

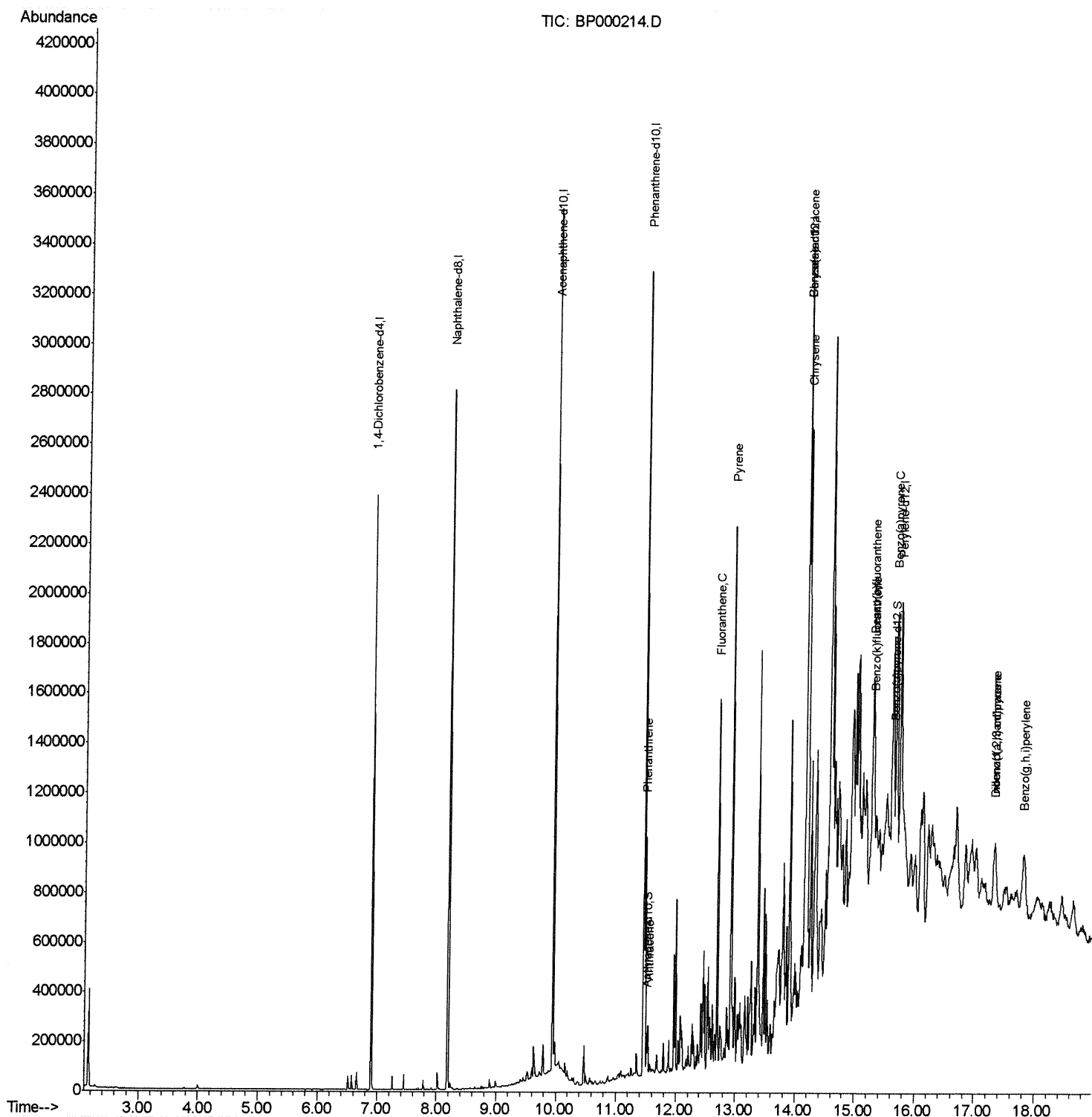
Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP091219\  
Data File : BP000214.D  
Acq On : 12 Sep 2019 13:38  
Operator : HP/JU  
Sample : K4633-12 30X  
Misc :  
ALS Vial : 8 Sample Multiplier: 1

Instrument :  
BNA\_P  
Client Sampled :  
F2D11

Manual Integrations  
APPROVED

mohammad  
9/16/2019 9:09:05 AM

Quant Time: Sep 13 13:15:31 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\SOM-EPA-BP090519MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Tue Sep 10 02:43:18 2019  
Response via : Initial Calibration



## Quantitation Report (Qedit)

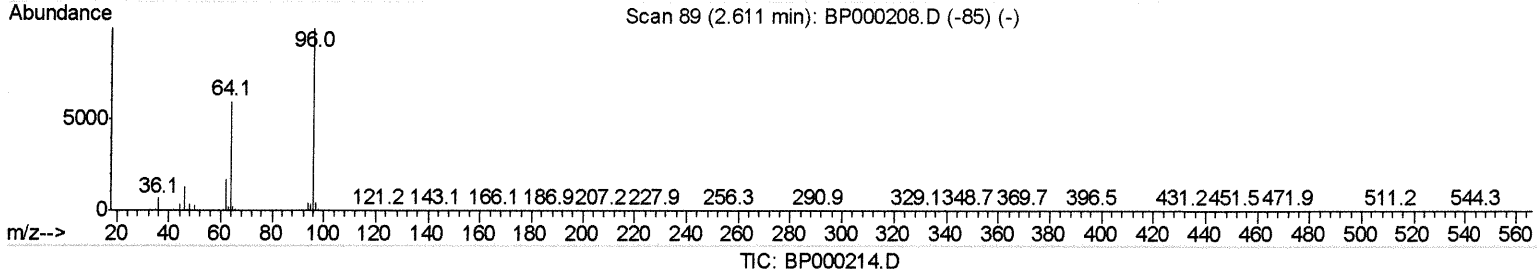
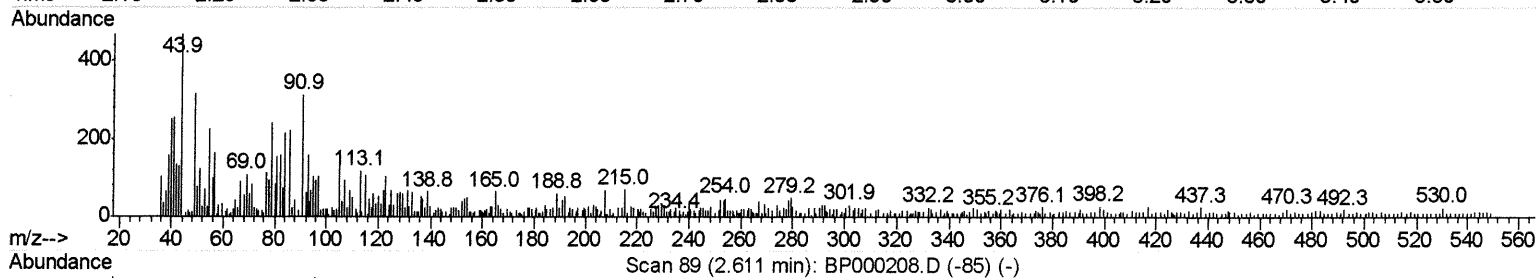
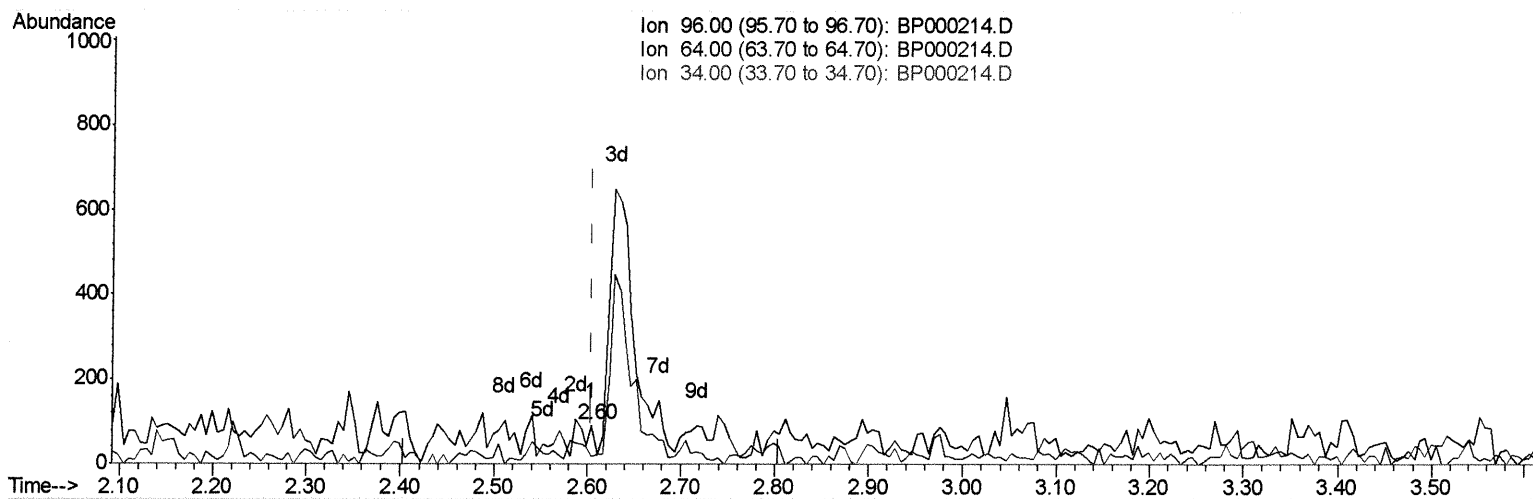
Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP091219\  
Data File : BP000214.D  
Acq On : 12 Sep 2019 13:38  
Operator : HP/JU  
Sample : K4633-12 30X  
Misc :  
ALS Vial : 8 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
F2D11

Manual Integrations  
APPROVED

mohammad  
9/16/2019 9:09:05 AM

Quant Time: Sep 13 01:47:36 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\SOM-EPA-BP090519MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Tue Sep 10 02:43:18 2019  
Response via : Initial Calibration



(3) 1,4-Dioxane-d8 (S)

2.604min (-0.000) 0.00ng/uL

response 33

| Ion   | Exp%  | Act%   |
|-------|-------|--------|
| 96.00 | 100   | 100    |
| 64.00 | 62.70 | 20.65# |
| 34.00 | 0.00  | 0.00   |
| 0.00  | 0.00  | 0.00   |

# Quantitation Report (Qedit)

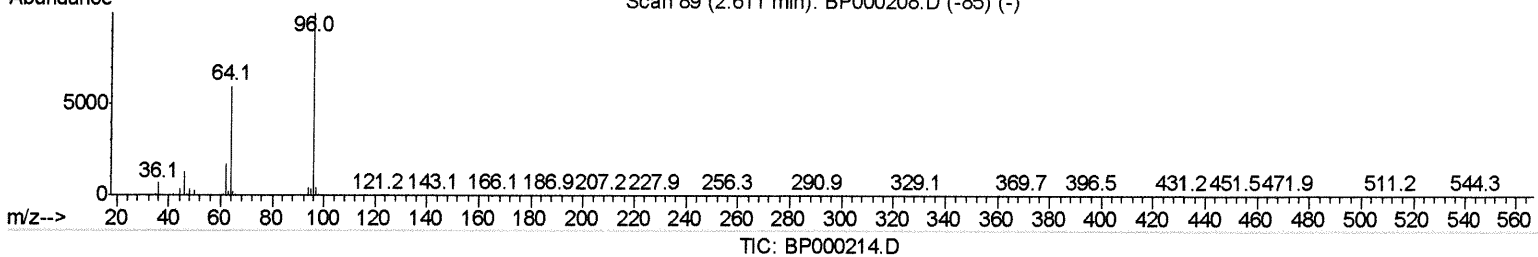
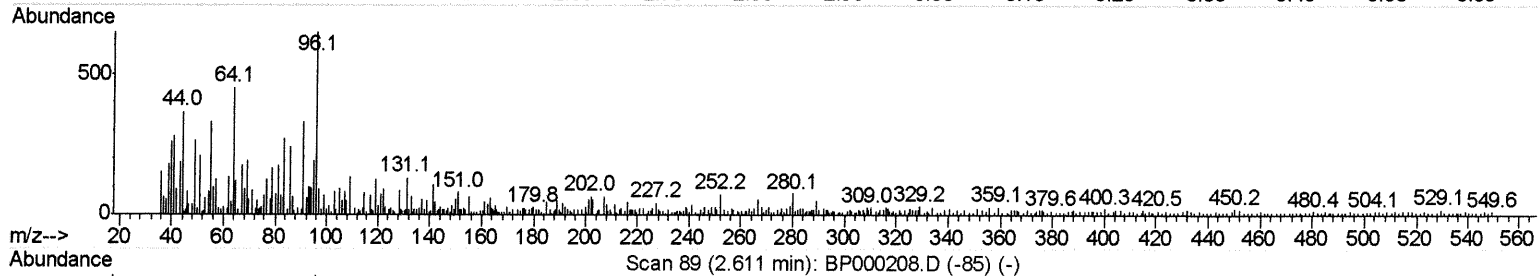
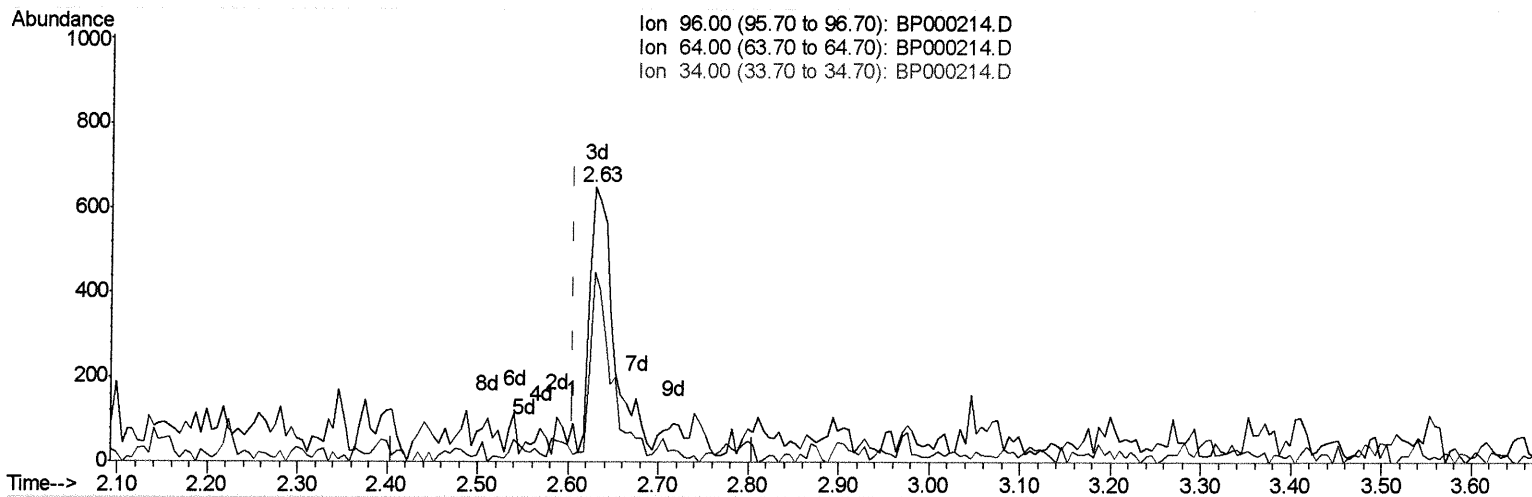
Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP091219\  
 Data File : BP000214.D  
 Acq On : 12 Sep 2019 13:38  
 Operator : HP/JU  
 Sample : K4633-12 30X  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampled :  
 F2D11

Manual Integrations  
 APPROVED

mohammad  
 9/16/2019 9:09:05 AM

Quant Time: Sep 13 01:47:36 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\SOM-EPA-BP090519MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Tue Sep 10 02:43:18 2019  
 Response via : Initial Calibration



(3) 1,4-Dioxane-d8 (S)

2.628min (+0.023) 0.12ng/uL m

*JU*  
 09/17/19

response 1090

| Ion   | Exp%  | Act%  |
|-------|-------|-------|
| 96.00 | 100   | 100   |
| 64.00 | 62.70 | 69.18 |
| 34.00 | 0.00  | 0.00  |
| 0.00  | 0.00  | 0.00  |

# Quantitation Report (Qedit)

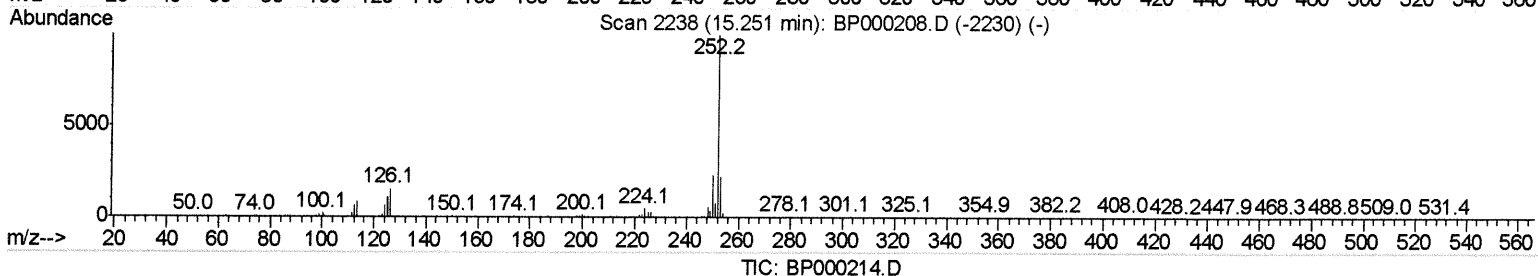
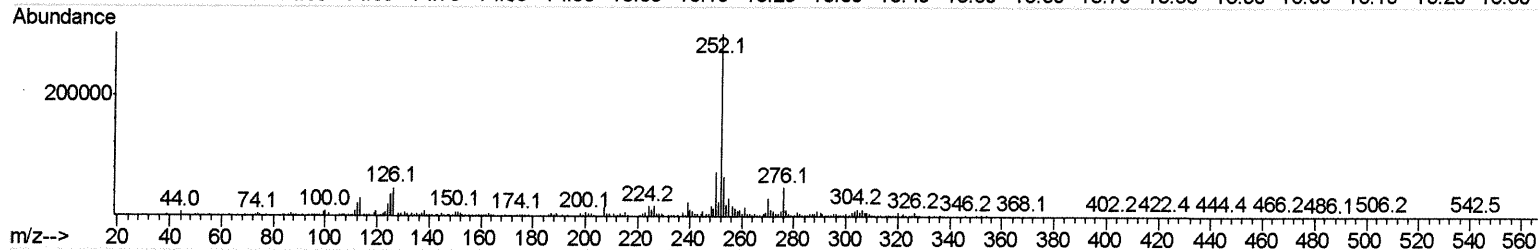
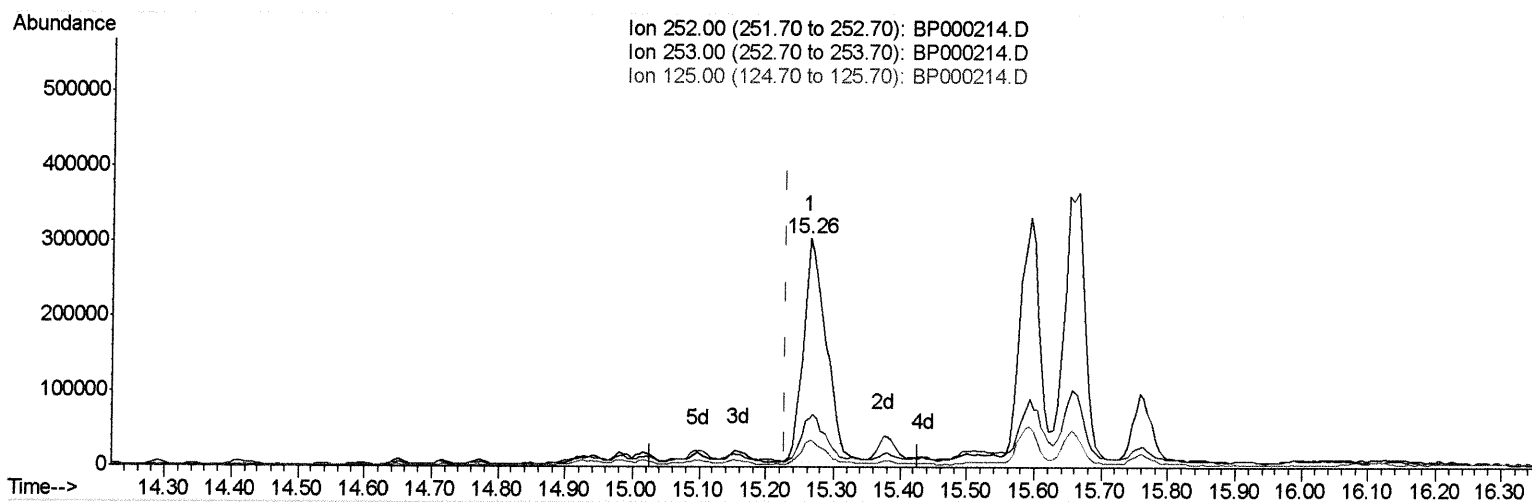
Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP091219\  
 Data File : BP000214.D  
 Acq On : 12 Sep 2019 13:38  
 Operator : HP/JU  
 Sample : K4633-12 30X  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 F2D11

Manual Integrations  
 APPROVED

mohammad  
 9/16/2019 9:09:05 AM

Quant Time: Sep 13 01:47:36 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\SOM-EPA-BP090519MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Tue Sep 10 02:43:18 2019  
 Response via : Initial Calibration



(88) Benzo(b)fluoranthene

15.263min (+0.035) 12.07ng/ul

response 711668

| Ion    | Exp%  | Act%  |
|--------|-------|-------|
| 252.00 | 100   | 100   |
| 253.00 | 21.90 | 21.40 |
| 125.00 | 12.40 | 11.67 |
| 0.00   | 0.00  | 0.00  |

# Quantitation Report (Qedit)

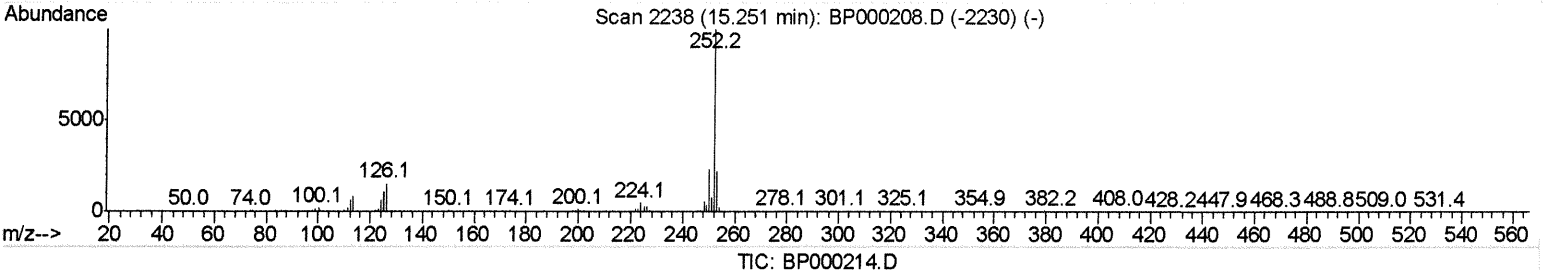
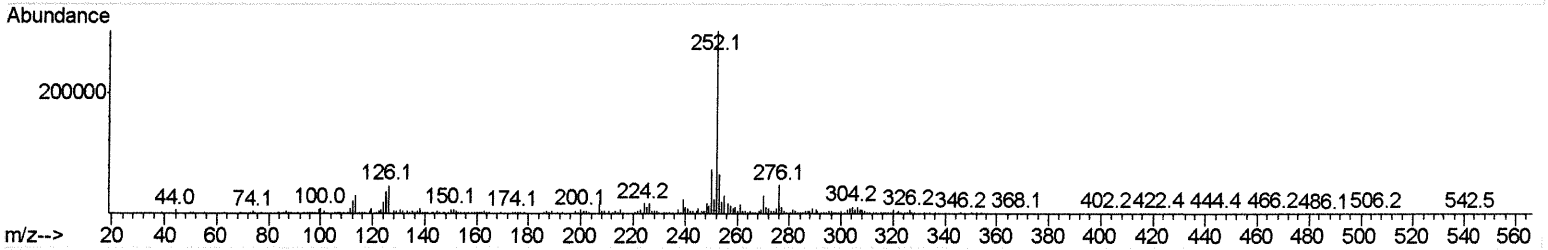
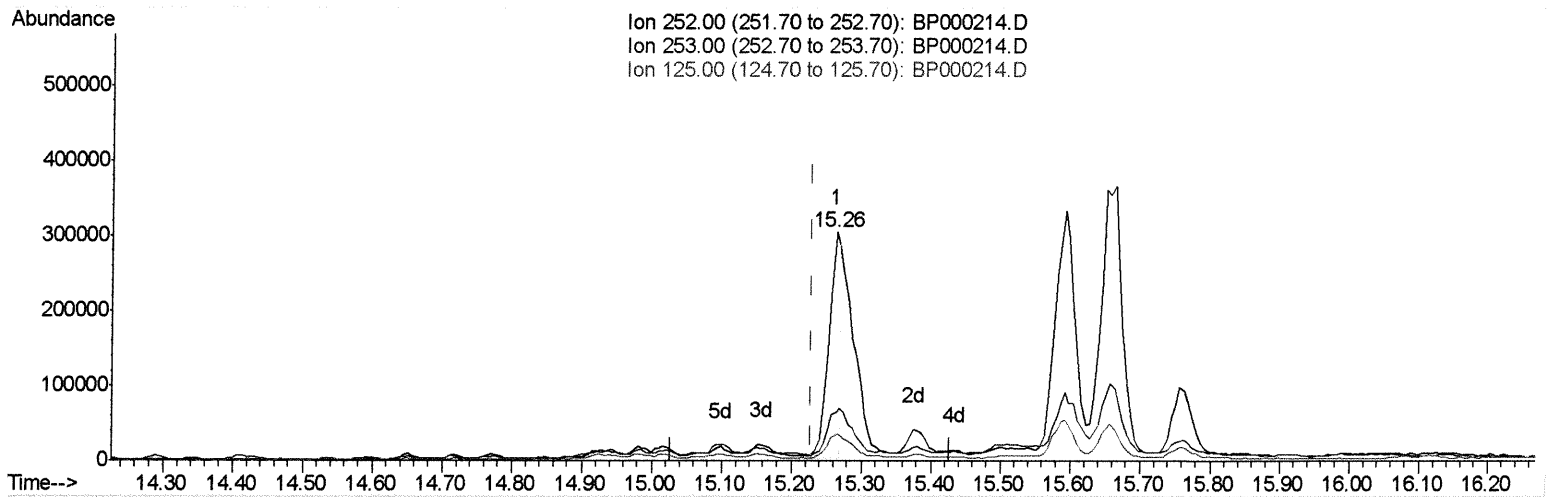
Data Path : Z:\SVOASRV\HPCHEM1\BNA\_P\DATA\BP091219\  
 Data File : BP000214.D  
 Acq On : 12 Sep 2019 13:38  
 Operator : HP/JU  
 Sample : K4633-12 30X  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleID :  
 F2D11

Manual Integrations  
 APPROVED

mohammad  
 9/16/2019 9:09:05 AM

Quant Time: Sep 13 01:47:36 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\SOM-EPA-BP090519MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Tue Sep 10 02:43:18 2019  
 Response via : Initial Calibration



(88) Benzo(b)fluoranthene

15.263min (+0.035) 6.28ng/ul m *JU 09/17/19*

response 370409

| Ion    | Exp%  | Act%  |
|--------|-------|-------|
| 252.00 | 100   | 100   |
| 253.00 | 21.90 | 21.40 |
| 125.00 | 12.40 | 11.67 |
| 0.00   | 0.00  | 0.00  |

# Quantitation Report (Qedit)

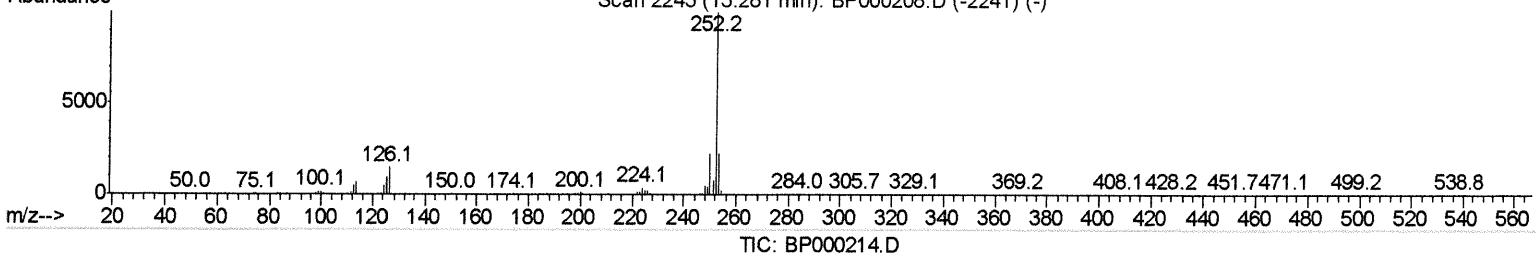
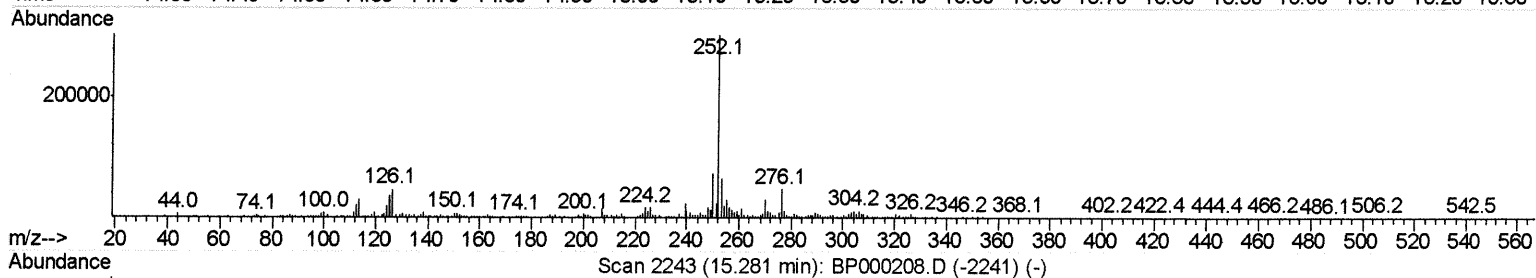
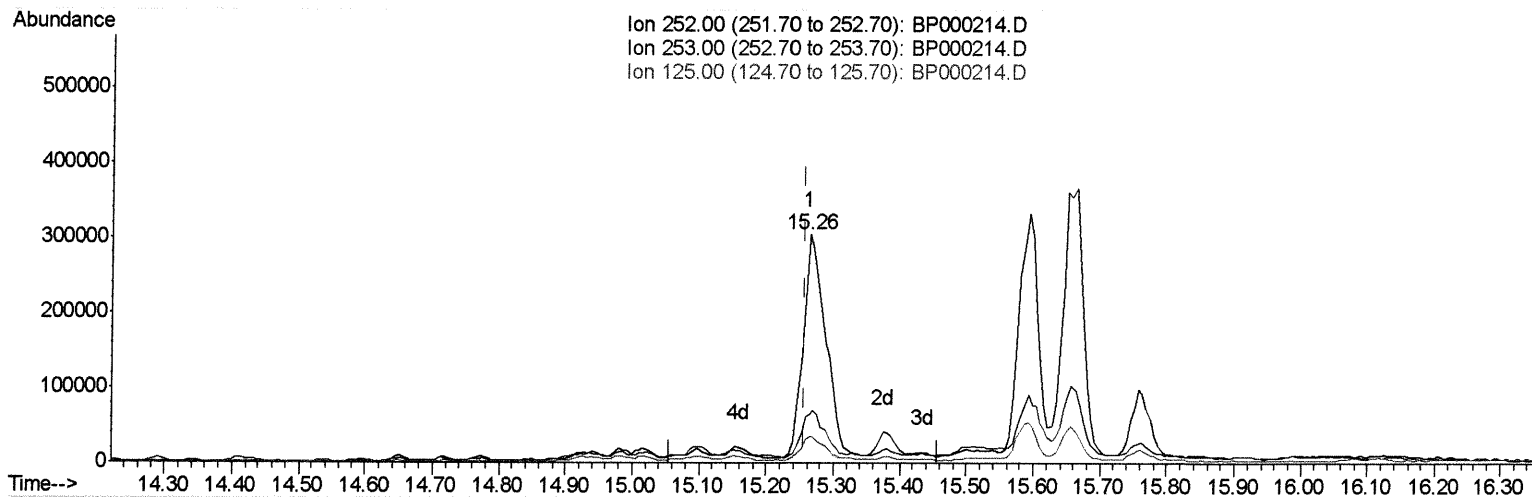
Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP091219\  
 Data File : BP000214.D  
 Acq On : 12 Sep 2019 13:38  
 Operator : HP/JU  
 Sample : K4633-12 30X  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 F2D11

Manual Integrations  
 APPROVED

mohammad  
 9/16/2019 9:09:05 AM

Quant Time: Sep 13 01:47:36 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\SOM-EPA-BP090519MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Tue Sep 10 02:43:18 2019  
 Response via : Initial Calibration



(89) Benzo(k)fluoranthene

15.263min (+0.006) 12.80ng/ul

response 711668

| Ion    | Exp%  | Act%  |
|--------|-------|-------|
| 252.00 | 100   | 100   |
| 253.00 | 22.50 | 21.40 |
| 125.00 | 12.70 | 11.67 |
| 0.00   | 0.00  | 0.00  |

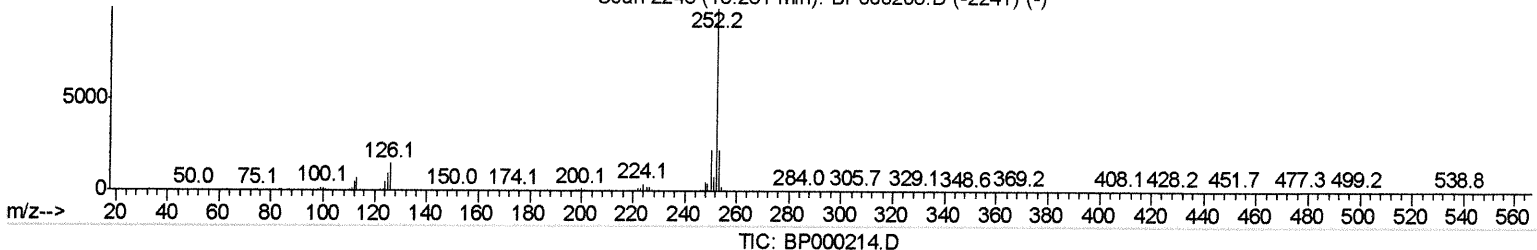
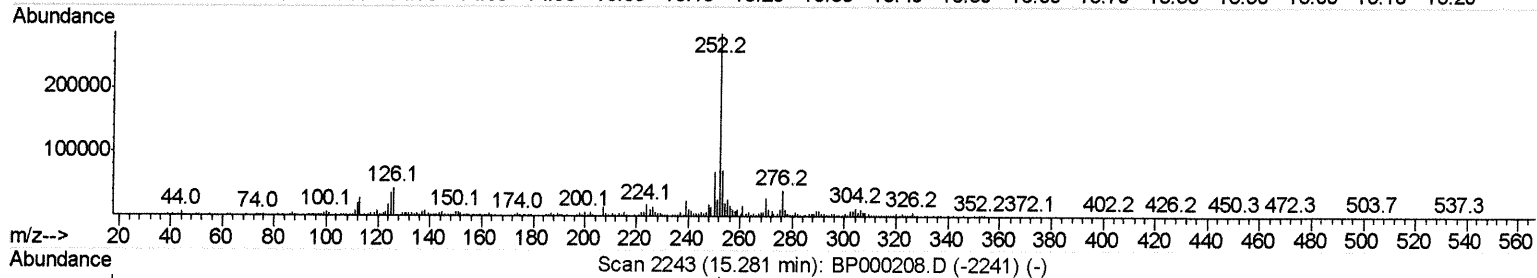
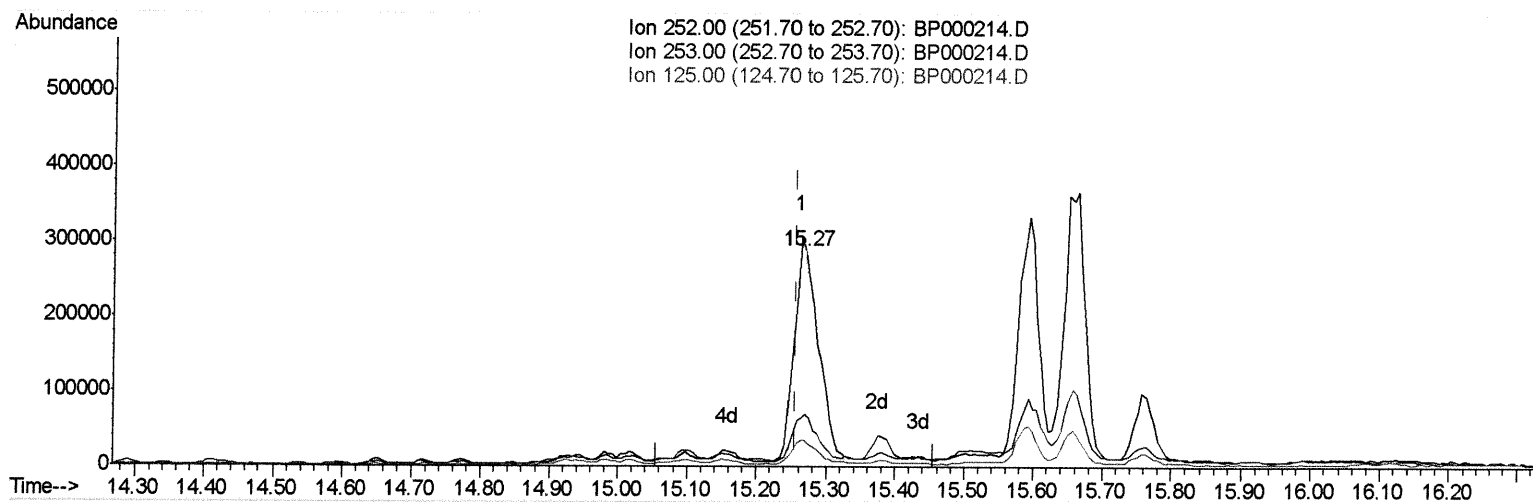
Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP091219\  
Data File : BP000214.D  
Acq On : 12 Sep 2019 13:38  
Operator : HP/JU  
Sample : K4633-12 30X  
Misc :  
ALS Vial : 8 Sample Multiplier: 1

Instrument :  
BNA\_P  
ClientSampleId :  
F2D11

Manual Integrations  
APPROVED

mohammad  
9/16/2019 9:09:05 AM

Quant Time: Sep 13 01:47:36 2019  
Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\SOM-EPA-BP090519MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Tue Sep 10 02:43:18 2019  
Response via : Initial Calibration



(89) Benzo(k)fluoranthene

15.268min (+0.012) 5.88ng/ul m

JU  
09/17/19

response 326605

| Ion    | Exp%  | Act%  |
|--------|-------|-------|
| 252.00 | 100   | 100   |
| 253.00 | 22.50 | 24.53 |
| 125.00 | 12.70 | 12.32 |
| 0.00   | 0.00  | 0.00  |

# Quantitation Report (Qedit)

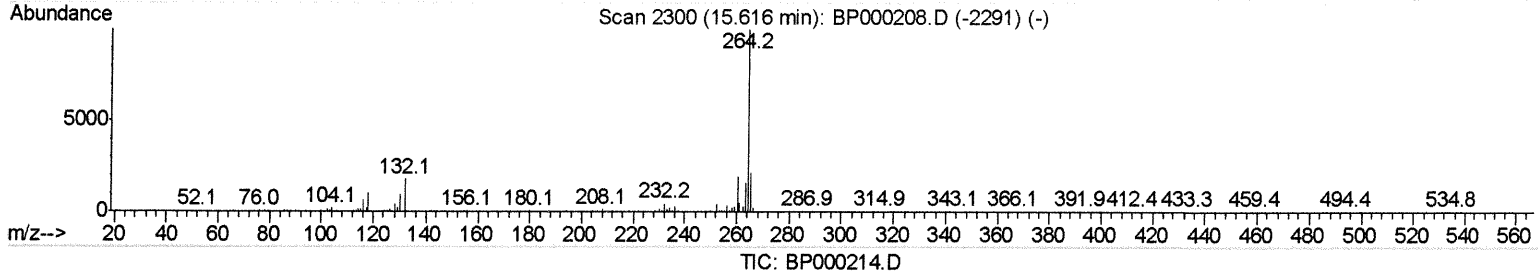
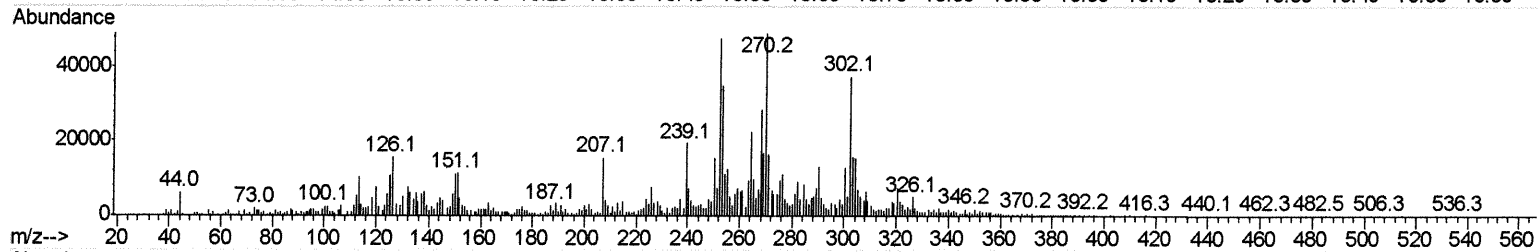
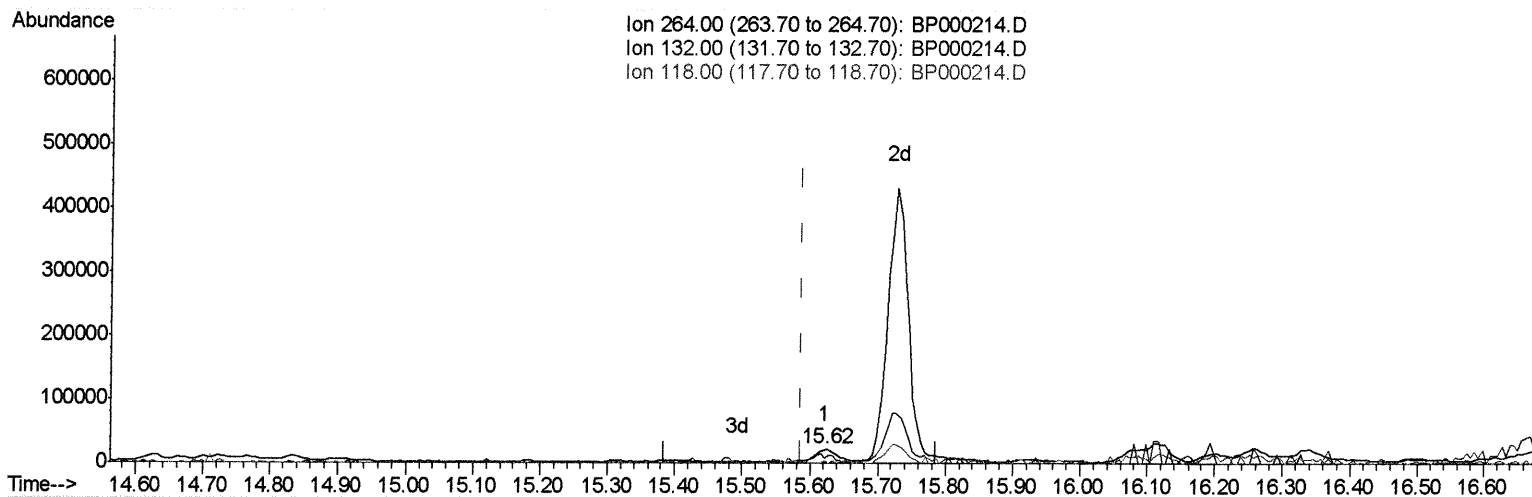
Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP091219\  
 Data File : BP000214.D  
 Acq On : 12 Sep 2019 13:38  
 Operator : HP/JU  
 Sample : K4633-12 30X  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 F2D11

Manual Integrations  
 APPROVED

mohammad  
 9/16/2019 9:09:05 AM

Quant Time: Sep 13 01:47:36 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\SOM-EPA-BP090519MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Tue Sep 10 02:43:18 2019  
 Response via : Initial Calibration



(90) Benzo(a)pyrene-d12 (S)

15.621min (+0.035) 0.97ng/ul

response 44773

| Ion    | Exp%  | Act%   |
|--------|-------|--------|
| 264.00 | 100   | 100    |
| 132.00 | 18.00 | 33.64# |
| 118.00 | 10.80 | 20.49# |
| 0.00   | 0.00  | 0.00   |

# Quantitation Report (Qedit)

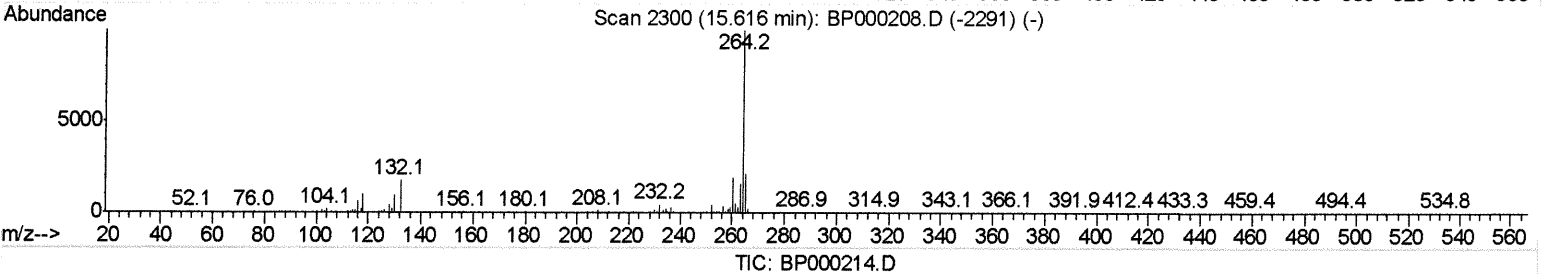
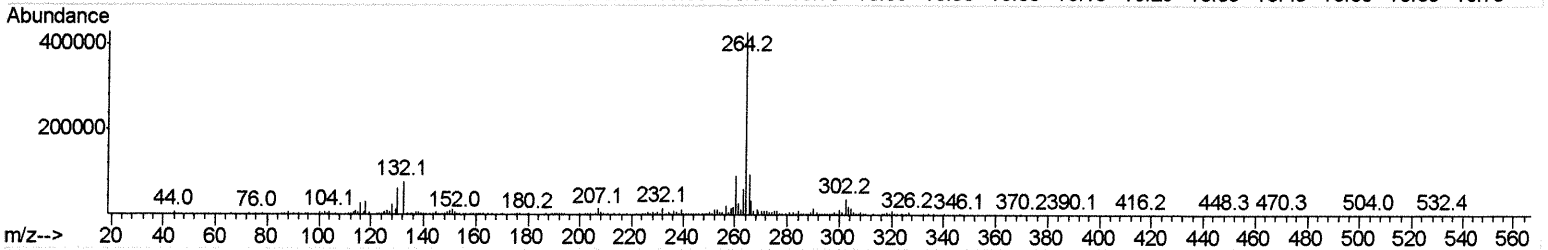
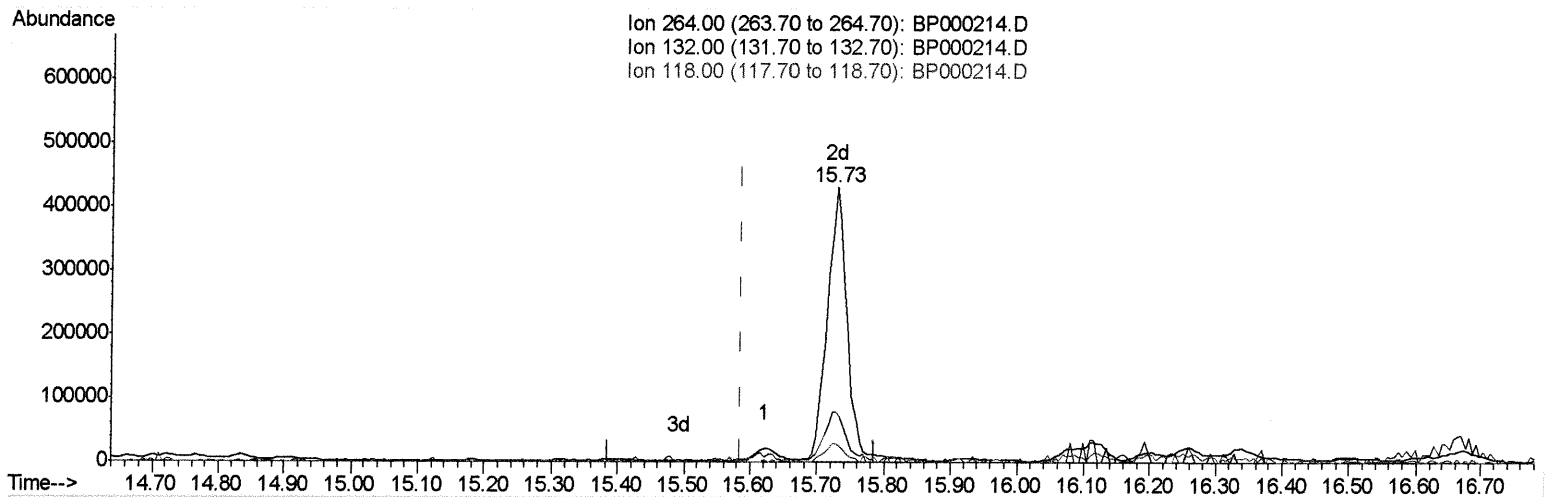
Data Path : Z:\SVOASRV\HPCHEM1\BNA P\DATA\BP091219\  
 Data File : BP000214.D  
 Acq On : 12 Sep 2019 13:38  
 Operator : HP/JU  
 Sample : K4633-12 30X  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 F2D11

Manual Integrations  
 APPROVED

mohammad  
 9/16/2019 9:09:05 AM

Quant Time: Sep 13 01:47:36 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\SOM-EPA-BP090519MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Tue Sep 10 02:43:18 2019  
 Response via : Initial Calibration



(90) Benzo(a)pyrene-d12 (S)

15.727min (+0.141) 19.10ng/ul m *50 09/17/19*

response 880547

| Ion    | Exp%  | Act%  |
|--------|-------|-------|
| 264.00 | 100   | 100   |
| 132.00 | 18.00 | 18.03 |
| 118.00 | 10.80 | 6.97# |
| 0.00   | 0.00  | 0.00  |

# Quantitation Report (Qedit)

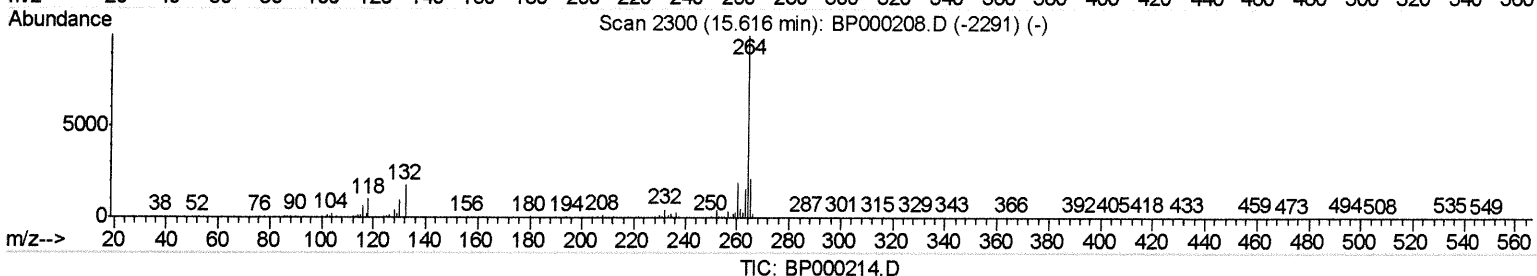
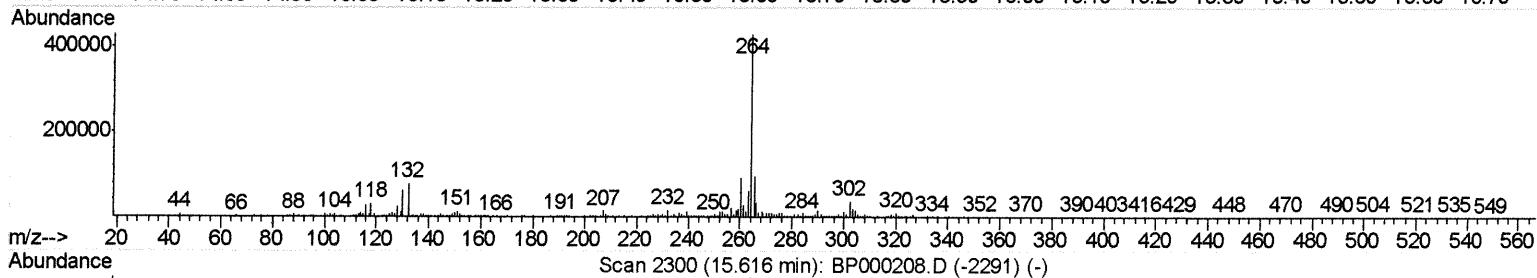
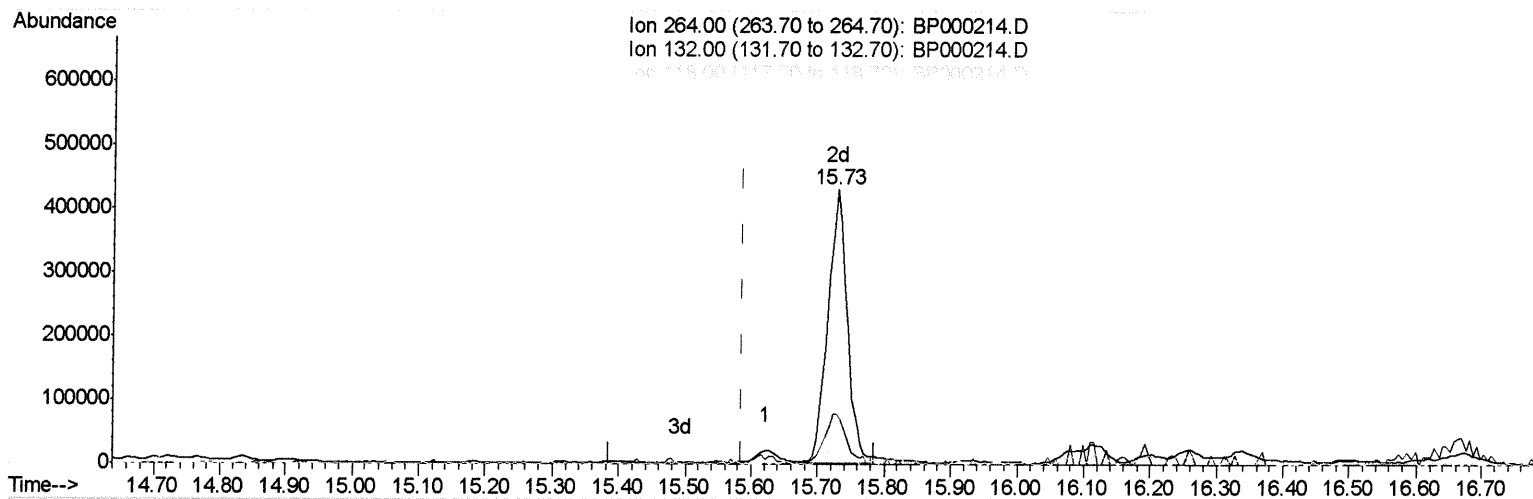
Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP091219\  
 Data File : BP000214.D  
 Acq On : 12 Sep 2019 13:38  
 Operator : HP/JU  
 Sample : K4633-12 30X  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 F2D11

Manual Integrations  
 APPROVED

mohammad  
 9/16/2019 9:09:05 AM

Quant Time: Sep 13 04:26:11 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\SOM-EPA-BP090519MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Tue Sep 10 02:43:18 2019  
 Response via : Initial Calibration



(90) Benzo(a)pyrene-d12 (S)

15.727min (+0.141) 19.10ng/ul m

JU  
 09/17/19

response 880547

| Ion    | Exp%  | Act%  |
|--------|-------|-------|
| 264.00 | 100   | 100   |
| 132.00 | 18.00 | 18.03 |
| 118.00 | 10.80 | 6.97# |
| 0.00   | 0.00  | 0.00  |

# Quantitation Report (Qedit)

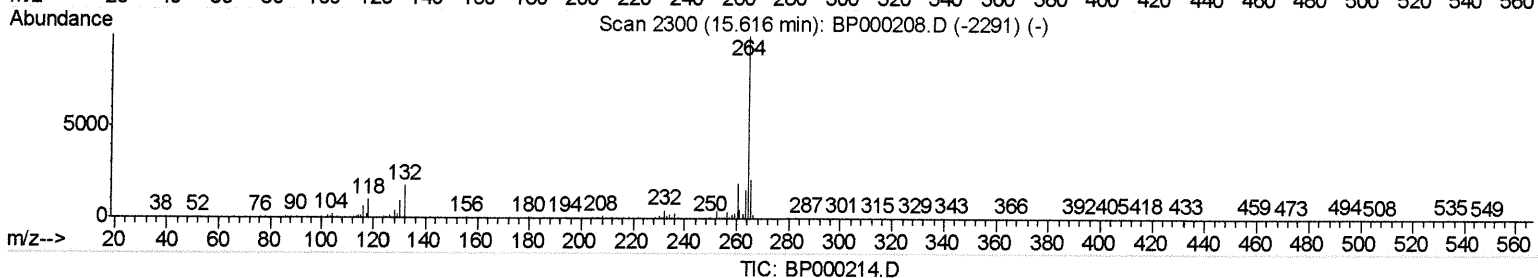
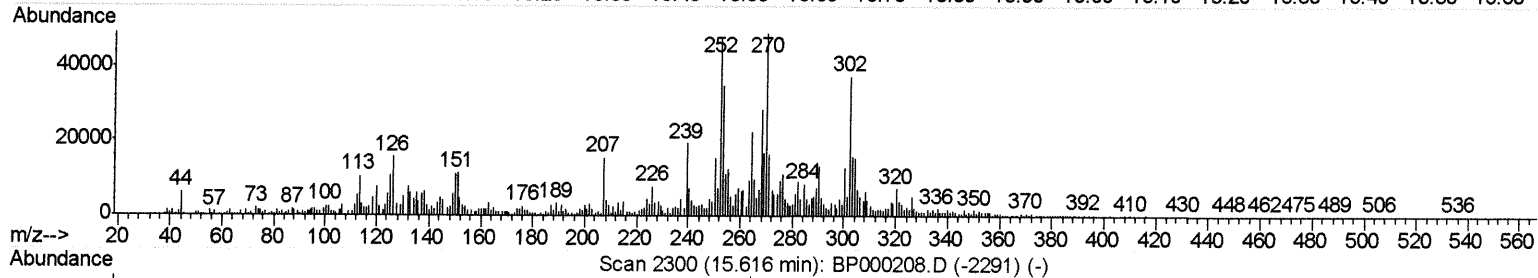
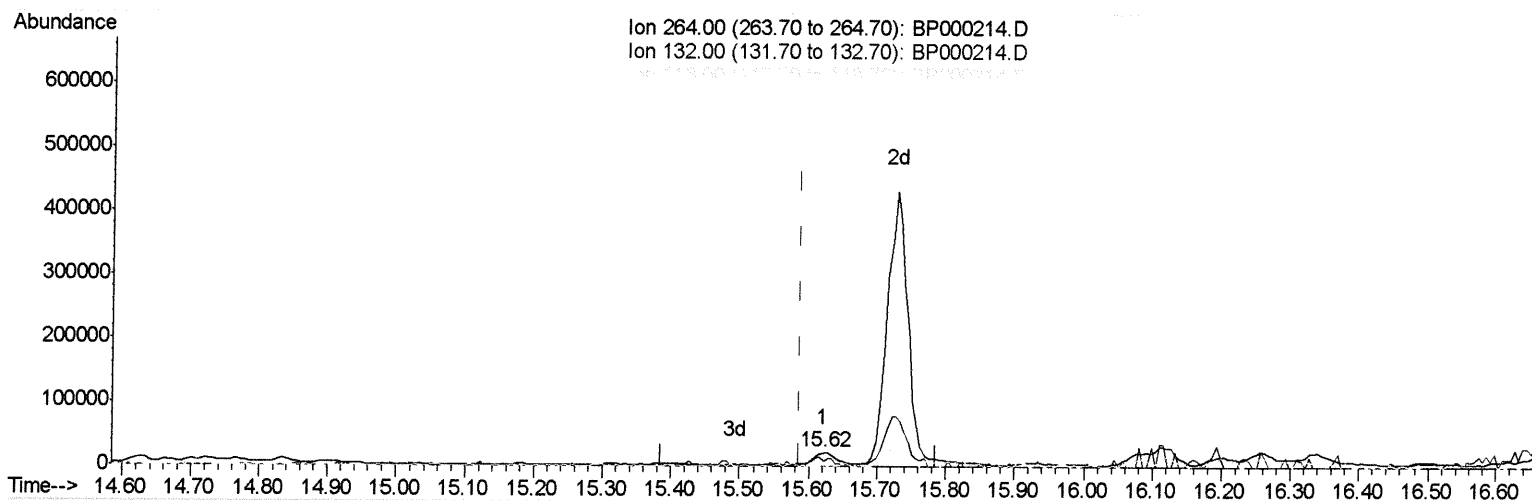
Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP091219\  
 Data File : BP000214.D  
 Acq On : 12 Sep 2019 13:38  
 Operator : HP/JU  
 Sample : K4633-12 30X  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 F2D11

Manual Integrations  
 APPROVED

mohammad  
 9/16/2019 9:09:05 AM

Quant Time: Sep 13 04:26:11 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\SOM-EPA-BP090519MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Tue Sep 10 02:43:18 2019  
 Response via : Initial Calibration



(90) Benzo(a)pyrene-d12 (S)

15.621min (+0.035) 1.15ng/ul m

50917119

response 53072

| Ion    | Exp%  | Act%   |
|--------|-------|--------|
| 264.00 | 100   | 100    |
| 132.00 | 18.00 | 33.64# |
| 118.00 | 10.80 | 20.49# |
| 0.00   | 0.00  | 0.00   |

# Quantitation Report (Qedit)

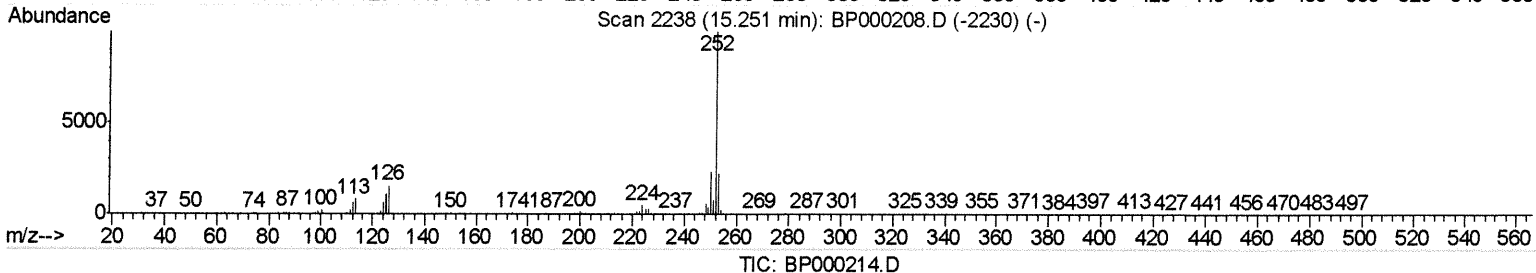
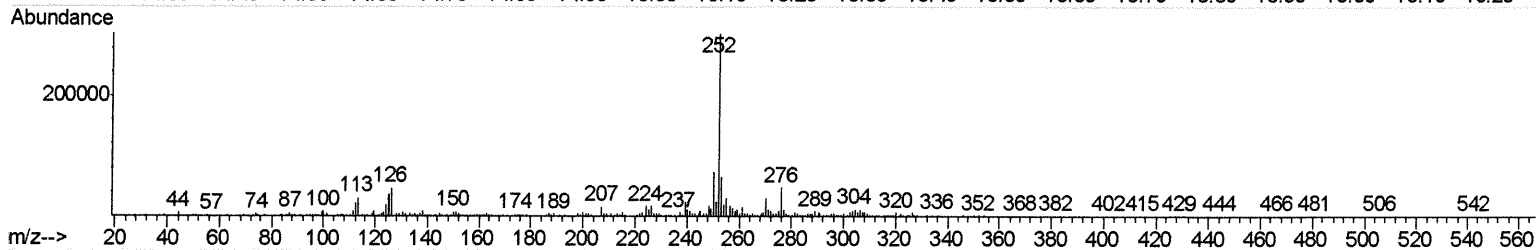
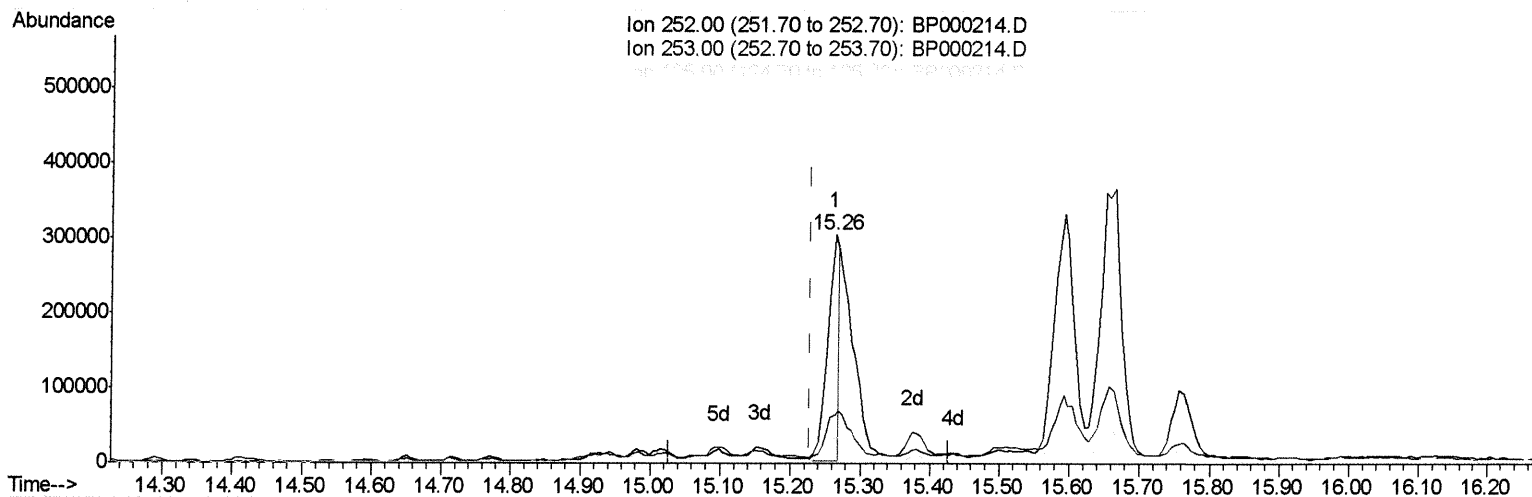
Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP091219\  
 Data File : BP000214.D  
 Acq On : 12 Sep 2019 13:38  
 Operator : HP/JU  
 Sample : K4633-12 30X  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 F2D11

Manual Integrations  
 APPROVED

mohammad  
 9/16/2019 9:09:05 AM

Quant Time: Sep 13 04:26:11 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\SOM-EPA-BP090519MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Tue Sep 10 02:43:18 2019  
 Response via : Initial Calibration



(88) Benzo(b)fluoranthene

15.263min (+0.035) 6.28ng/ul m *JU* 09/12/19

response 370409

| Ion    | Exp%  | Act%  |
|--------|-------|-------|
| 252.00 | 100   | 100   |
| 253.00 | 21.90 | 21.40 |
| 125.00 | 12.40 | 11.67 |
| 0.00   | 0.00  | 0.00  |

# Quantitation Report (Qedit)

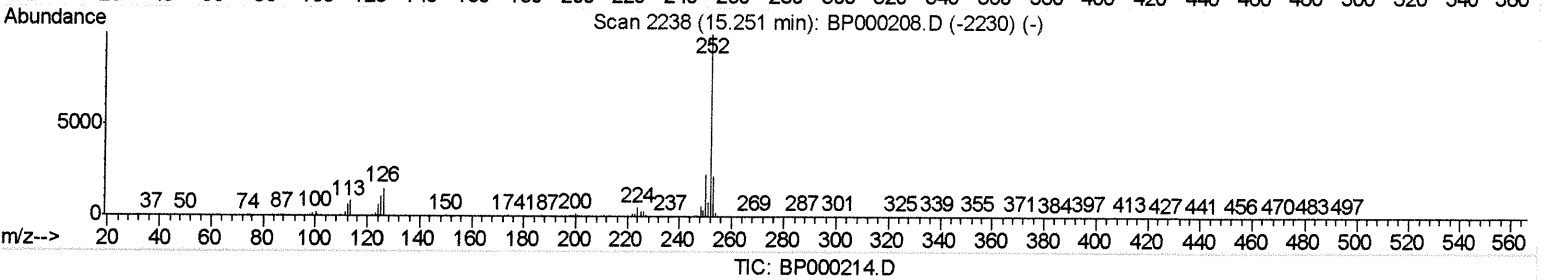
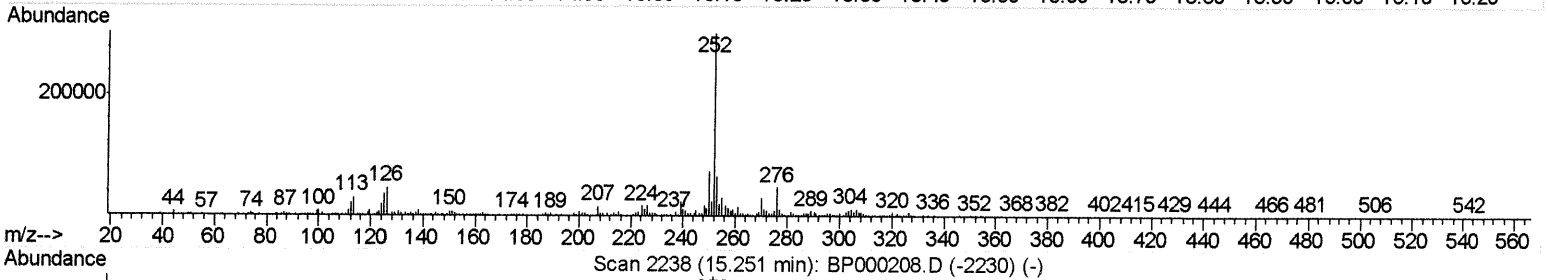
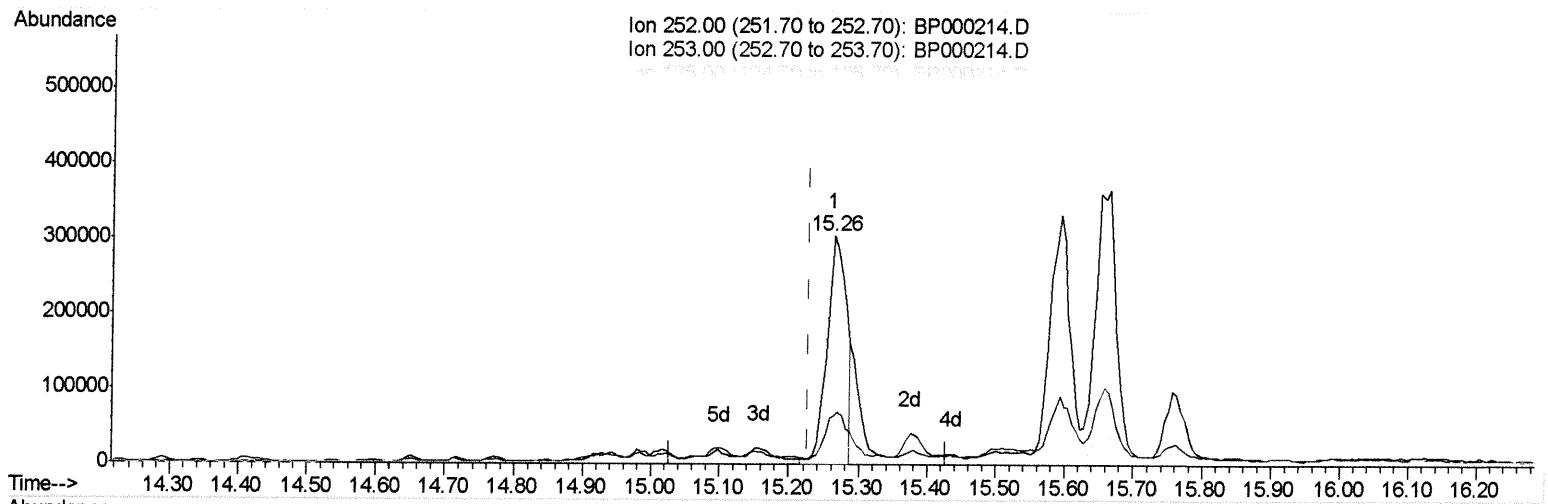
Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP091219\  
 Data File : BP000214.D  
 Acq On : 12 Sep 2019 13:38  
 Operator : HP/JU  
 Sample : K4633-12 30X  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 F2D11

Manual Integrations  
 APPROVED

mohammad  
 9/16/2019 9:09:05 AM

Quant Time: Sep 13 04:26:11 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\SOM-EPA-BP090519MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Tue Sep 10 02:43:18 2019  
 Response via : Initial Calibration



(88) Benzo(b)fluoranthene

15.263min (+0.035) 10.30ng/ul m

Jg 8/17/19

response 607206

| Ion    | Exp%  | Act%  |
|--------|-------|-------|
| 252.00 | 100   | 100   |
| 253.00 | 21.90 | 21.40 |
| 125.00 | 12.40 | 11.67 |
| 0.00   | 0.00  | 0.00  |

# Quantitation Report (Qedit)

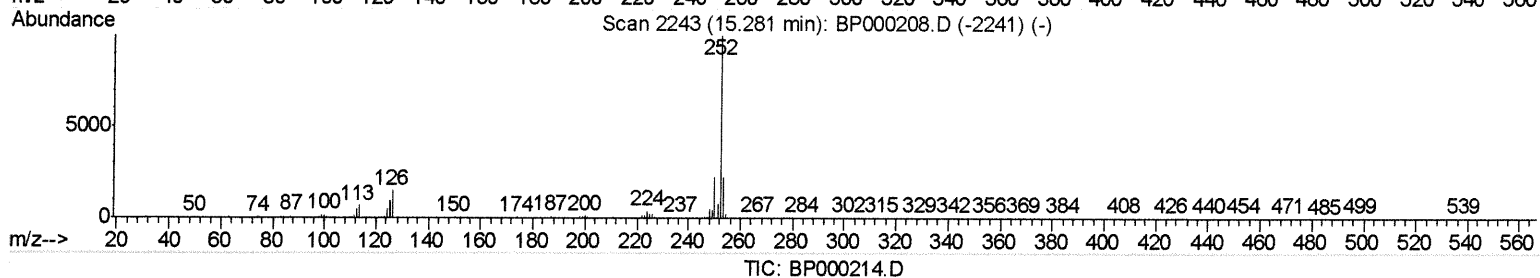
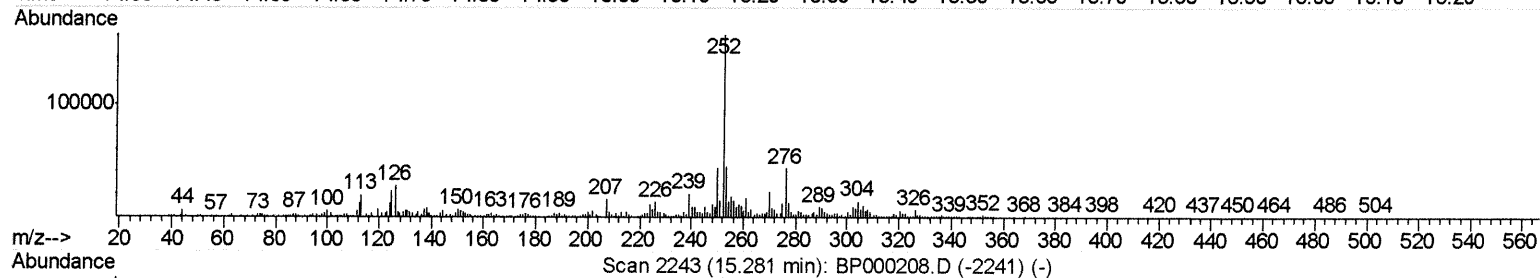
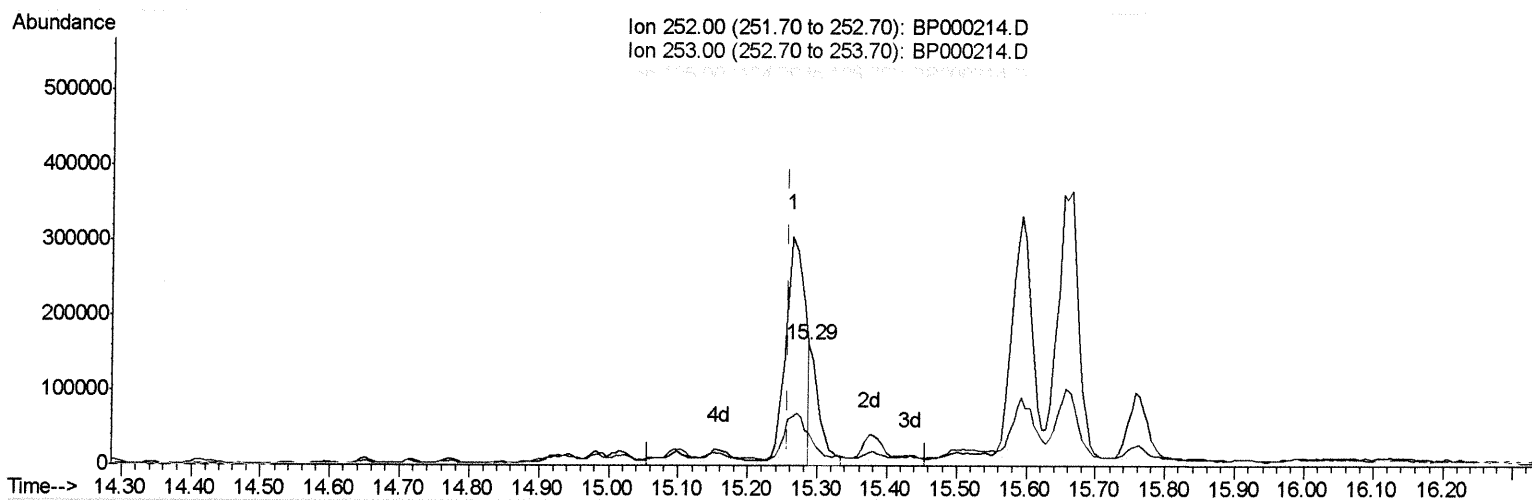
Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP091219\  
 Data File : BP000214.D  
 Acq On : 12 Sep 2019 13:38  
 Operator : HP/JU  
 Sample : K4633-12 30X  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 F2D11

Manual Integrations  
 APPROVED

mohammad  
 9/16/2019 9:09:05 AM

Quant Time: Sep 13 04:26:11 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\SOM-EPA-BP090519MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Tue Sep 10 02:43:18 2019  
 Response via : Initial Calibration



(89) Benzo(k)fluoranthene

15.286min (+0.029) 2.60ng/ul m *JU 09/17/19*

response 144697

| Ion    | Exp%  | Act%   |
|--------|-------|--------|
| 252.00 | 100   | 100    |
| 253.00 | 22.50 | 27.65# |
| 125.00 | 12.70 | 14.56  |
| 0.00   | 0.00  | 0.00   |

Data Path : Z:\svoasrv\HPCHEM1\BNA\_P\Data\BP091219\  
 Data File : BP000214.D  
 Acq On : 12 Sep 2019 13:38  
 Operator : HP/JU  
 Sample : K4633-12 30X  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_P  
 ClientSampleId :  
 F2D11

Manual Integrations  
 APPROVED

mohammad  
 9/16/2019 9:09:05 AM

Quant Time: Sep 13 13:15:31 2019  
 Quant Method : Z:\SVOASRV\HPCHEM1\BNA\_P\METHODS\SOM-EPA-BP090519MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Tue Sep 10 02:43:18 2019  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 6.89  | 152  | 332680   | 20.00 | ng/ul | 0.00     |
| 18) Naphthalene-d8        | 8.18  | 136  | 1274049  | 20.00 | ng/ul | 0.00     |
| 36) Acenaphthene-d10      | 9.95  | 164  | 670262   | 20.00 | ng/ul | 0.00     |
| 62) Phenanthrene-d10      | 11.45 | 188  | 1128469  | 20.00 | ng/ul | 0.00     |
| 78) Chrysene-d12          | 14.16 | 240  | 873418   | 20.00 | ng/ul | 0.02     |
| 86) Perylene-d12          | 15.73 | 264  | 889609   | 20.00 | ng/ul | 0.04     |

## System Monitoring Compounds

|                                |       |     |          |      |         |      |             |
|--------------------------------|-------|-----|----------|------|---------|------|-------------|
| 3) 1,4-Dioxane-d8              | 2.63  | 96  | 1090m →  | 0.12 | ng/uL > | 0.02 | JU 09/17/19 |
| 5) Phenol-d5                   | 6.50  | 99  | 18705    | 0.66 | ng/ul   | 0.00 |             |
| 7) Bis-(2-Chloroethyl) ether-d | 6.57  | 67  | 11761    | 0.79 | ng/ul   | 0.00 |             |
| 9) 2-Chlorophenol-d4           | 6.66  | 132 | 17045    | 0.74 | ng/ul   | 0.00 |             |
| 13) 4-Methylphenol-d8          | 7.26  | 113 | 11285    | 0.53 | ng/ul   | 0.00 |             |
| 19) Nitrobenzene-d5            | 7.45  | 128 | 6825     | 0.71 | ng/ul   | 0.00 |             |
| 22) 2-Nitrophenol-d4           | 7.77  | 143 | 6937     | 0.74 | ng/ul   | 0.00 |             |
| 26) 2,4-Dichlorophenol-d3      | 8.02  | 165 | 12905    | 0.65 | ng/ul   | 0.00 |             |
| 29) 4-Chloroaniline-d4         | 8.23  | 131 | 7048     | 0.29 | ng/ul   | 0.00 |             |
| 44) Dimethylphthalate-d6       | 9.63  | 166 | 42285    | 0.85 | ng/ul   | 0.00 |             |
| 47) Acenaphthylene-d8          | 9.79  | 160 | 51405    | 0.84 | ng/ul   | 0.00 |             |
| 52) 4-Nitrophenol-d4           | 10.04 | 143 | 1835     | 0.21 | ng/ul   | 0.00 |             |
| 58) Fluorene-d10               | 10.47 | 176 | 34610    | 0.82 | ng/ul   | 0.00 |             |
| 63) 4,6-Dinitro-2-methylphenol | 10.54 | 200 | 837      | 0.16 | ng/ul   | 0.01 |             |
| 71) Anthracene-d10             | 11.51 | 188 | 55337    | 1.01 | ng/ul   | 0.00 |             |
| 79) Pyrene-d10                 | 12.90 | 212 | 49012    | 0.94 | ng/ul   | 0.00 |             |
| 90) Benzo(a)pyrene-d12         | 15.62 | 264 | 53072m → | 1.15 | ng/ul > | 0.04 | JU 09/17/19 |

## Target Compounds

|                            |       |     |           |        | Qvalue  |             |
|----------------------------|-------|-----|-----------|--------|---------|-------------|
| 70) Phenanthrene           | 11.47 | 178 | 340134    | 5.097  | ng/ul   | 99          |
| 72) Anthracene             | 11.53 | 178 | 68953     | 1.050  | ng/ul   | 99          |
| 77) Fluoranthene           | 12.69 | 202 | 670048    | 9.955  | ng/ul   | 100         |
| 80) Pyrene                 | 12.92 | 202 | 946838    | 14.369 | ng/ul   | 98          |
| 83) Benzo(a)anthracene     | 14.15 | 228 | 809549    | 12.804 | ng/ul#  | 91          |
| 85) Chrysene               | 14.19 | 228 | 1108866   | 19.113 | ng/ul#  | 95          |
| 88) Benzo(b)fluoranthene   | 15.26 | 252 | 607206m → | 10.298 | ng/ul > | JU 09/17/19 |
| 89) Benzo(k)fluoranthene   | 15.29 | 252 | 144697m → | 2.603  | ng/ul > | JU 09/17/19 |
| 91) Benzo(a)pyrene         | 15.66 | 252 | 761677    | 13.769 | ng/ul#  | 93          |
| 92) Indeno(1,2,3-cd)pyrene | 17.32 | 276 | 208751    | 3.280  | ng/ul#  | 90          |
| 93) Dibenzo(a,h)anthracene | 17.32 | 278 | 96960     | 1.839  | ng/ul#  | 50          |
| 94) Benzo(g,h,i)perylene   | 17.80 | 276 | 308696    | 5.818  | ng/ul   | 91          |

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