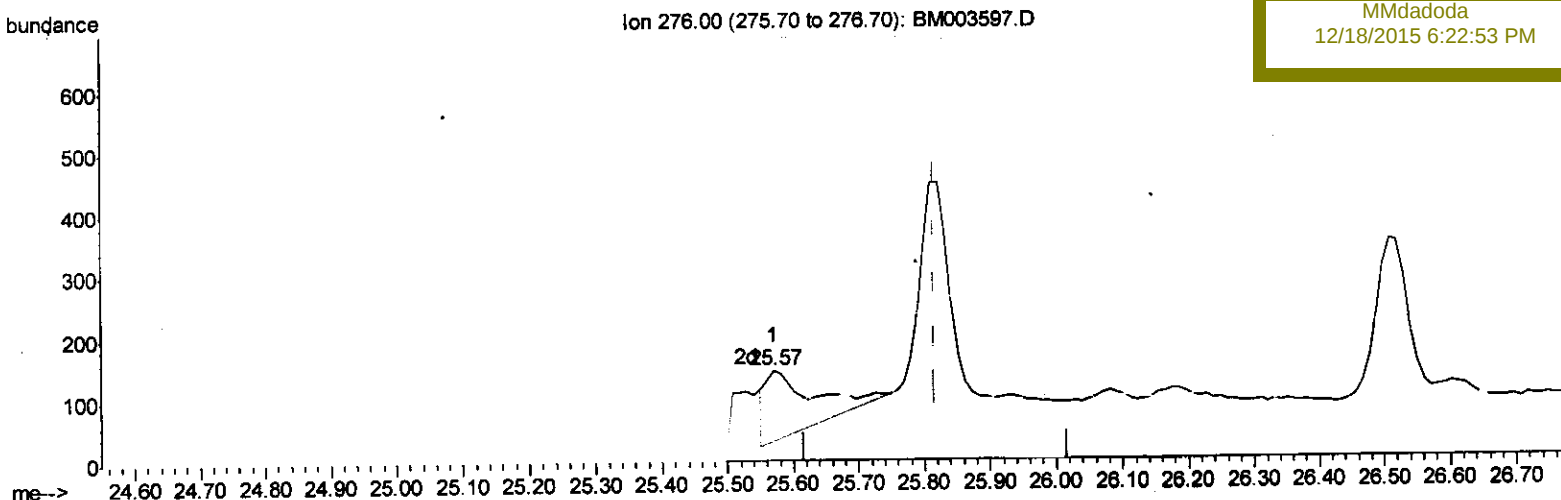
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 Data File : BM003597.D  
 Acq On : 17 Dec 2015 13:49  
 Operator : UM/IZ  
 Sample : G4767-23  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Dec 18 00:33:14 2015  
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 Qlast Update : Fri Dec 18 00:27:21 2015  
 Response via : Initial Calibration

Instrument :  
 BNA\_M  
 ClientSampleId :  
 D9N45

Manual Integrations  
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(26) Indeno(1,2,3-cd)pyrene

25.571min (-0.247) 0.01ng/ul

response 552

| Ion    | Exp%  | Act%  |
|--------|-------|-------|
| 276.00 | 100   | 100   |
| 138.00 | 20.40 | 0.00# |
| 277.00 | 24.80 | 0.00# |
| 0.00   | 0.00  | 0.00  |

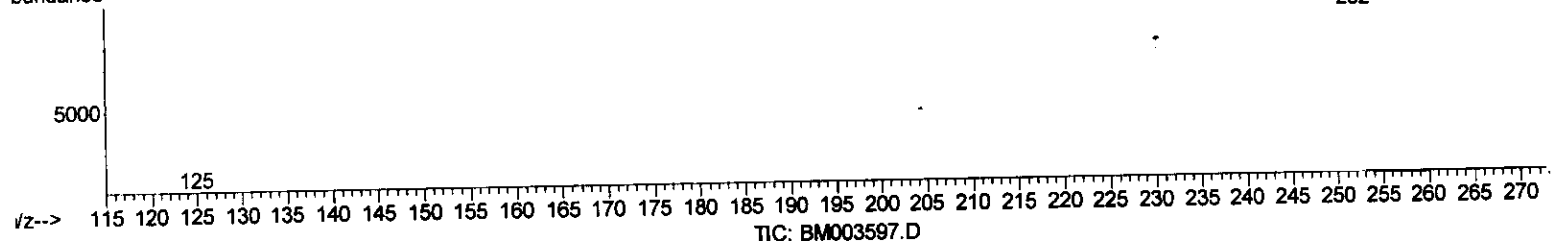
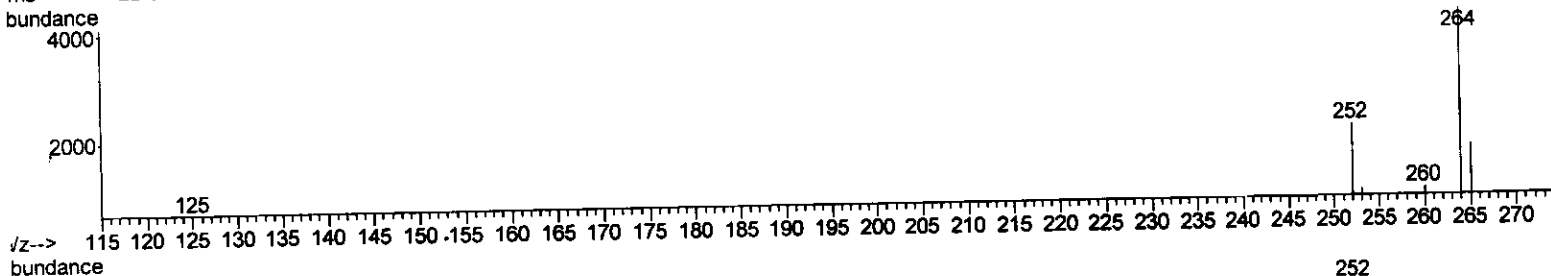
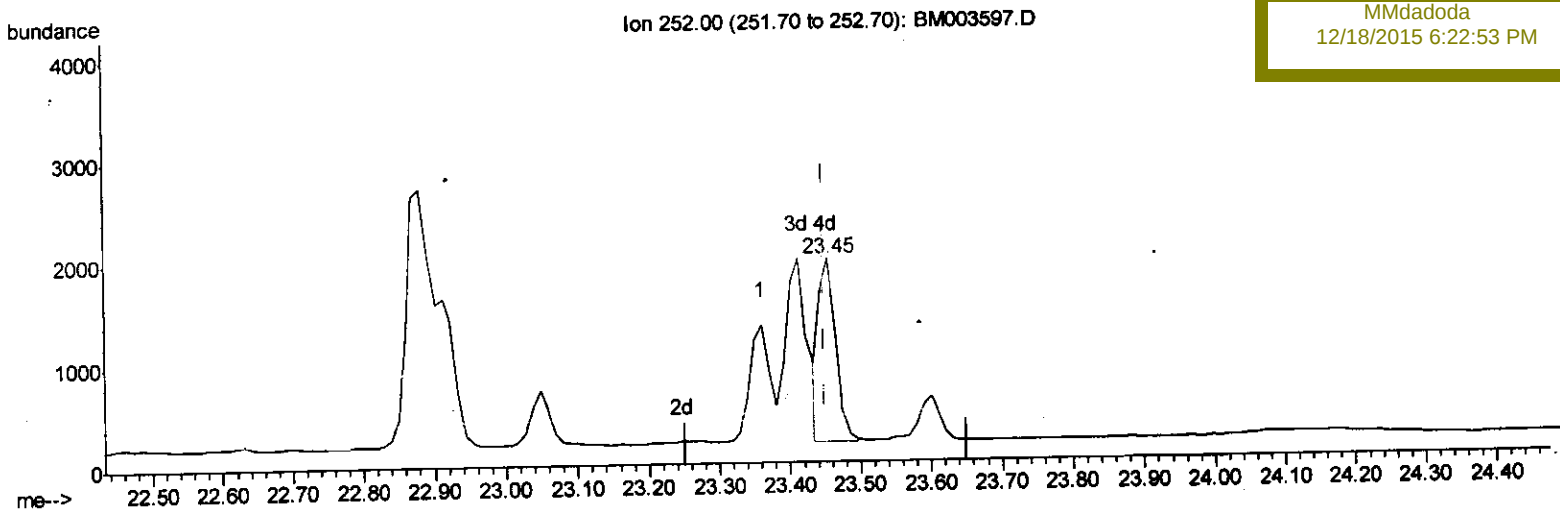
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 Acq On : 17 Dec 2015 13:49  
 Operator : UM/IZ  
 Sample : G4767-23  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

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Instrument :  
 BNA M  
 ClientSampleId :  
 D9N45

Manual Integrations  
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(25) Benzo(a)pyrene (C)

23.455min (+0.003) 0.07ng/ul m

response 2970

| Ion    | Exp%  | Act%   |
|--------|-------|--------|
| 252.00 | 100   | 100    |
| 253.00 | 24.30 | 39.28# |
| 125.00 | 15.90 | 33.54# |
| 0.00   | 0.00  | 0.00   |

>U.M  
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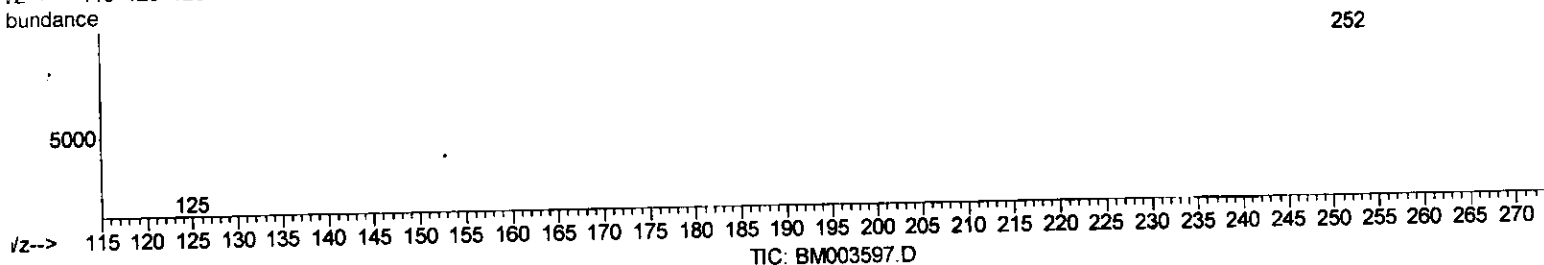
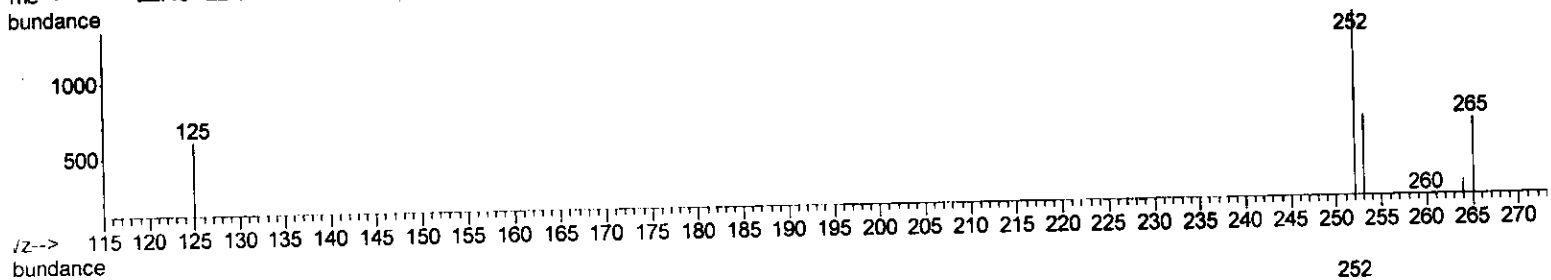
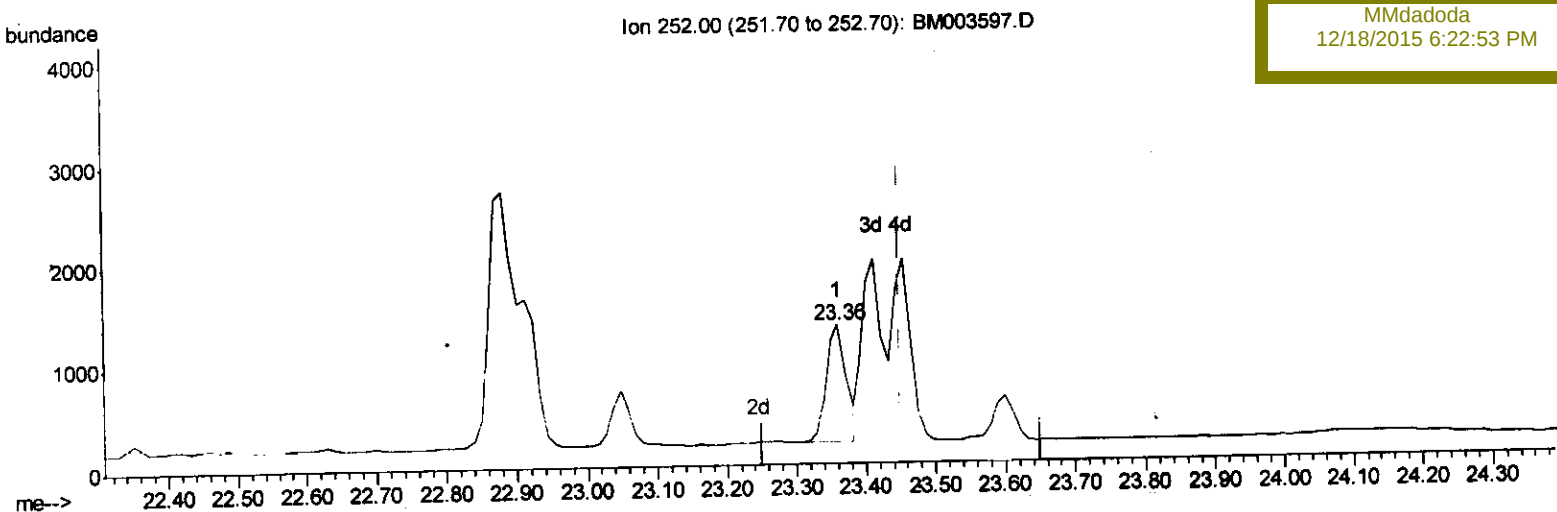
Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM121715\  
 Data File : BM003597.D  
 Acq On : 17 Dec 2015 13:49  
 Operator : UM/IZ  
 Sample : G4767-23  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Dec 18 00:33:14 2015  
 Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-SIM-BM121515.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
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 Response via : Initial Calibration

Instrument :  
 BNA\_M  
 ClientSampleId :  
 D9N45

Manual Integrations  
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(25) Benzo(a)pyrene (C)

23.361min (-0.090) 0.05ng/ul

response 2288

| Ion    | Exp%  | Act%   |
|--------|-------|--------|
| 252.00 | 100   | 100    |
| 253.00 | 24.30 | 47.69# |
| 125.00 | 15.90 | 44.35# |
| 0.00   | 0.00  | 0.00   |

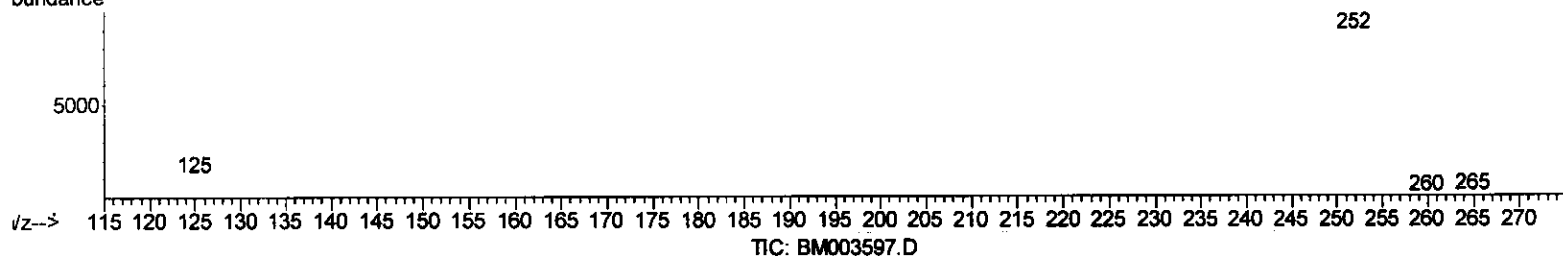
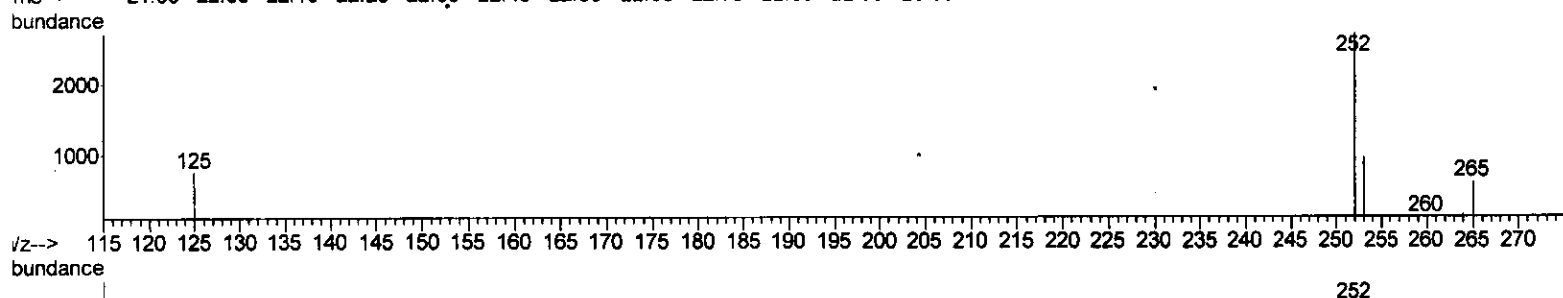
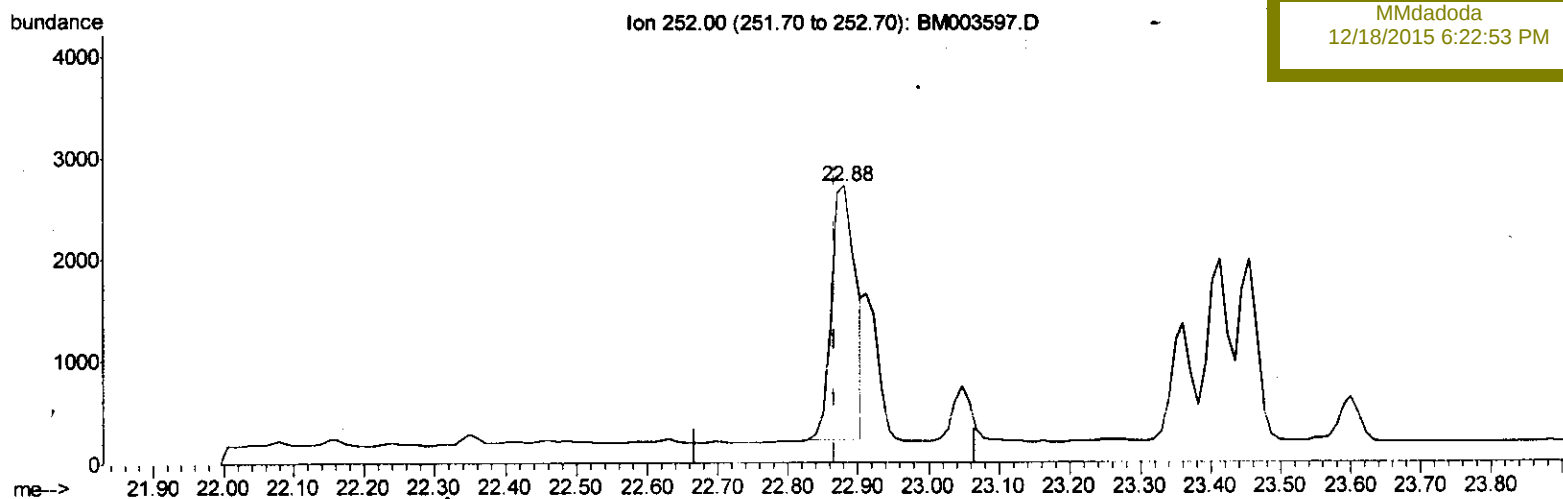
Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM121715\  
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 Acq On : 17 Dec 2015 13:49  
 Operator : UM/IZ  
 Sample : G4767-23  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Dec 18 00:33:14 2015  
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 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Dec 18 00:27:21 2015  
 Response via : Initial Calibration

Instrument :  
 BNA\_M  
 ClientSampled :  
 D9N45

Manual Integrations  
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(23) Benzo(b)fluoranthene

22.881min (+0.014) 0.12ng/ul m

response 5972

| Ion    | Exp%  | Act%  |
|--------|-------|-------|
| 252.00 | 100   | 100   |
| 253.00 | 22.70 | 34.60 |
| 125.00 | 14.40 | 27.93 |
| 0.00   | 0.00  | 0.00  |

> U.M  
 25/12/15

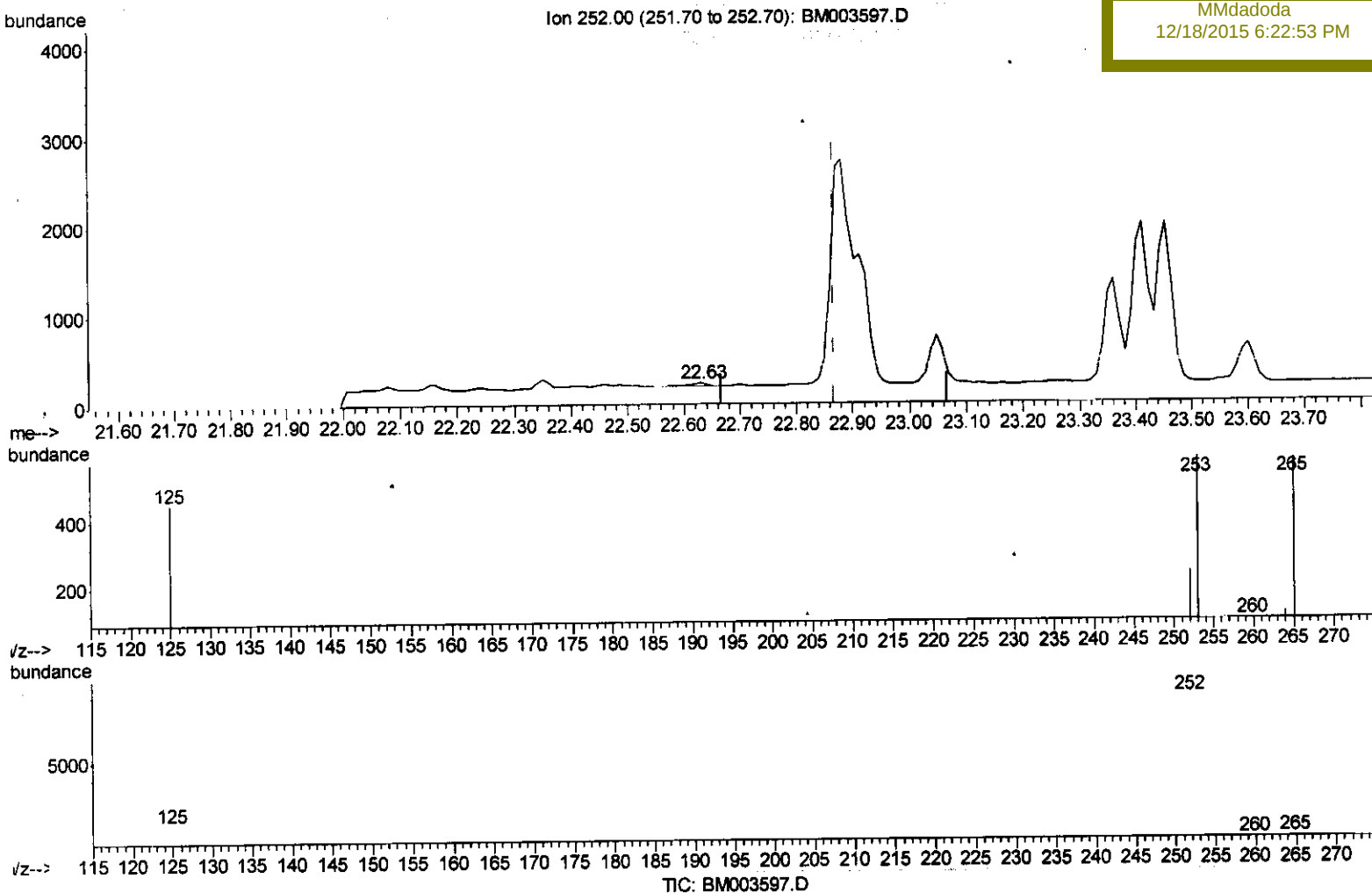
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 Data File : BM003597.D  
 Acq On : 17 Dec 2015 13:49  
 Operator : UM/IZ  
 Sample : G4767-23  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Dec 18 00:33:14 2015  
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Instrument :  
 BNA\_M  
 ClientSampleId :  
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Manual Integrations  
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(23) Benzo(b)fluoranthene

22.631min (-0.236) 0.00ng/ui

response 88

| Ion    | Exp%  | Act%    |
|--------|-------|---------|
| 252.00 | 100   | 100     |
| 253.00 | 22.70 | 247.01# |
| 125.00 | 14.40 | 192.31# |
| 0.00   | 0.00  | 0.00    |

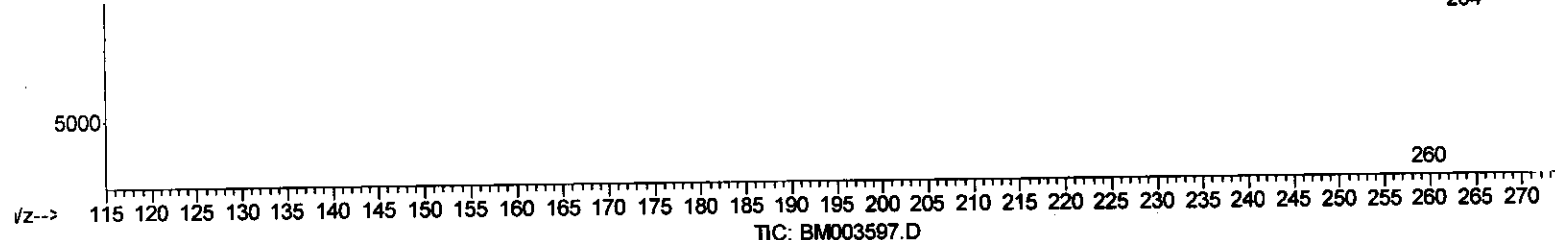
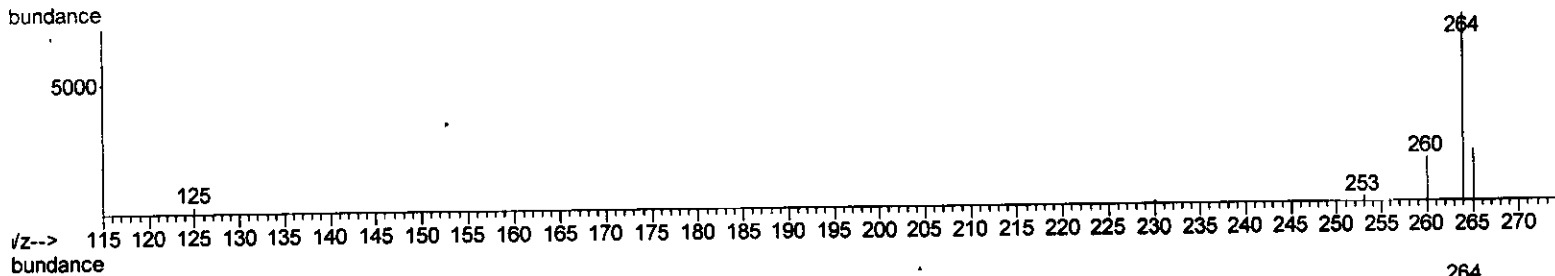
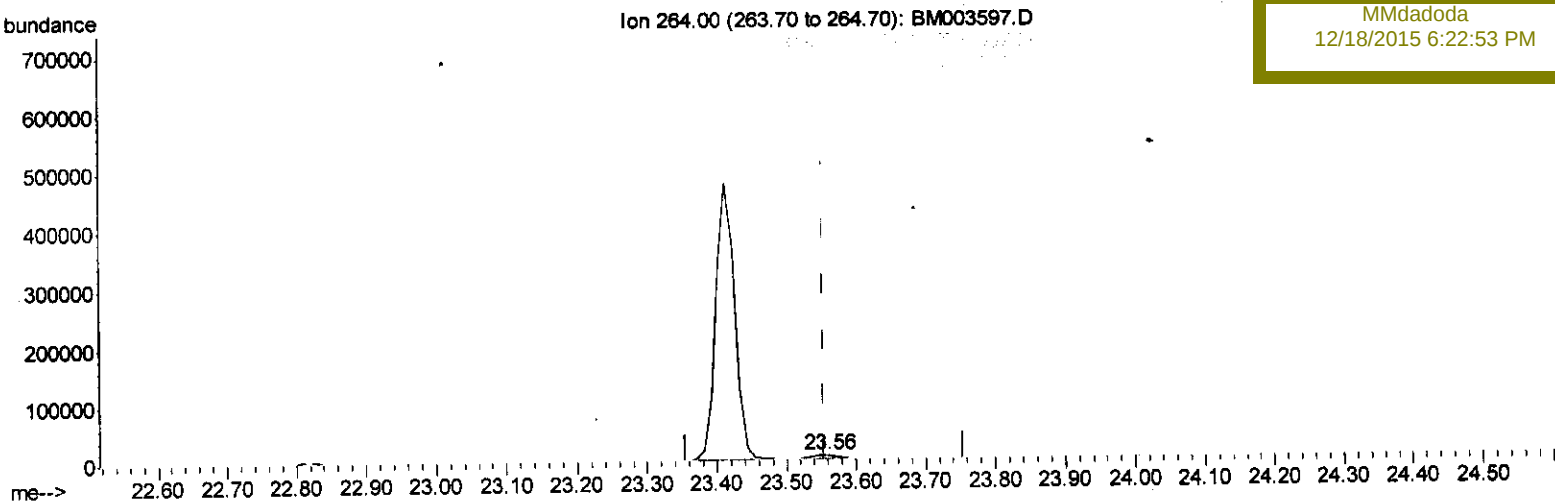
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 Operator : UM/I7  
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 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Dec 18 00:30:47 2015  
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(22) Perylene-d12 (I)

23.559min (+0.003) 0.40ng/ul m

response 14491

> U.M  
 25/12/15

| Ion    | Exp%  | Act%   |
|--------|-------|--------|
| 264.00 | 100   | 100    |
| 260.00 | 25.60 | 25.49  |
| 265.00 | 38.20 | 30.00# |
| 0.00   | 0.00  | 0.00   |

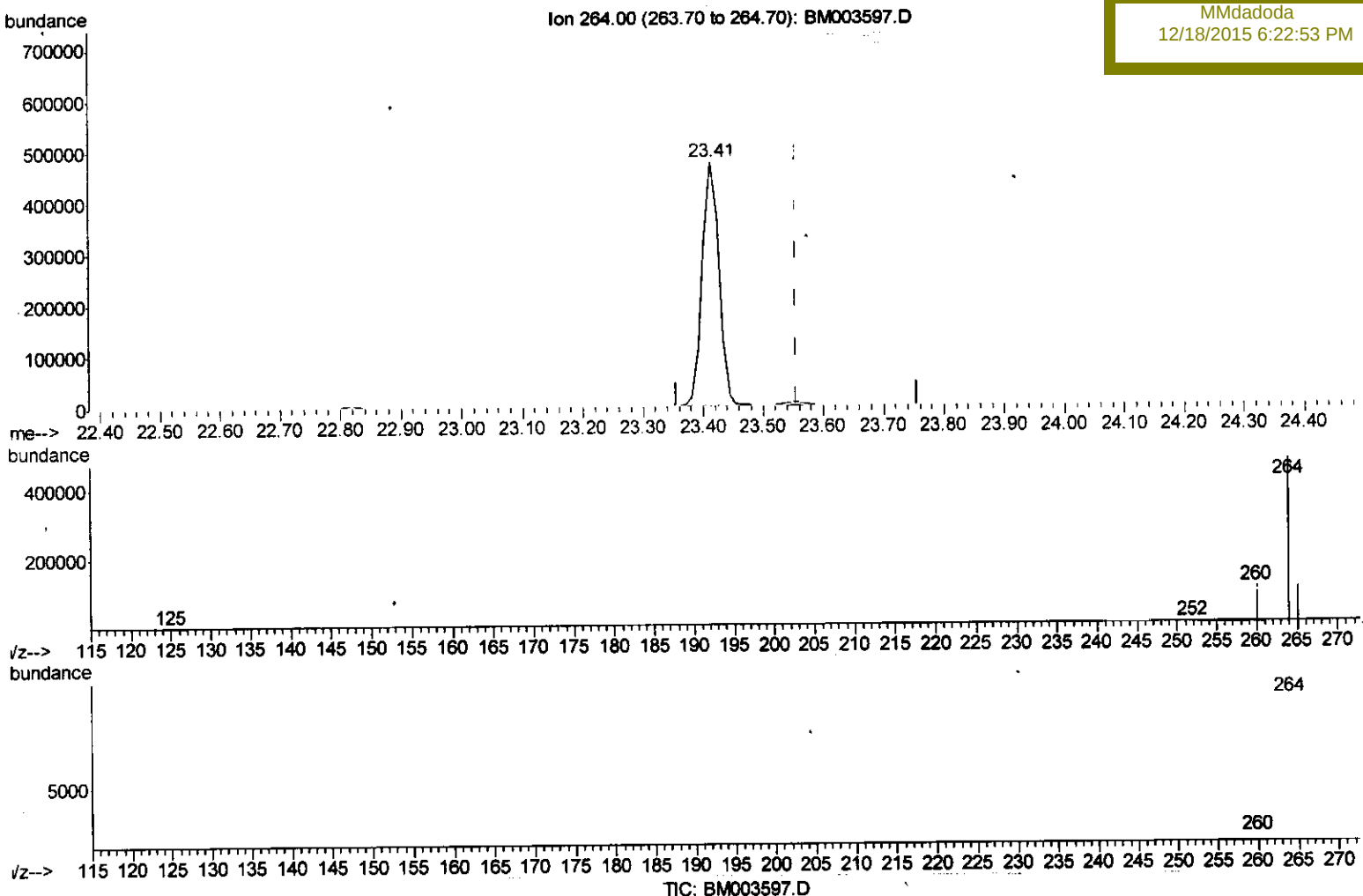
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 Data File : BM003597.D  
 Acq On : 17 Dec 2015 13:49  
 Operator : UM/IZ  
 Sample : G4767-23  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Dec 18 00:30:47 2015  
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Manual Integrations  
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(22) Perylene-d12 (I)

23.413min (-0.143) 0.40ng/ul

response 889114

| Ion    | Exp%  | Act%   |
|--------|-------|--------|
| 264.00 | 100   | 100    |
| 260.00 | 25.60 | 21.75  |
| 265.00 | 38.20 | 21.24# |
| 0.00   | 0.00  | 0.00   |

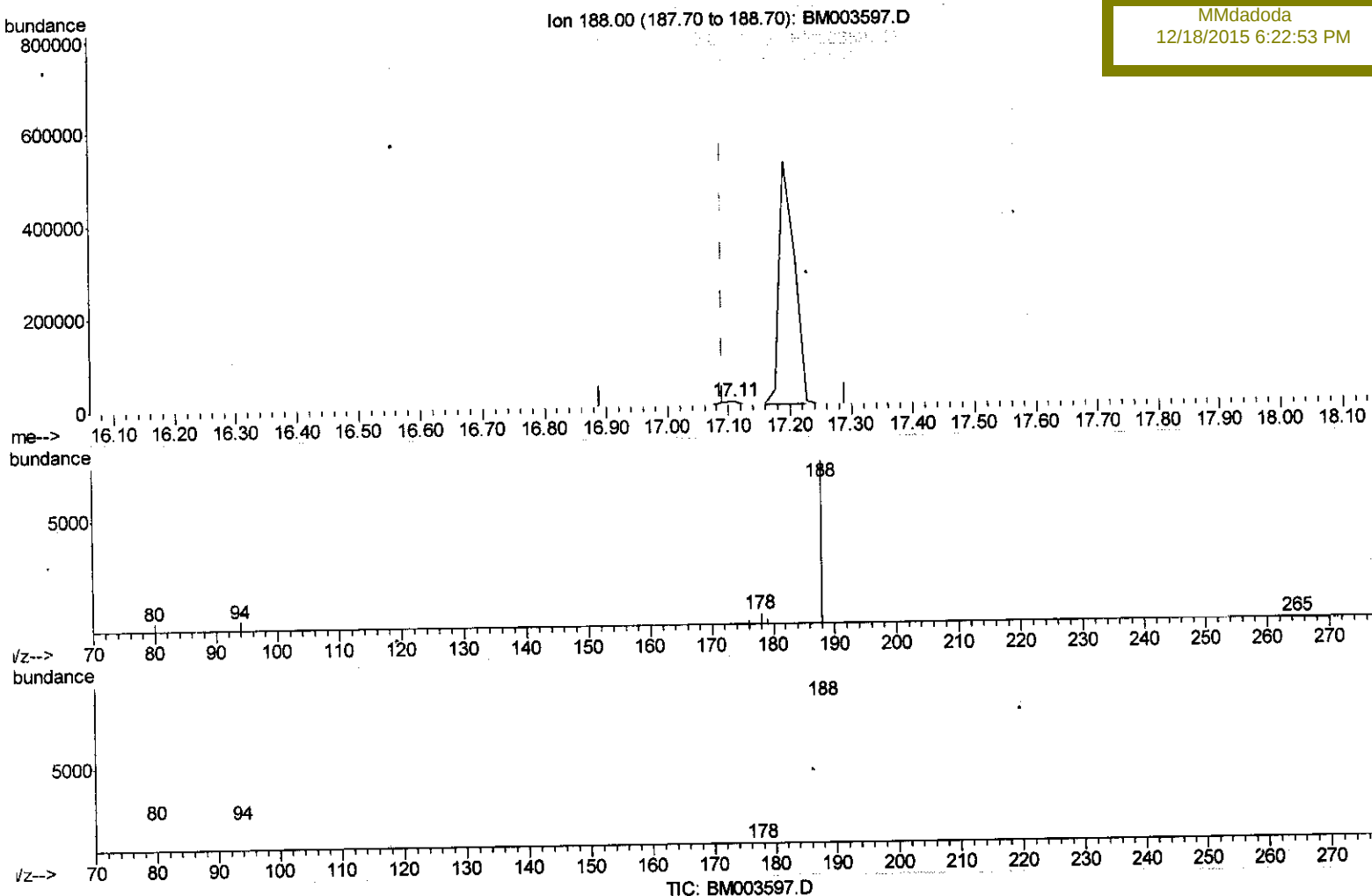
Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM121715\  
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Manual Integrations  
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(12) Phenanthrene-d10 (I)

17.108min (+0.017) 0.40ng/ul m

> U.M  
 25/12/15

response 14355

| Ion    | Exp%  | Act%  |
|--------|-------|-------|
| 188.00 | 100   | 100   |
| 94.00  | 11.70 | 5.91# |
| 80.00  | 11.90 | 5.15# |
| 0.00   | 0.00  | 0.00  |

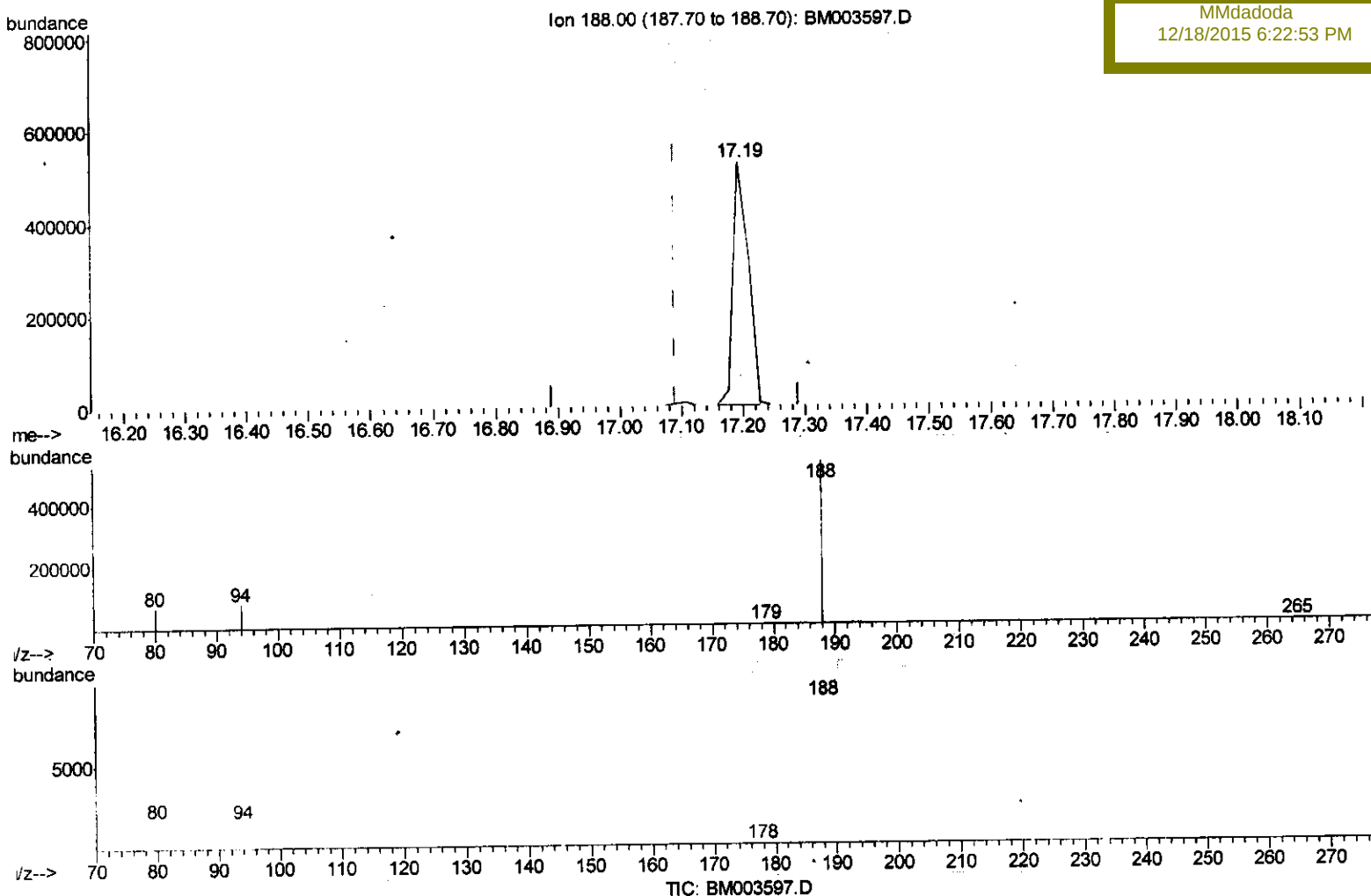
Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM121715\  
 Data File : BM003597.D  
 Acq On : 17 Dec 2015 13:49  
 Operator : UM/IZ  
 Sample : G4767-23  
 Misc :  
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: Dec 18 00:30:47 2015  
 Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-SIM-BM121515.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Dec 18 00:27:21 2015  
 Response via : Initial Calibration

Instrument :  
 BNA M  
 ClientSampleId :  
 D9N45

Manual Integrations  
 APPROVED

MMdadoda  
 12/18/2015 6:22:53 PM



(12) Phenanthrene-d10 (I)

17.193min (+0.103) 0.40ng/ul

response 902058

| Ion    | Exp%  | Act%   |
|--------|-------|--------|
| 188.00 | 100   | 100    |
| 94.00  | 11.70 | 14.86# |
| 80.00  | 11.90 | 13.01  |
| 0.00   | 0.00  | 0.00   |