

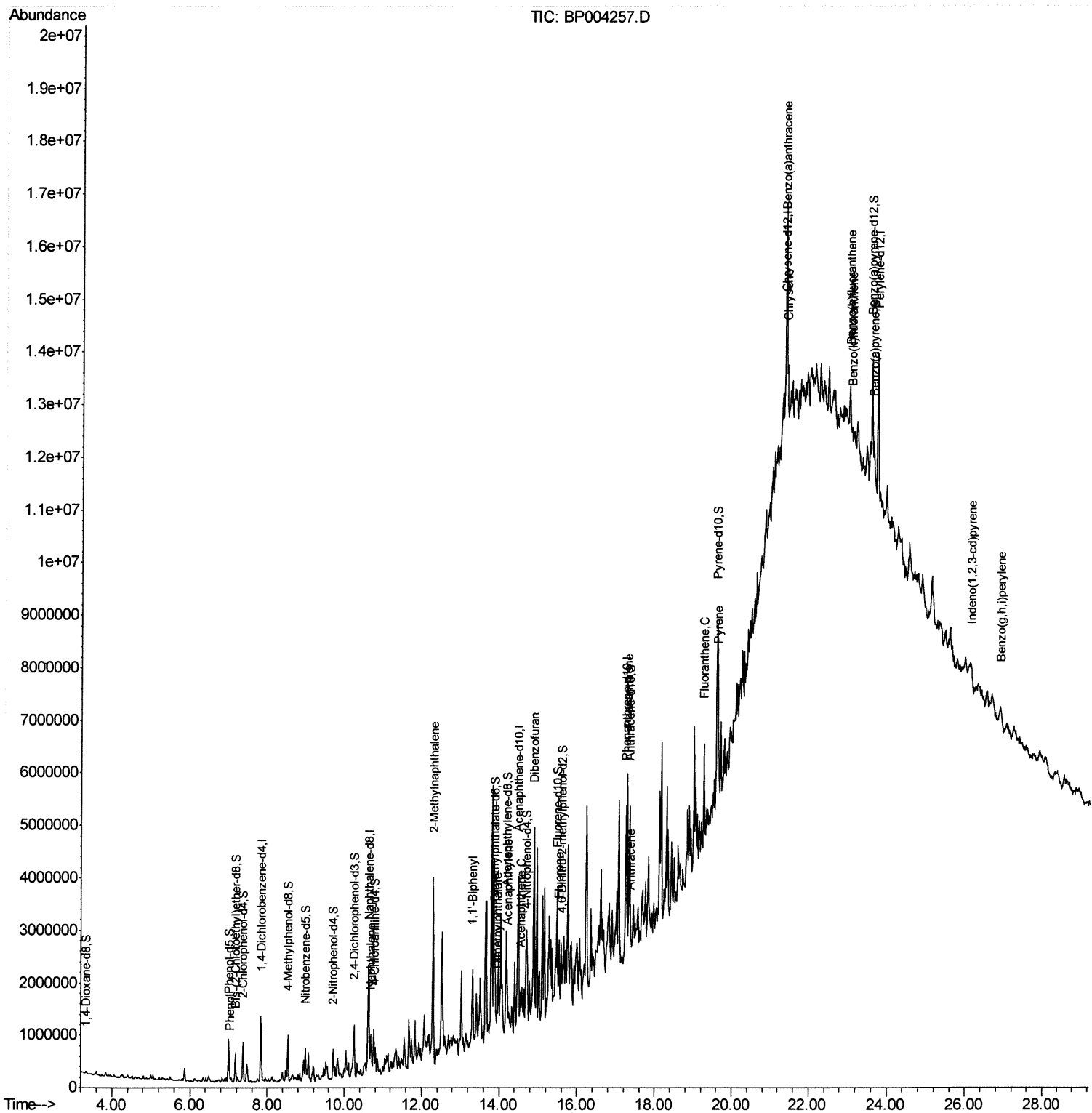
Data Path : Z:\svoasrv\HPCHEM1\BNA P\Data\BP121320\  
Data File : BP004257.D  
Acq On : 12 Dec 2020 14:01  
Operator : CG/JU  
Sample : L5063-05  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampled :  
C0AD7

Manual Integrations  
APPROVED

mohammad  
12/14/2020 2:46:01 PM

Quant Time: Dec 14 14:35:10 2020  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\SOM-EPA-BP121020MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Thu Dec 10 13:52:32 2020  
Response via : Initial Calibration



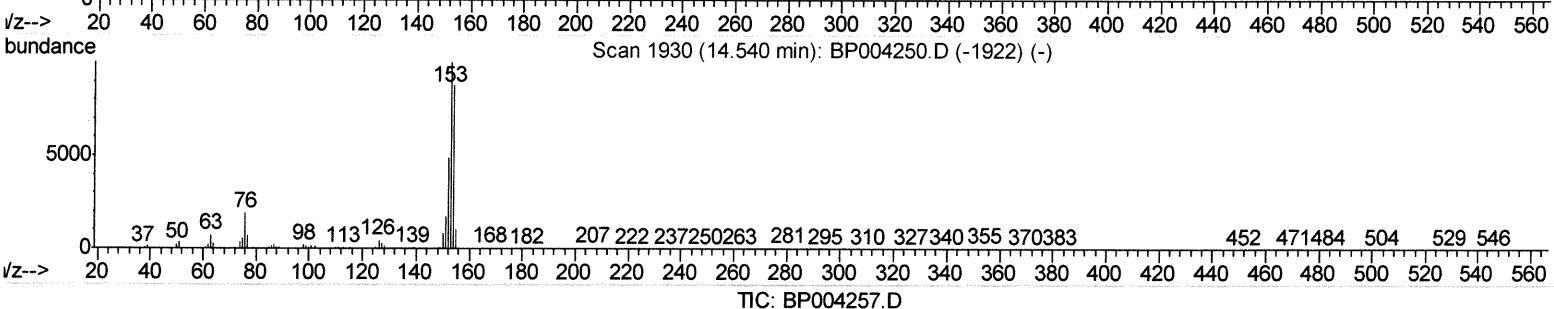
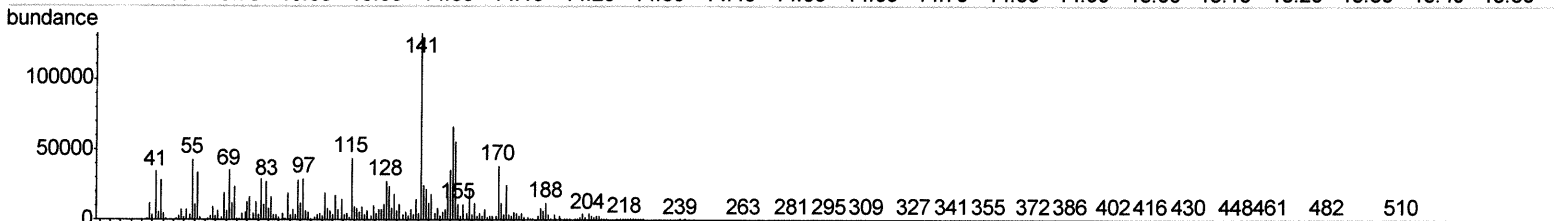
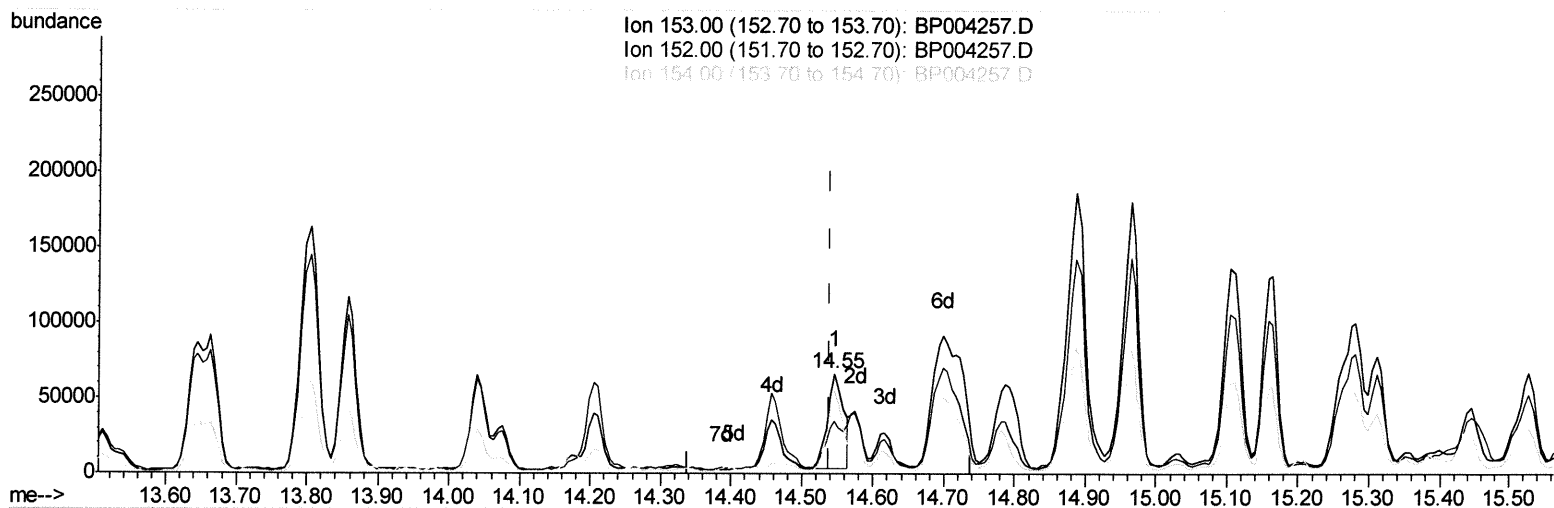
Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP121320\  
 Data File : BP004257.D  
 Acq On : 12 Dec 2020 14:01  
 Operator : CG/JU  
 Sample : L5063-05  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 C0AD7

Manual Integrations  
 APPROVED

mohammad  
 12/14/2020 2:46:01 PM

Quant Time: Dec 14 05:20:08 2020  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\SOM-EPA-BP121020MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Thu Dec 10 13:52:32 2020  
 Response via : Initial Calibration



(50) Acenaphthene (C)

14.545min (+0.006) 1.74ng/ul

response 99549

| Ion    | Exp%  | Act%  |
|--------|-------|-------|
| 153.00 | 100   | 100   |
| 152.00 | 47.20 | 52.96 |
| 154.00 | 87.30 | 82.87 |
| 0.00   | 0.00  | 0.00  |

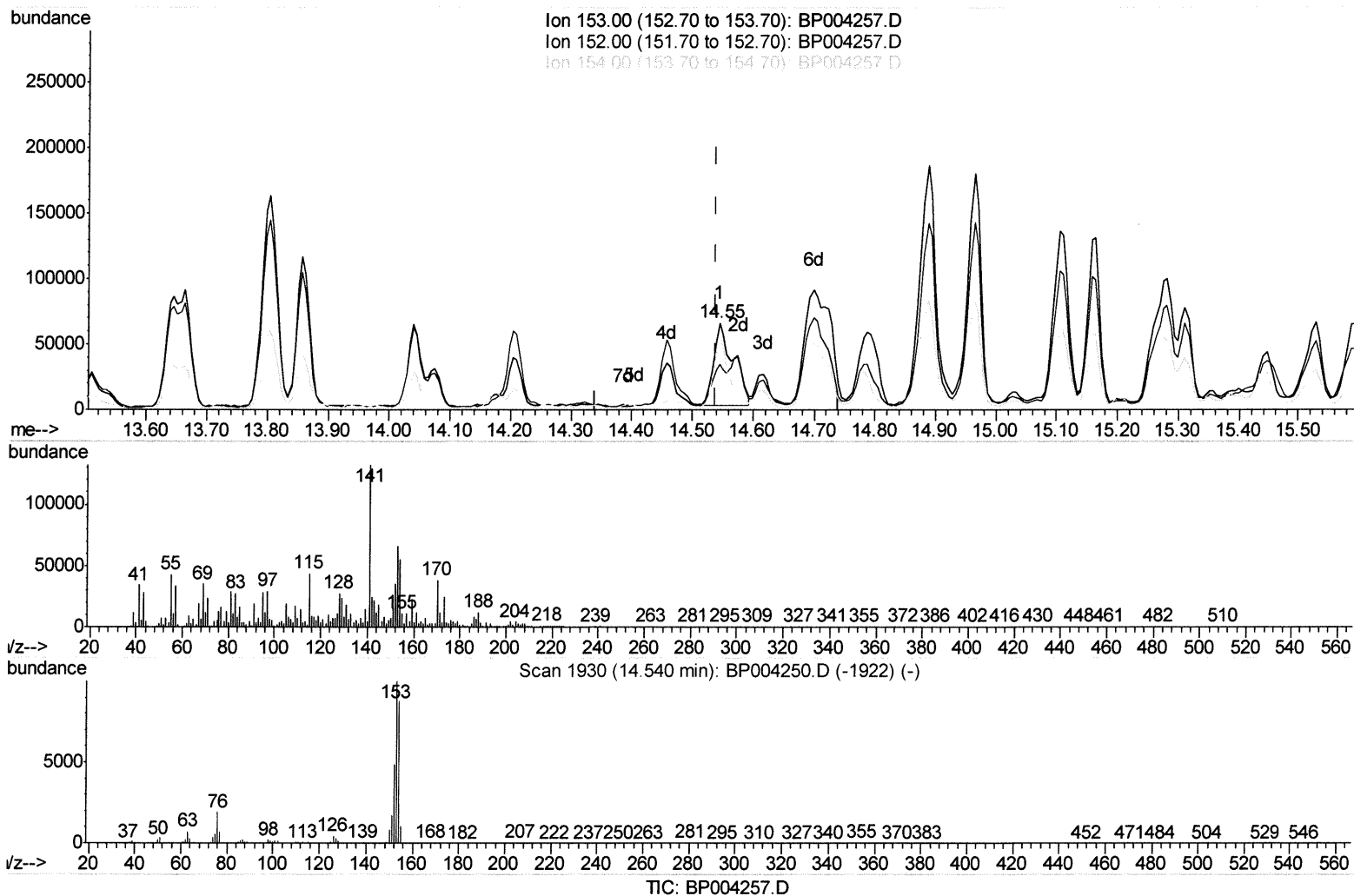
Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP121320\  
 Data File : BP004257.D  
 Acq On : 12 Dec 2020 14:01  
 Operator : CG/JU  
 Sample : L5063-05  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 C0AD7

Manual Integrations  
 APPROVED

mohammad  
 12/14/2020 2:46:01 PM

Quant Time: Dec 14 05:20:08 2020  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\SOM-EPA-BP121020MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Thu Dec 10 13:52:32 2020  
 Response via : Initial Calibration



(50) Acenaphthene (C)

14.545min (+0.006) 2.52ng/ul m

response 143826

| Ion    | Exp%  | Act%  |
|--------|-------|-------|
| 153.00 | 100   | 100   |
| 152.00 | 47.20 | 52.96 |
| 154.00 | 87.30 | 82.87 |
| 0.00   | 0.00  | 0.00  |

341278120

**Instrument :**  
BNA\_P  
**ClientSampleId :**  
C0AD7

mohammad  
12/14/2020 2:46:01 PM

undance

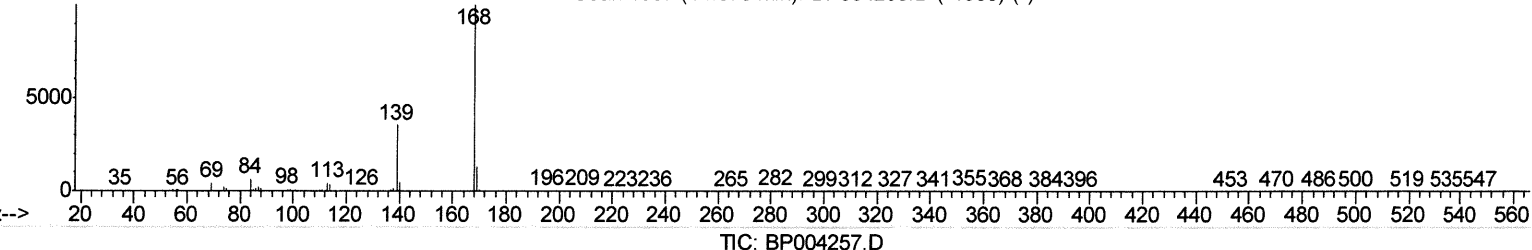
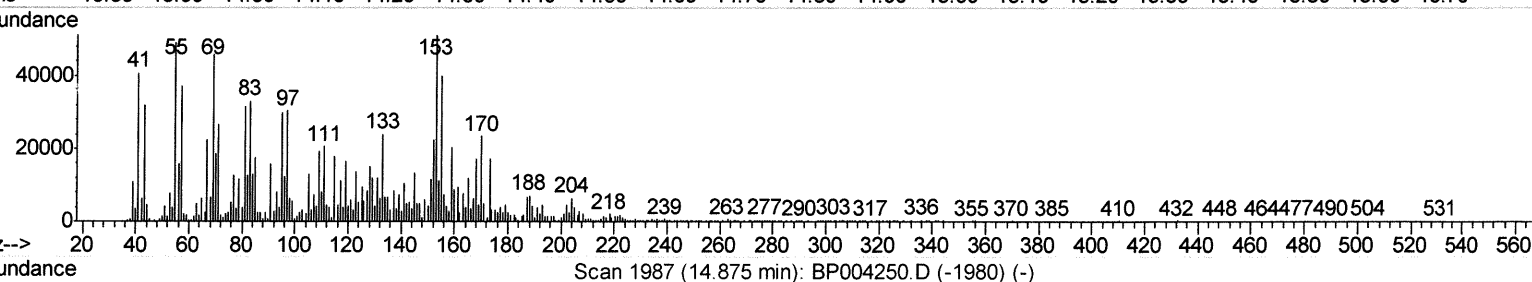
Ion 168.00 (167.70 to 168.70): BP004257.D  
Ion 139.00 (138.70 to 139.70): BP004257.D

300000  
250000  
200000  
150000  
100000  
50000  
0

ne-->

13.80 13.90 14.00 14.10 14.20 14.30 14.40 14.50 14.60 14.70 14.80 14.90 15.00 15.10 15.20 15.30 15.40 15.50 15.60 15.70

6d 1 2d 3d 4d



| Ion    | Exp%  | Act%  |
|--------|-------|-------|
| 168.00 | 100   | 100   |
| 139.00 | 36.30 | 42.55 |
| 0.00   | 0.00  | 0.00  |
| 0.00   | 0.00  | 0.00  |

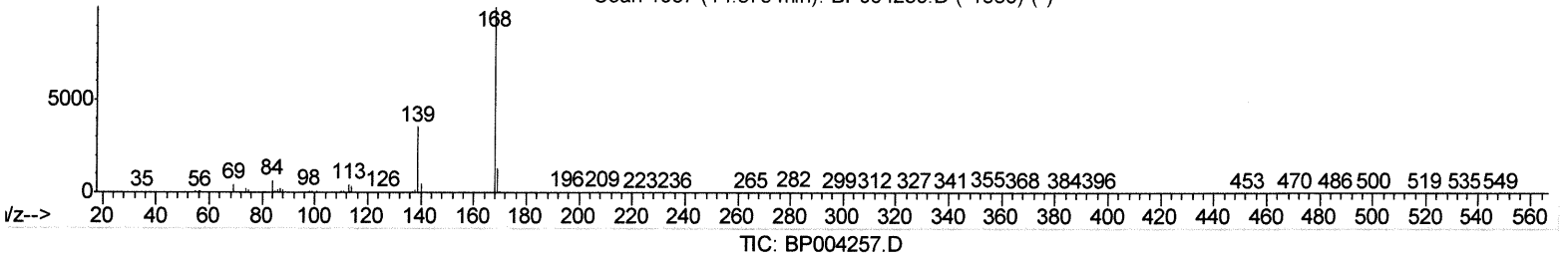
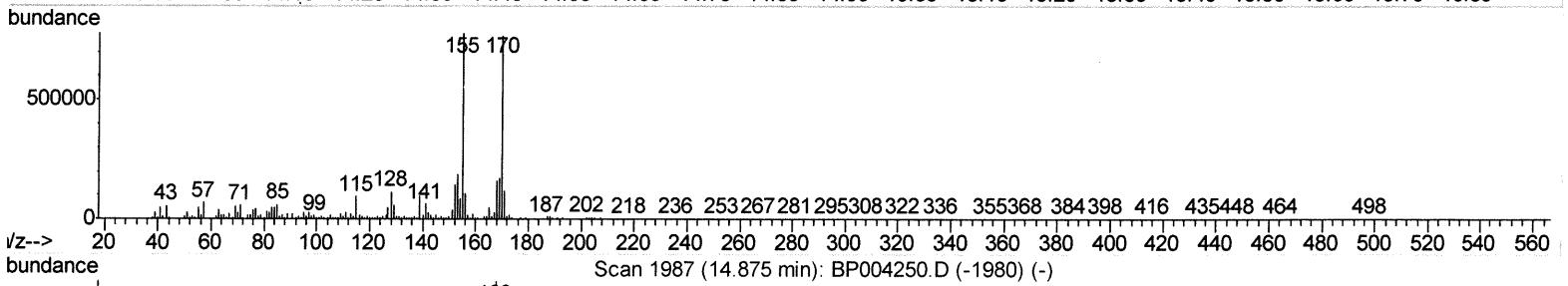
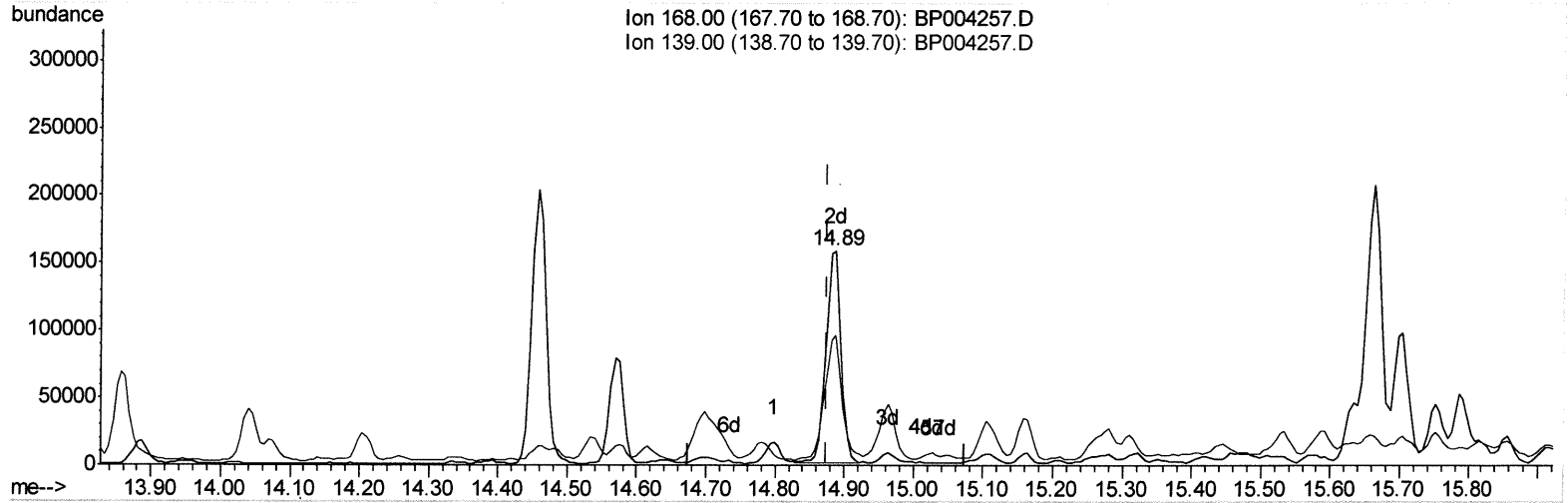
Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP121320\  
 Data File : BP004257.D  
 Acq On : 12 Dec 2020 14:01  
 Operator : CG/JU  
 Sample : L5063-05  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampled :  
 C0AD7

Manual Integrations  
 APPROVED

mohammad  
 12/14/2020 2:46:01 PM

Quant Time: Dec 14 05:20:08 2020  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\SOM-EPA-BP121020MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Thu Dec 10 13:52:32 2020  
 Response via : Initial Calibration



(54) Dibenzofuran

14.887min (+0.012) 2.98ng/ul m

response 239332

| Ion    | Exp%  | Act%   |
|--------|-------|--------|
| 168.00 | 100   | 100    |
| 139.00 | 36.30 | 60.53# |
| 0.00   | 0.00  | 0.00   |
| 0.00   | 0.00  | 0.00   |

*Handwritten signature/initials*

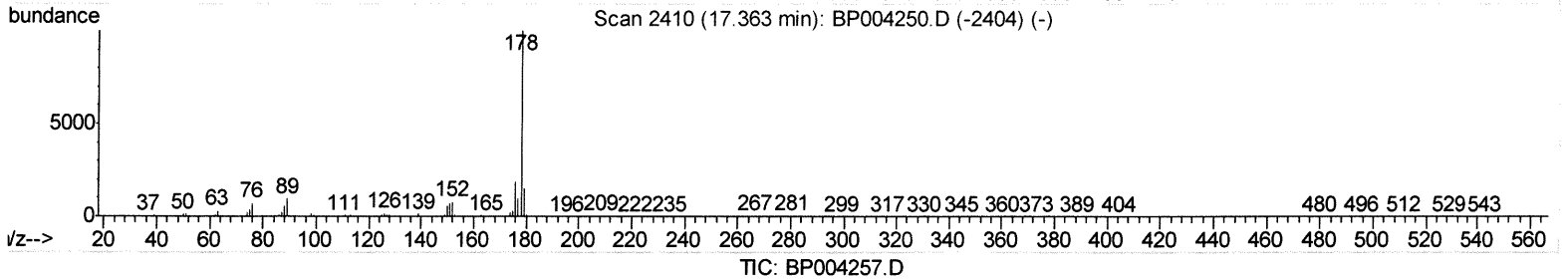
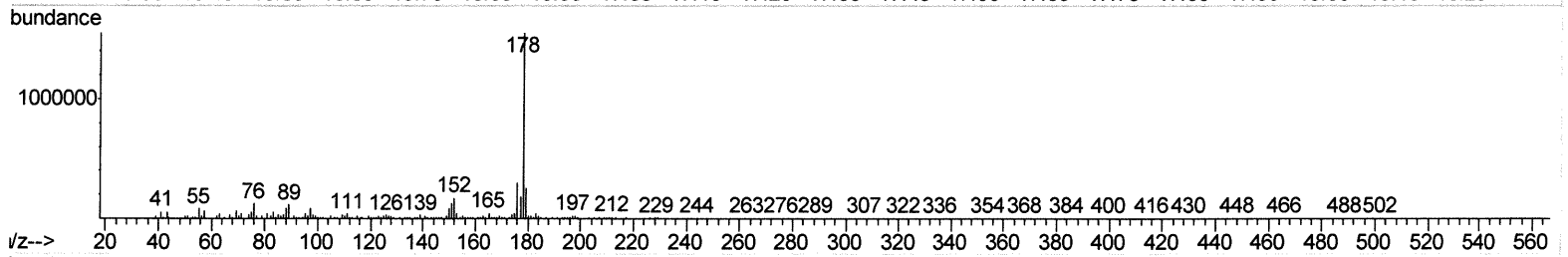
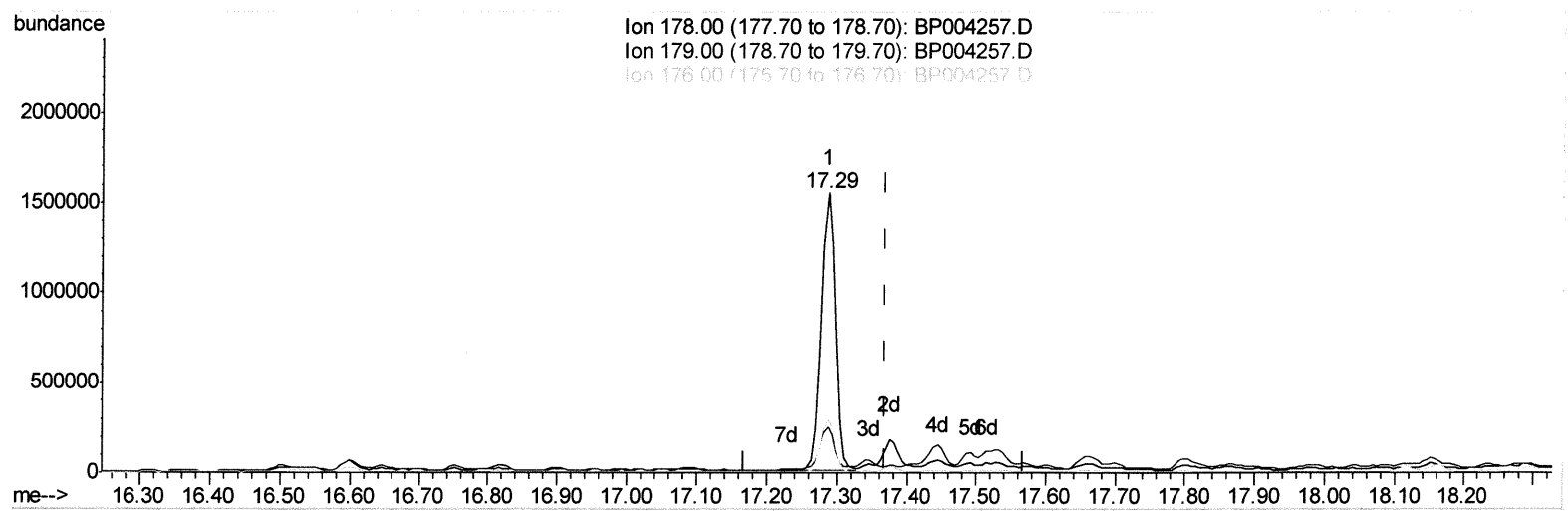
Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP121320\  
Data File : BP004257.D  
Acq On : 12 Dec 2020 14:01  
Operator : CG/JU  
Sample : L5063-05  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
C0AD7

Manual Integrations  
APPROVED

mohammad  
12/14/2020 2:46:01 PM

Quant Time: Dec 14 05:20:08 2020  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\SOM-EPA-BP121020MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Thu Dec 10 13:52:32 2020  
Response via : Initial Calibration



(72) Anthracene

17.286min (-0.082) 20.93ng/ul

response 2141710

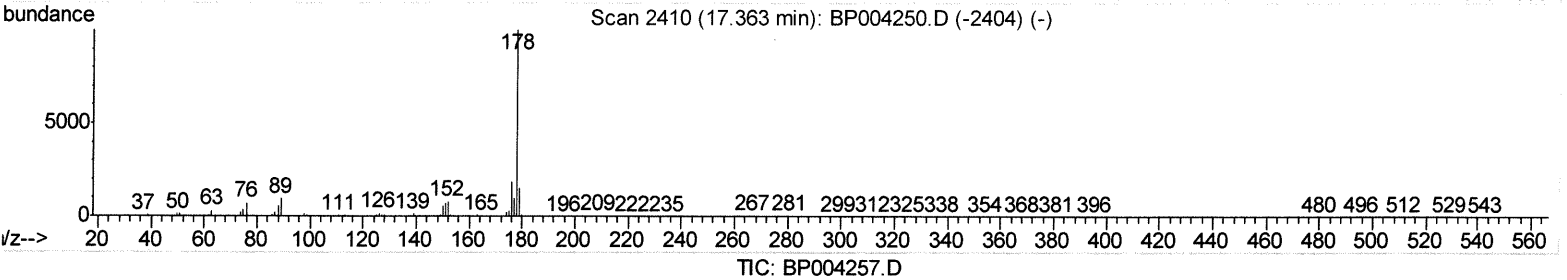
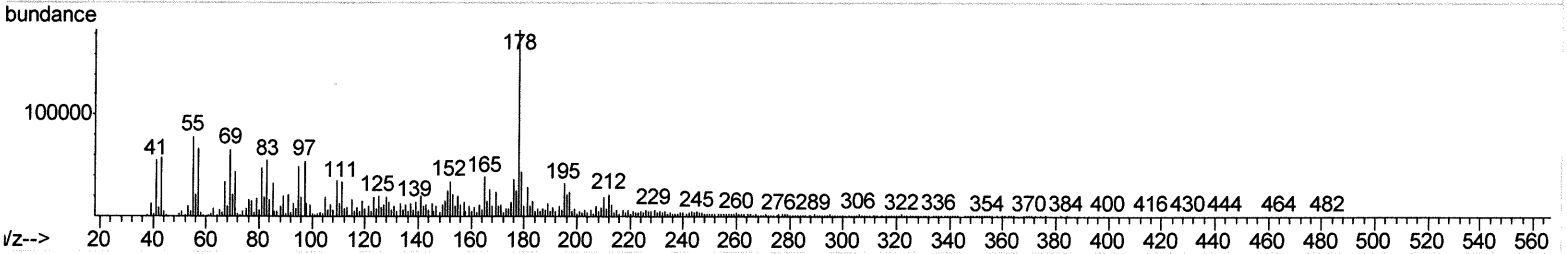
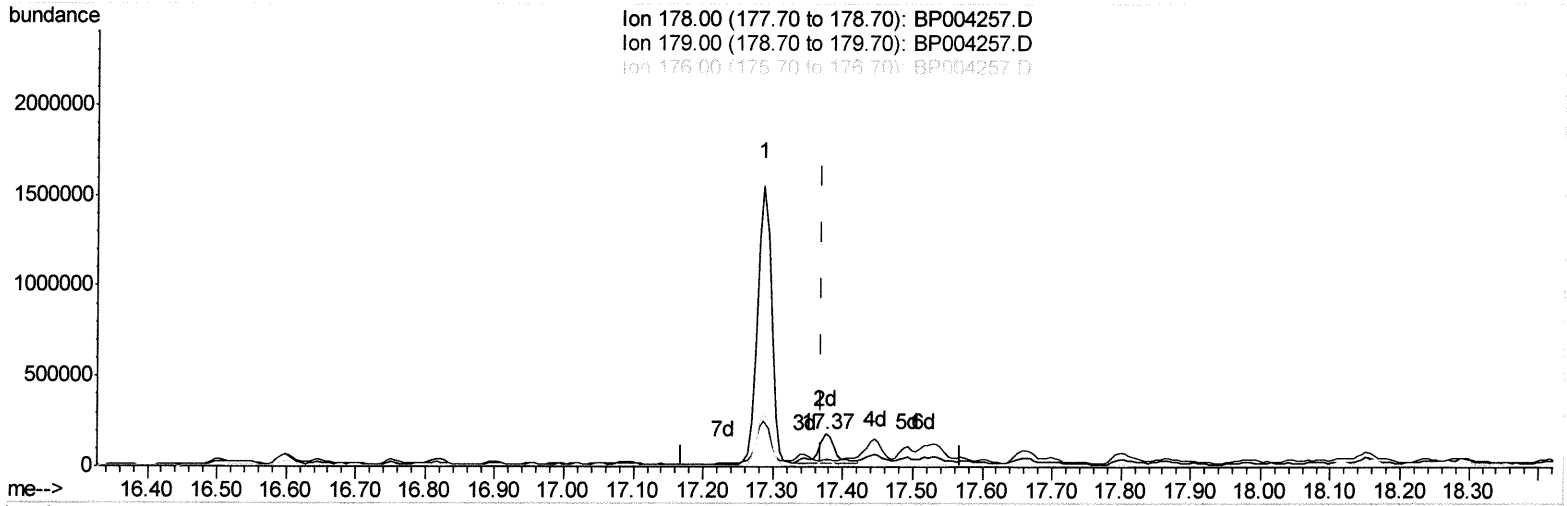
| Ion    | Exp%  | Act%  |
|--------|-------|-------|
| 178.00 | 100   | 100   |
| 179.00 | 15.40 | 16.24 |
| 176.00 | 18.60 | 19.29 |
| 0.00   | 0.00  | 0.00  |

Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP121320\  
 Data File : BP004257.D  
 Acq On : 12 Dec 2020 14:01  
 Operator : CG/JU  
 Sample : L5063-05  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 C0AD7

Manual Integrations  
 APPROVED  
 mohammad  
 12/14/2020 2:46:01 PM

Quant Time: Dec 14 05:20:08 2020  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\SOM-EPA-BP121020MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Thu Dec 10 13:52:32 2020  
 Response via : Initial Calibration



(72) Anthracene

17.375min (+0.006) 2.60ng/ul m

response 265804

*July 28/20*

| Ion    | Exp%  | Act%   |
|--------|-------|--------|
| 178.00 | 100   | 100    |
| 179.00 | 15.40 | 24.14# |
| 176.00 | 18.60 | 19.56  |
| 0.00   | 0.00  | 0.00   |

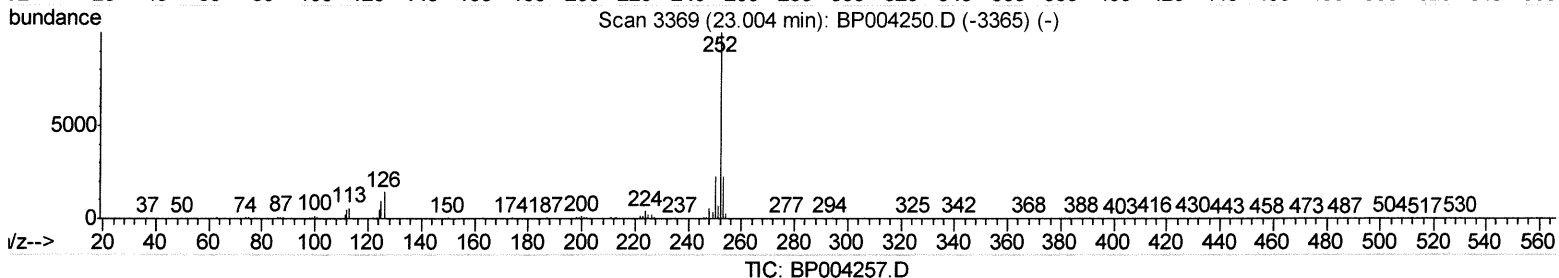
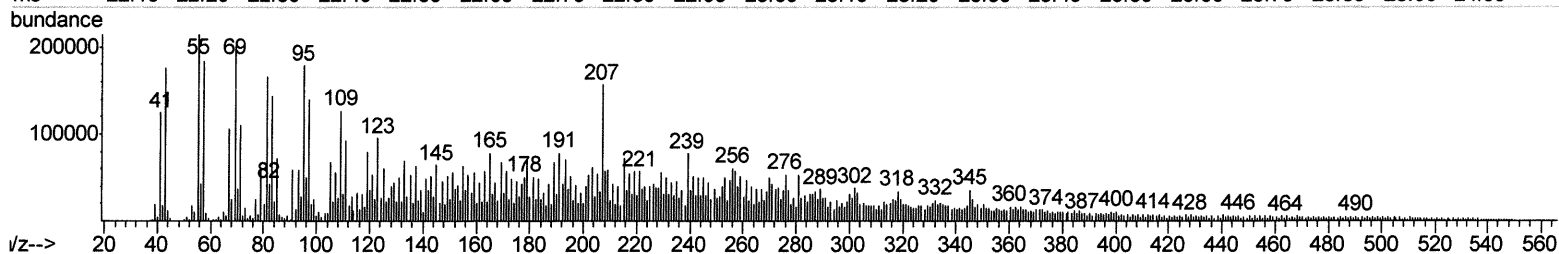
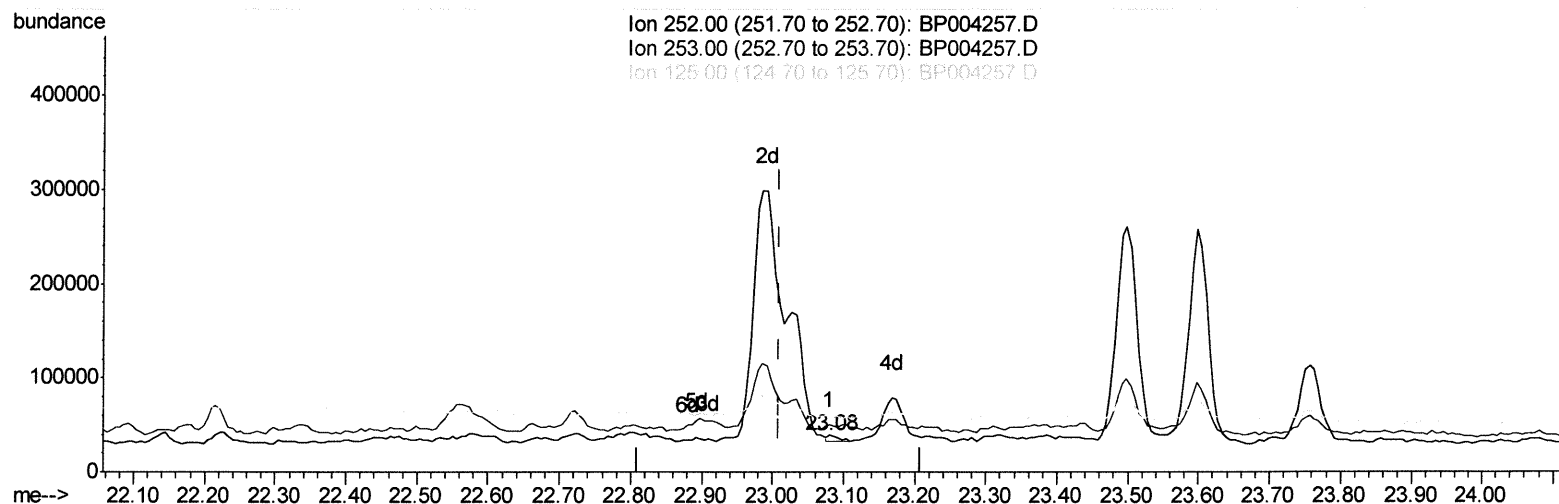
Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP121320\  
 Data File : BP004257.D  
 Acq On : 12 Dec 2020 14:01  
 Operator : CG/JU  
 Sample : L5063-05  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 C0AD7

Manual Integrations  
 APPROVED

mohammad  
 12/14/2020 2:46:01 PM

Quant Time: Dec 14 05:20:08 2020  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\SOM-EPA-BP121020MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Thu Dec 10 13:52:32 2020  
 Response via : Initial Calibration



(89) Benzo(k)fluoranthene

23.080min (+0.071) 0.04ng/ul

response 6241

| Ion    | Exp%  | Act%    |
|--------|-------|---------|
| 252.00 | 100   | 100     |
| 253.00 | 21.80 | 126.67# |
| 125.00 | 9.10  | 152.99# |
| 0.00   | 0.00  | 0.00    |

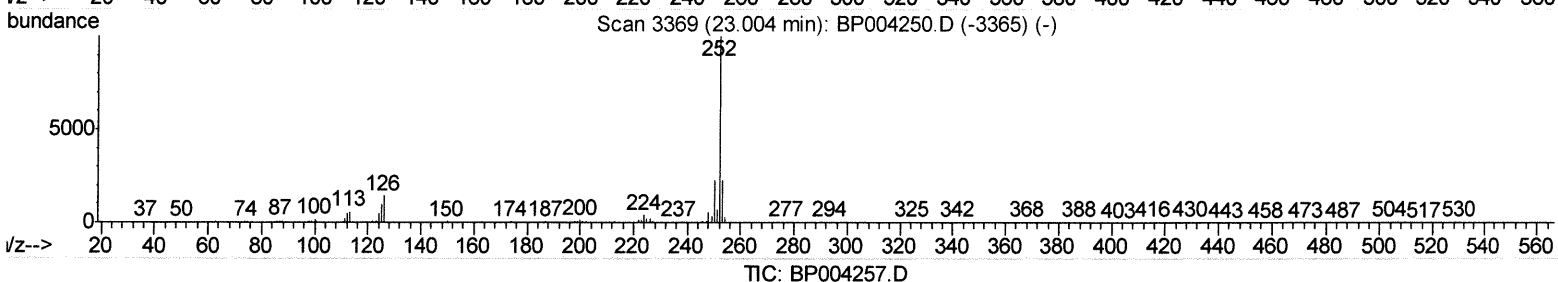
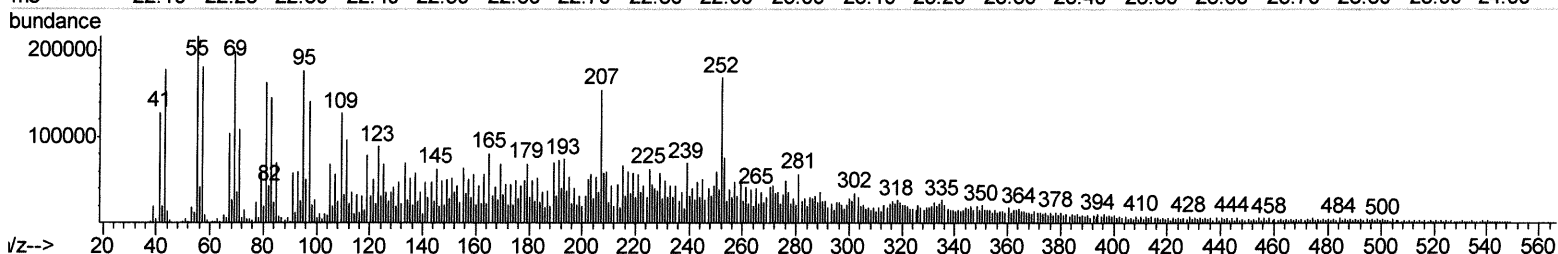
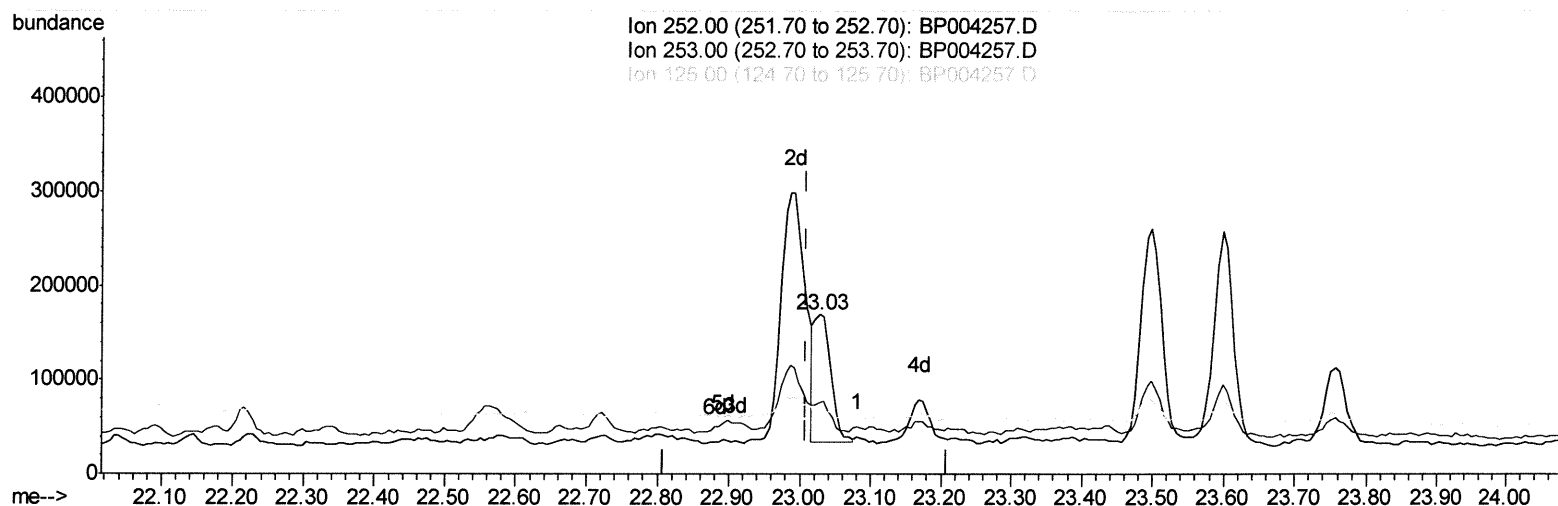
Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP121320\  
 Data File : BP004257.D  
 Acq On : 12 Dec 2020 14:01  
 Operator : CG/JU  
 Sample : L5063-05  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 C0AD7

Manual Integrations  
 APPROVED

mohammad  
 12/14/2020 2:46:01 PM

Quant Time: Dec 14 05:20:08 2020  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\SOM-EPA-BP121020MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Thu Dec 10 13:52:32 2020  
 Response via : Initial Calibration



(89) Benzo(k)fluoranthene

23.027min (+0.018) 1.53ng/ul m

response 217705

| Ion    | Exp%  | Act%   |
|--------|-------|--------|
| 252.00 | 100   | 100    |
| 253.00 | 21.80 | 44.88# |
| 125.00 | 9.10  | 40.84# |
| 0.00   | 0.00  | 0.00   |

*July 18/20*

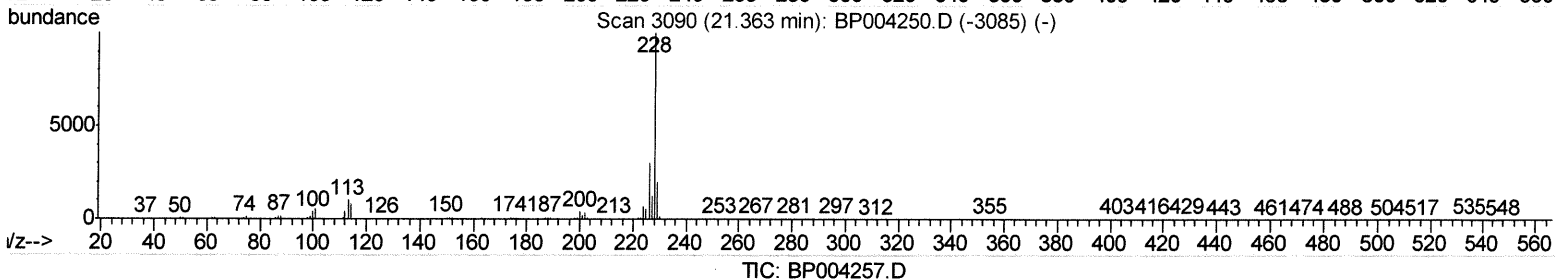
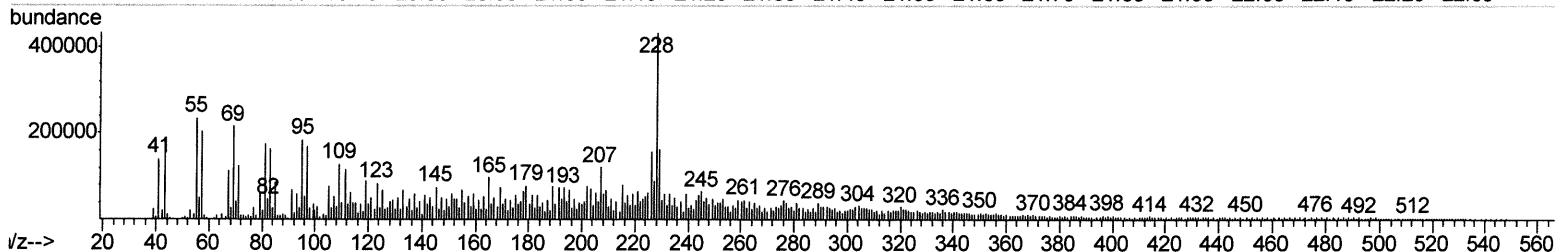
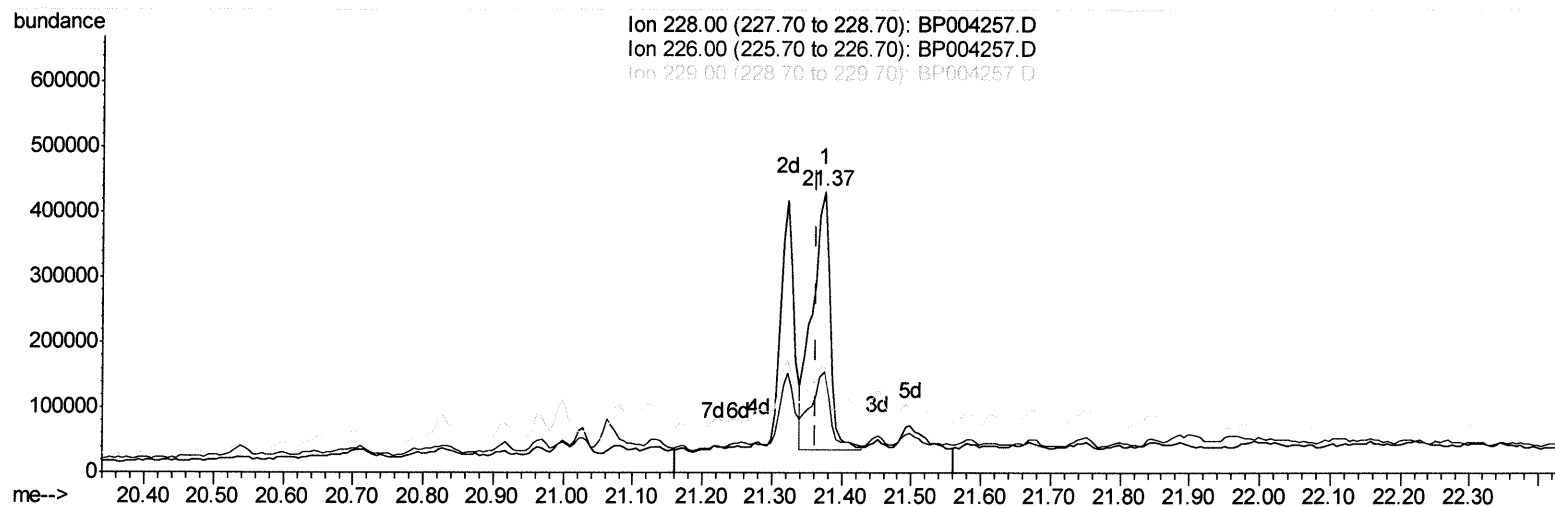
Data Path : Z:\svoasrv\HPCHEM1\BNA P\Data\BP121320\  
 Data File : BP004257.D  
 Acq On : 12 Dec 2020 14:01  
 Operator : CG/JU  
 Sample : L5063-05  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 C0AD7

Manual Integrations  
 APPROVED

mohammad  
 12/14/2020 2:46:01 PM

Quant Time: Dec 14 07:36:02 2020  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\SOM-EPA-BP121020MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Thu Dec 10 13:52:32 2020  
 Response via : Initial Calibration



(85) Chrysene

21.374min (+0.012) 5.86ng/ul

response 715019

| Ion    | Exp%  | Act%   |
|--------|-------|--------|
| 228.00 | 100   | 100    |
| 226.00 | 30.20 | 36.13  |
| 229.00 | 19.80 | 37.51# |
| 0.00   | 0.00  | 0.00   |

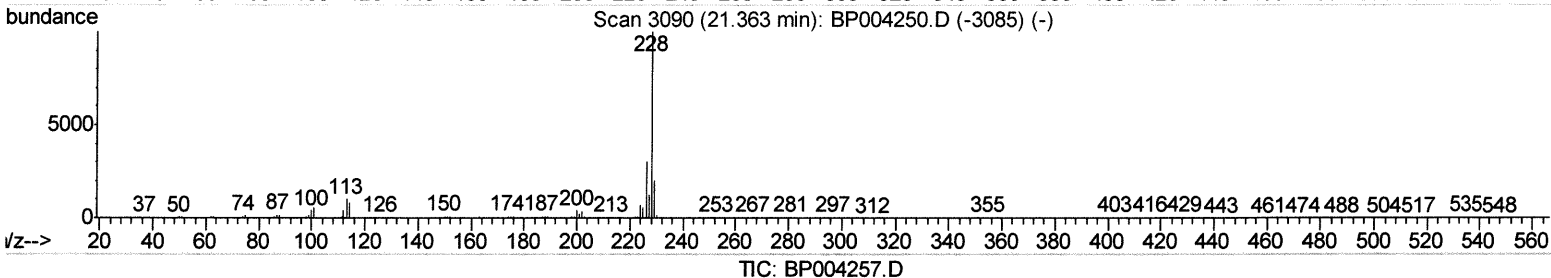
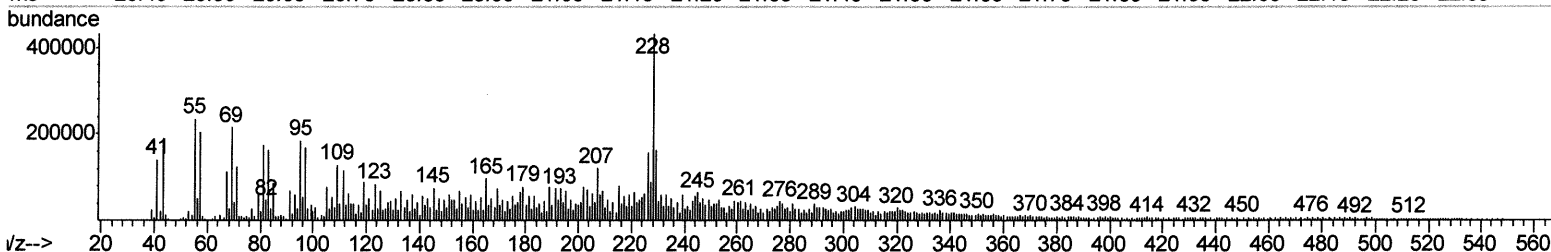
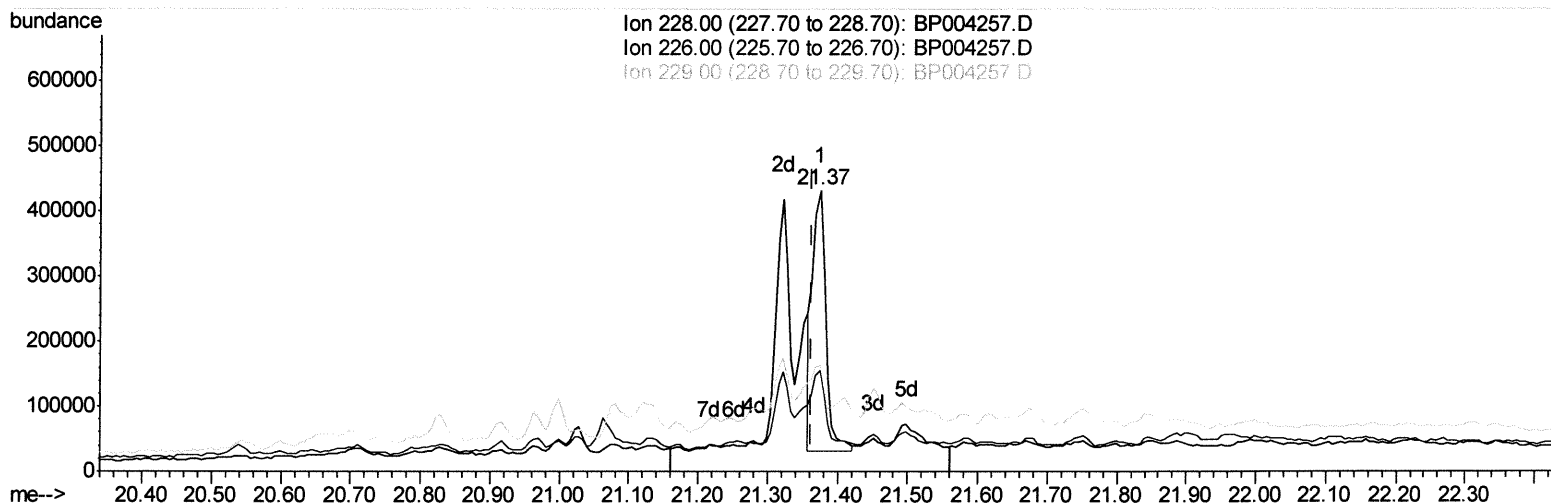
Data Path : Z:\svoasrv\HPCHEM1\BNA P\Data\BP121320\  
 Data File : BP004257.D  
 Acq On : 12 Dec 2020 14:01  
 Operator : CG/JU  
 Sample : L5063-05  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 C0AD7

Manual Integrations  
 APPROVED

mohammad  
 12/14/2020 2:46:01 PM

Quant Time: Dec 14 07:36:02 2020  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\SOM-EPA-BP121020MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Thu Dec 10 13:52:32 2020  
 Response via : Initial Calibration



(85) Chrysene

21.374min (+0.012) 4.37ng/ul m

response 532958

| Ion    | Exp%  | Act%   |
|--------|-------|--------|
| 228.00 | 100   | 100    |
| 226.00 | 30.20 | 36.13  |
| 229.00 | 19.80 | 37.51# |
| 0.00   | 0.00  | 0.00   |

*Handwritten signature: JU 12/14/20*

Data Path : Z:\svoasrv\HPCHEM1\BNA P\Data\BP121320\  
 Data File : BP004257.D  
 Acq On : 12 Dec 2020 14:01  
 Operator : CG/JU  
 Sample : L5063-05  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 C0AD7

Manual Integrations  
 APPROVED

mohammad  
 12/14/2020 2:46:01 PM

Quant Time: Dec 14 14:35:10 2020  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\SOM-EPA-BP121020MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Thu Dec 10 13:52:32 2020  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.84  | 152  | 354254   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 10.63 | 136  | 1389686  | 20.00 | ng/ul | 0.00     |
| 36) Acenaphthene-d10      | 14.48 | 164  | 832336   | 20.00 | ng/ul | 0.00     |
| 62) Phenanthrene-d10      | 17.25 | 188  | 1752835  | 20.00 | ng/ul | 0.01     |
| 78) Chrysene-d12          | 21.33 | 240  | 1886529  | 20.00 | ng/ul | 0.01     |
| 86) Perylene-d12          | 23.70 | 264  | 2186537  | 20.00 | ng/ul | 0.03     |

| System Monitoring Compounds    | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|--------------------------------|-------|------|----------|-------|-------|----------|
| 3) 1,4-Dioxane-d8              | 3.33  | 96   | 21813    | 2.16  | ng/uL | 0.00     |
| 5) Phenol-d5                   | 7.00  | 99   | 437109   | 14.92 | ng/ul | 0.01     |
| 7) Bis-(2-Chloroethyl)ether-d  | 7.17  | 67   | 233150   | 12.74 | ng/ul | 0.00     |
| 9) 2-Chlorophenol-d4           | 7.37  | 132  | 351378   | 15.80 | ng/ul | 0.00     |
| 13) 4-Methylphenol-d8          | 8.53  | 113  | 339791   | 15.34 | ng/ul | 0.00     |
| 19) Nitrobenzene-d5            | 8.99  | 128  | 170441   | 14.98 | ng/ul | 0.01     |
| 22) 2-Nitrophenol-d4           | 9.71  | 143  | 177968   | 18.96 | ng/ul | 0.00     |
| 26) 2,4-Dichlorophenol-d3      | 10.25 | 165  | 355087   | 17.20 | ng/ul | 0.01     |
| 29) 4-Chloroaniline-d4         | 10.76 | 131  | 477371   | 18.66 | ng/ul | 0.00     |
| 44) Dimethylphthalate-d6       | 13.89 | 166  | 982788   | 15.45 | ng/ul | 0.00     |
| 47) Acenaphthylene-d8          | 14.17 | 160  | 1310259  | 16.14 | ng/ul | 0.01     |
| 52) 4-Nitrophenol-d4           | 14.67 | 143  | 160340   | 14.92 | ng/ul | 0.02     |
| 58) Fluorene-d10               | 15.48 | 176  | 890149   | 15.45 | ng/ul | 0.01     |
| 63) 4,6-Dinitro-2-methylphenol | 15.60 | 200  | 31475    | 3.74  | ng/ul | 0.02     |
| 71) Anthracene-d10             | 17.35 | 188  | 1402545  | 16.42 | ng/ul | 0.01     |
| 79) Pyrene-d10                 | 19.58 | 212  | 1638651  | 16.67 | ng/ul | 0.01     |
| 90) Benzo(a)pyrene-d12         | 23.55 | 264  | 1910072  | 16.58 | ng/ul | 0.03     |

| Target Compounds           | R.T.  | QIon | Response | Conc   | Units  | Ovalue |
|----------------------------|-------|------|----------|--------|--------|--------|
| 6) Phenol                  | 7.03  | 94   | 35439    | 1.158  | ng/ul  | 96     |
| 28) Naphthalene            | 10.68 | 128  | 380566   | 4.831  | ng/ul  | 97     |
| 34) 2-Methylnaphthalene    | 12.30 | 142  | 1643737  | 31.011 | ng/ul  | 98     |
| 41) 1,1'-Biphenyl          | 13.31 | 154  | 262594   | 3.762  | ng/ul  | 98     |
| 45) Dimethylphthalate      | 13.93 | 163  | 126314   | 1.949  | ng/ul# | 95     |
| 48) Acenaphthylene         | 14.20 | 152  | 99985    | 1.241  | ng/ul# | 27     |
| 50) Acenaphthene           | 14.55 | 153  | 143826m  | 2.521  | ng/ul  | 89     |
| 54) Dibenzofuran           | 14.89 | 168  | 239332m  | 2.977  | ng/ul  | 99     |
| 59) Fluorene               | 15.54 | 166  | 156311   | 2.431  | ng/ul# | 89     |
| 70) Phenanthrene           | 17.29 | 178  | 2141710  | 20.711 | ng/ul  | 99     |
| 72) Anthracene             | 17.37 | 178  | 265804m  | 2.598  | ng/ul  | 99     |
| 77) Fluoranthene           | 19.26 | 202  | 868597   | 7.866  | ng/ul  | 96     |
| 80) Pyrene                 | 19.61 | 202  | 1235740  | 9.711  | ng/ul  | 95     |
| 83) Benzo(a)anthracene     | 21.32 | 228  | 512163   | 4.119  | ng/ul# | 69     |
| 85) Chrysene               | 21.37 | 228  | 532958m  | 4.369  | ng/ul  | 63     |
| 88) Benzo(b)fluoranthene   | 22.99 | 252  | 637671   | 4.599  | ng/ul# | 63     |
| 89) Benzo(k)fluoranthene   | 23.03 | 252  | 217705m  | 1.529  | ng/ul  | 61     |
| 91) Benzo(a)pyrene         | 23.60 | 252  | 445301   | 3.441  | ng/ul# | 61     |
| 92) Indeno(1,2,3-cd)pyrene | 26.13 | 276  | 322187   | 1.985  | ng/ul# | 85     |
| 94) Benzo(g,h,i)perylene   | 26.87 | 276  | 288370   | 2.118  | ng/ul# | 77     |

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