

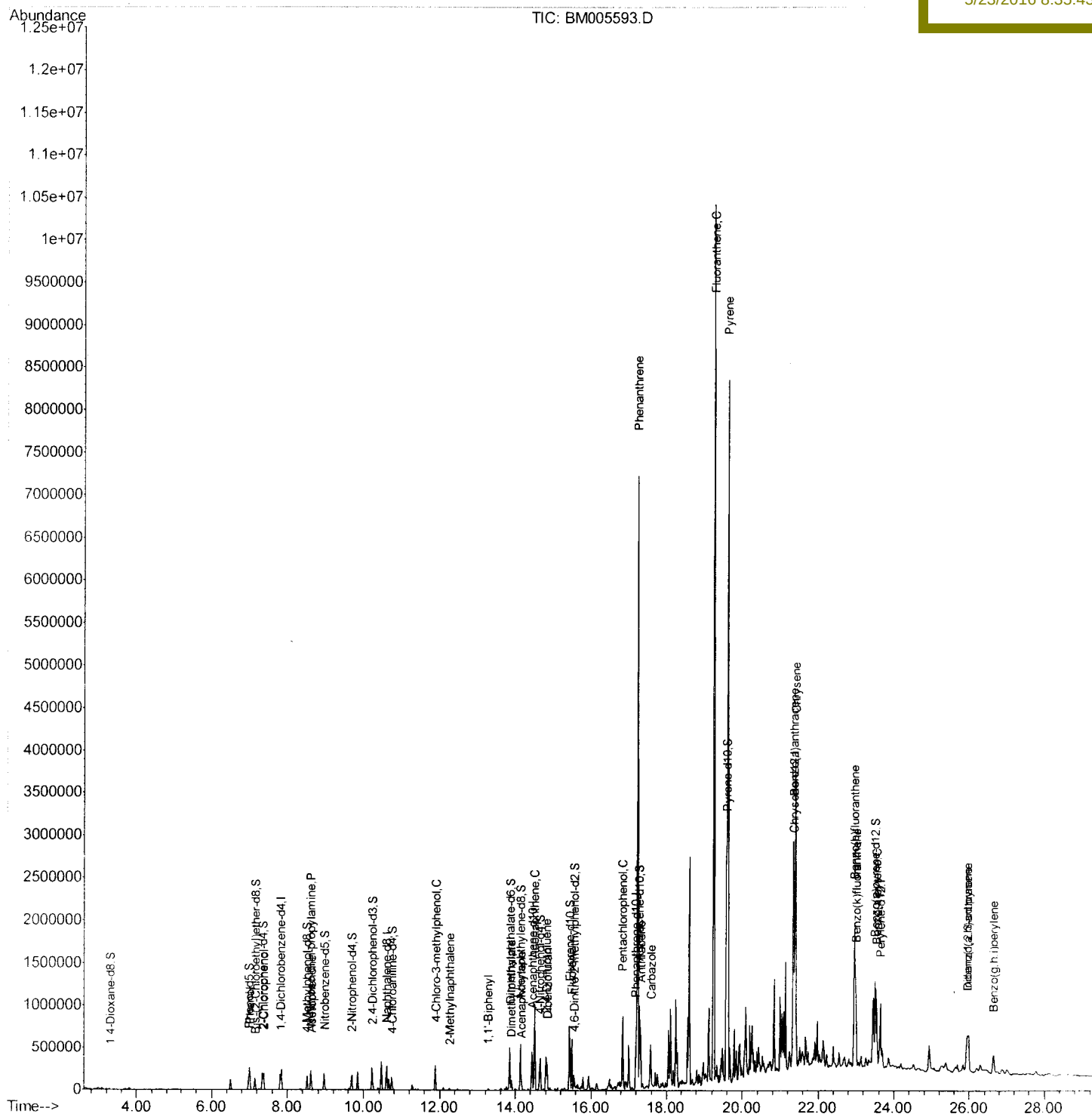
```
Data Path   : Z:\HPCHEM1\BNA_M\DATA\BM052216\  
Data File  : BM005593.D  
Acq On     : 22 May 2016   19:02  
Operator   : UM/SJ  
Sample     : H3087-11MSD  
Misc       :  
ALS Vial   : 12      Sample Multiplier: 1
```

Quant Time: May 23 06:50:28 2016  
Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Mon May 23 05:32:02 2016  
Response via : Initial Calibration

**Instrument :**  
BNA\_M  
**ClientSampleId :**  
JHKG4MSD

## Manual Integrations APPROVED

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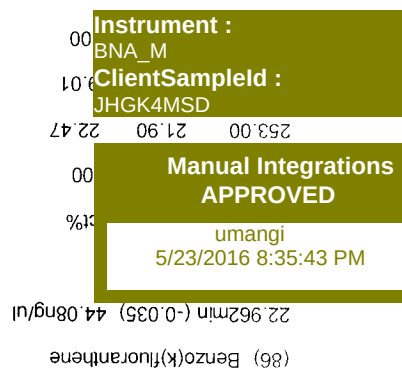


```

Data Path      : Z:\HPCHEM1\BNA_M\DATA\BM052216\
Acq On        : BM005593.D
Operator       : UM/SJ
Sample         : H3087-11MSD
Misc           :
ALS Vial       : 12
Sample Multiplier: 1

```

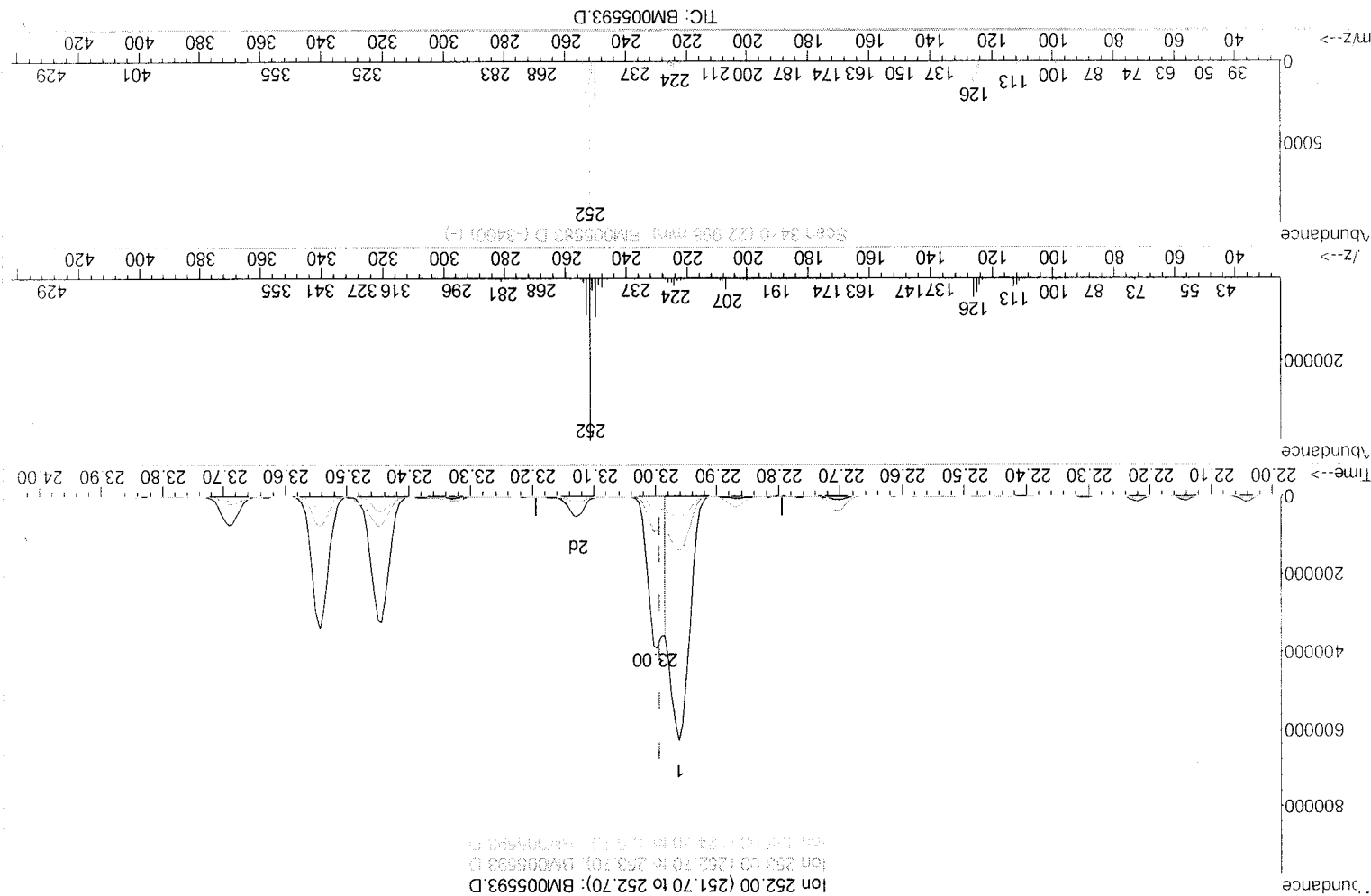
Last update : Mon May 23 05:32:02 2016  
 Response via : Initial calibration



Quantitation Report (Qedit)

Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
Data File : BM005593.D  
Acq On : 22 May 2016 19:02  
Operator : UM/SJ  
Sample : H3087-11MSD  
Misc :  
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 23 06:47:14 2016  
Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
Quant Title : SVOA CALIBRATION  
QLast Update : Mon May 23 05:32:02 2016  
Response via : Initial Calibration



(86) Benzo(k)fluoranthene  
22.997min (-0.000) 17.49ng/u1 m  
response 589147  
Ion Exp% Act%  
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Manual Integrations  
APPROVED

Instrument :  
BNA M  
ClientSampleId :  
JHKG4MSD

U.M.  
05/25/16

Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\

Data File : BM005593.D

Acq On : 22 May 2016 19:02

Operator : UM/SJ

Sample : H3087-11MSD

Misc :

ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 23 06:50:28 2016

Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M

Quant Title : SVOA CALIBRATION

Quant Update : Mon May 23 05:32:02 2016

Response via : Initial Calibration

Internal Standards

|    |                        |       |     |        |       |       |      |
|----|------------------------|-------|-----|--------|-------|-------|------|
| 1  | 1,4-Dichlorobenzene-d4 | 7.81  | 152 | 48382  | 20.00 | ng/ul | 0.00 |
| 18 | Naphthalene-d8         | 10.60 | 136 | 236084 | 20.00 | ng/ul | 0.00 |
| 35 | Acenaphthene-d10       | 14.45 | 164 | 149388 | 20.00 | ng/ul | 0.00 |
| 61 | Phenanthrene-d10       | 17.19 | 188 | 367677 | 20.00 | ng/ul | 0.00 |
| 75 | Chrysene-d12           | 21.37 | 240 | 497443 | 20.00 | ng/ul | 0.00 |
| 83 | Perylene-d12           | 23.64 | 264 | 603150 | 20.00 | ng/ul | 0.00 |

System Monitoring Compounds

|    |                             |       |     |        |       |       |      |
|----|-----------------------------|-------|-----|--------|-------|-------|------|
| 3  | 1,4-Dioxane-d8              | 3.29  | 96  | 5549   | 5.02  | ng/uL | 0.00 |
| 5  | Phenol-d5                   | 6.98  | 99  | 107092 | 27.00 | ng/uL | 0.00 |
| 7  | Bis-(2-chloroethyl) ether-d | 7.15  | 67  | 61545  | 26.78 | ng/uL | 0.00 |
| 9  | 2-Chlorophenol-d4           | 7.35  | 132 | 85598  | 25.87 | ng/uL | 0.00 |
| 13 | 4-Methylphenol-d8           | 8.52  | 113 | 57150  | 17.59 | ng/uL | 0.00 |
| 19 | Nitrobenzene-d5             | 8.96  | 128 | 45737  | 25.34 | ng/uL | 0.00 |
| 22 | 2-Nitrophenol-d4            | 9.69  | 143 | 52136  | 26.24 | ng/uL | 0.00 |
| 26 | 2,4-Dichlorophenol-d3       | 10.22 | 165 | 92504  | 24.72 | ng/uL | 0.00 |
| 29 | 4-Chloroaniline-d4          | 10.73 | 131 | 82238  | 21.94 | ng/uL | 0.00 |
| 43 | Dimethylphthalate-d6        | 13.85 | 166 | 331587 | 27.19 | ng/uL | 0.00 |
| 46 | Acenaphthylene-d8           | 14.14 | 160 | 401882 | 26.36 | ng/uL | 0.00 |
| 51 | 4-Nitrophenol-d4            | 14.65 | 143 | 51862  | 22.48 | ng/uL | 0.00 |
| 57 | Fluorene-d10                | 15.43 | 176 | 296651 | 27.96 | ng/uL | 0.00 |
| 62 | 4,6-Dinitro-2-methylphenol  | 15.56 | 200 | 38959  | 18.42 | ng/uL | 0.00 |
| 70 | Anthracene-d10              | 17.29 | 188 | 476731 | 27.22 | ng/uL | 0.00 |
| 76 | Pyrene-d10                  | 19.58 | 212 | 562673 | 24.98 | ng/uL | 0.00 |
| 87 | Benzo(a)pyrene-d12          | 23.50 | 264 | 752717 | 26.73 | ng/uL | 0.00 |

Target Compounds

|     |                            |       |     |         |        |       |     |
|-----|----------------------------|-------|-----|---------|--------|-------|-----|
| 6   | Phenol                     | 7.00  | 94  | 131025  | 32.07  | ng/uL | 99  |
| 10  | 2-Chlorophenol             | 7.38  | 128 | 83858   | 25.26  | ng/uL | 97  |
| 14  | Acetophenone               | 8.63  | 105 | 24247   | 4.96   | ng/uL | 96  |
| 15  | N-Nitroso-di-n-propylamine | 8.61  | 70  | 78998   | 30.57  | ng/uL | 99  |
| 33  | 4-Chloro-3-methylphenol    | 11.89 | 107 | 101799  | 25.19  | ng/uL | 96  |
| 34  | 2-Methylnaphthalene        | 12.26 | 142 | 12218   | 1.41   | ng/uL | 99  |
| 40  | 1,1'-Biphenyl              | 13.27 | 154 | 12711   | 1.01   | ng/uL | 98  |
| 44  | Dimethylphthalate          | 13.90 | 163 | 68534   | 5.69   | ng/uL | 99  |
| 47  | Acenaphthylene             | 14.17 | 152 | 60614   | 3.91   | ng/uL | 98  |
| 49  | Acenaphthene               | 14.51 | 153 | 425990  | 41.71  | ng/uL | 99  |
| 52  | 4-Nitrophenol              | 14.66 | 109 | 56679   | 24.45  | ng/uL | 98  |
| 53  | Dibenzofuran               | 14.85 | 168 | 193664  | 13.28  | ng/uL | 98  |
| 54  | 2,4-Dinitrotoluene         | 14.81 | 165 | 108154  | 30.42  | ng/uL | 94  |
| 58  | Fluorene                   | 15.49 | 166 | 273256  | 23.41  | ng/uL | 99  |
| 62  | 4-Chlorophenol             | 16.84 | 266 | 62662   | 22.37  | ng/uL | 98  |
| 77  | Pyrene                     | 17.24 | 178 | 4690517 | 228.26 | ng/uL | 99  |
| 77  | Pyrene                     | 17.32 | 178 | 449577  | 21.47  | ng/uL | 100 |
| 77  | Pyrene                     | 17.59 | 167 | 315383  | 17.35  | ng/uL | 100 |
| 202 | 7634157                    | 19.26 | 202 | 7634157 | 330.06 | ng/uL | 97  |
| 202 | 5816469                    | 19.62 | 202 | 5816469 | 203.40 | ng/uL | 94  |
| 228 | 1301718                    | 21.35 | 228 | 1301718 | 44.52  | ng/uL | 96  |
| 228 | 2136353                    | 21.40 | 228 | 2136353 | 76.80  | ng/uL | 97  |
| 252 | 1484410                    | 22.96 | 252 | 1484410 | 41.73  | ng/uL | 98  |

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Manual Integrations  
APPROVED

Instrument :  
Client Sample Id :  
M BNA  
JHGS4MSD

# Quantitation Report (QT Reviewed)

Data Path : Z:\HPCHEM1\BNA\_M\DATA\BM052216\  
 Data File : BM005593.D  
 Acq On : 22 May 2016 19:02  
 Operator : UM/SJ  
 Sample : H3087-11MSD  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 BNA\_M  
 ClientSampleId :  
 JHGK4MSD

Manual Integrations  
 APPROVED

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 5/23/2016 8:35:43 PM

Quant Time: May 23 06:50:28 2016  
 Quant Method : Z:\HPCHEM1\BNA\_M\METHODS\SOM02.2-EPA-BM052016.M  
 Quant Title : SVOA CALIBRATION  
 QLast Update : Mon May 23 05:32:02 2016  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|----------------------------|-------|------|----------|-------|--------|----------|
| 86) Benzo(k)fluoranthene   | 23.00 | 252  | 589147m  | 17.49 | ng/ul  |          |
| 88) Benzo(a)pyrene         | 23.54 | 252  | 619477   | 17.95 | ng/ul  | 99       |
| 89) Indeno(1,2,3-cd)pyrene | 25.94 | 276  | 377721   | 9.22  | ng/ul  | 97       |
| 90) Dibenzo(a,h)anthracene | 25.94 | 278  | 95116    | 2.79  | ng/ul# | 83       |
| 91) Benzo(g,h,i)perylene   | 26.64 | 276  | 279631   | 8.11  | ng/ul  | 100      |

U.N.  
 05/25/16

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