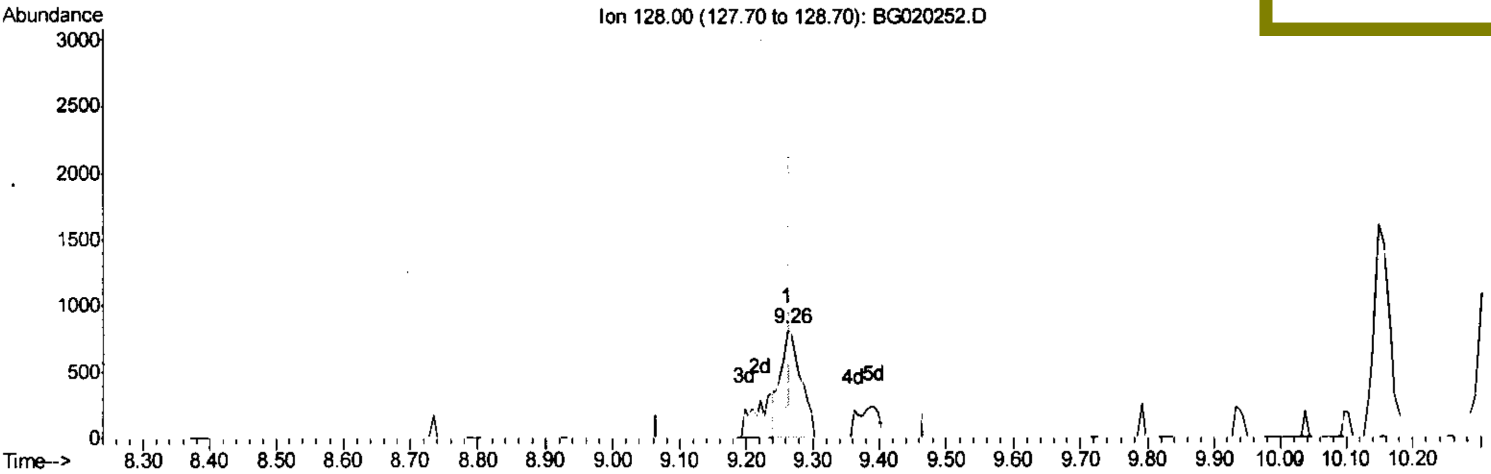
Quantitation Report (Qedit)

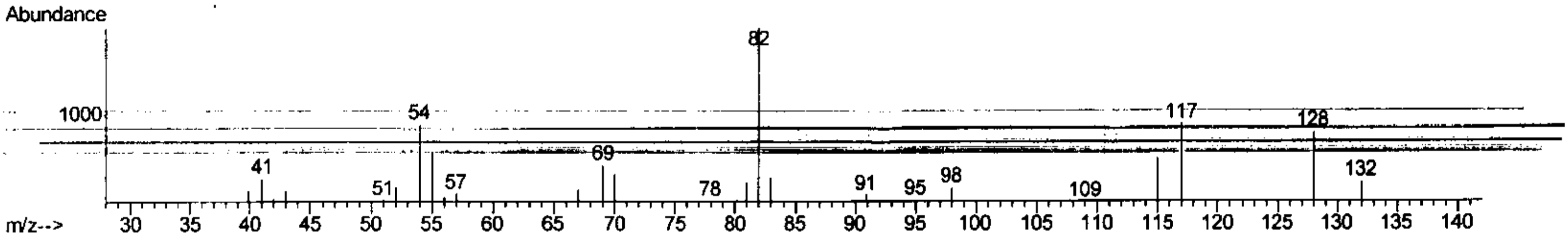
Data Path : Z:\HPCHEM1\BNA_G\DATA\BG121815\
Data File : BG020252.D
Acq On : 17 Dec 2015 19:12
Operator : UM/SJ
Sample : G4787-17DL 10X
Misc :
ALS Vial : 5 Sample Multiplier: 1

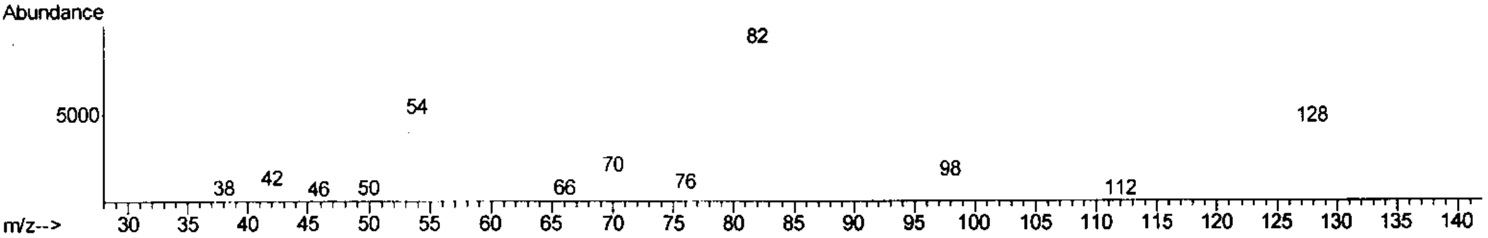
Quant Time: Dec 18 02:42:35 2015
Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
Quant Title : SVOA CALIBRATION
QLast Update : Fri Dec 18 02:40:02 2015
Response via : Initial Calibration

Instrument :
BNA_G
ClientSampleId :
G9BN9DL

Manual Integrations APPROVED
MMdadoda
12/18/2015 6:20:16 PM







TIC: BG020252.D

(19) Nitrobenzene-d5 (S)

9.262min (-0.004) 2.86ng/ul

response 1746

Ion	Exp%	Act%
128.00	100	100
82.00	258.00	221.67
54.00	123.60	109.44
0.00	0.00	0.00

Quantitation Report (Qedit)

Instrument :
BNA_G
ClientSampleId :
G9BN9DL

Manual Integrations
APPROVED
MMdadoda
12/18/2015 6:20:16 PM

```
Data Path : Z:\HPCHEM1\BNA_G\DATA\BG121815\
Data File : BG020252.D
Acq On    : 17 Dec 2015  19:12
Operator  : UM/SJ
Sample    : G4787-17DL 10X
Misc      :
ALS Vial  : 5   Sample Multiplier: 1

Quant Time: Dec 18 02:42:35 2015
Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
Quant Title  : SVOA CALIBRATION
QLast Update : Fri Dec 18 02:40:02 2015
Response via : Initial Calibration
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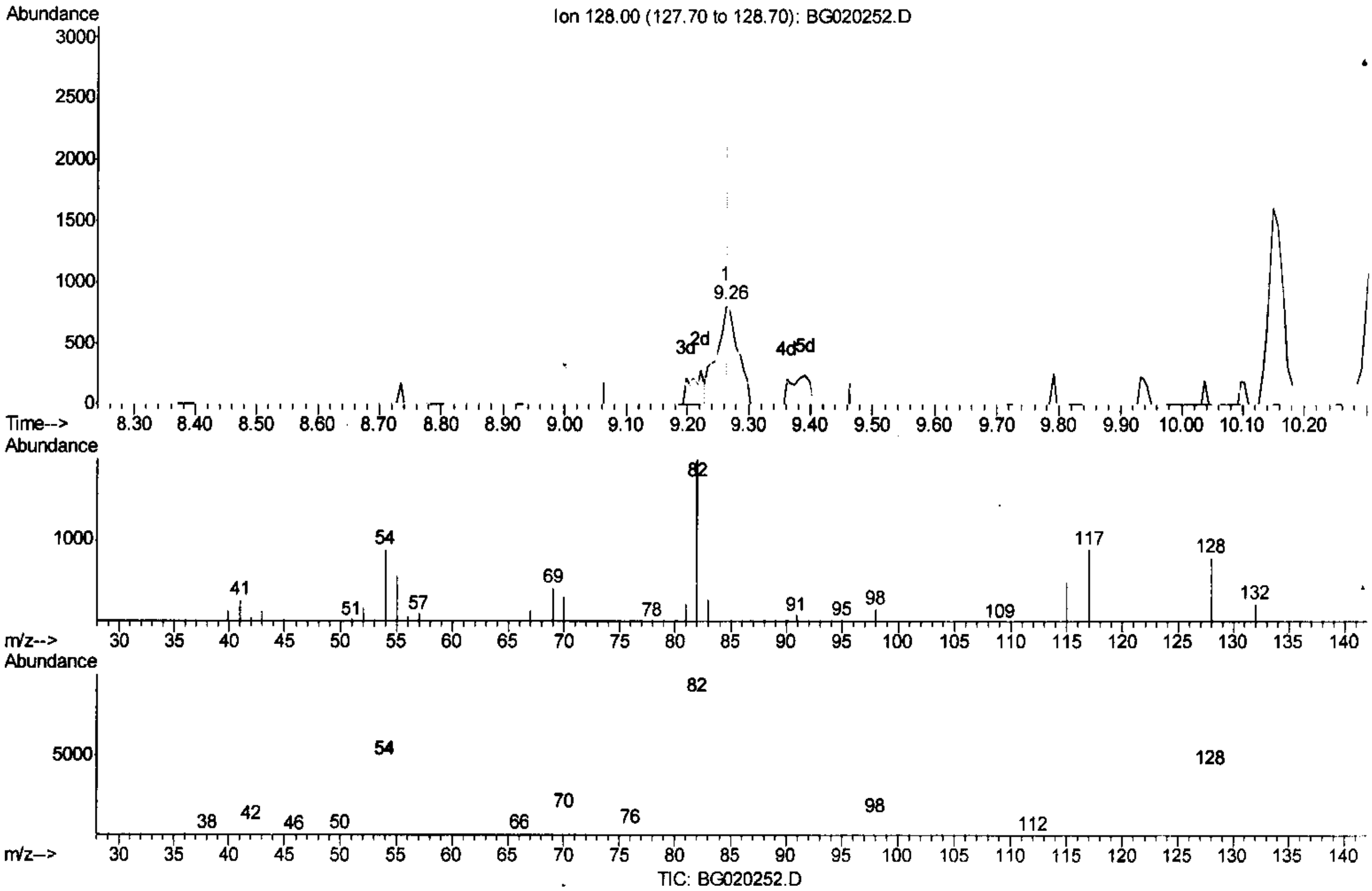


(19) Nitrobenzene-d5 (S)

9.262min (-0.004) 3.24ng/ul m U.M 12/21/15

response 1976

Ion	Exp%	Act%
128.00	100	100
82.00	258.00	221.67
54.00	123.60	109.44
0.00	0.00	0.00

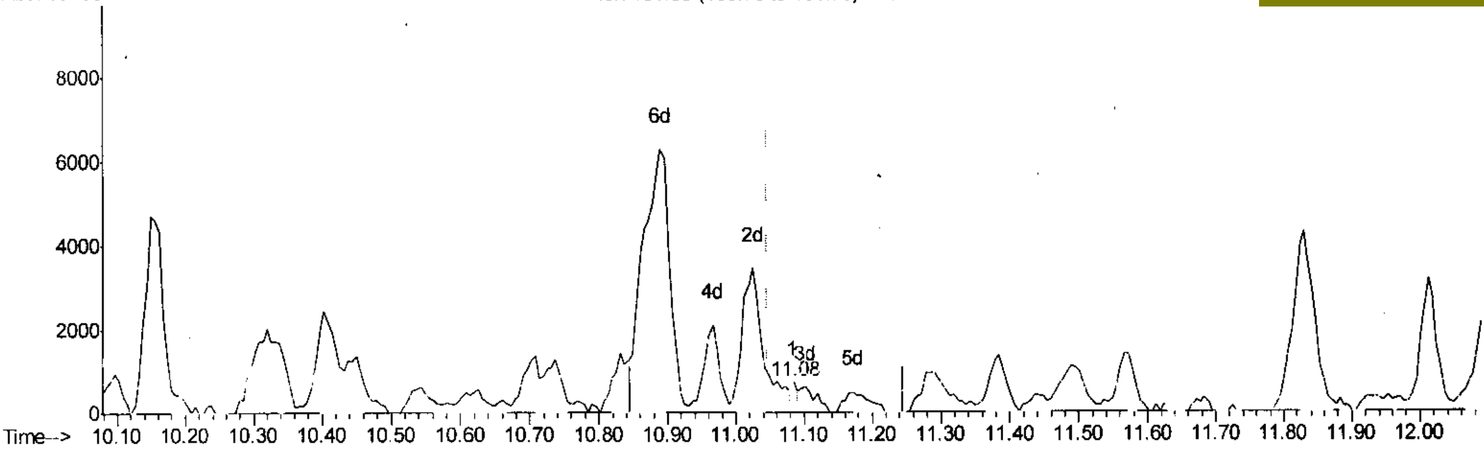
Quantitation Report (Qedit)

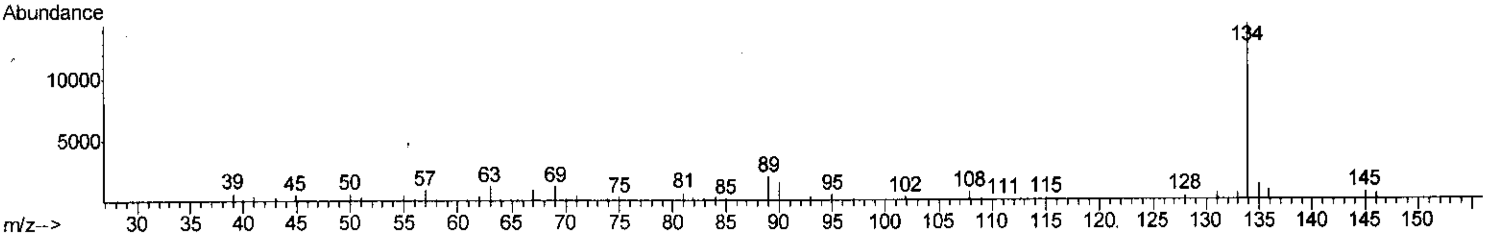
Data Path : Z:\HPCHEM1\BNA_G\DATA\BG121815\
Data File : BG020252.D
Acq On : 17 Dec 2015 19:12
Operator : UM/SJ
Sample : G4787-17DL 10X
Misc :
ALS Vial : 5 Sample Multiplier: 1

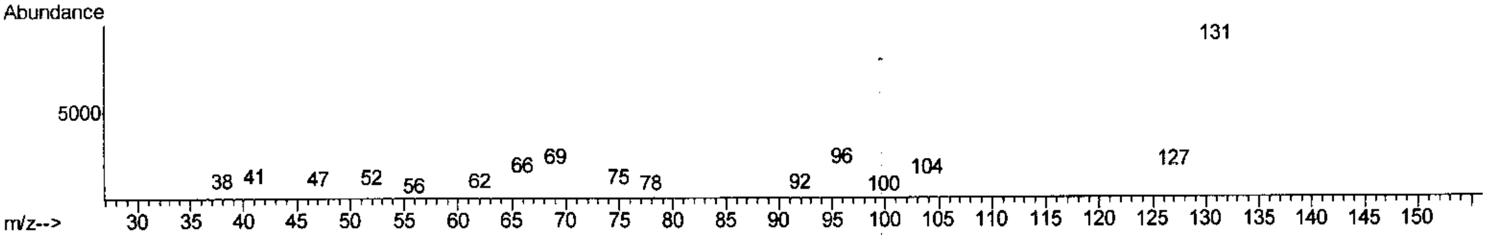
Quant Time: Dec 18 02:42:35 2015
Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
Quant Title : SVOA CALIBRATION
QLast Update : Fri Dec 18 02:40:02 2015
Response via : Initial Calibration

Instrument :
BNA_G
ClientSampleId :
G9BN9DL

Manual Integrations APPROVED
MMdadoda
12/18/2015 6:20:16 PM







TIC: BG020252.D

(29) 4-Chloroaniline-d4 (S)

11.084min (+0.038) 0.16ng/ul

response 250

Ion	Exp%	Act%
131.00	100	100
133.00	30.40	98.00#
69.00	17.80	173.50#
0.00	0.00	0.00

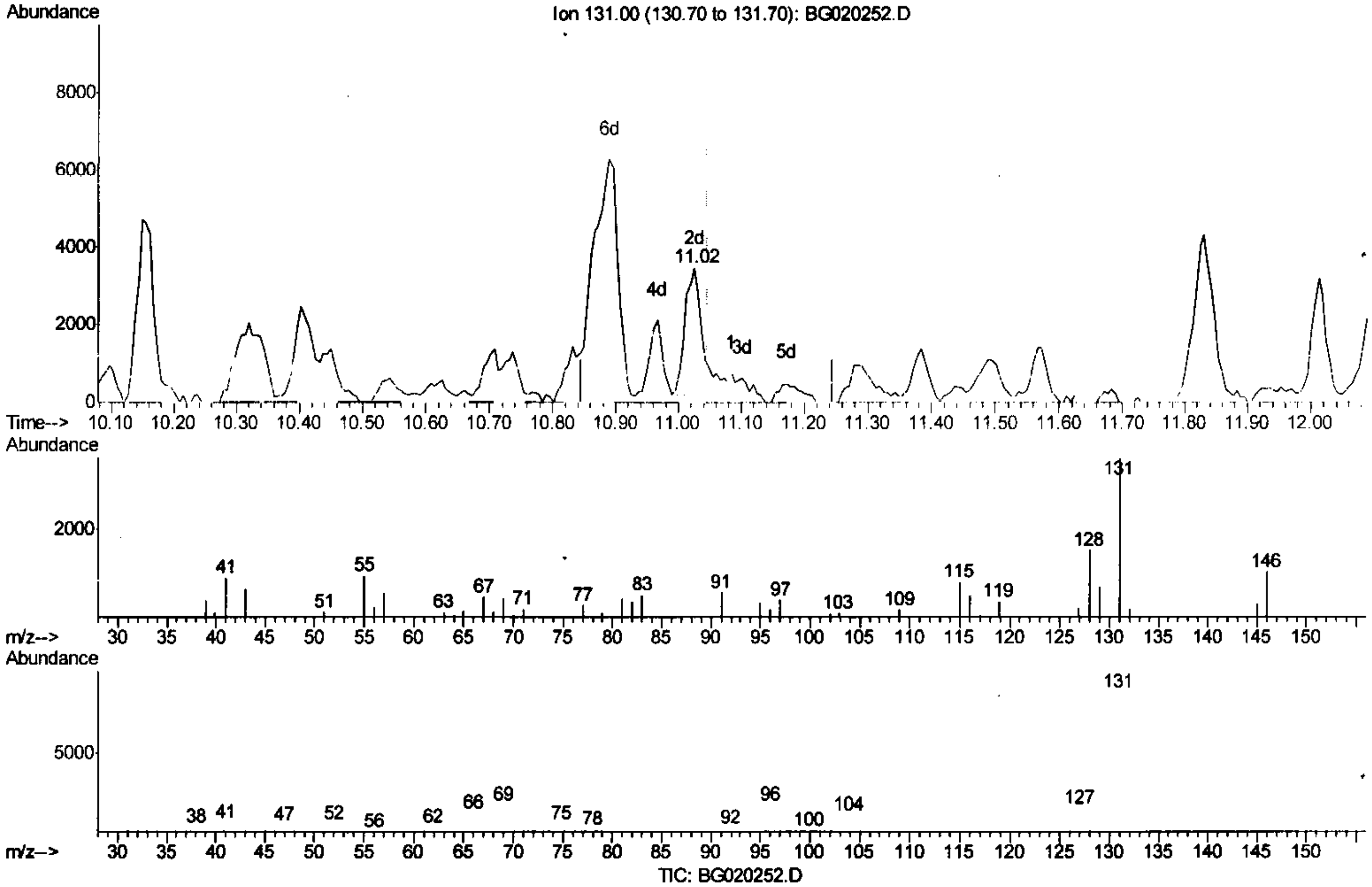
Quantitation Report (Qedit)

Instrument :
BNA_G
ClientSampleId :
G9BN9DL

Manual Integrations APPROVED
MMdadoda
12/18/2015 6:20:16 PM

```
Data Path : Z:\HPCHEM1\BNA_G\DATA\BG121815\
Data File : BG020252.D
Acq On    : 17 Dec 2015   19:12
Operator  : UM/SJ
Sample    : G4787-17DL 10X
Misc      :
ALS Vial  : 5    Sample Multiplier: 1

Quant Time: Dec 18 02:42:35 2015
Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
Quant Title  : SVOA CALIBRATION
QLast Update : Fri Dec 18 02:40:02 2015
Response via : Initial Calibration
```



(29) 4-Chloroaniline-d4 (S)

11.025min (-0.021) 3.85ng/ul m U.M 12|21|15

response 5940

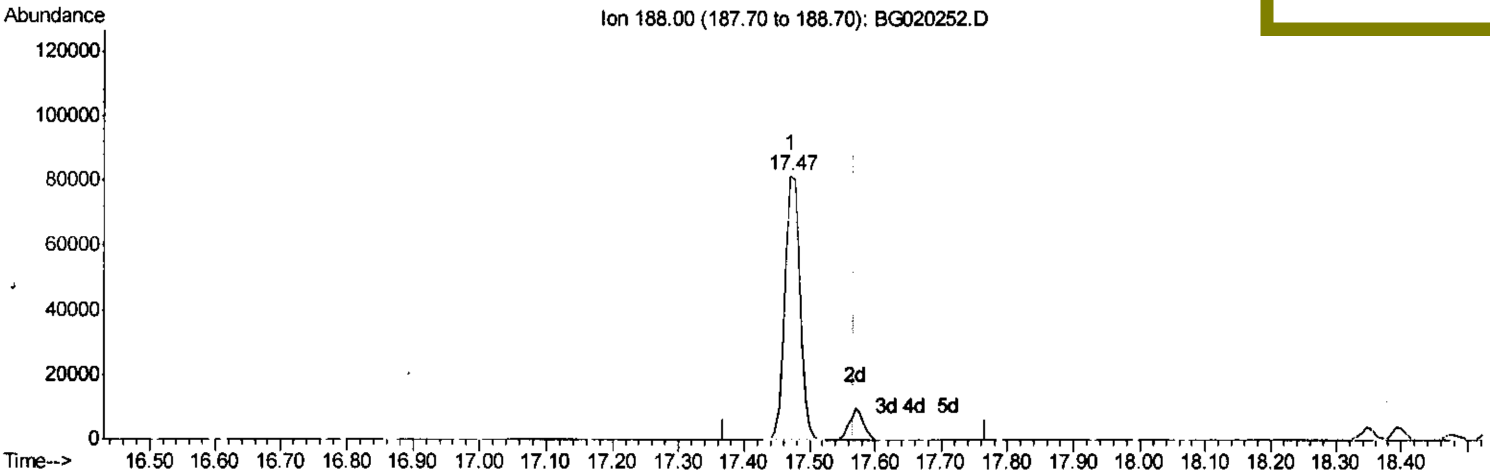
Ion	Exp%	Act%
131.00	100	100
133.00	30.40	0.00#
69.00	17.80	15.99
0.00	0.00	0.00

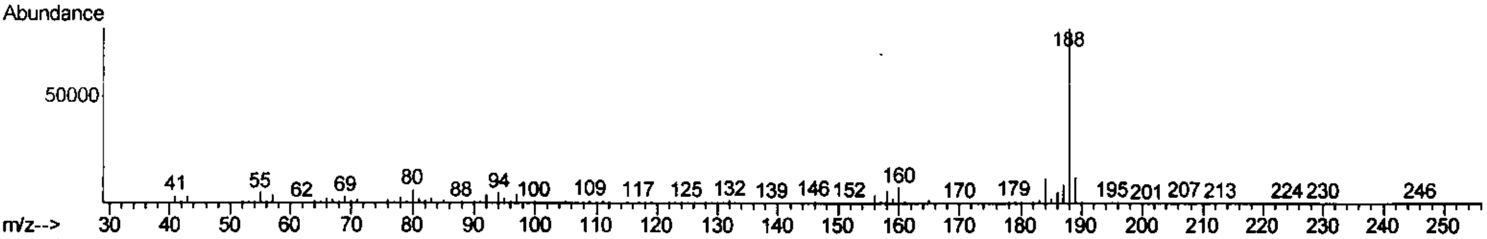
```
Data Path : Z:\HPCHEM1\BNA_G\DATA\BG121815\
Data File : BG020252.D
Acq On    : 17 Dec 2015  19:12
Operator  : UM/SJ
Sample    : G4787-17DL 10X
Misc      :
ALS Vial  : 5   Sample Multiplier: 1

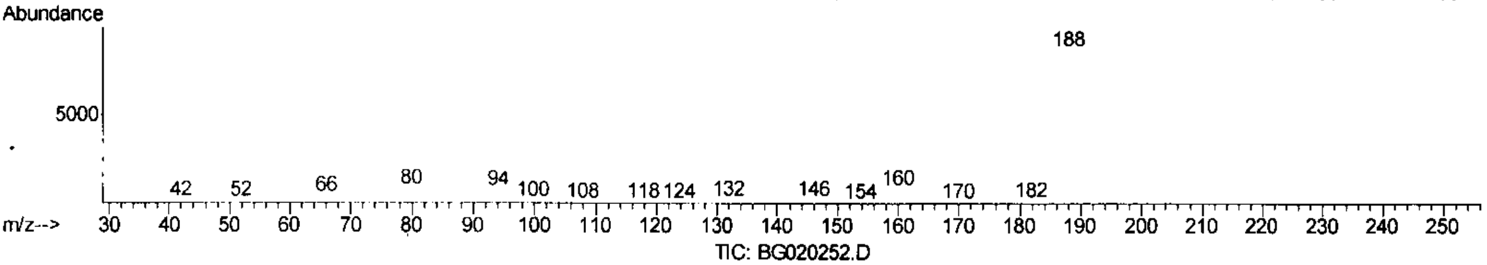
Quant Time: Dec 18 02:42:35 2015
Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
Quant Title  : SVOA CALIBRATION
QLast Update : Fri Dec 18 02:40:02 2015
Response via : Initial Calibration
```

Instrument :
BNA_G
ClientSampleId :
G9BN9DL

Manual Integrations APPROVED
MMdadoda
12/18/2015 6:20:16 PM







(71) Anthracene-d10 (S)

17.470min (-0.098) 21.70ng/ul

response 130641

Ion	Exp%	Act%
188.00	100	100
94.00	7.70	6.27
80.00	7.50	7.83
0.00	0.00	0.00

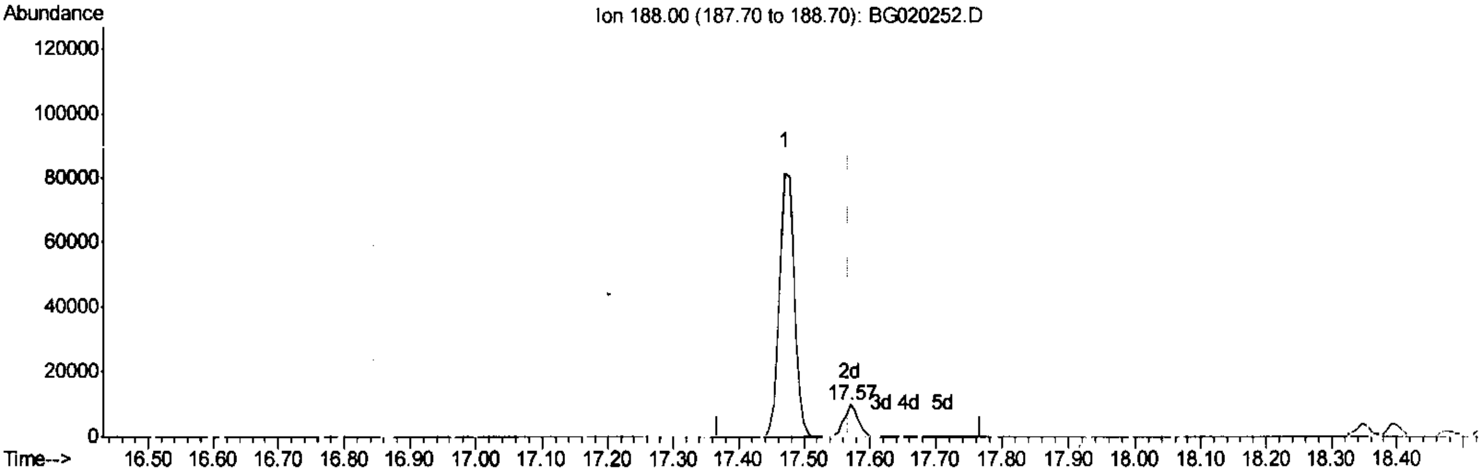
Quantitation Report (Qedit)

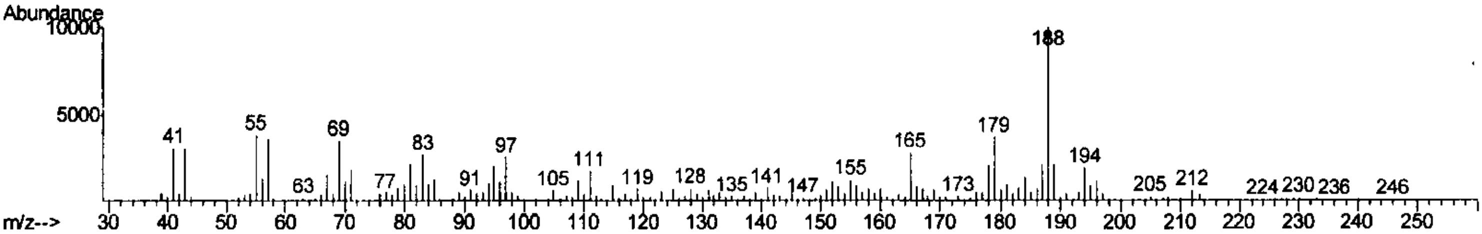
```
Data Path : Z:\HPCHEM1\BNA_G\DATA\BG121815\
Data File : BG020252.D
Acq On    : 17 Dec 2015   19:12
Operator  : UM/SJ
Sample    : G4787-17DL 10X
Misc      :
ALS Vial  : 5   Sample Multiplier: 1

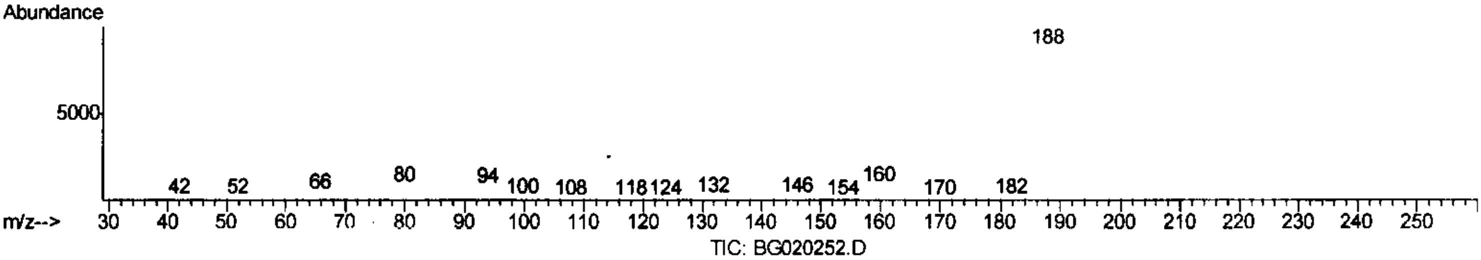
Quant Time: Dec 18 02:42:35 2015
Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
Quant Title  : SVOA CALIBRATION
QLast Update : Fri Dec 18 02:40:02 2015
Response via : Initial Calibration
```

Instrument : BNA_G
ClientSampleId : G9BN9DL

Manual Integrations APPROVED
MMdadoda
12/18/2015 6:20:16 PM







(71) Anthracene-d10 (S)

17.570min (+0.002) 2.47ng/ul m U.M 12/21/15

response 14875

Ion	Exp%	Act%
188.00	100	100
94.00	7.70	11.62#
80.00	7.50	10.71#
0.00	0.00	0.00

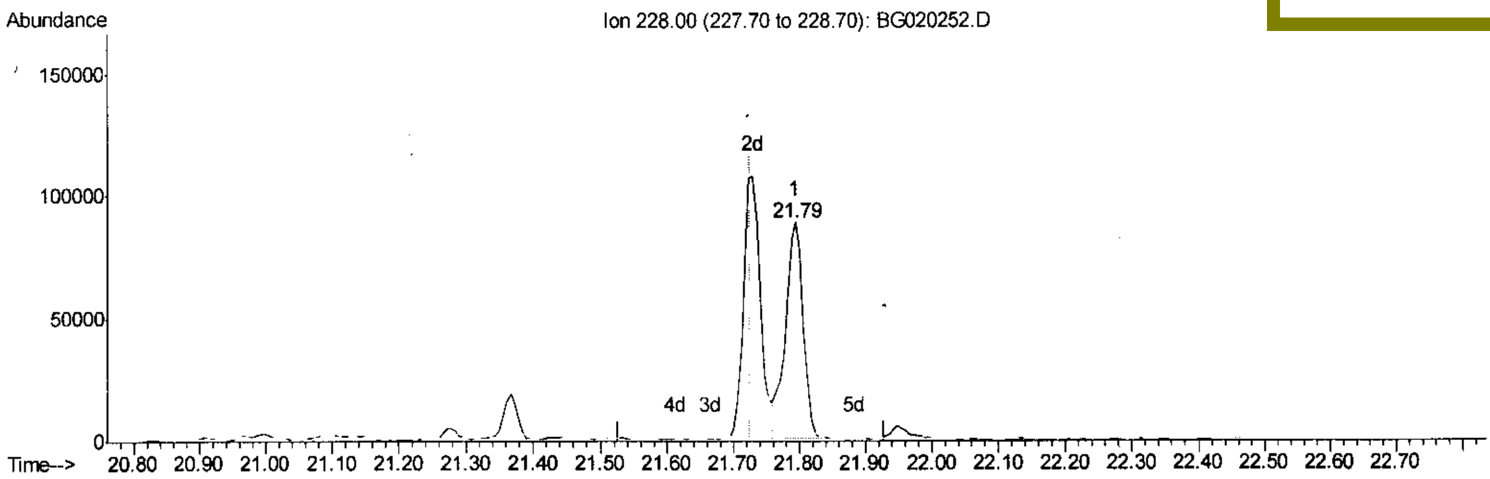
Quantitation Report (Qedit)

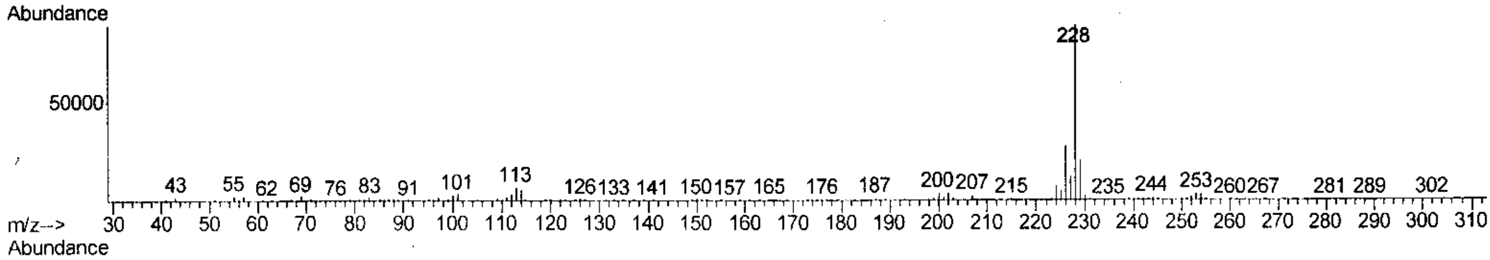
Data Path : Z:\HPCHEM1\BNA_G\DATA\BG121815\
Data File : BG020252.D
Acq On : 17 Dec 2015 19:12
Operator : UM/SJ
Sample : G4787-17DL 10X
Misc :
ALS Vial : 5 Sample Multiplier: 1

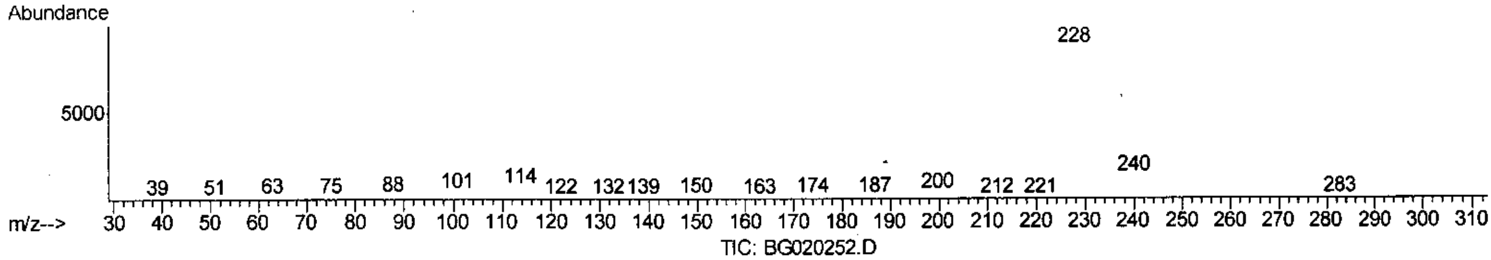
Quant Time: Dec 18 02:42:35 2015
Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
Quant Title : SVOA CALIBRATION
QLast Update : Fri Dec 18 02:40:02 2015
Response via : Initial Calibration

Instrument :
BNA_G
ClientSampleId :
G9BN9DL

Manual Integrations APPROVED
MMdadoda
12/18/2015 6:20:16 PM







(83) Benzo(a)anthracene

21.795min (+0.067) 16.47ng/ul

response 161046

Ion	Exp%	Act%
228.00	100	100
229.00	19.80	22.61
226.00	27.20	31.19
0.00	0.00	0.00

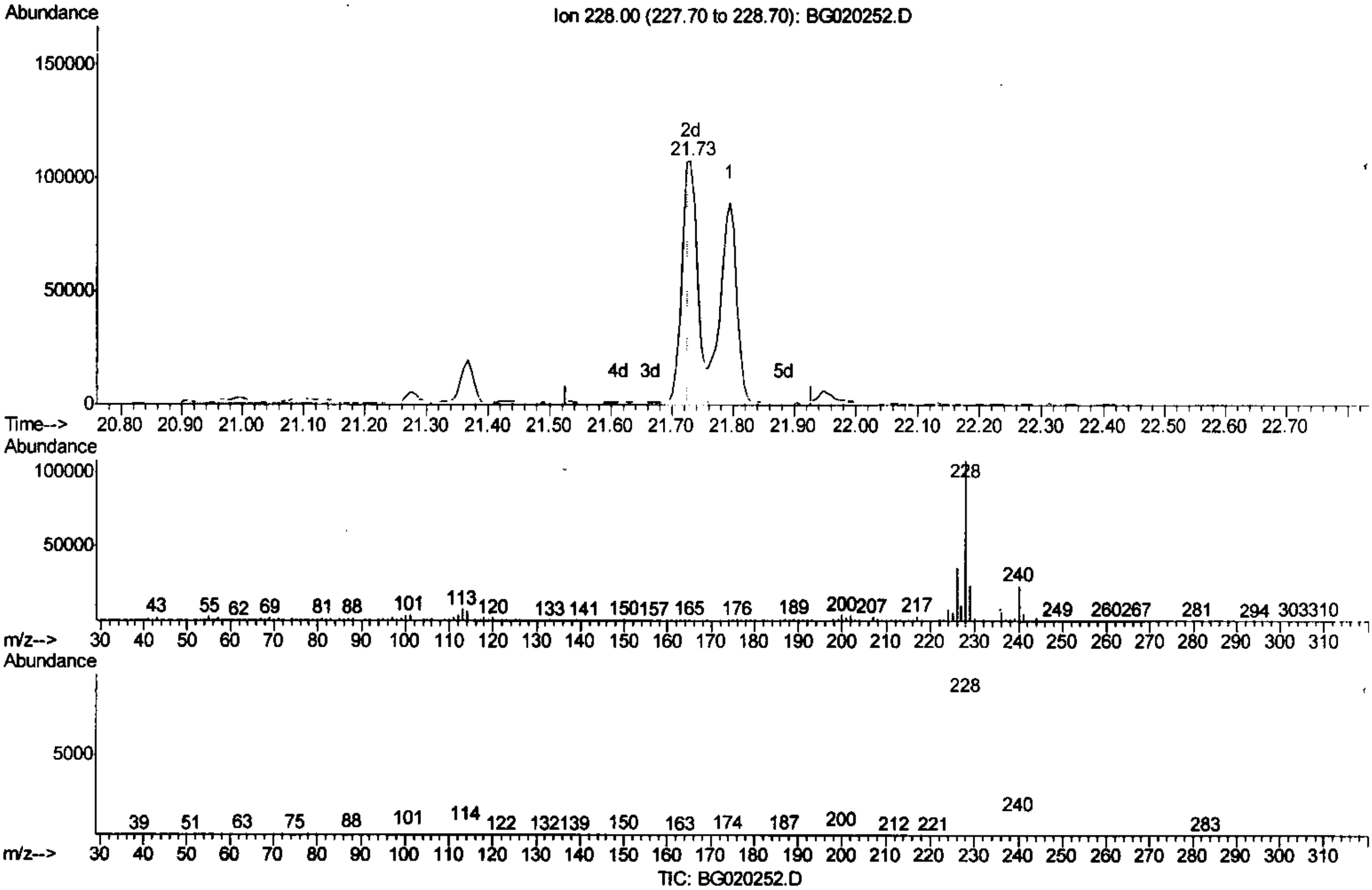
Quantitation Report (Qedit)

Instrument :
BNA_G
ClientSampleId :
G9BN9DL

Manual Integrations
APPROVED
MMdadoda
12/18/2015 6:20:16 PM

```
Data Path : Z:\HPCHEM1\BNA_G\DATA\BG121815\
Data File : BG020252.D
Acq On    : 17 Dec 2015   19:12
Operator  : UM/SJ
Sample    : G4787-17DL 10X
Misc      :
ALS Vial  : 5   Sample Multiplier: 1

Quant Time: Dec 18 02:42:35 2015
Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
Quant Title  : SVOA CALIBRATION
QLast Update : Fri Dec 18 02:40:02 2015
Response via : Initial Calibration
```



(83) Benzo(a)anthracene

21.730min (+0.002) 19.96ng/ul m

U.M
12/21/15

response 195170

Ion	Exp%	Act%
228.00	100	100
229.00	19.80	22.56
226.00	27.20	34.00#
0.00	0.00	0.00

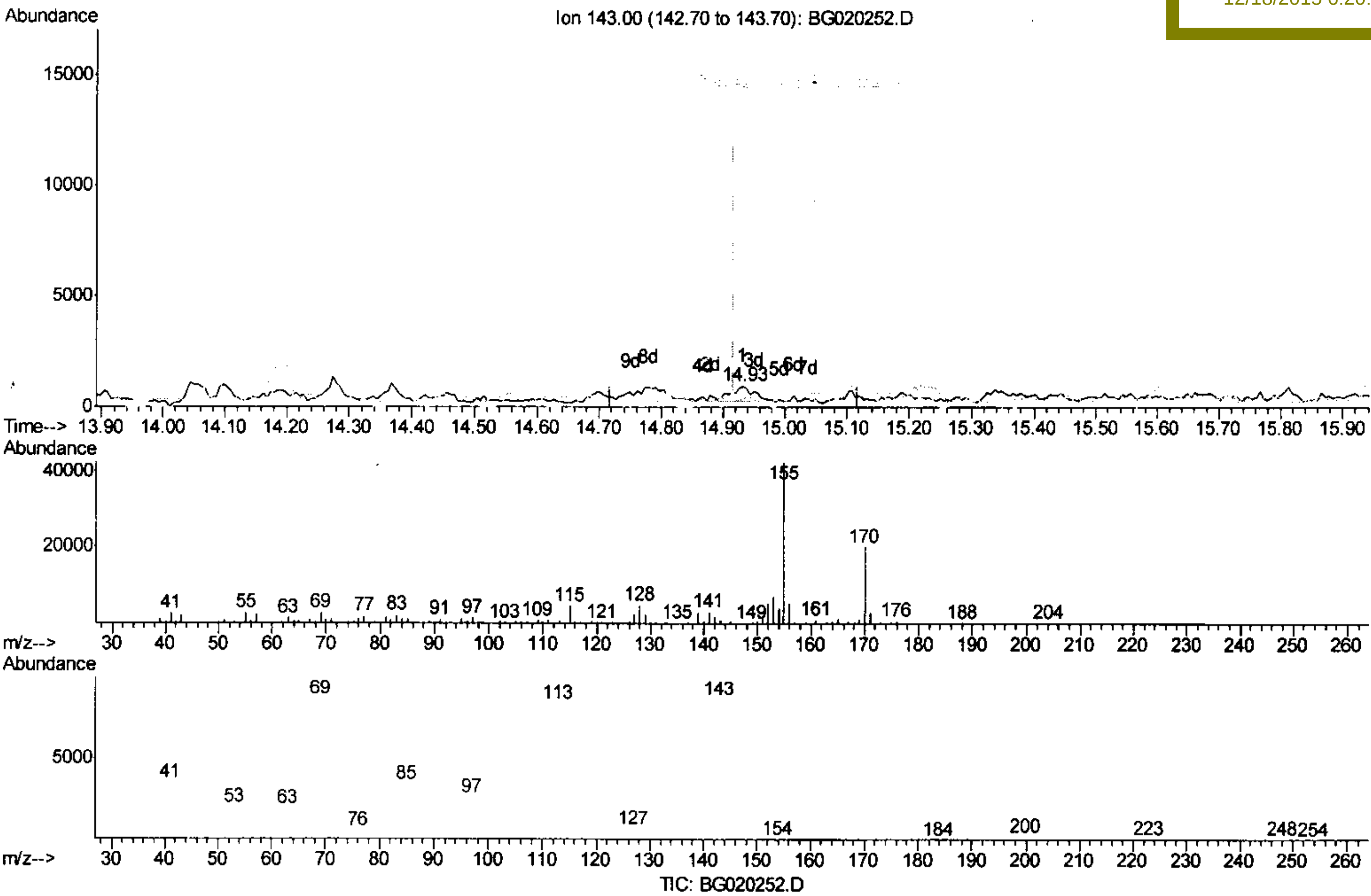
Quantitation Report (Qedit)

```
Data Path : Z:\HPCHEM1\BNA_G\DATA\BG121815\
Data File : BG020252.D
Acq On    : 17 Dec 2015  19:12
Operator  : UM/SJ
Sample    : G4787-17DL 10X
Misc      :
ALS Vial  : 5   Sample Multiplier: 1

Quant Time: Dec 18 03:16:57 2015
Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
Quant Title  : SVOA CALIBRATION
QLast Update : Fri Dec 18 02:40:02 2015
Response via : Initial Calibration
```

Instrument :
BNA_G
ClientSampleId :
G9BN9DL

Manual Integrations APPROVED
MMdadoda
12/18/2015 6:20:16 PM



(52) 4-Nitrophenol-d4 (S)

14.932min (+0.014) 1.63ng/ul

response 1302

Ion	Exp%	Act%
143.00	100	100
113.00	89.00	84.14
41.00	38.30	279.94#
42.00	23.40	34.87#

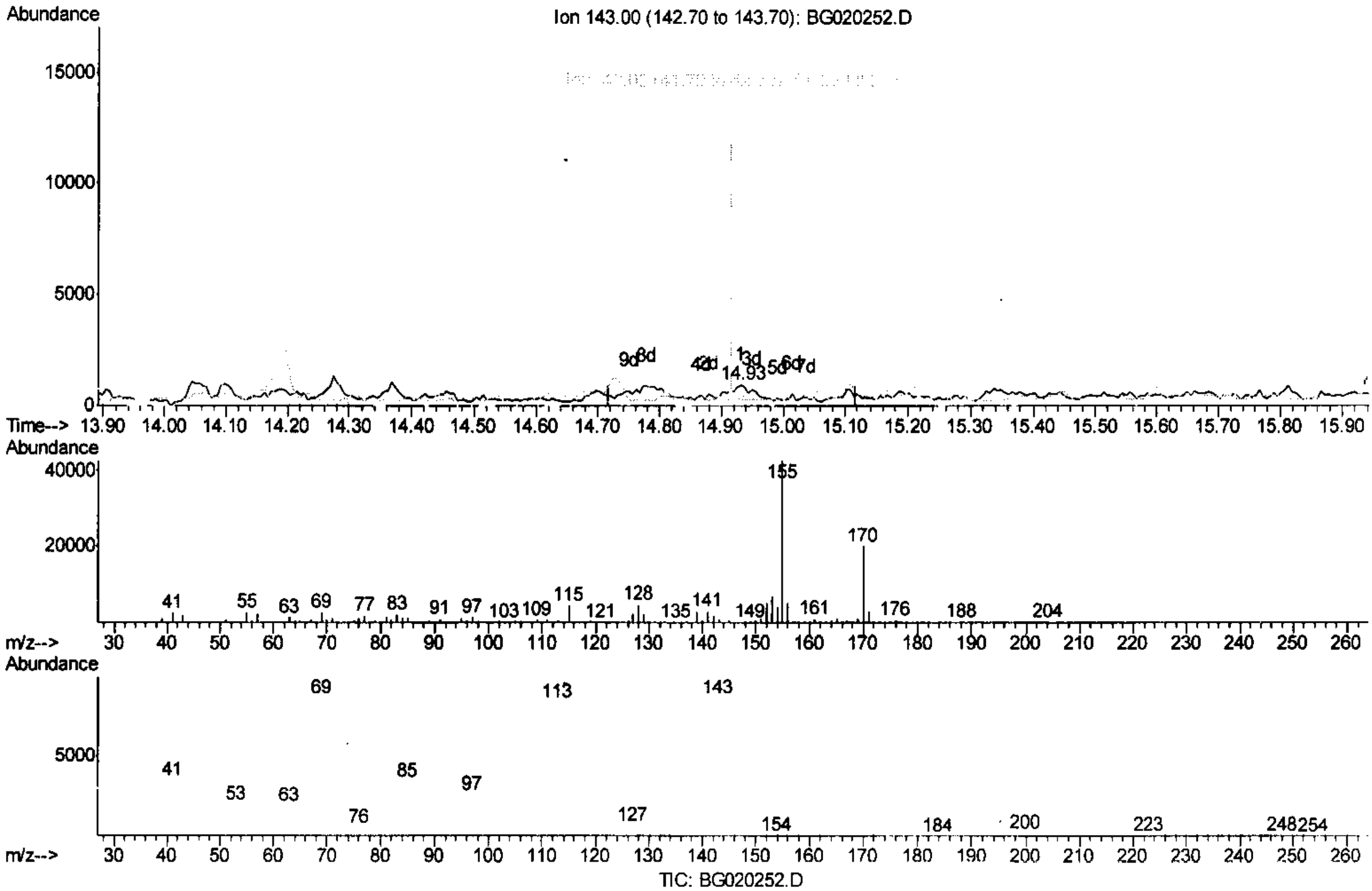
Quantitation Report (Qedit)

```
Data Path : Z:\HPCHEM1\BNA_G\DATA\BG121815\
Data File : BG020252.D
Acq On    : 17 Dec 2015   19:12
Operator  : UM/SJ
Sample    : G4787-17DL 10X
Misc      :
ALS Vial  : 5   Sample Multiplier: 1

Quant Time: Dec 18 03:16:57 2015
Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
Quant Title  : SVOA CALIBRATION
QLast Update : Fri Dec 18 02:40:02 2015
Response via : Initial Calibration
```

Instrument :
BNA_G
ClientSampleId :
G9BN9DL

Manual Integrations APPROVED
MMdadoda
12/18/2015 6:20:16 PM



(52) 4-Nitrophenol-d4 (S)

14.932min (+0.014) 2.21ng/ul m

U.M
12/21/15

response 1759

Ion	Exp%	Act%
143.00	100	100
113.00	89.00	84.14
41.00	38.30	279.94#
42.00	23.40	34.87#

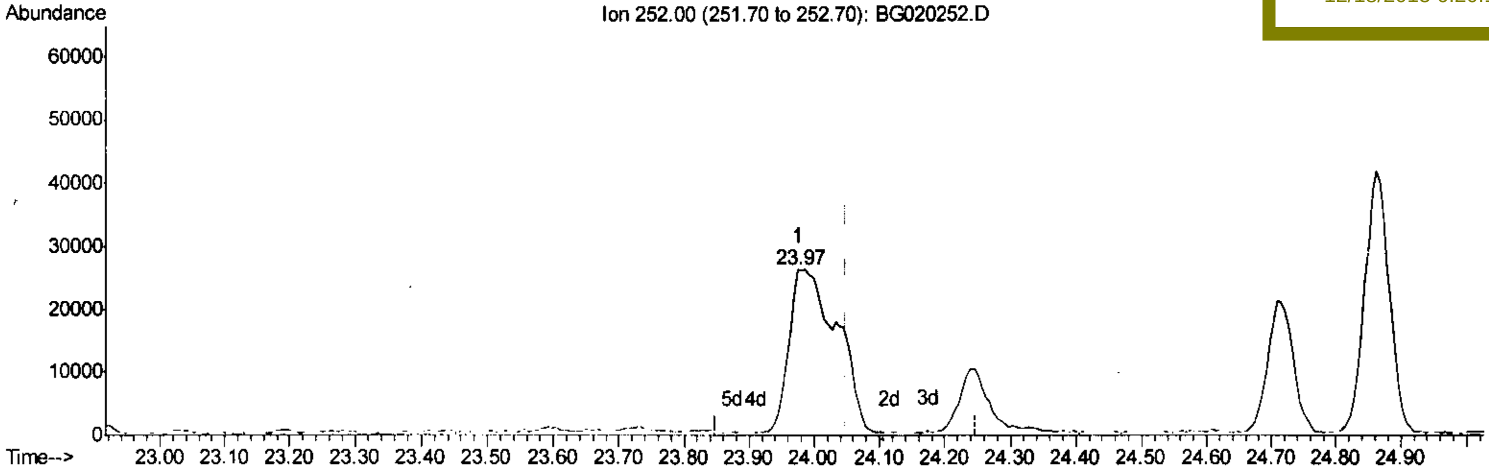
Quantitation Report (Qedit)

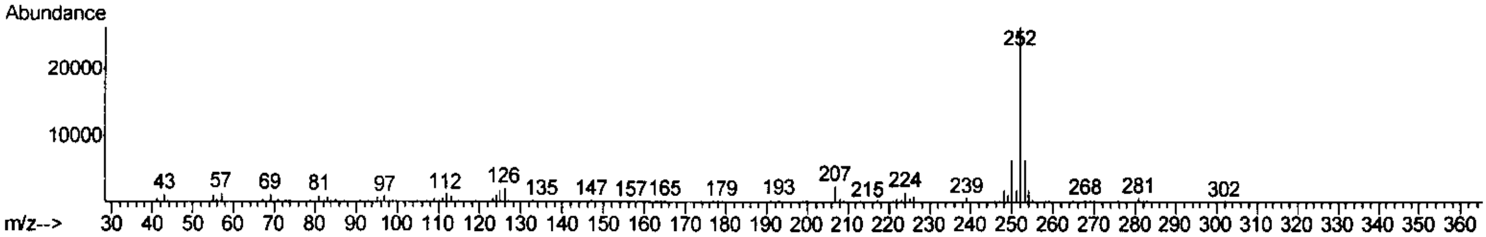
Data Path : Z:\HPCHEM1\BNA_G\DATA\BG121815\
Data File : BG020252.D
Acq On : 17 Dec 2015 19:12
Operator : UM/SJ
Sample : G4787-17DL 10X
Misc :
ALS Vial : 5 Sample Multiplier: 1

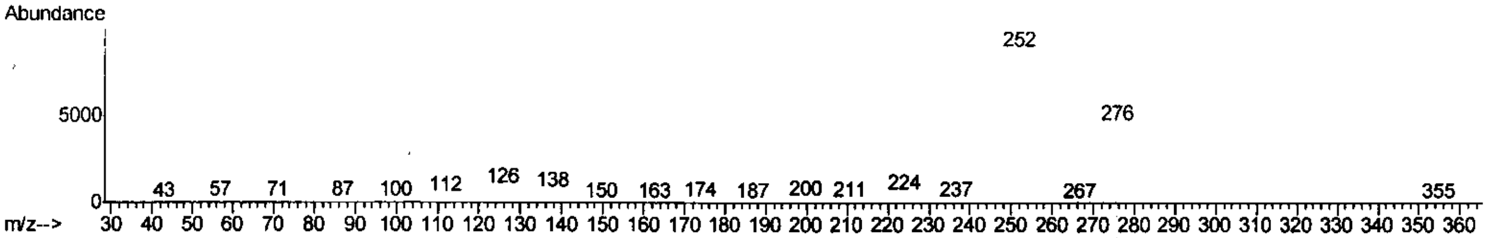
Quant Time: Dec 18 03:27:22 2015
Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
Quant Title : SVOA CALIBRATION
QLast Update : Fri Dec 18 02:40:02 2015
Response via : Initial Calibration

Instrument :
BNA_G
ClientSampleId :
G9BN9DL

Manual Integrations APPROVED
MMdadoda
12/18/2015 6:20:16 PM







TIC: BG020252.D

(89) Benzo(k)fluoranthene

23.974min (-0.074) 10.49ng/ul

response 100279

Ion	Exp%	Act%
252.00	100	100
253.00	22.40	24.37
125.00	7.20	7.32
0.00	0.00	0.00

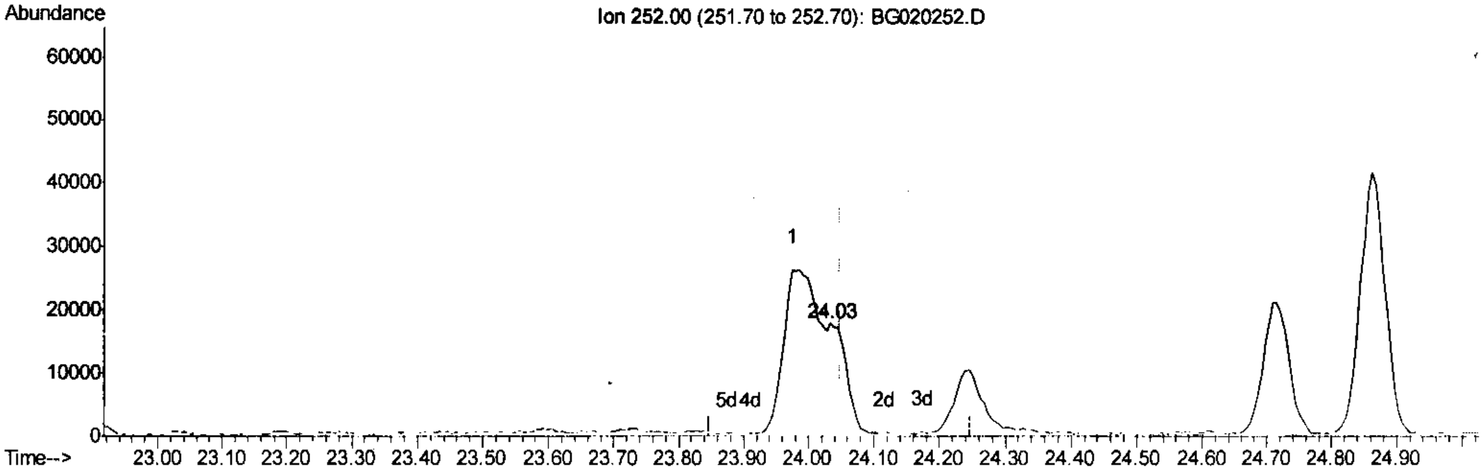
Quantitation Report (Qedit)

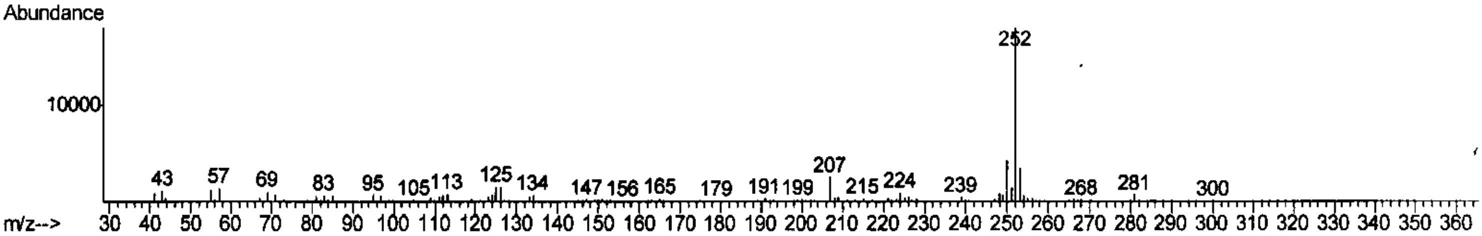
Data Path : Z:\HPCHEM1\BNA_G\DATA\BG121815\
Data File : BG020252.D
Acq On : 17 Dec 2015 19:12
Operator : UM/SJ
Sample : G4787-17DL 10X
Misc :
ALS Vial : 5 Sample Multiplier: 1

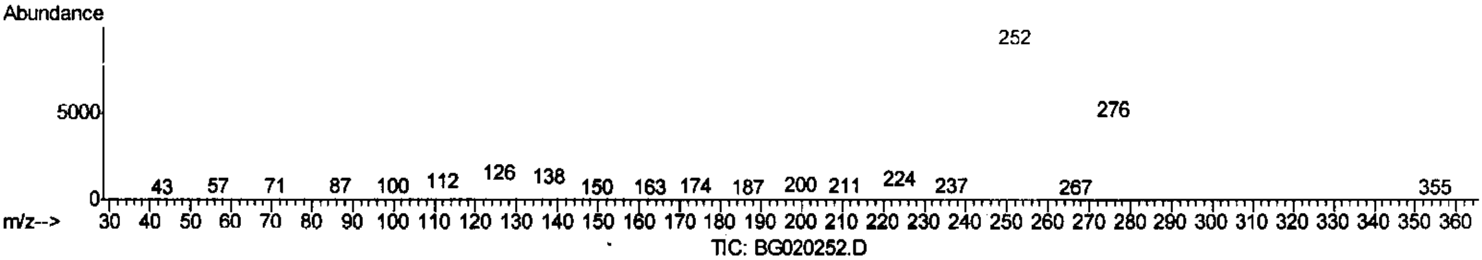
Quant Time: Dec 18 03:27:22 2015
Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
Quant Title : SVOA CALIBRATION
QLast Update : Fri Dec 18 02:40:02 2015
Response via : Initial Calibration

Instrument :
BNA_G
ClientSampleId :
G9BN9DL

Manual Integrations APPROVED
MMdadoda
12/18/2015 6:20:16 PM







(89) Benzo(k)fluoranthene

24.033min (-0.015) 3.68ng/ul m U.M 12/21/15

response 35167

Ion	Exp%	Act%
252.00	100	100
253.00	22.40	19.68
125.00	7.20	9.21#
0.00	0.00	0.00

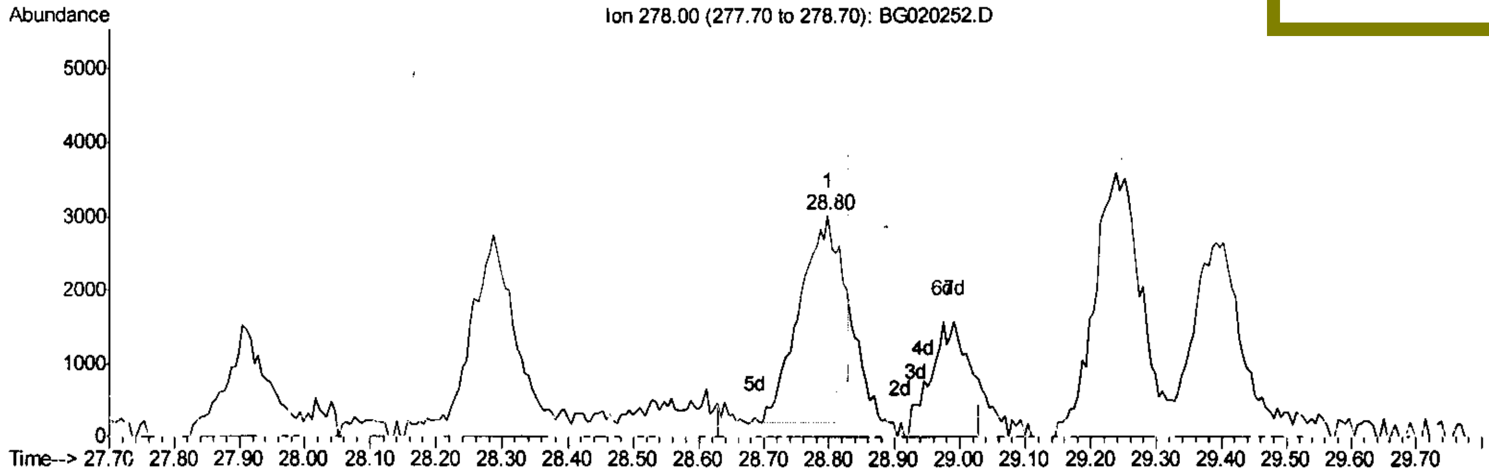
Quantitation Report (Qedit)

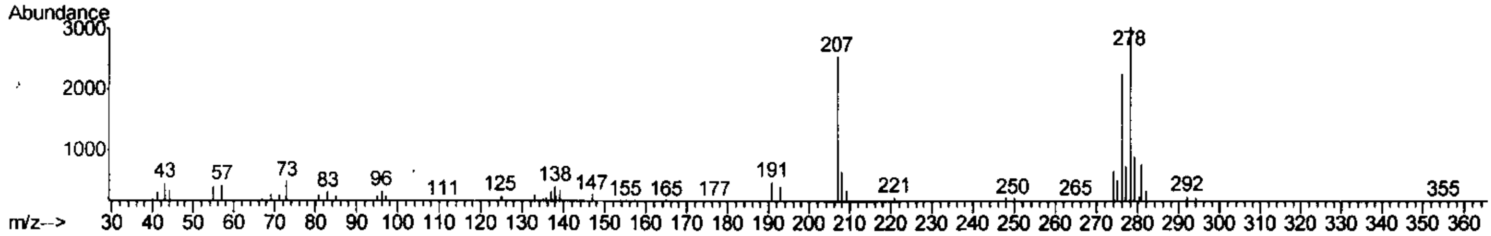
```
Data Path : Z:\HPCHEM1\BNA_G\DATA\BG121815\
Data File : BG020252.D
Acq On    : 17 Dec 2015   19:12
Operator  : UM/SJ
Sample    : G4787-17DL 10X
Misc      :
ALS Vial  : 5    Sample Multiplier: 1

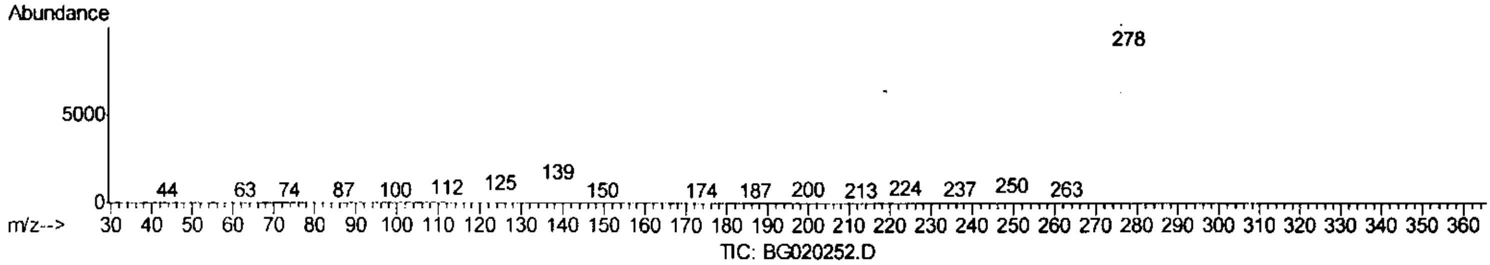
Quant Time: Dec 18 03:28:33 2015
Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
Quant Title  : SVOA CALIBRATION
QLast Update : Fri Dec 18 02:40:02 2015
Response via : Initial Calibration
```

Instrument :
BNA_G
ClientSampleId :
G9BN9DL

Manual Integrations APPROVED
MMdadoda
12/18/2015 6:20:16 PM







(93) Dibenzo(a,h)anthracene

28.798min (-0.033) 1.12ng/ul

response 10461

Ion	Exp%	Act%
278.00	100	100
139.00	11.80	11.13
279.00	24.20	30.10#
0.00	0.00	0.00

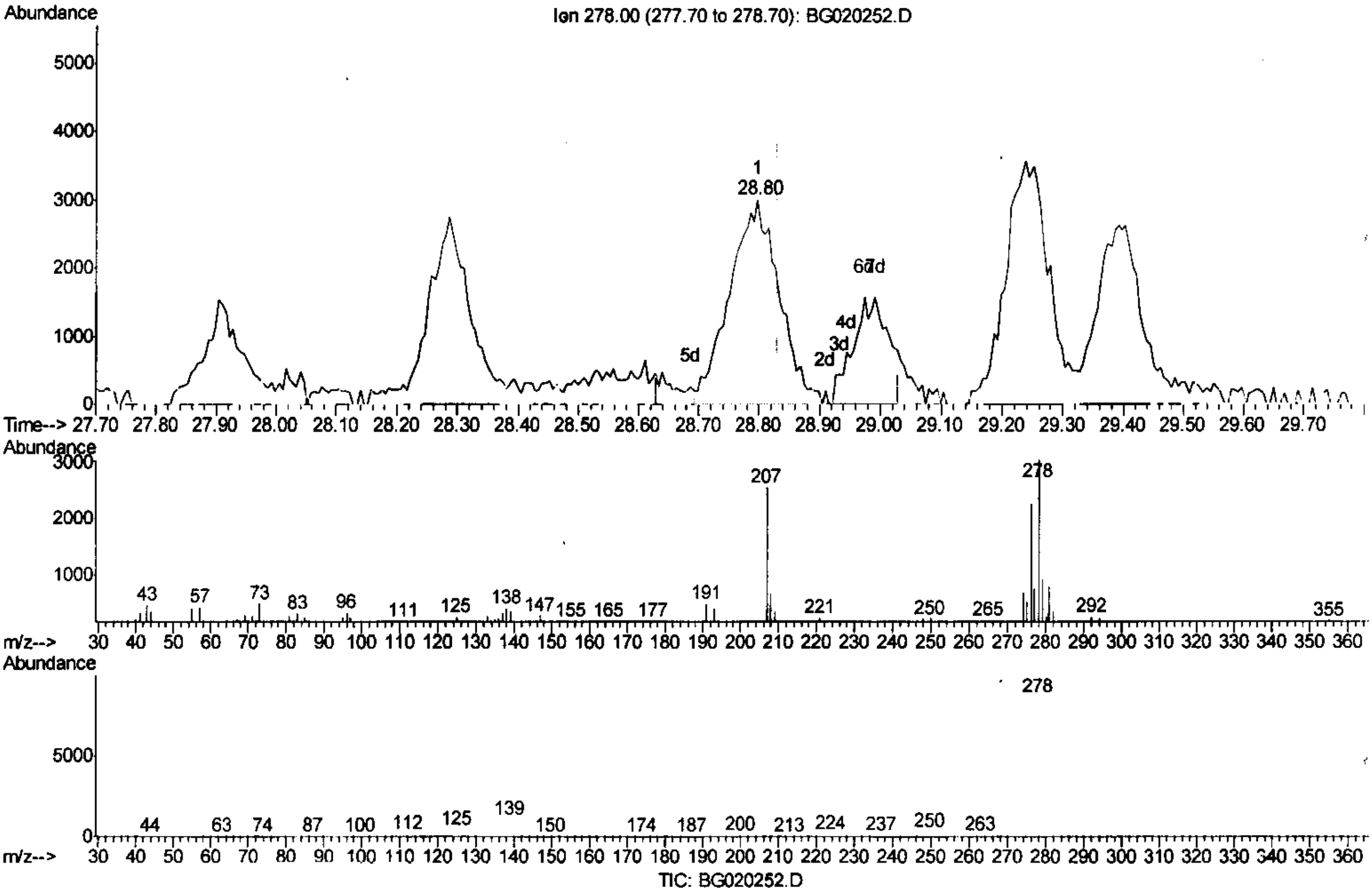
Quantitation Report (Qedit)

Data Path : Z:\HPCHEM1\BNA_G\DATA\BG121815\
Data File : BG020252.D
Acq On : 17 Dec 2015 19:12
Operator : UM/SJ
Sample : G4787-17DL 10X
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 18 03:28:33 2015
Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
Quant Title : SVOA CALIBRATION
QLast Update : Fri Dec 18 02:40:02 2015
Response via : Initial Calibration

Instrument :
BNA_G
ClientSampleId :
G9BN9DL

Manual Integrations APPROVED
MMdadoda
12/18/2015 6:20:16 PM



(93) Dibenzo(a,h)anthracene

28.798min (-0.033) 1.83ng/ul m U.M 12/21/15

response 17108

Ion	Exp%	Act%
278.00	100	100
139.00	11.80	11.13
279.00	24.20	30.10#
0.00	0.00	0.00

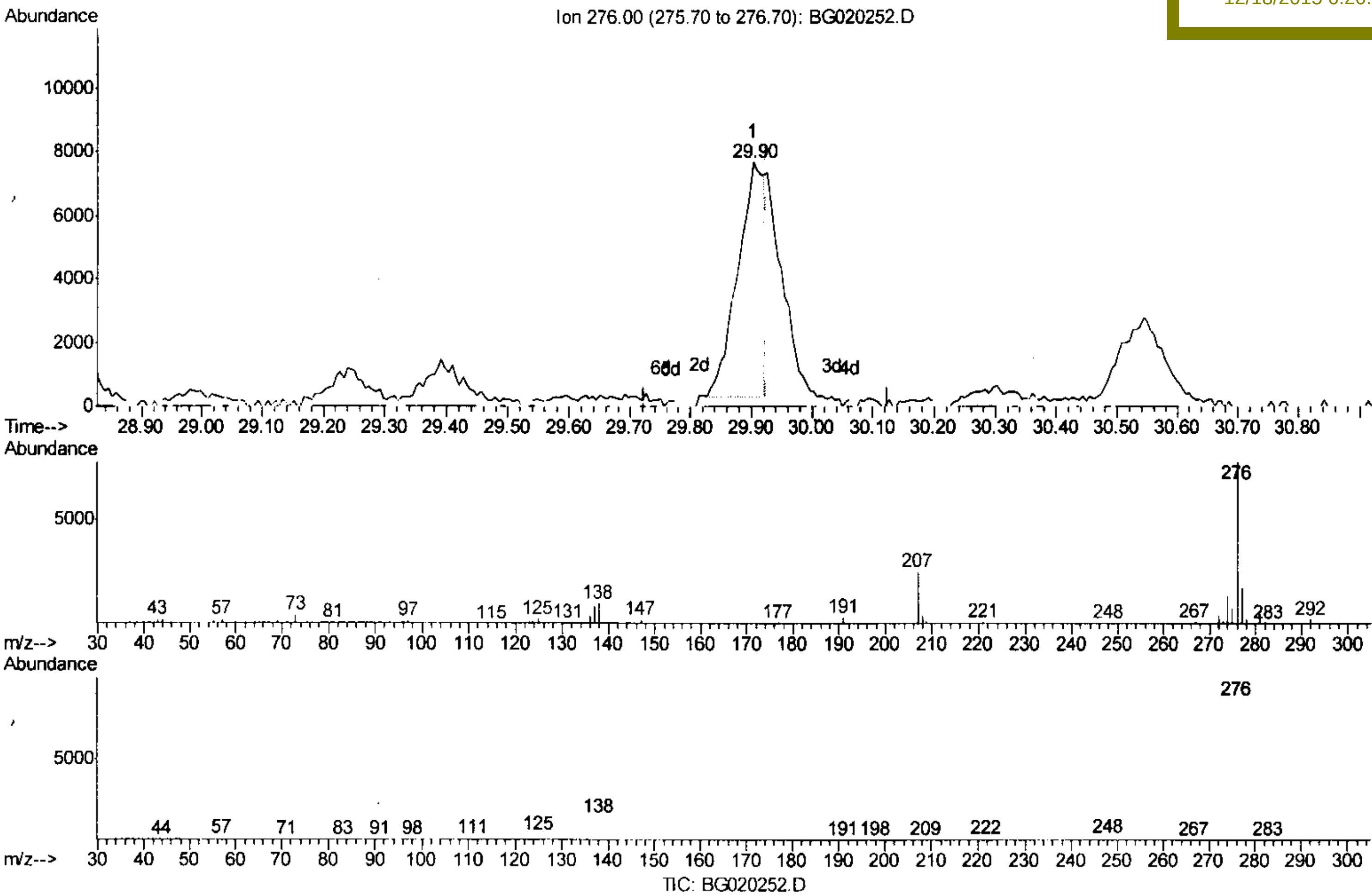
Quantitation Report (Qedit)

```
Data Path : Z:\HPCHEM1\BNA G\DATA\BG121815\
Data File : BG020252.D
Acq On    : 17 Dec 2015  19:12
Operator  : UM/SJ
Sample    : G4787-17DL 10X
Misc      :
ALS Vial  : 5   Sample Multiplier: 1

Quant Time: Dec 18 03:28:33 2015
Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
Quant Title  : SVOA CALIBRATION
QLast Update : Fri Dec 18 02:40:02 2015
Response via : Initial Calibration
```

Instrument : BNA_G
ClientSampleId : G9BN9DL

Manual Integrations APPROVED
MMdadoda
12/18/2015 6:20:16 PM



(94) Benzo(g,h,i)perylene

29.903min (-0.021) 2.38ng/ul

response 21897

Ion	Exp%	Act%
276.00	100	100
138.00	13.50	13.87
277.00	24.90	23.42
0.00	0.00	0.00

Quantitation Report (Qedit)

Instrument :
BNA_G
ClientSampleId :
G9BN9DL

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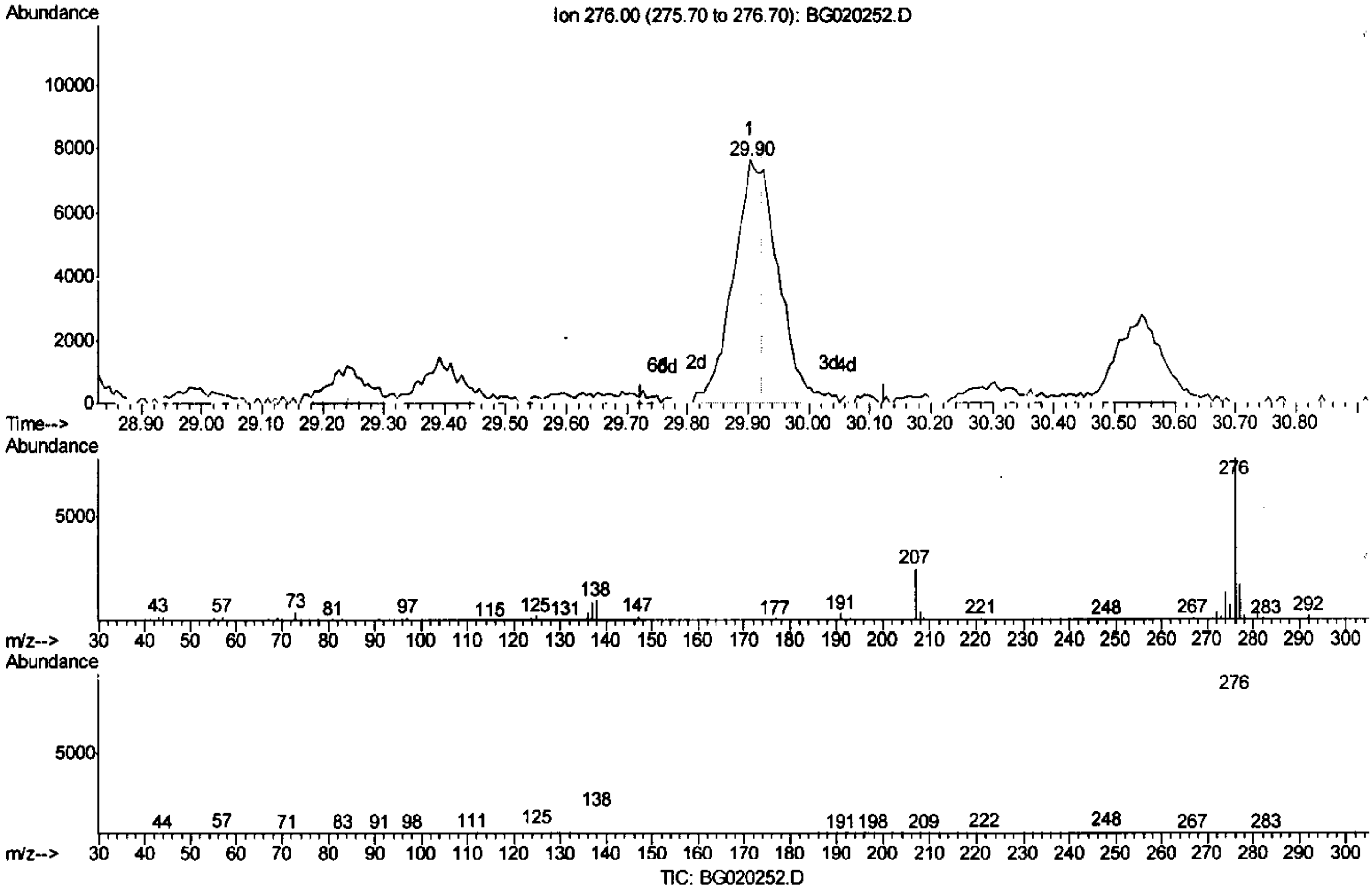
```
Data Path : Z:\HPCHEM1\BNA_G\DATA\BG121815\
Data File : BG020252.D
Acq On    : 17 Dec 2015  19:12
Operator  : UM/SJ
Sample    : G4787-17DL 10X
Misc      :
ALS Vial  : 5   Sample Multiplier: 1

Quant Time: Dec 18 03:28:33 2015
Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
Quant Title  : SVOA CALIBRATION
QLast Update : Fri Dec 18 02:40:02 2015
Response via : Initial Calibration
```



(94) Benzo(g,h,i)perylene

29.903min (-0.021) 4.31ng/ul m U.M 12/21/15

response 39690

Ion	Exp%	Act%
276.00	100	100
138.00	13.50	13.87
277.00	24.90	23.42
0.00	0.00	0.00

Quantitation Report (LSC Reviewed)

Data Path : Z:\HPCHEM1\BNA_G\DATA\BG121815\
Data File : BG020252.D
Acq On : 17 Dec 2015 19:12
Operator : UM/SJ
Sample : G4787-17DL 10X
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_G
ClientSampleId :
G9BN9DL

Manual Integrations
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Quant Time: Dec 18 03:30:55 2015
Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
Quant Title : SVOA CALIBRATION
QLast Update : Fri Dec 18 02:40:02 2015
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.09	152	18727	20.00 ng/ul	0.00
18) Naphthalene-d8	10.92	136	78207	20.00 ng/ul	0.00
36) Acenaphthene-d10	14.73	164	54969	20.00 ng/ul	0.00
62) Phenanthrene-d10	17.47	188	130641	20.00 ng/ul	0.00
78) Chrysene-d12	21.75	240	167590	20.00 ng/ul	0.00
86) Perylene-d12	25.02	264	165492	20.00 ng/ul	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc Units	Dev(Min)
3) 1,4-Dioxane-d8	0.00	96	0	0.00 ng/uL	
5) Phenol-d5	7.25	99	2660	1.61 ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	7.42	67	2457	2.49 ng/ul	0.00
9) 2-Chlorophenol-d4	7.62	132	2270	1.89 ng/ul	0.00
13) 4-Methylphenol-d8	8.80	113	2260	1.60 ng/ul	0.00
19) Nitrobenzene-d5	9.26	128	1976m	3.24 ng/ul	0.00
22) 2-Nitrophenol-d4	9.99	143	1214	1.79 ng/ul	0.00
26) 2,4-Dichlorophenol-d3	10.53	165	2633	1.92 ng/ul	0.00
29) 4-Chloroaniline-d4	11.02	131	5940m	3.85 ng/ul	-0.02
44) Dimethylphthalate-d6	14.13	166	10484	2.36 ng/ul	0.00
47) Acenaphthylene-d8	14.42	160	12278	2.37 ng/ul	0.00
52) 4-Nitrophenol-d4	14.93	143	1759m	2.21 ng/ul	0.01
58) Fluorene-d10	15.71	176	9738	2.41 ng/ul	0.00
63) 4,6-Dinitro-2-methylphenol	0.00	200	0d	0.00 ng/ul	
71) Anthracene-d10	17.57	188	14875m	2.47 ng/ul	0.00
79) Pyrene-d10	19.85	212	17740	2.27 ng/ul	0.00
90) Benzo(a)pyrene-d12	24.80	264	19737	2.39 ng/ul	0.00

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Target Compounds					Qvalue
28) Naphthalene	10.98	128	1727048	422.87 ng/ul#	92
34) 2-Methylnaphthalene	12.57	142	858710	275.26 ng/ul	98
35) 1-Methylnaphthalene	12.79	142	488737	162.96 ng/ul	96
41) 1,1'-Biphenyl	13.56	154	79382	19.14 ng/ul	96
45) Dimethylphthalate	14.17	163	6969	1.53 ng/ul#	94
48) Acenaphthylene	14.45	152	27261	4.96 ng/ul#	72
50) Acenaphthene	14.80	153	295930	80.03 ng/ul	98
54) Dibenzofuran	15.12	168	39892	7.25 ng/ul	92
59) Fluorene	15.77	166	178060	40.31 ng/ul	99
70) Phenanthrene	17.52	178	845260	118.29 ng/ul	98
72) Anthracene	17.61	178	220698	30.45 ng/ul	98
75) Carbazole	17.88	167	9238	1.52 ng/ul#	70
77) Fluoranthene	19.52	202	326072	39.04 ng/ul	98
80) Pyrene	19.89	202	497256	49.02 ng/ul	99
83) Benzo(a)anthracene	21.73	228	195170m	19.96 ng/ul	
85) Chrysene	21.79	228	160991	17.48 ng/ul	96
88) Benzo(b)fluoranthene	23.97	252	100279	10.07 ng/ul	94
89) Benzo(k)fluoranthene	24.03	252	35167m	3.68 ng/ul	
91) Benzo(a)pyrene	24.86	252	109701	11.62 ng/ul	98
92) Indeno(1,2,3-cd)pyrene	28.75	276	43571	3.87 ng/ul#	91
93) Dibenzo(a,h)anthracene	28.80	278	17108m	1.83 ng/ul	
94) Benzo(g,h,i)perylene	29.90	276	39690m	4.31 ng/ul	

U.M
12/21/15

Quantitation Report (LSC Reviewed)

Instrument :
BNA_G
ClientSampleId :
G9BN9DL

Manual Integrations
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Data Path : Z:\HPCHEM1\BNA_G\DATA\BG121815\
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Misc      :
ALS Vial  : 5   Sample Multiplier: 1

Quant Time: Dec 18 03:30:55 2015
Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
Quant Title  : SVOA CALIBRATION
QLast Update : Fri Dec 18 02:40:02 2015
Response via : Initial Calibration

 Internal Standards                 R.T. QIon  Response  Conc Units Dev(Min)
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 (#) = qualifier out of range (m) = manual integration (+) = signals summed
```

Quantitation Report (LSC Reviewed)

Data Path : Z:\HPCHEM1\BNA_G\DATA\BG121815\
Data File : BG020252.D
Acq On : 17 Dec 2015 19:12
Operator : UM/SJ
Sample : G4787-17DL 10X
Misc :
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 18 03:30:55 2015
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Instrument :
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Manual Integrations APPROVED
MMdadoda
12/18/2015 6:20:16 PM