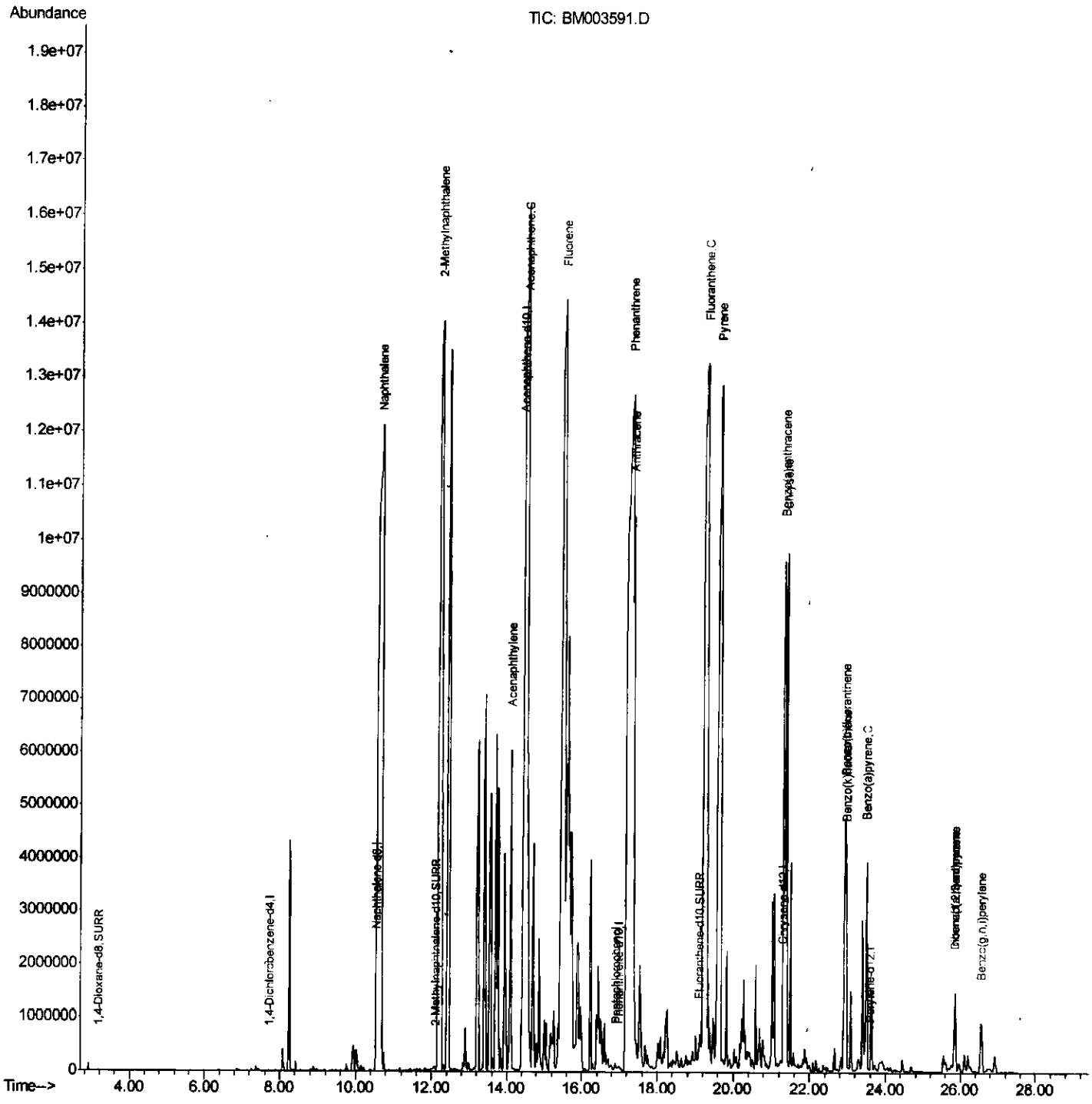
Quantitation Report (QT Reviewed)

Data Path : Z:\HPCHEM1\BNA_M\Data\BM121615\
Data File : BM003591.D
Acq On : 16 Dec 2015 23:19
Operator : UM/IZ
Sample : G4767-15
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 17 08:04:21 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 : Thu Dec 17 02:56:38 2015
Response via : Initial Calibration

**Instrument :**
BNA_M
**ClientSampleId :**
D9N37

**Manual Integrations APPROVED**
MMdadoda
12/17/2015 5:36:17 PM



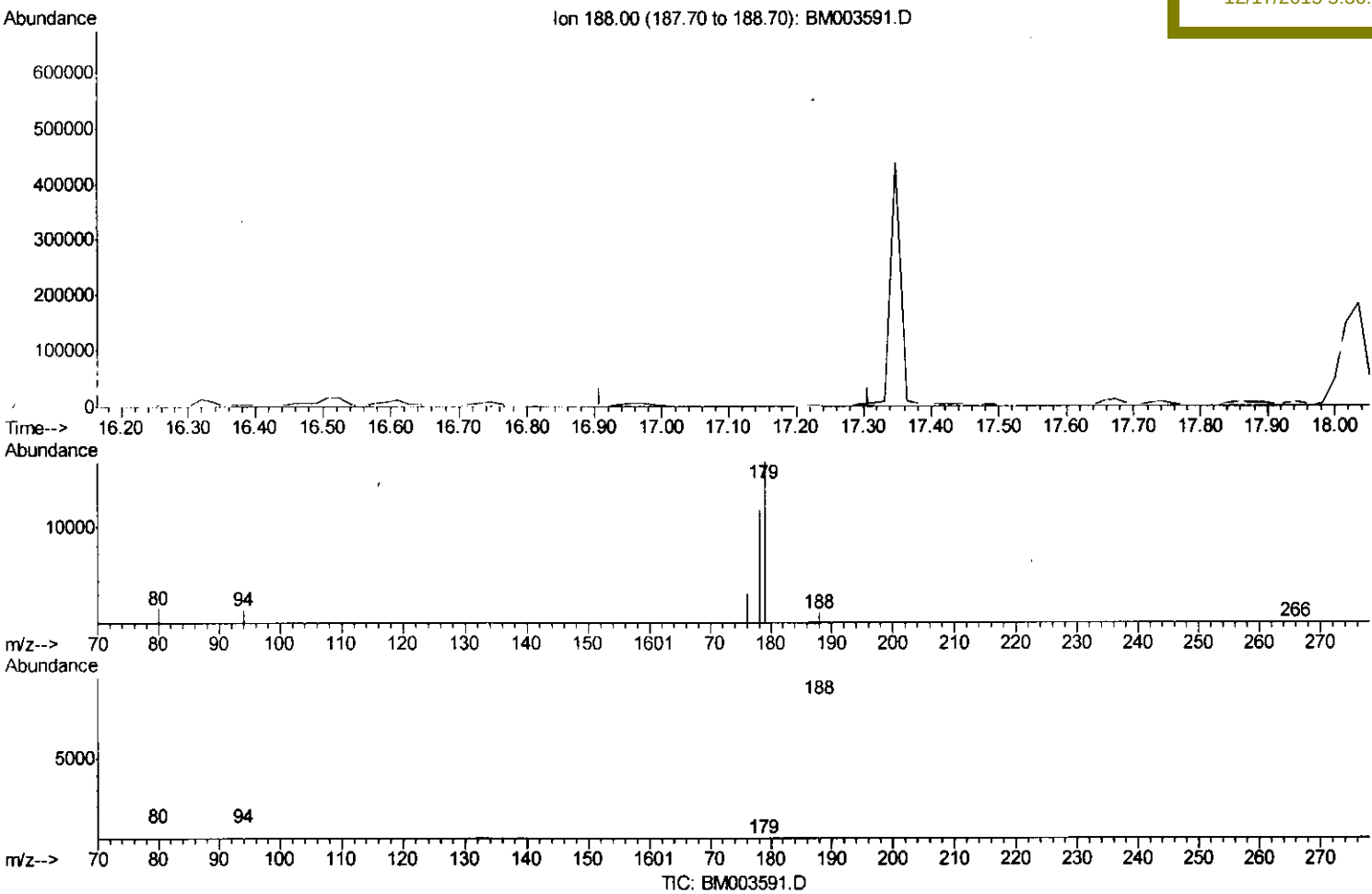
Quantitation Report (Qedit)

Data Path : Z:\HPCHEM1\BNA_M\Data\BM121615\
Data File : BM003591.D
Acq On : 16 Dec 2015 23:19
Operator : UM/IZ
Sample : G4767-15
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 17 03:03:08 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 : Thu Dec 17 02:56:38 2015
Response via : Initial Calibration

**Instrument :**
BNA_M
**ClientSampleId :**
D9N37

**Manual Integrations APPROVED**
MMdadoda
12/17/2015 5:36:17 PM




(12) Phenanthrene-d10 (I)

17.108min (-17.108) 0.00ng/ul

response 0

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

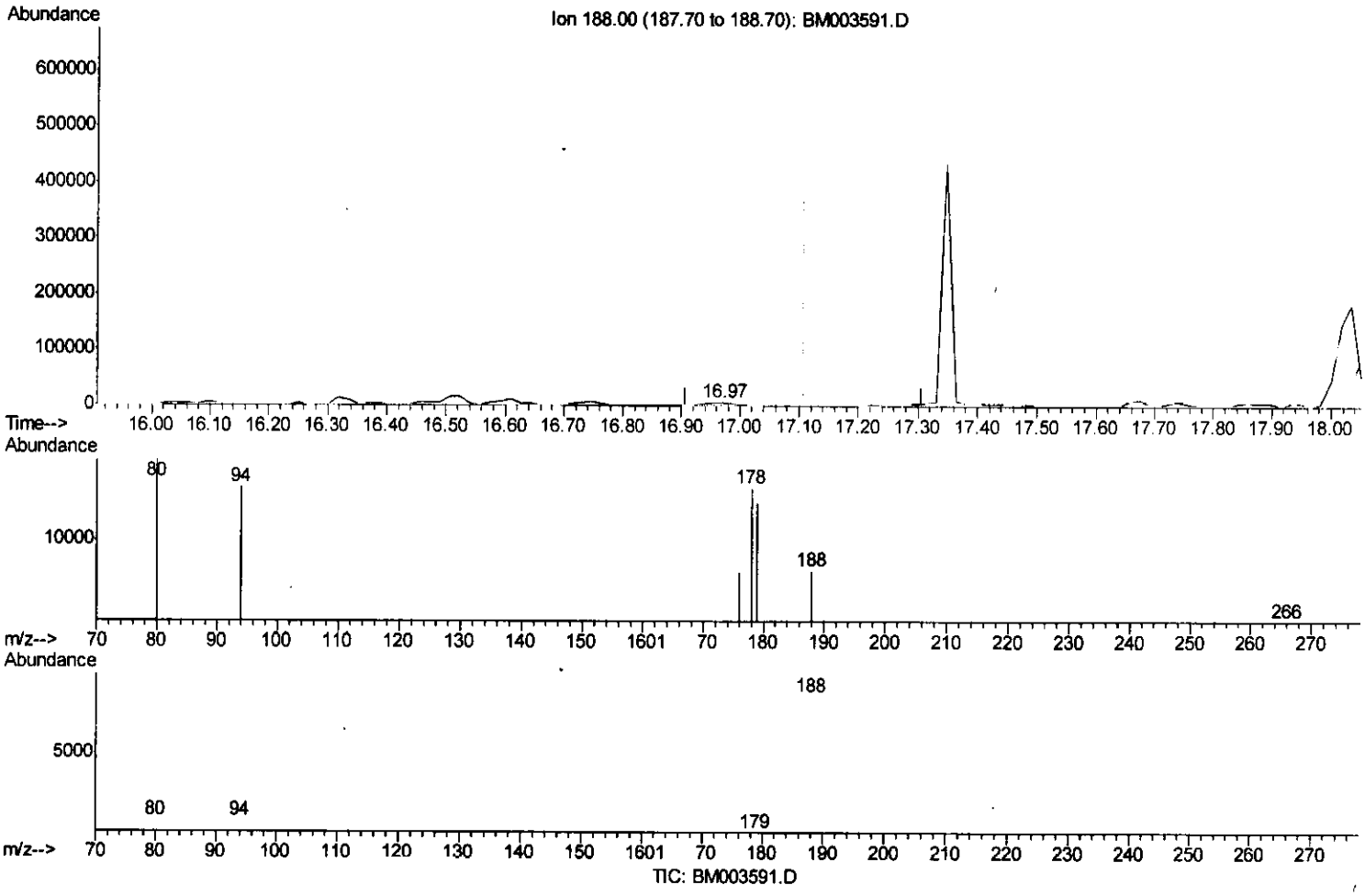
Quantitation Report (Qedit)

Data Path : Z:\HPCHEM1\BNA_M\Data\BM121615\
Data File : BM003591.D
Acq On : 16 Dec 2015 23:19
Operator : UM/IZ
Sample : G4767-15
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 17 03:03:08 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 : Thu Dec 17 02:56:38 2015
Response via : Initial Calibration

**Instrument :**
BNA_M
**ClientSampleId :**
D9N37

**Manual Integrations APPROVED**
MMdadoda
12/17/2015 5:36:17 PM




(12) Phenanthrene-d10 (I)

16.970min (-0.137) 0.40ng/ul m U.M 12/18/15

response 26337

| Ion | Exp% | Act% |
|---|---|---|
| 188.00 | 100 | 100 |
| 94.00 | 11.70 | 260.73# |
| 80.00 | 11.90 | 312.27# |
| 0.00 | 0.00 | 0.00 |

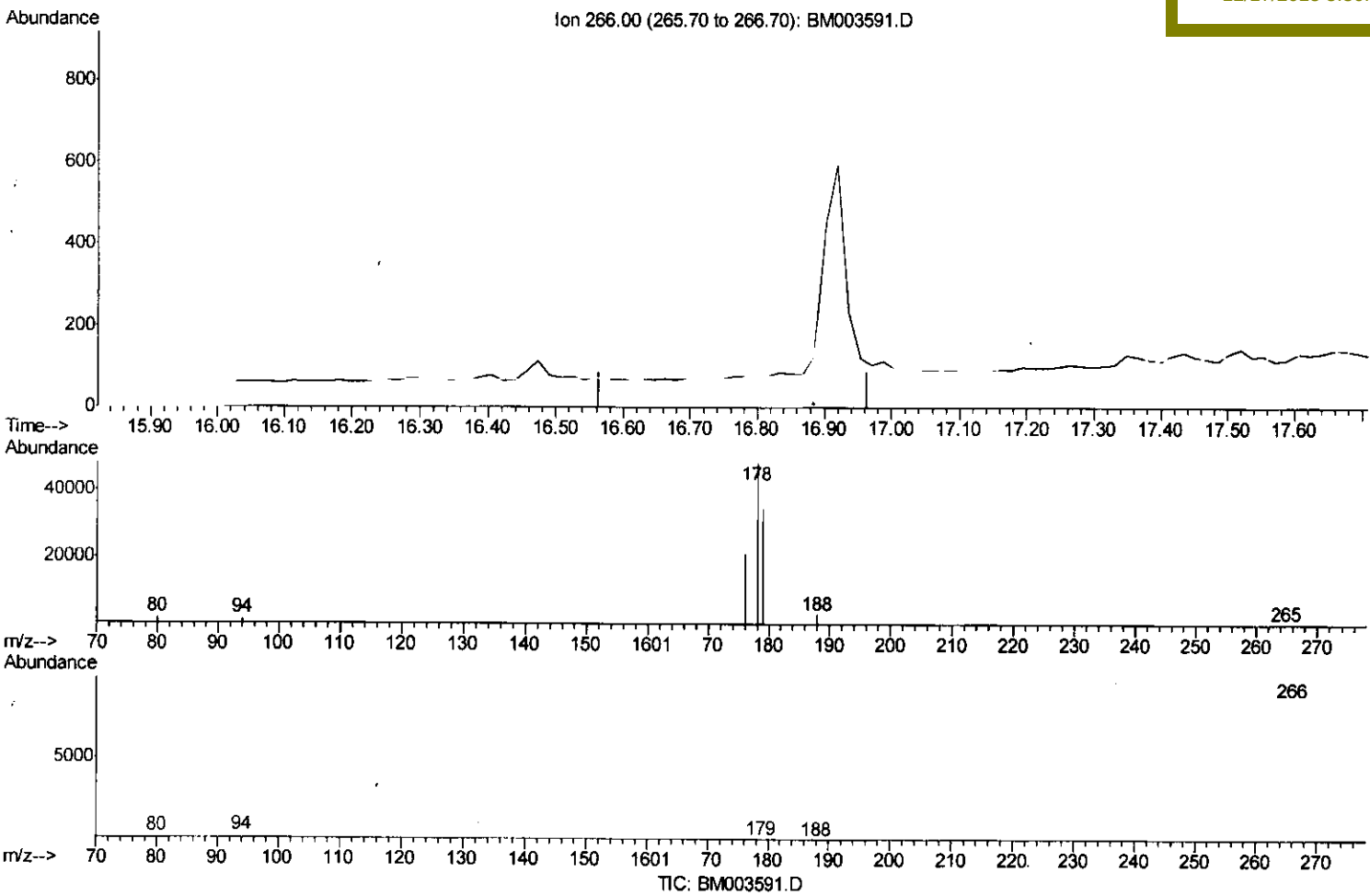
Quantitation Report (Qedit)

Data Path : Z:\HPCHEM1\BNA_M\Data\BM121615\
Data File : BM003591.D
Acq On : 16 Dec 2015 23:19
Operator : UM/IZ
Sample : G4767-15
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 17 08:02:43 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 : Thu Dec 17 02:56:38 2015
Response via : Initial Calibration

**Instrument :**
BNA_M
**ClientSampleId :**
D9N37

**Manual Integrations APPROVED**
MMdadoda
12/17/2015 5:36:17 PM




(13) Pentachlorophenol

16.764min (-16.764) 0.00ng/ul

response 0

| Ion | Exp% | Act% |
|---|---|---|
| 266.00 | 100 | 0.00 |
| 264.00 | 64.80 | 0.00# |
| 268.00 | 58.50 | 0.00# |
| 0.00 | 0.00 | 0.00 |

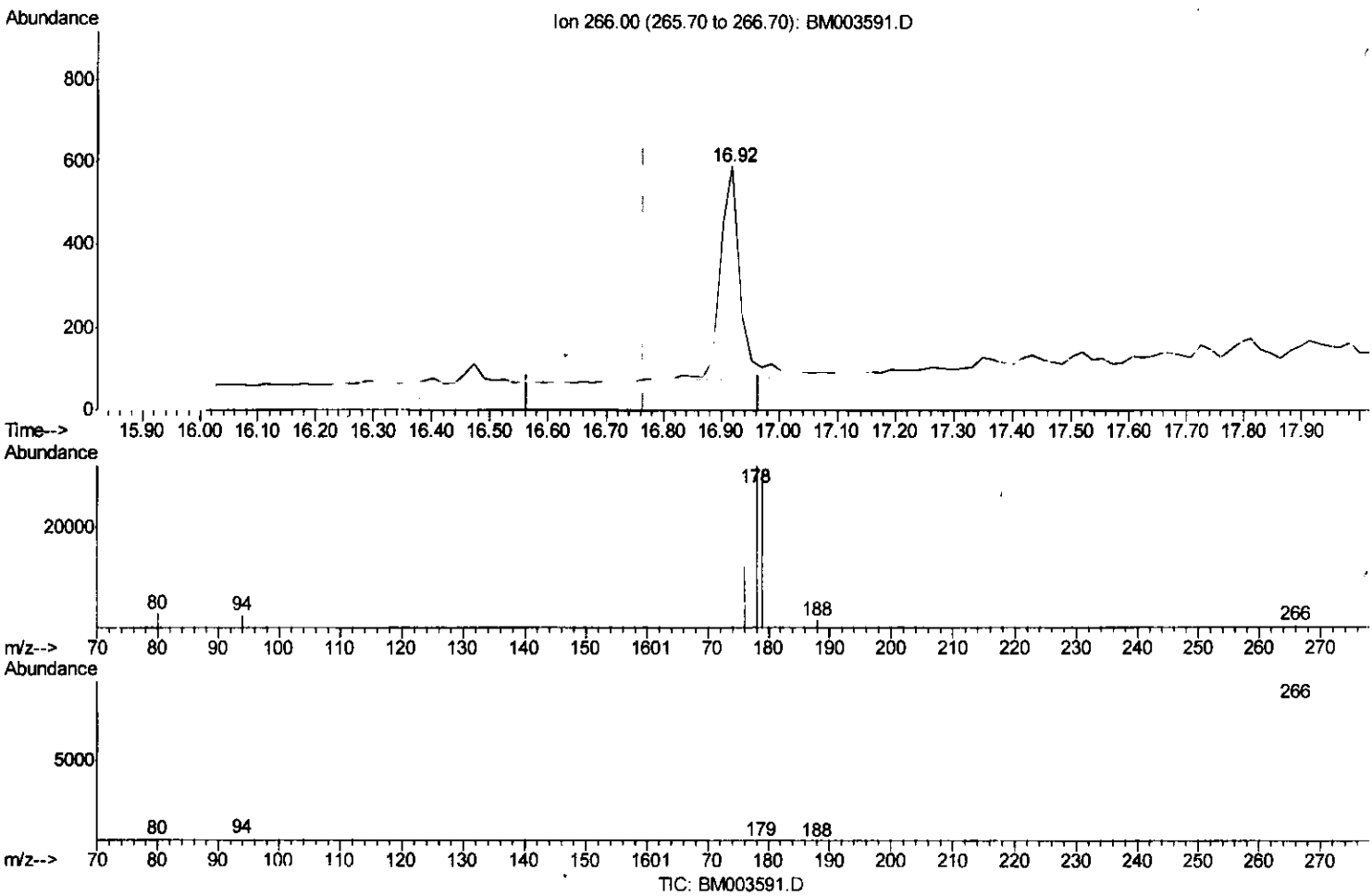
Quantitation Report (Qedit)

Instrument :
BNA_M
ClientSampleId :
D9N37

Manual Integrations APPROVED
MMdadoda
12/17/2015 5:36:17 PM

Data Path : Z:\HPCHEM1\BNA_M\Data\BM121615\
Data File : BM003591.D
Acq On : 16 Dec 2015 23:19
Operator : UM/IZ
Sample : G4767-15
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 17 08:02:43 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 : Thu Dec 17 02:56:38 2015
Response via : Initial Calibration




TIC: BM003591.D

(13) Pentachlorophenol

16.919min (+0.154) 0.34ng/ul m U.M 12/18/15

response 1276

| Ion | Exp% | Act% |
|---|---|---|
| 266.00 | 100 | 100 |
| 264.00 | 64.80 | 0.00# |
| 268.00 | 58.50 | 0.00# |
| 0.00 | 0.00 | 0.00 |

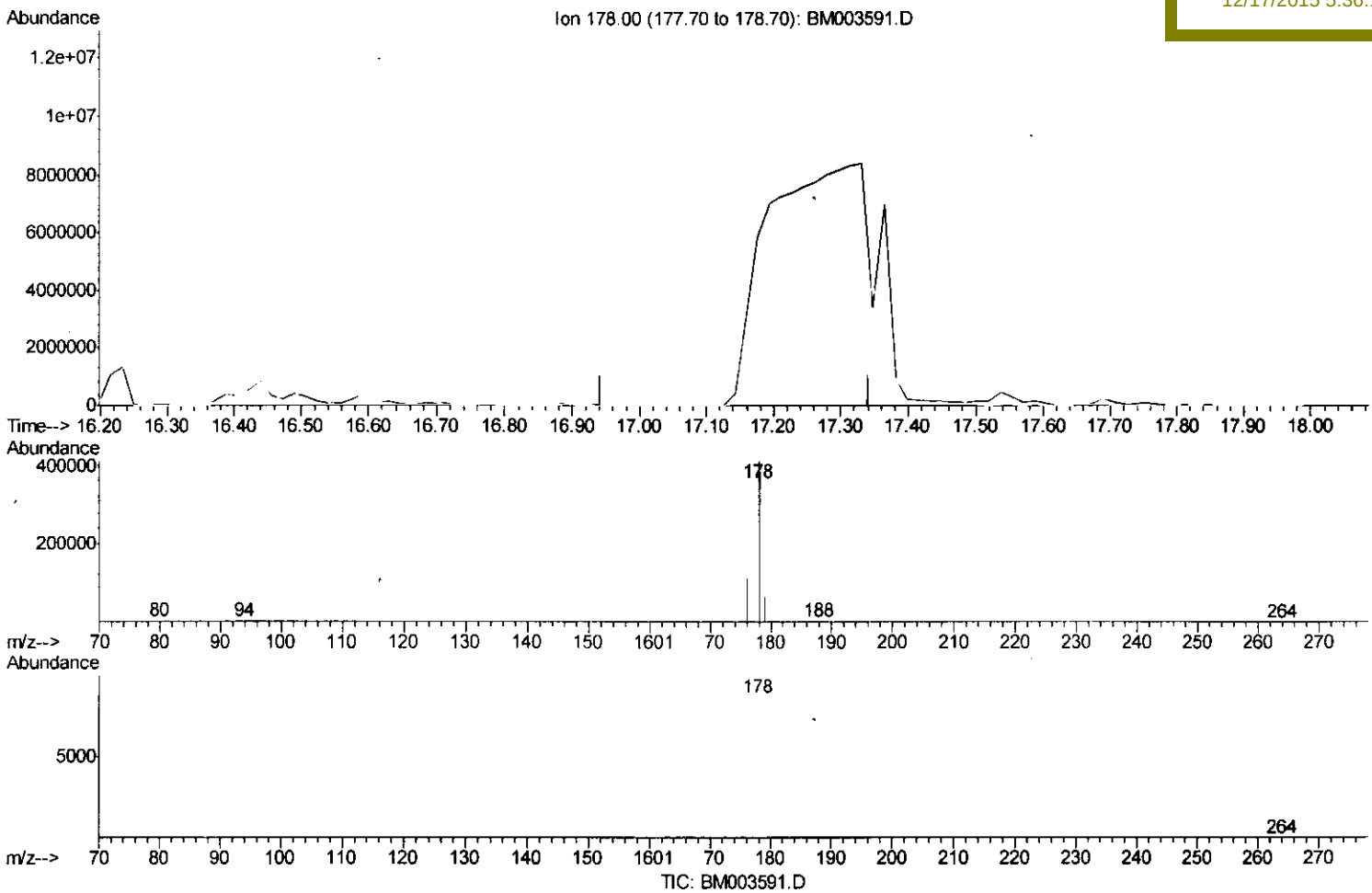
Quantitation Report (Qedit)

Data Path : Z:\HPCHEM1\BNA_M\Data\BM121615\
Data File : BM003591.D
Acq On : 16 Dec 2015 23:19
Operator : UM/IZ
Sample : 64767-15
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 17 08:02:43 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 : Thu Dec 17 02:56:38 2015
Response via : Initial Calibration

**Instrument :**
BNA_M
**ClientSampleId :**
D9N37

**Manual Integrations APPROVED**
MMdadoda
12/17/2015 5:36:17 PM




(14) Phenanthrene

17.142min (-17.142) 0.00ng/ul

response 0

| Ion | Exp% | Act% |
|---|---|---|
| 178.00 | 100 | 0.00 |
| 176.00 | 16.20 | 0.00# |
| 179.00 | 17.70 | 0.00# |
| 0.00 | 0.00 | 0.00 |

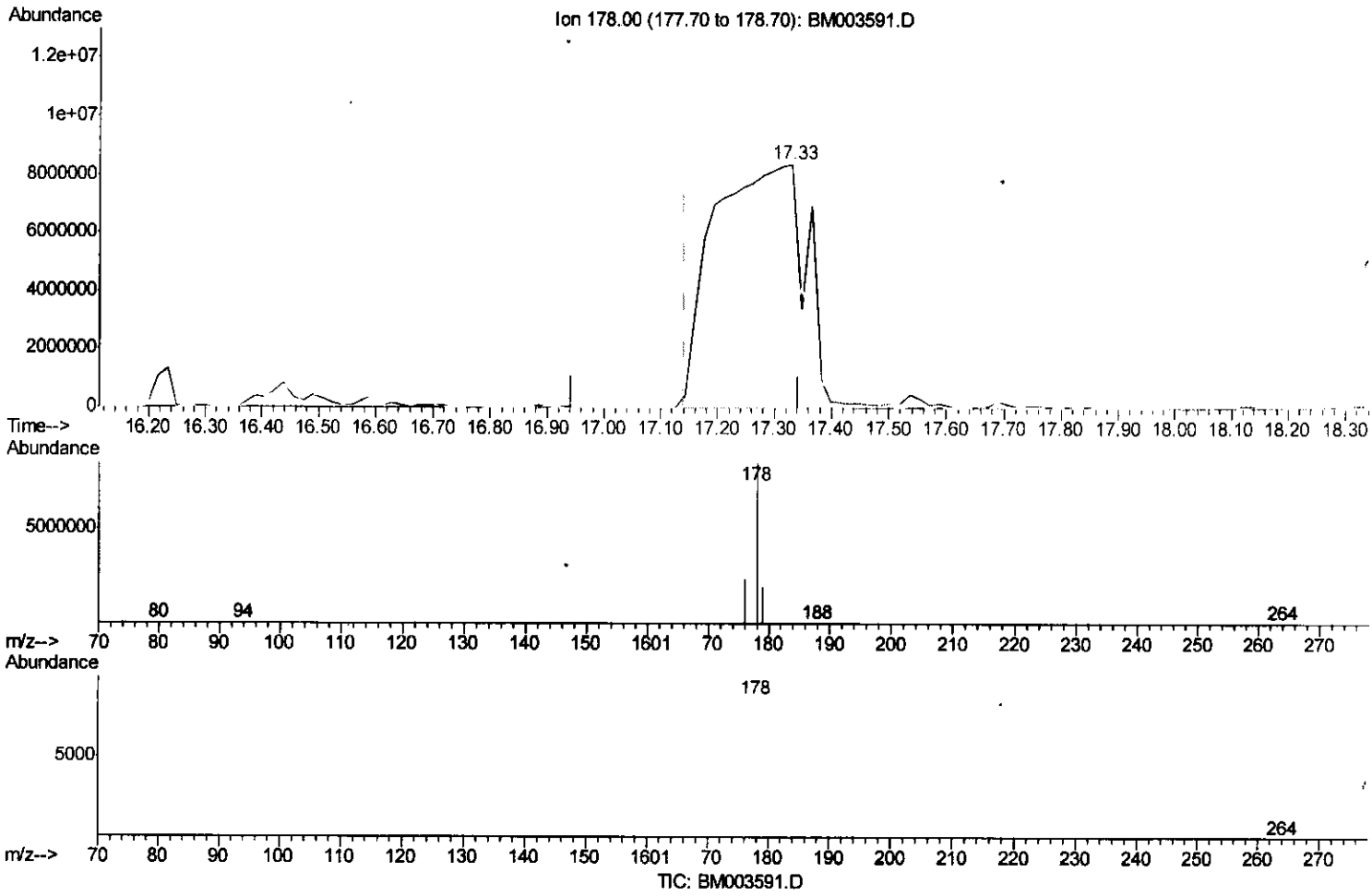
Quantitation Report (Qedit)

Data Path : Z:\HPCHEM1\BNA_M\Data\BM121615\
Data File : BM003591.D
Acq On : 16 Dec 2015 23:19
Operator : UM/IZ
Sample : G4767-15
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 17 08:02:43 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 : Thu Dec 17 02:56:38 2015
Response via : Initial Calibration

**Instrument :**
BNA_M
**ClientSampleId :**
D9N37

**Manual Integrations APPROVED**
MMdadoda
12/17/2015 5:36:17 PM




(14) Phenanthrene

17.330min (+0.189) 1247.29ng/ul m U.M 12/18/15

response 84728466

| Ion | Exp% | Act% |
|---|---|---|
| 178.00 | 100 | 100 |
| 176.00 | 16.20 | 28.28# |
| 179.00 | 17.70 | 23.26# |
| 0.00 | 0.00 | 0.00 |

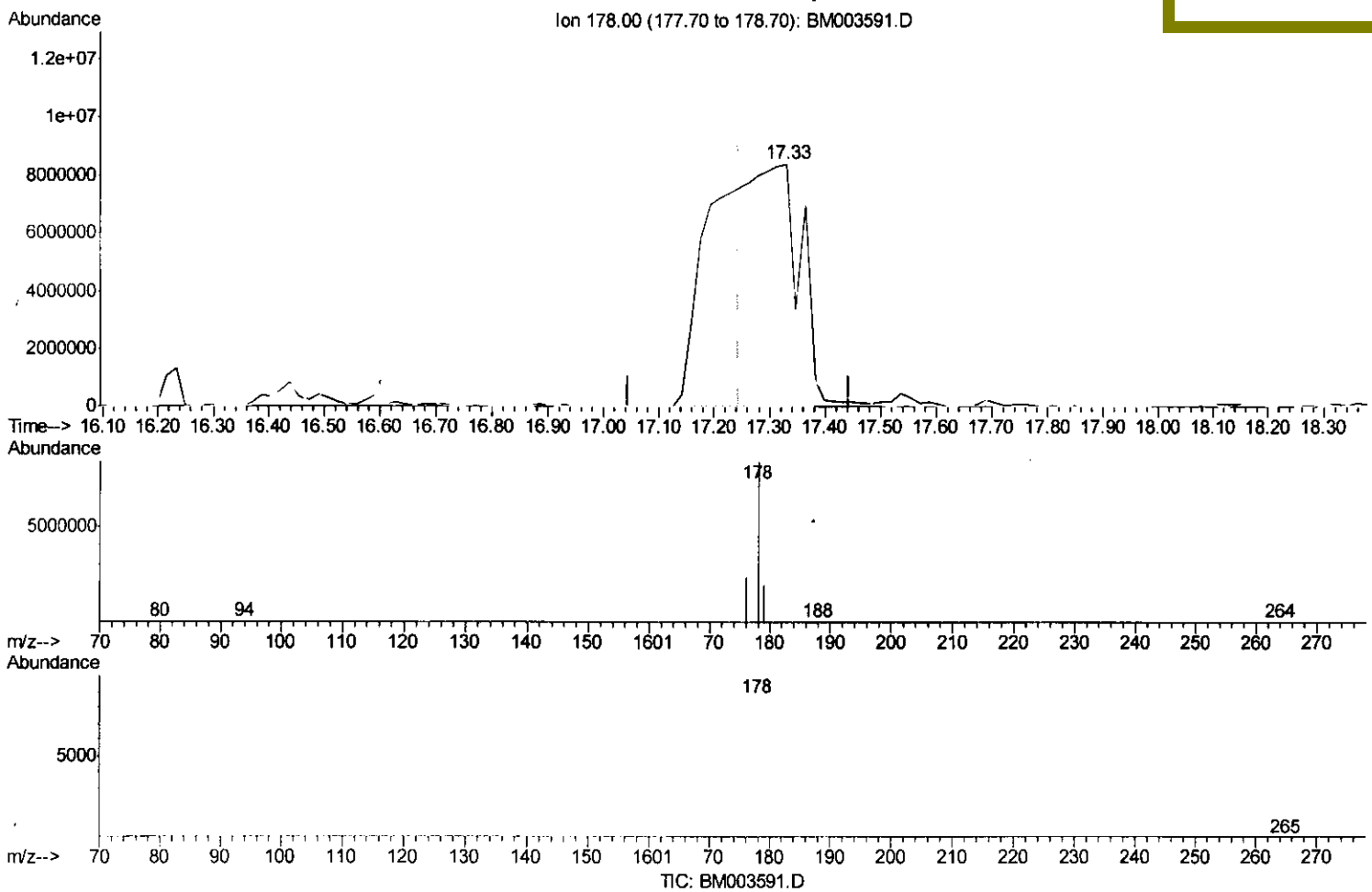
Quantitation Report (Qedit)

Data Path : Z:\HPCHEM1\BNA_M\Data\BM121515\
Data File : BM003591.D
Acq On : 16 Dec 2015 23:19
Operator : UM/IZ
Sample : G4767-15
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 17 08:02:43 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 : Thu Dec 17 02:56:38 2015
Response via : Initial Calibration

**Instrument :**
BNA_M
**ClientSampleId :**
D9N37

**Manual Integrations APPROVED**
MMdadoda
12/17/2015 5:36:17 PM




(15) Anthracene

17.330min (+0.086) 1576.79ng/ul

response 92659606

| Ion | Exp% | Act% |
|---|---|---|
| 178.00 | 100 | 100 |
| 176.00 | 17.50 | 28.28# |
| 179.00 | 16.10 | 23.26# |
| 0.00 | 0.00 | 0.00 |

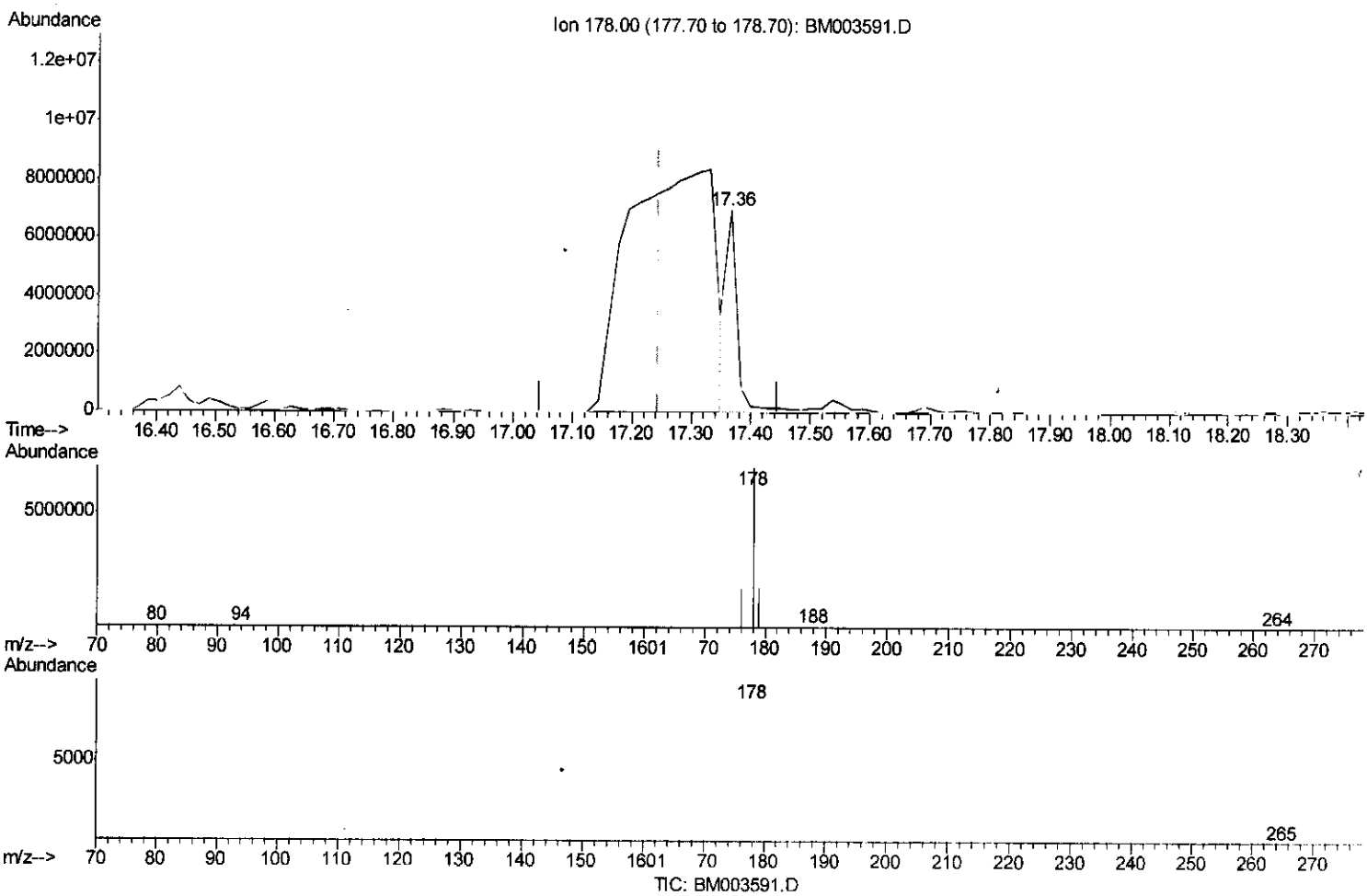
Quantitation Report (Qedit)

Instrument :
BNA_M
ClientSampleId :
D9N37

Manual Integrations APPROVED
MMdadoda
12/17/2015 5:36:17 PM

Data Path : Z:\HPCHEM1\BNA_M\Data\BM121615\
Data File : BM003591.D
Acq On : 16 Dec 2015 23:19
Operator : UM/IZ
Sample : G4767-15
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 17 08:02:43 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 : Thu Dec 17 02:56:38 2015
Response via : Initial Calibration




(15) Anthracene

17.365min (+0.120) 145.23ng/ul m U.M

response 8534310 12/18/15

| Ion | Exp% | Act% |
|---|---|---|
| 178.00 | 100 | 100 |
| 176.00 | 17.50 | 24.63# |
| 179.00 | 16.10 | 25.18# |
| 0.00 | 0.00 | 0.00 |

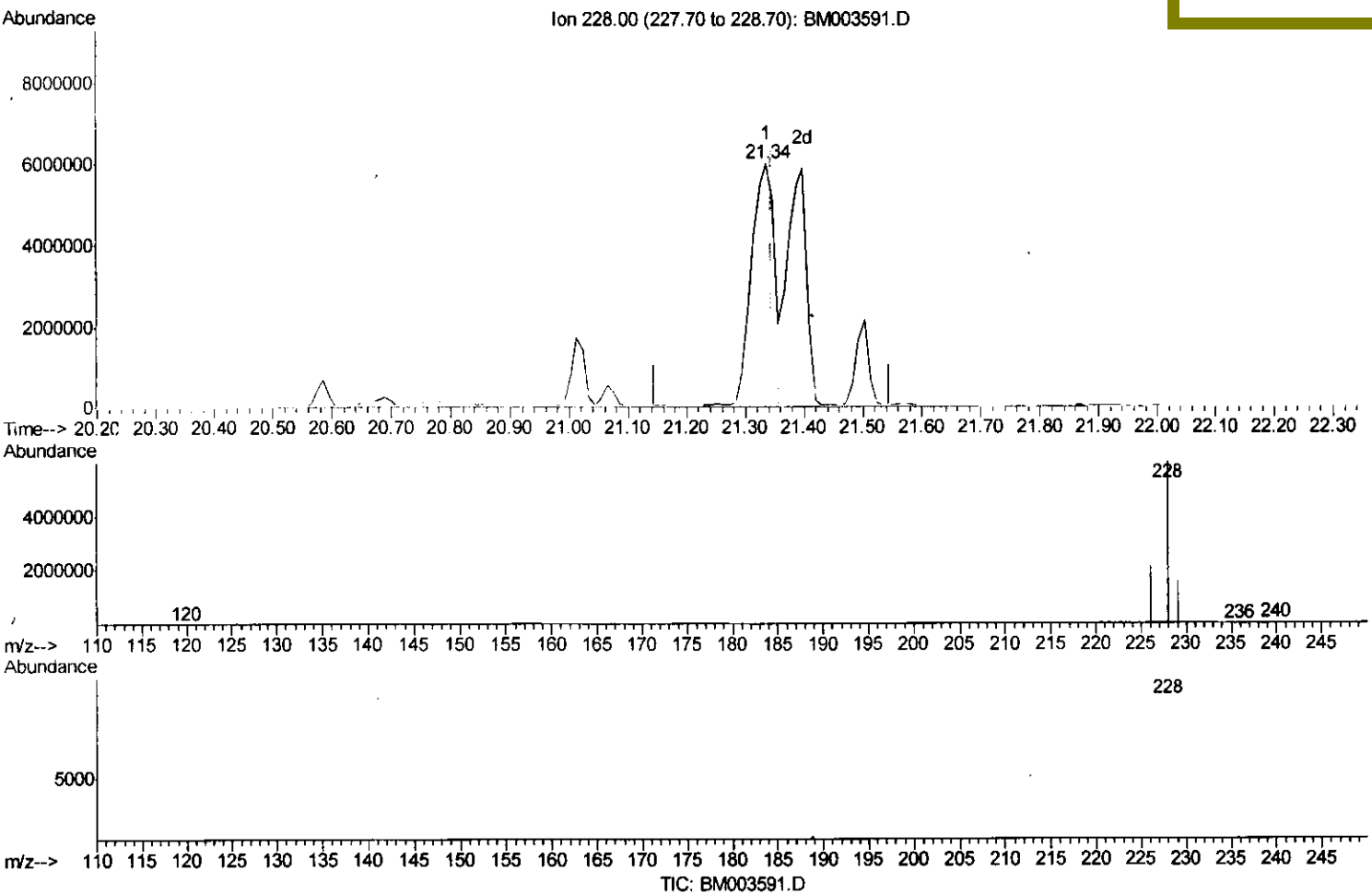
Quantitation Report (Qedit)

Data Path : Z:\HPCHEM1\BNA_M\Data\BM121615\
Data File : BM003591.D
Acq On : 16 Dec 2015 23:19
Operator : UM/IZ
Sample : G4767-15
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 17 08:02:43 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 : Thu Dec 17 02:56:38 2015
Response via : Initial Calibration

**Instrument :**
BNA_M
**ClientSampleId :**
D9N37

**Manual Integrations APPROVED**
MMdadoda
12/17/2015 5:36:17 PM




(21) Chrysene

21.335min (-0.010) 354.55ng/ul

response 16593115

| Ion | Exp% | Act% |
|---|---|---|
| 228.00 | 100 | 100 |
| 226.00 | 26.50 | 34.68# |
| 229.00 | 21.30 | 25.84# |
| 0.00 | 0.00 | 0.00 |

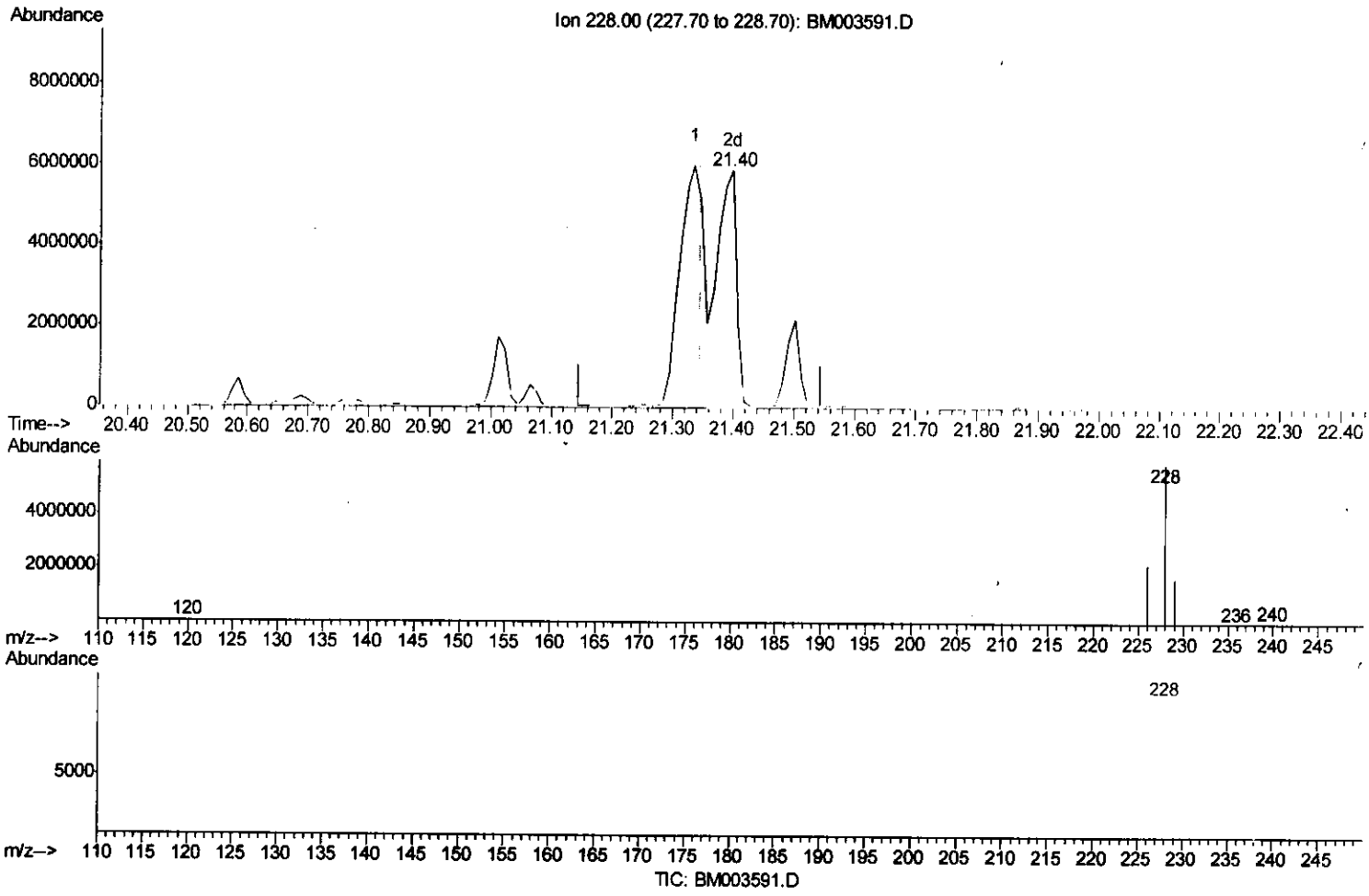
Quantitation Report (Qcdit)

Data Path : Z:\HPCHEM1\BNA_M\Data\BM121615\
Data File : BM003591.D
Acq On : 16 Dec 2015 23:19
Operator : UM/IZ
Sample : G4767-15
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 17 08:02:43 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 : Thu Dec 17 02:56:38 2015
Response via : Initial Calibration

**Instrument :** BNA_M
**ClientSampleId :** D9N37

**Manual Integrations APPROVED**
MMdadoda
12/17/2015 5:36:17 PM




(21) Chrysene

21.398min (+0.052) 280.74ng/ul m U.M 12/18/15

response 13138543

| Ion | Exp% | Act% |
|---|---|---|
| 228.00 | 100 | 100 |
| 226.00 | 26.50 | 37.38# |
| 229.00 | 21.30 | 28.49# |
| 0.00 | 0.00 | 0.00 |

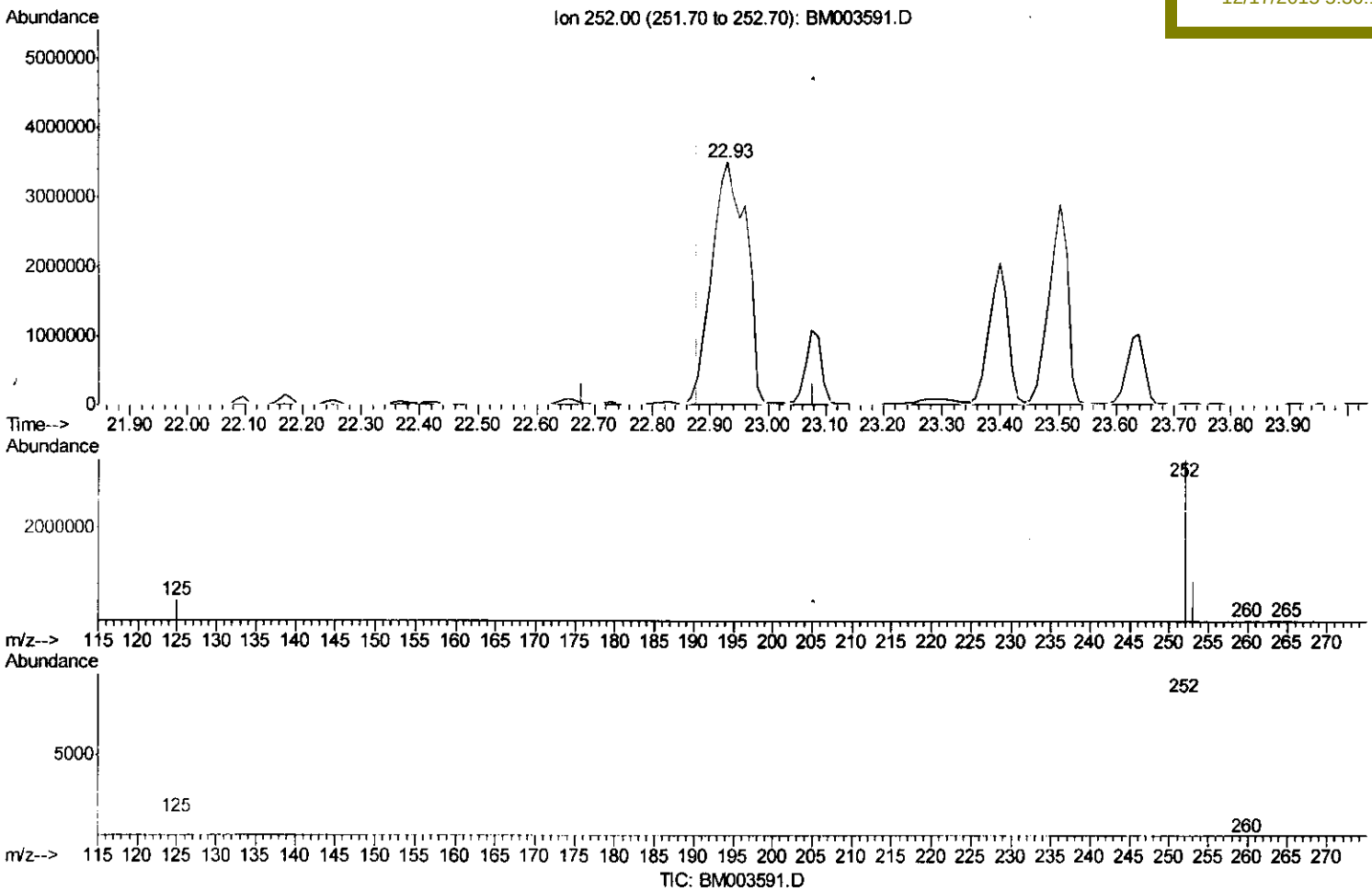
Quantitation Report (Qedit)

Data Path : Z:\HPCHEM1\BNA_M\Data\BM121615\
Data File : BM003591.D
Acq On : 16 Dec 2015 23:19
Operator : UM/IZ
Sample : G4767-15
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 17 08:02:43 2015
Quant Method : Z:\HPCHEM1\BNA_M\METHODS\SOM02.2-EPA-STM-BM121515.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Dec 17 02:56:38 2015
Response via : Initial Calibration

**Instrument :**
BNA_M
**ClientSampleId :**
D9N37

**Manual Integrations APPROVED**
MMdadoda
12/17/2015 5:36:17 PM




(23) Benzo(b)fluoranthene

22.930min (+0.052) 147.27ng/ul

response 14406357

| Ion | Exp% | Act% |
|---|---|---|
| 252.00 | 100 | 100 |
| 253.00 | 22.70 | 24.52 |
| 125.00 | 14.40 | 12.79 |
| 0.00 | 0.00 | 0.00 |

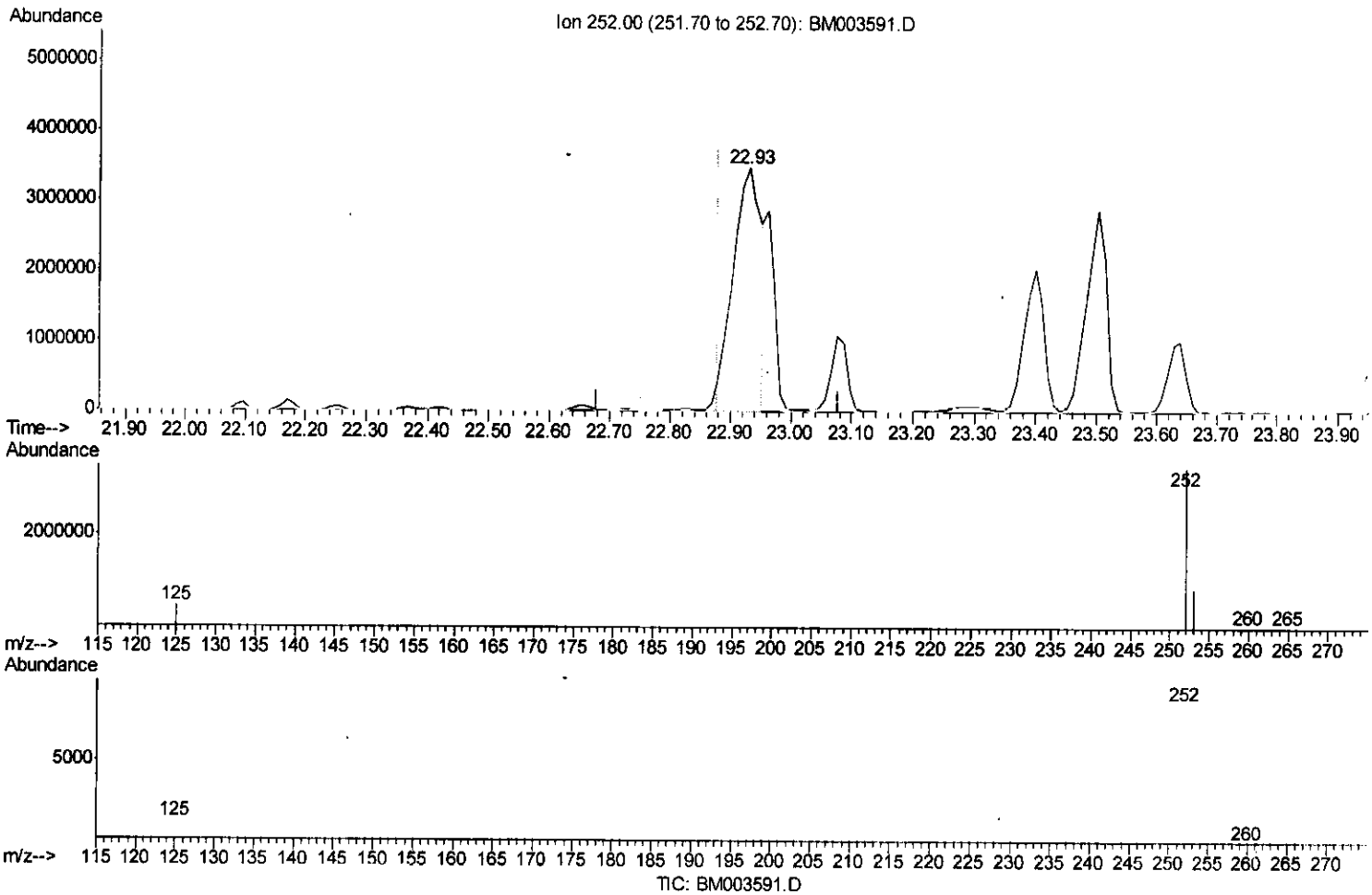
Quantitation Report (Qedit)

Data Path : Z:\HPCHEM1\BNA_M\Data\BM121615\
Data File : BM003591.D
Acq On : 16 Dec 2015 23:19
Operator : UM/IZ
Sample : G4767-15
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 17 08:02:43 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 : Thu Dec 17 02:56:38 2015
Response via : Initial Calibration

**Instrument :**
BNA_M
**ClientSampleId :**
D9N37

**Manual Integrations APPROVED**
MMdadoda
12/17/2015 5:36:17 PM




(23) Benzo(b)fluoranthene

22.930min (+0.052) 116.25ng/ul m U.M 12/18/15

response 11371610

| Ion | Exp% | Act% |
|---|---|---|
| 252.00 | 100 | 100 |
| 253.00 | 22.70 | 24.52 |
| 125.00 | 14.40 | 12.79 |
| 0.00 | 0.00 | 0.00 |

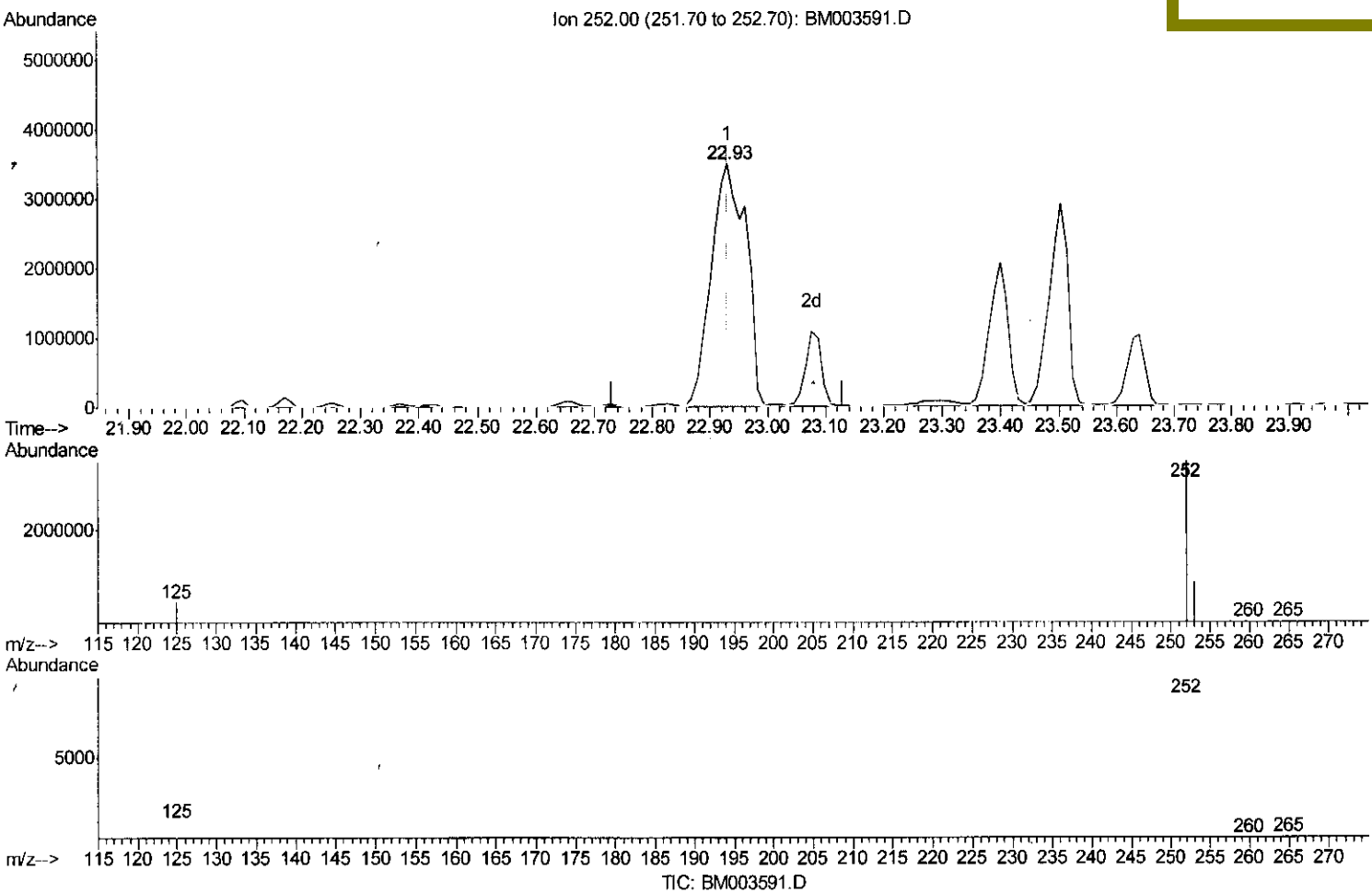
Quantitation Report (Qedit)

Data Path : Z:\HPCHEM1\BNA_M\Data\BM121615\
Data File : BM003591.D
Acq On : 16 Dec 2015 , 23:19
Operator : UM/IZ
Sample : G4767-15
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 17 08:02:43 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 : Thu Dec 17 02:56:38 2015
Response via : Initial Calibration

**Instrument :**
BNA_M
**ClientSampleId :**
D9N37

**Manual Integrations APPROVED**
MMdadoda
12/17/2015 5:36:17 PM




TIC: BM003591.D

(24) Benzo(k)fluoranthene

22.930min (0.000) 162.48ng/ul

response 14406357

| Ion | Exp% | Act% |
|---|---|---|
| 252.00 | 100 | 100 |
| 253.00 | 24.80 | 24.52 |
| 125.00 | 13.00 | 12.79 |
| 0.00 | 0.00 | 0.00 |

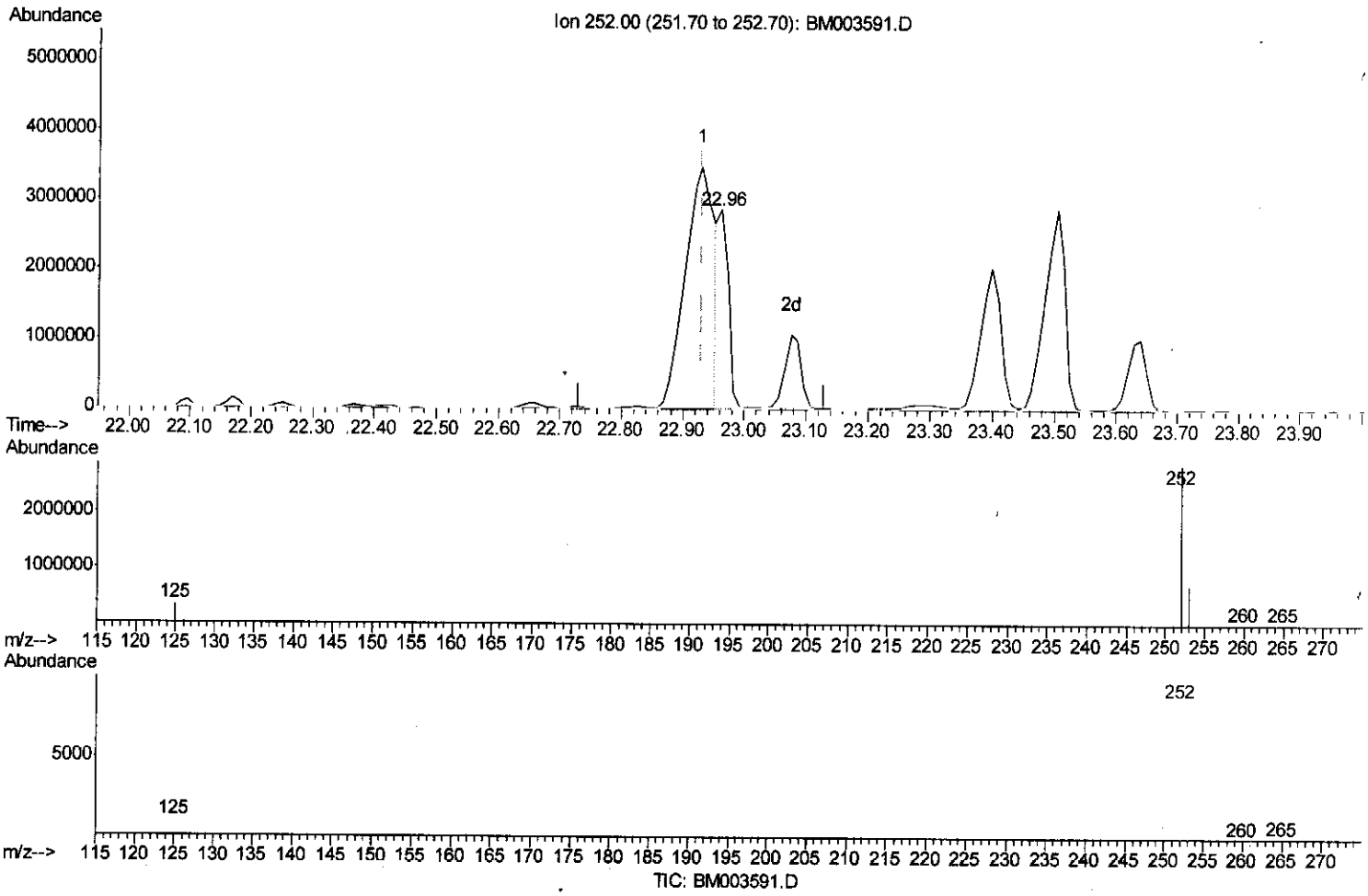
Quantitation Report (Qedit)

Data Path : Z:\HPCHEM1\BNA_M\Data\BM121615\
Data File : BM003591.D
Acq On : 16 Dec 2015 23:19
Operator : UM/IZ
Sample : G4767-15
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 17 08:02:43 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 : Thu Dec 17 02:56:38 2015
Response via : Initial Calibration

**Instrument :**
BNA_M
**ClientSampleId :**
D9N37

**Manual Integrations APPROVED**
MMdadoda
12/17/2015 5:36:17 PM




(24) Benzo(k)fluoranthene

22.961min (+0.031) 35.84ng/ul m U.M 12/18/15

response 3177903

| Ion | Exp% | Act% |
|---|---|---|
| 252.00 | 100 | 100 |
| 253.00 | 24.80 | 24.92 |
| 125.00 | 13.00 | 11.79 |
| 0.00 | 0.00 | 0.00 |

Quantitation Report (QT Reviewed)

Data Path : Z:\HPCHEM1\BNA_M\Data\BM121615\
Data File : BM003591.D
Acq On : 16 Dec 2015 23:19
Operator : UM/IZ
Sample : G4767-15
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Dec 17 08:04:21 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 : Thu Dec 17 02:56:38 2015
Response via : Initial Calibration

**Instrument :** BNA_M
**ClientSampleId :** D9N37

**Manual Integrations APPROVED**
MMdadoda
12/17/2015 5:36:17 PM

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 7.71 | 152 | 4478 | 0.40 | ng/ul | 0.00 |
| 4) Naphthalene-d8 | 10.54 | 136 | 12238 | 0.40 | ng/ul | 0.04 |
| 8) Acenaphthene-d10 | 14.43 | 164 | 221277 | 0.40 | ng/ul | 0.07 |
| 12) Phenanthrene-d10 | 16.97 | 188 | 26337m | 0.40 | ng/ul | -0.14 |
| 18) Chrysene-d12 | 21.29 | 240 | 16730 | 0.40 | ng/ul | -0.02 |
| 22) Perylene-d12 | 23.60 | 264 | 28660 | 0.40 | ng/ul | 0.03 |
| **System Monitoring Compounds** | | | | | | |
| 2) 1,4-Dioxane-d8 | 3.17 | 96 | 9462 | 4.94 | ng/uL | 0.00 |
| 6) 2-Methylnaphthalene-d10 | 12.11 | 152 | 6230 | 0.42 | ng/ul | 0.01 |
| 16) Fluoranthene-d10 | 19.11 | 212 | 492477 | 8.81 | ng/ul | -0.04 |
| **Target Compounds** | | | | | | Qvalue |
| 5) Naphthalene | 10.66 | 128 | 73053561 | 2649.74 | ng/ul# | 82 |
| 7) 2-Methylnaphthalene | 12.26 | 142 | 33022417 | 1784.15 | ng/ul | 95 |
| 9) Acenaphthylene | 14.11 | 152 | 9981022 | 11.81 | ng/ul# | 93 |
| 10) Acenaphthene | 14.54 | 153 | 47587118 | 69.85 | ng/ul# | 86 |
| 11) Fluorene | 15.53 | 166 | 37550897 | 49.72 | ng/ul | 90 |
| 13) Pentachlorophenol | 16.92 | 266 | 1276m | 0.34 | ng/ul | |
| 14) Phenanthrene | 17.33 | 178 | 84728466m | 1247.29 | ng/ul | |
| 15) Anthracene | 17.36 | 178 | 8534310m | 145.23 | ng/ul | |
| 17) Fluoranthene | 19.30 | 202 | 51555914 | 698.88 | ng/ul | 88 |
| 19) Pyrene | 19.65 | 202 | 39113444 | 866.04 | ng/ul# | 81 |
| 20) Benzo(a)anthracene | 21.34 | 228 | 16593115 | 406.23 | ng/ul# | 84 |
| 21) Chrysene | 21.40 | 228 | 13138543m | 280.74 | ng/ul | |
| 23) Benzo(b)fluoranthene | 22.93 | 252 | 11371610m | 116.25 | ng/ul | |
| 24) Benzo(k)fluoranthene | 22.96 | 252 | 3177903m | 35.84 | ng/ul | |
| 25) Benzo(a)pyrene | 23.50 | 252 | 6533155 | 79.18 | ng/ul | 96 |
| 26) Indeno(1,2,3-cd)pyrene | 25.86 | 276 | 2395331 | 25.04 | ng/ul# | 96 |
| 27) Dibenzo(a,h)anthracene | 25.86 | 278 | 659619 | 8.56 | ng/ul | 96 |
| 28) Benzo(g,h,i)perylene | 26.56 | 276 | 2009601 | 24.14 | ng/ul | 97 |

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