

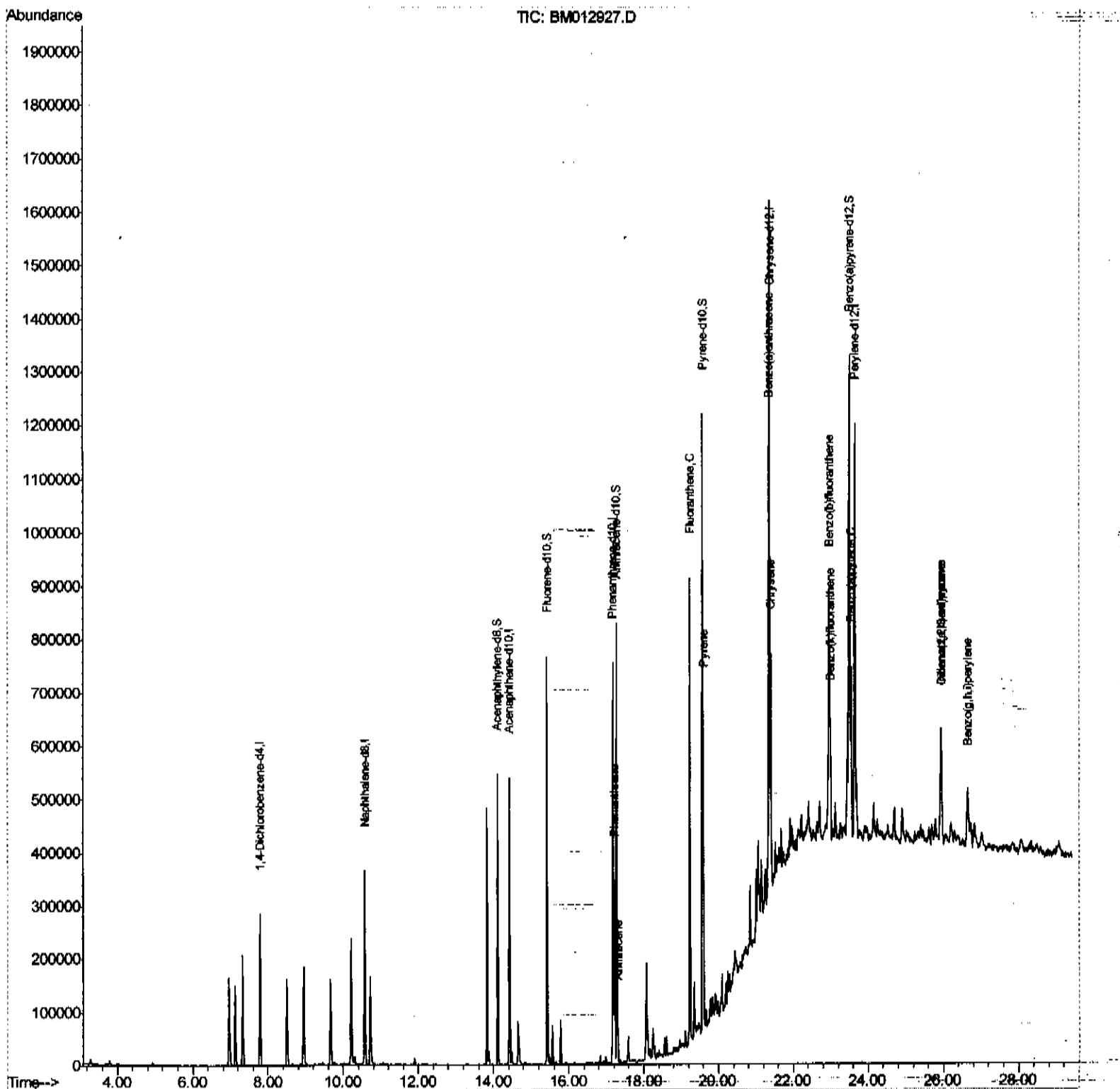
Data Path : Z:\HPCHEM1\BNA M\DATA\BM111017\  
Data File : BM012927.D  
Acq On : 12 Nov 2017 06:02  
Operator : SJ/JU  
Sample : I6322-01  
Misc :  
ALS Vial : 34 Sample Multiplier: 1

Instrument :  
BNA\_M  
ClientSampled :  
DAH9

Manual Integrations  
APPROVED

SOHIL  
11/13/2017 4:50:12 PM

Quant Time: Nov 13 04:01:10 2017  
Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM111017MA.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Mon Nov 13 02:06:47 2017  
Response via : Initial Calibration



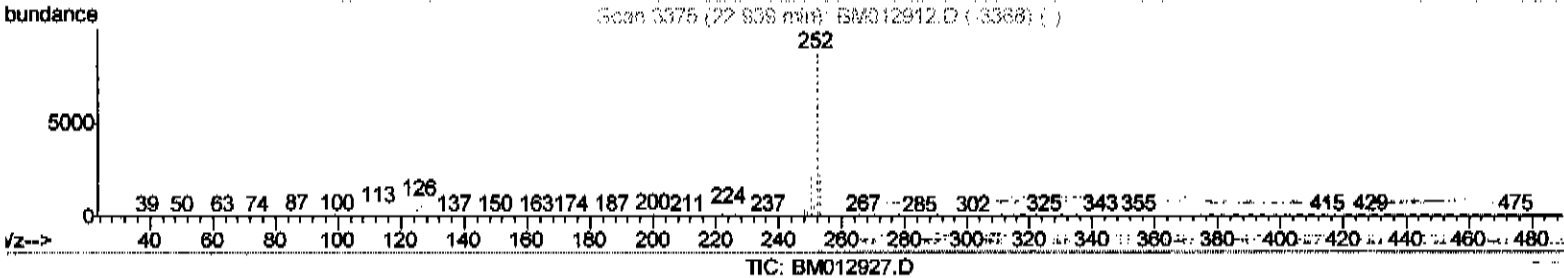
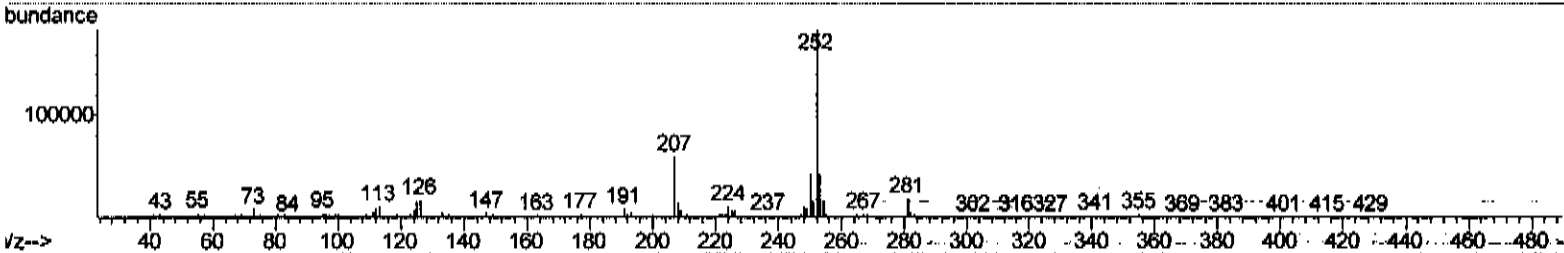
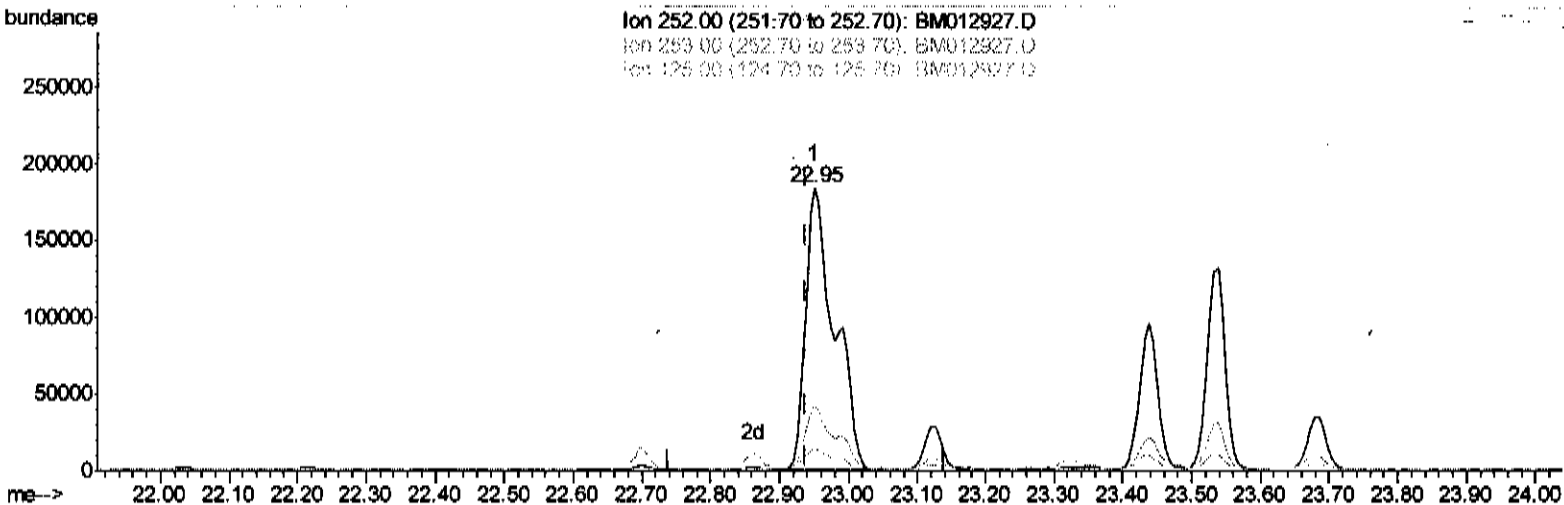
Data Path : Z:\HPCHEM1\BNA M\DATA\BM111017\  
 Data File : BM012927.D  
 Acq On : 12 Nov 2017 06:02  
 Operator : SJ/JU  
 Sample : I6322-01  
 Misc :  
 ALS Vial : 34 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampled :  
 DAHH9

Manual Integrations  
 APPROVED

SOHIL  
 11/13/2017 4:50:12 PM

Quant Time: Nov 13 02:12:45 2017  
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM111017MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Mon Nov 13 02:06:47 2017  
 Response via : Initial Calibration



(23) Benzo(b)fluoranthene

22.950min (+0.012) 15.17ng/ul

response 533084

| Ion    | Exp%  | Act%  |
|--------|-------|-------|
| 252.00 | 100   | 100   |
| 253.00 | 22.50 | 22.56 |
| 125.00 | 10.00 | 8.12  |
| 0.00   | 0.00  | 0.00  |

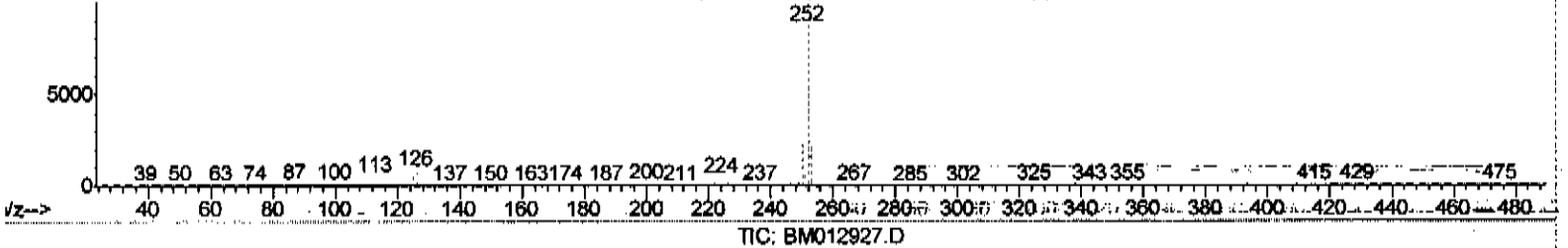
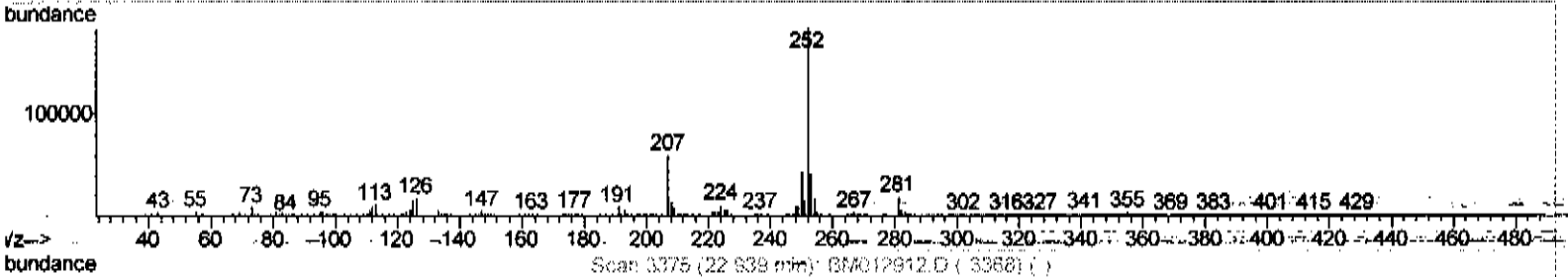
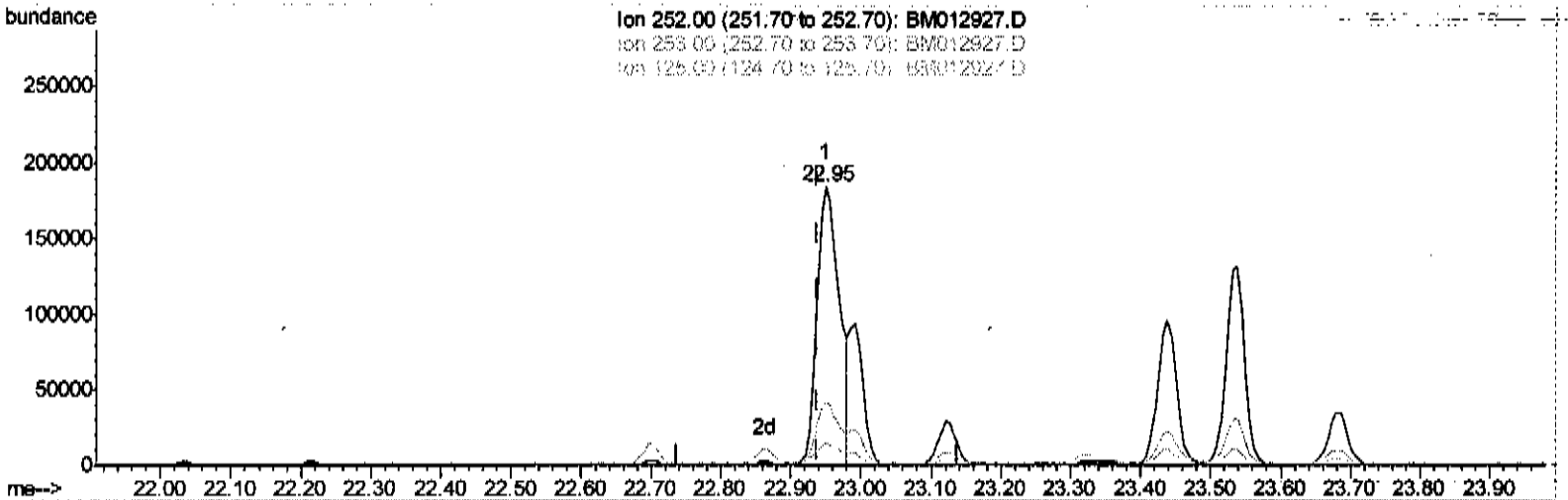
Data Path : Z:\HPCHEM1\BNA M\DATA\BM111017\  
 Data File : BM012927.D  
 Acc On : 12 Nov 2017 06:02  
 Operator : SJ/JU  
 Sample : I6322-01  
 Misc :  
 ALS Vial : 34 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampled :  
 DAHH9

Manual Integrations  
 APPROVED

SOHIL  
 11/13/2017 4:50:12 PM

Quant Time: Nov 13 02:12:45 2017  
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM111017MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Mon Nov 13 02:06:47 2017  
 Response via : Initial Calibration



(23) Benzo(b)fluoranthene

22.950min (+0.012) 11.58ng/ul m

response 407079

| Ion    | Exp%  | Act%  |
|--------|-------|-------|
| 252.00 | 100   | 100   |
| 253.00 | 22.50 | 22.56 |
| 125.00 | 10.00 | 8.12  |
| 0.00   | 0.00  | 0.00  |

*Handwritten signature:* JU 11/13/17

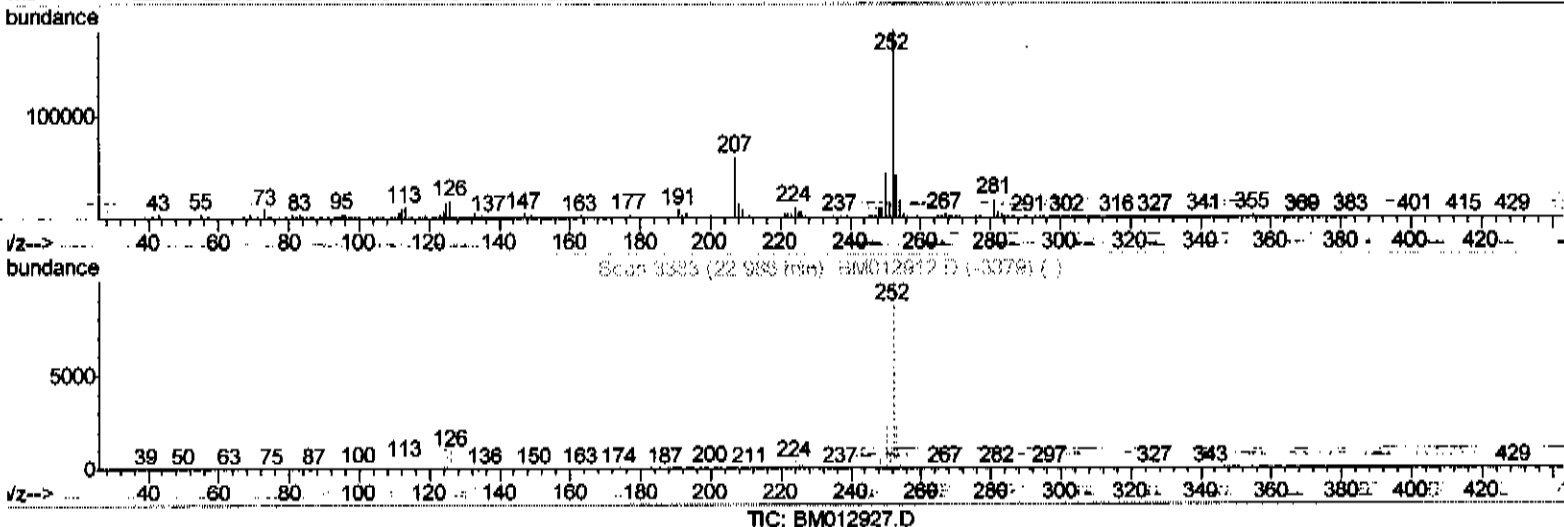
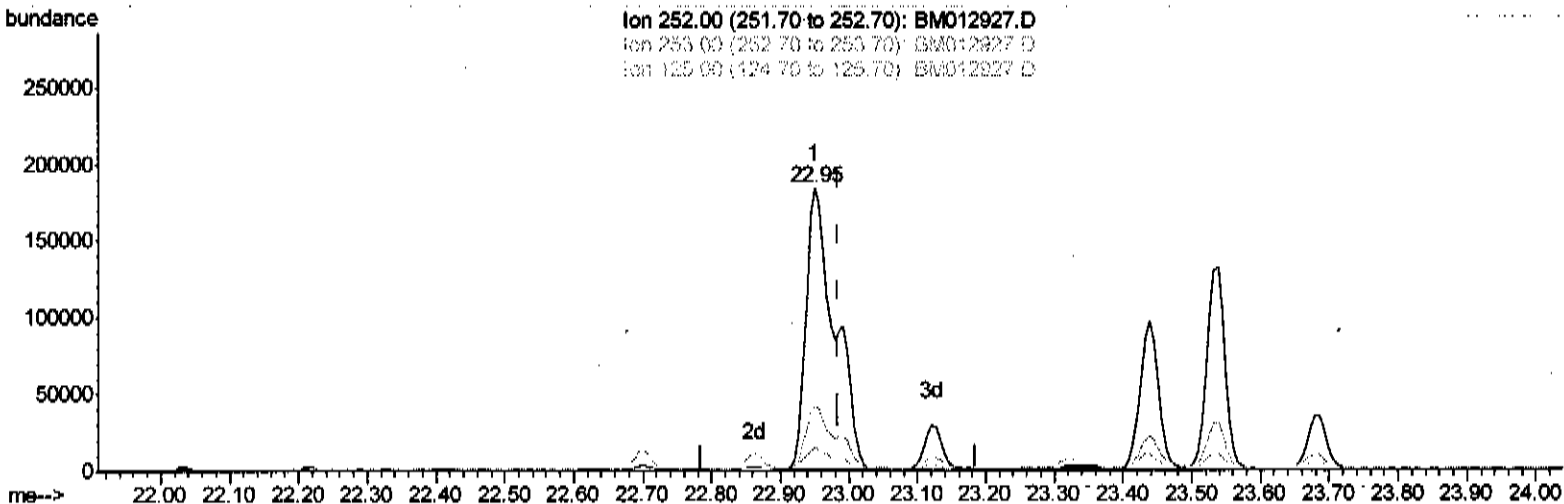
Data Path : Z:\HPCHEM1\BNA M\DATA\BM111017\  
 Data File : BM012927.D  
 Acq On : 12 Nov 2017 06:02  
 Operator : SJ/JU  
 Sample : I6322-01  
 Misc :  
 ALS Vial : 34 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampled :  
 DAHH9

Manual Integrations  
 APPROVED

SOHIL  
 11/13/2017 4:50:12 PM

Quant Time: Nov 13 02:12:45 2017  
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM111017MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Mon Nov 13 02:06:47 2017  
 Response via : Initial Calibration



TIC: BM012927.D

(24) Benzo(k)fluoranthene

22.950min (-0.035) 15.87ng/ul

response 533084

| Ion    | Exp%  | Act%  |
|--------|-------|-------|
| 252.00 | 100   | 100   |
| 253.00 | 22.50 | 22.56 |
| 125.00 | 10.10 | 8.12  |
| 0.00   | 0.00  | 0.00  |

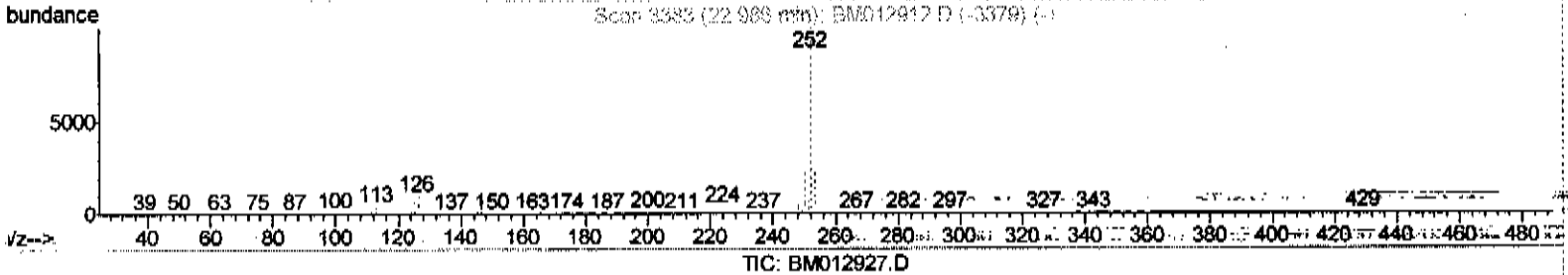
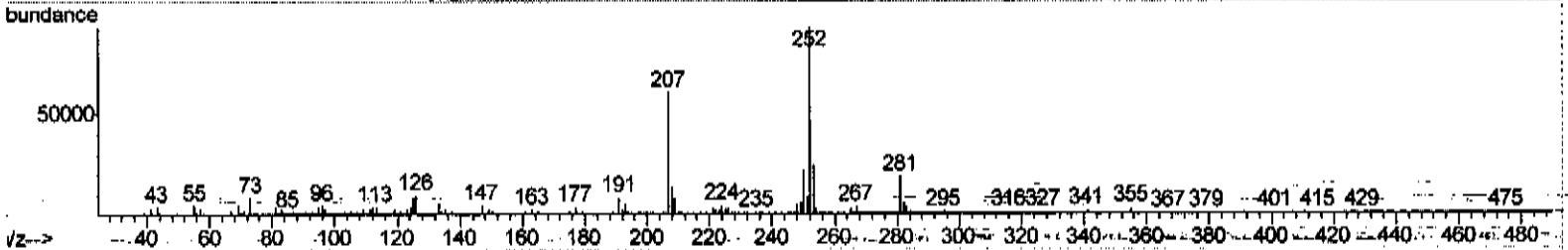
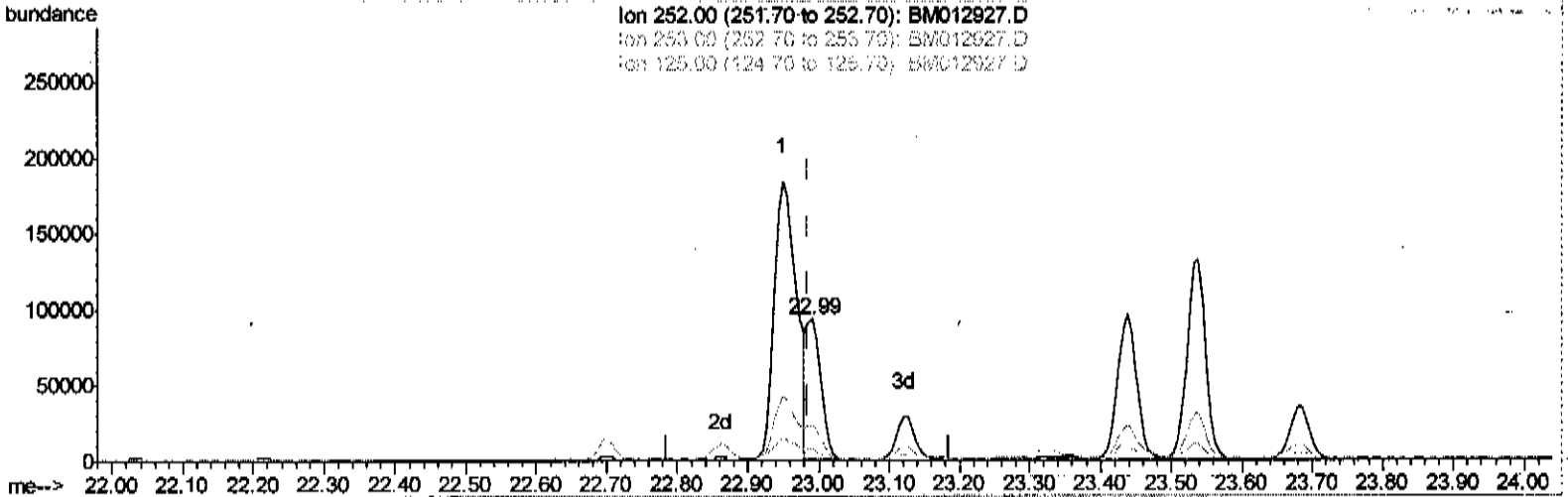
Data Path : Z:\HPCHEM1\BNA M\DATA\BM111017\  
 Data File : BM012927.D  
 Acq On : 12 Nov 2017 06:02  
 Operator : SJ/JU  
 Sample : I6322-01  
 Misc :  
 ALS Vial : 34 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 DAHH9

Manual Integrations  
 APPROVED

SOHIL  
 11/13/2017 4:50:12 PM

Quant Time: Nov 13 02:12:45 2017  
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM111017MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Mon Nov 13 02:06:47 2017  
 Response via : Initial Calibration



(24) Benzo(k)fluoranthene

22.991min (+0.006) 3.71ng/ul m

response 124626

| Ion    | Exp%  | Act%  |
|--------|-------|-------|
| 252.00 | 100   | 100   |
| 253.00 | 22.50 | 25.33 |
| 125.00 | 10.10 | 8.78  |
| 0.00   | 0.00  | 0.00  |

*SJ 11/13/17*

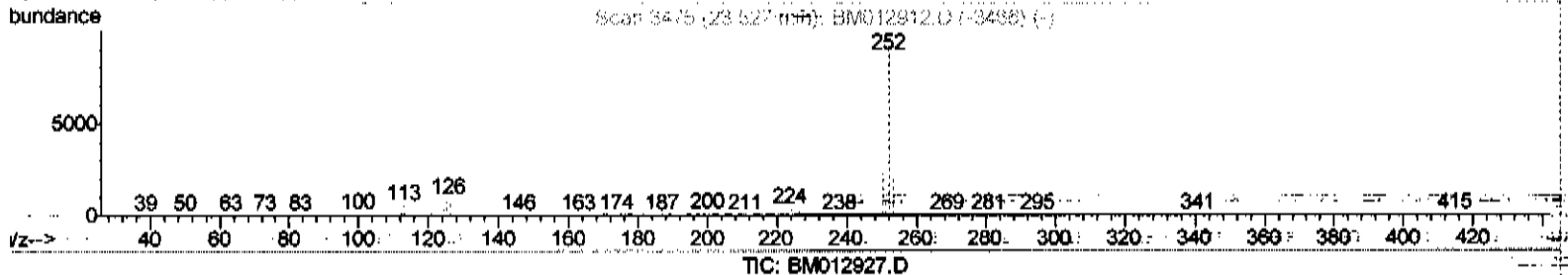
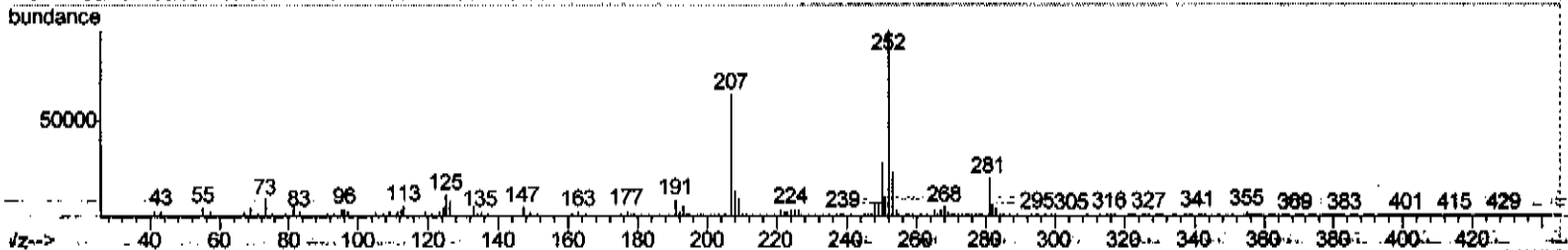
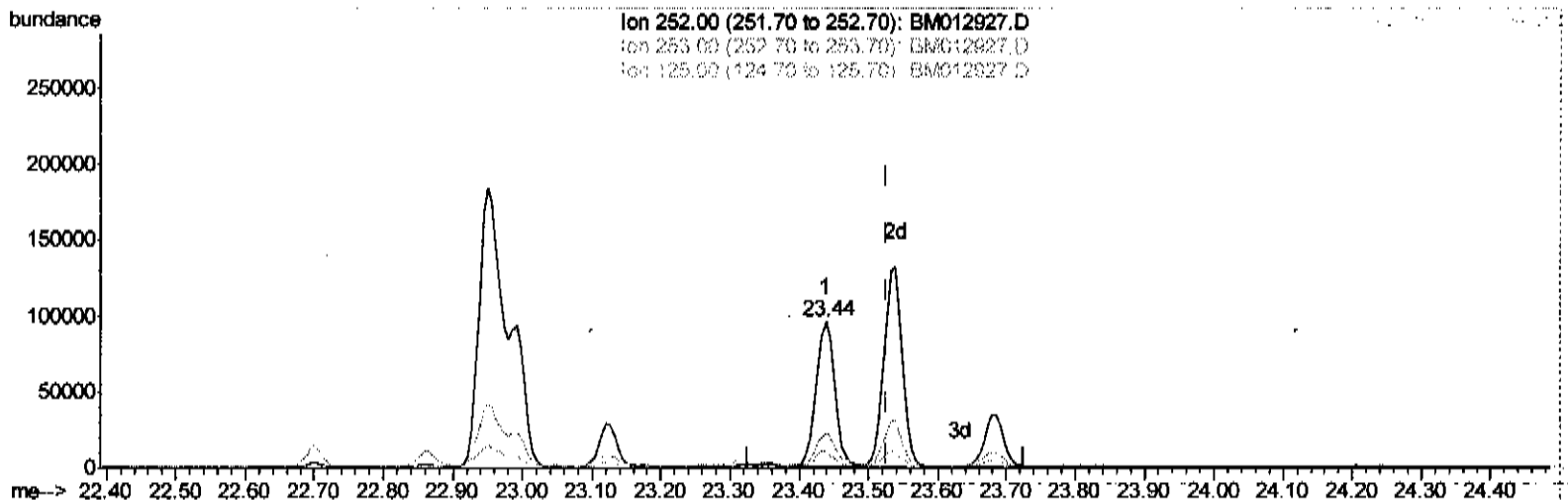
Data Path : Z:\HPCHEM1\ENA M\DATA\BM111017\  
 Data File : BM012927.D  
 Acq On : 12 Nov 2017 06:02  
 Operator : SJ/JU  
 Sample : I6322-01  
 Misc :  
 ALS Vial : 34 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampled :  
 DAHH9

Manual Integrations  
 APPROVED

SOHIL  
 11/13/2017 4:50:12 PM

Quant Time: Nov 13 02:12:45 2017  
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM111017MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Mon Nov 13 02:06:47 2017  
 Response via : Initial Calibration



(26) Benzo(a)pyrene (C)

23.438min (-0.088) 5.23ng/ul

response 178303

| Ion    | Exp%  | Act%  |
|--------|-------|-------|
| 252.00 | 100   | 100   |
| 253.00 | 21.50 | 23.52 |
| 125.00 | 10.30 | 11.33 |
| 0.00   | 0.00  | 0.00  |

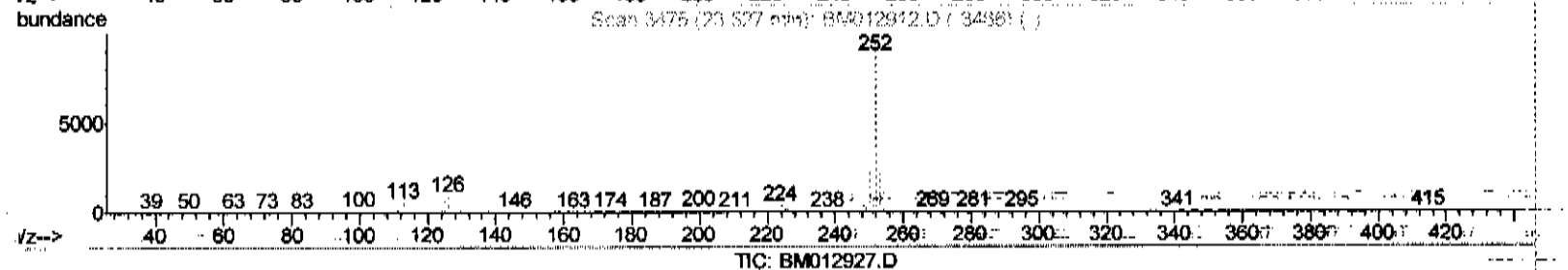
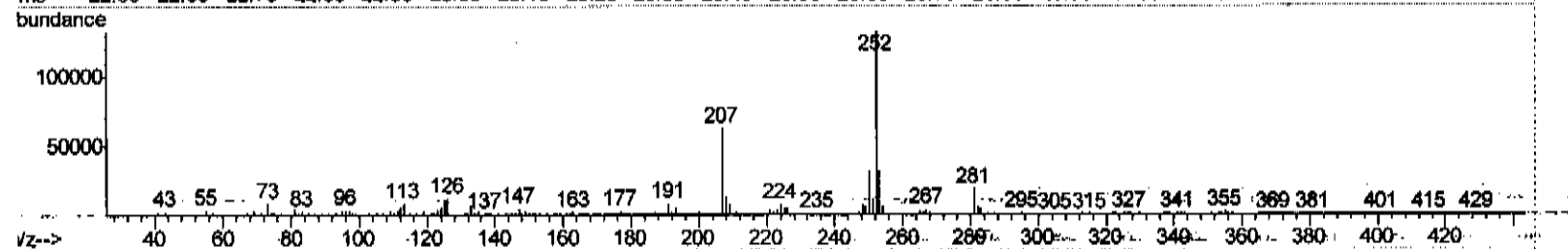
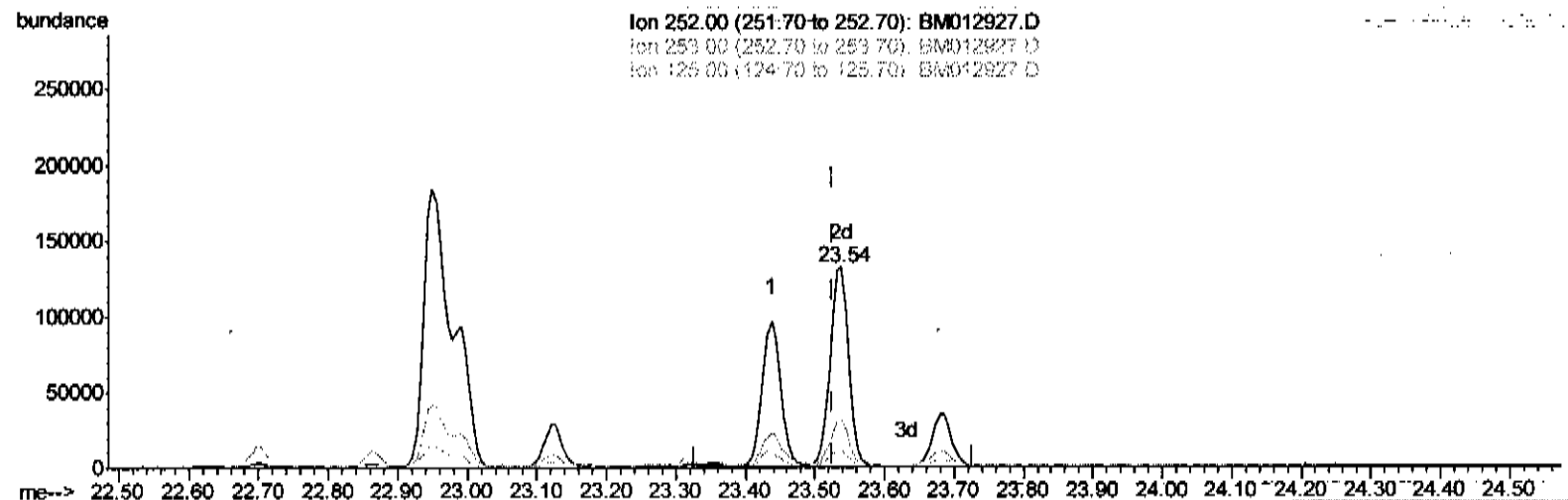
Data Path : Z:\HPCHEM1\BNA M\DATA\BM111017\  
 Data File : BM012927.D  
 Acq On : 12 Nov 2017 06:02  
 Operator : SJ/JU  
 Sample : I6322-01  
 Misc :  
 ALS Vial : 34 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampled :  
 DAHH9

Manual Integrations  
 APPROVED

SOHIL  
 11/13/2017 4:50:12 PM

Quant Time: Nov 13 02:12:45 2017  
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM111017MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Mon Nov 13 02:06:47 2017  
 Response via : Initial Calibration



(26) Benzo(a)pyrene (C)

23.538min (+0.012) 7.00ng/ul m

response 238522

| Ion    | Exp%  | Act%  |
|--------|-------|-------|
| 252.00 | 100   | 100   |
| 253.00 | 21.50 | 23.91 |
| 125.00 | 10.30 | 8.16# |
| 0.00   | 0.00  | 0.00  |

*Handwritten signature:* 34 11/13/17

Data Path : Z:\HPCHEM1\BNA M\DATA\BM111017\  
 Data File : BM012927.D  
 Acq On : 12 Nov 2017 06:02  
 Operator : SJ/JU  
 Sample : I6322-01  
 Misc :  
 ALS Vial : 34 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampled :  
 DAHH9

Manual Integrations  
 APPROVED

SOHIL  
 11/13/2017 4:50:12 PM

Quant Time: Nov 13 04:01:10 2017  
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM-EPA-BM111017MA.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Mon Nov 13 02:06:47 2017  
 Response via : Initial Calibration

| Internal Standards        | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|---------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Dichlorobenzene-d4 | 7.79  | 152  | 81674    | 20.00 | ng/ul | 0.00     |
| 2) Naphthalene-d8         | 10.57 | 136  | 315127   | 20.00 | ng/ul | 0.00     |
| 6) Acenaphthene-d10       | 14.42 | 164  | 185549   | 20.00 | ng/ul | 0.00     |
| 12) Phenanthrene-d10      | 17.17 | 188  | 433616   | 20.00 | ng/ul | 0.00     |
| 17) Chrysene-d12          | 21.36 | 240  | 519525   | 20.00 | ng/ul | 0.00     |
| 22) Perylene-d12          | 23.63 | 264  | 590970   | 20.00 | ng/ul | 0.00     |

| System Monitoring Compounds | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-----------------------------|-------|------|----------|-------|-------|----------|
| 7) Acenaphthylene-d8        | 14.12 | 160  | 403942   | 20.93 | ng/ul | 0.00     |
| 10) Fluorene-d10            | 15.42 | 176  | 293147   | 22.21 | ng/ul | 0.00     |
| 14) Anthracene-d10          | 17.27 | 188  | 468494   | 22.35 | ng/ul | 0.00     |
| 18) Pyrene-d10              | 19.57 | 212  | 520226   | 22.38 | ng/ul | 0.00     |
| 25) Benzo(a)pyrene-d12      | 23.49 | 264  | 623177   | 22.34 | ng/ul | 0.01     |

| Target Compounds           | R.T.  | QIon | Response | Conc  | Units  | Ovalue |
|----------------------------|-------|------|----------|-------|--------|--------|
| 13) Phenanthrene           | 17.22 | 178  | 214777   | 8.97  | ng/ul  | 99     |
| 15) Anthracene             | 17.30 | 178  | 48652    | 1.96  | ng/ul  | 98     |
| 16) Fluoranthene           | 19.23 | 202  | 487260   | 16.54 | ng/ul# | 91     |
| 19) Pyrene                 | 19.60 | 202  | 368465   | 12.36 | ng/ul# | 92     |
| 20) Benzo(a)anthracene     | 21.34 | 228  | 269460   | 8.43  | ng/ul  | 98     |
| 21) Chrysene               | 21.39 | 228  | 233216   | 8.16  | ng/ul  | 95     |
| 23) Benzo(b)fluoranthene   | 22.95 | 252  | 407079m  | 11.58 | ng/ul  |        |
| 24) Benzo(k)fluoranthene   | 22.99 | 252  | 124626m  | 3.71  | ng/ul  |        |
| 26) Benzo(a)pyrene         | 23.54 | 252  | 238522m  | 7.00  | ng/ul  |        |
| 27) Indeno(1,2,3-cd)pyrene | 25.94 | 276  | 204391   | 4.65  | ng/ul# | 93     |
| 28) Dibenzo(a,h)anthracene | 25.94 | 278  | 59186    | 1.60  | ng/ul# | 89     |
| 29) Benzo(a,h,i)perylene   | 26.64 | 276  | 150849   | 4.11  | ng/ul  | 96     |

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

*Handwritten signature and date: SJ 11/13/17*