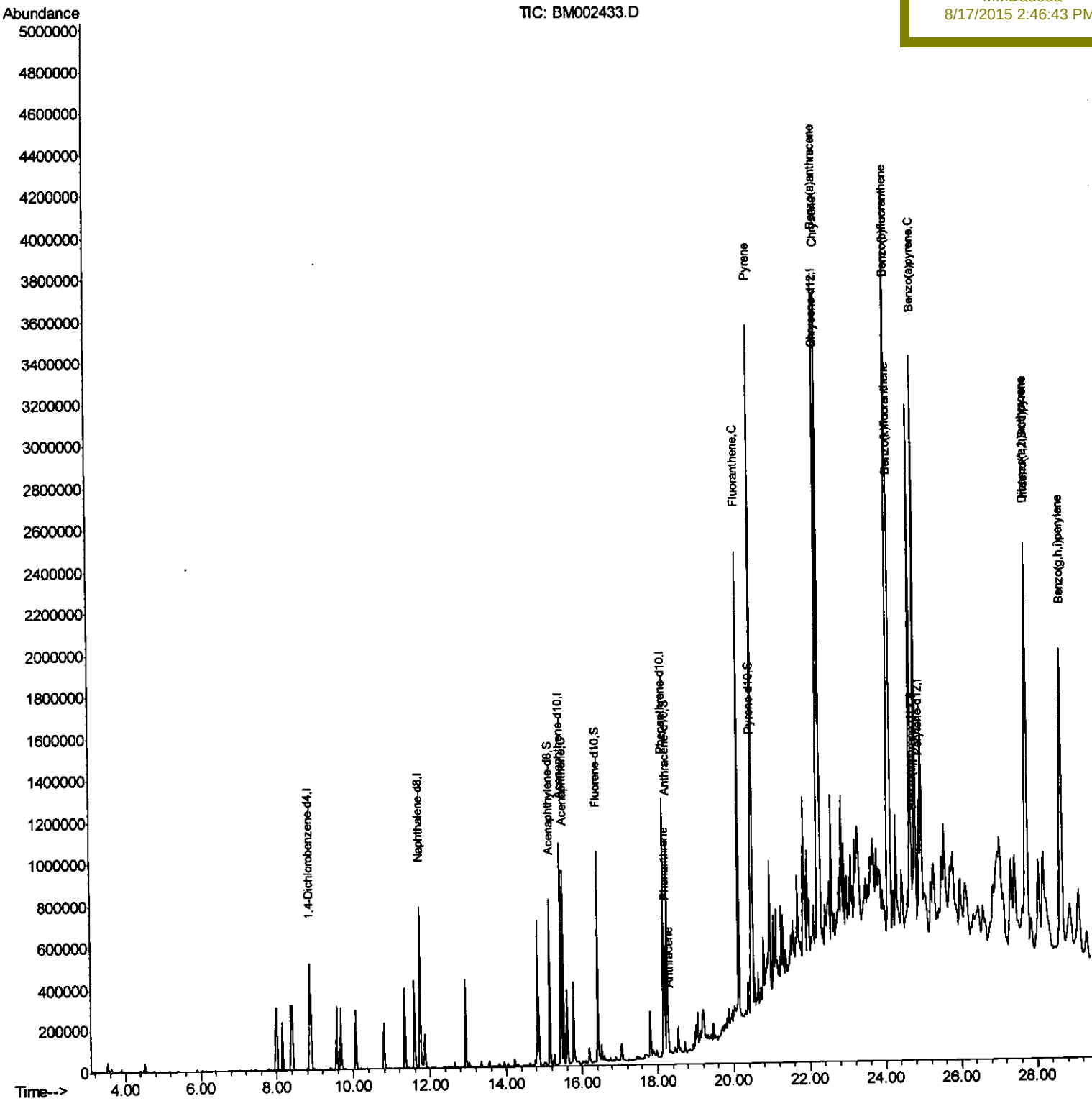


Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
Data File : BM002433.D
Acq On : 15 Aug 2015 20:14
Operator : UM/IZ
Sample : G3219-12MS
Misc :
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Aug 17 05:57:17 2015
Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Aug 17 05:12:59 2015
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampled :
D9DA4MS

Manual Integrations
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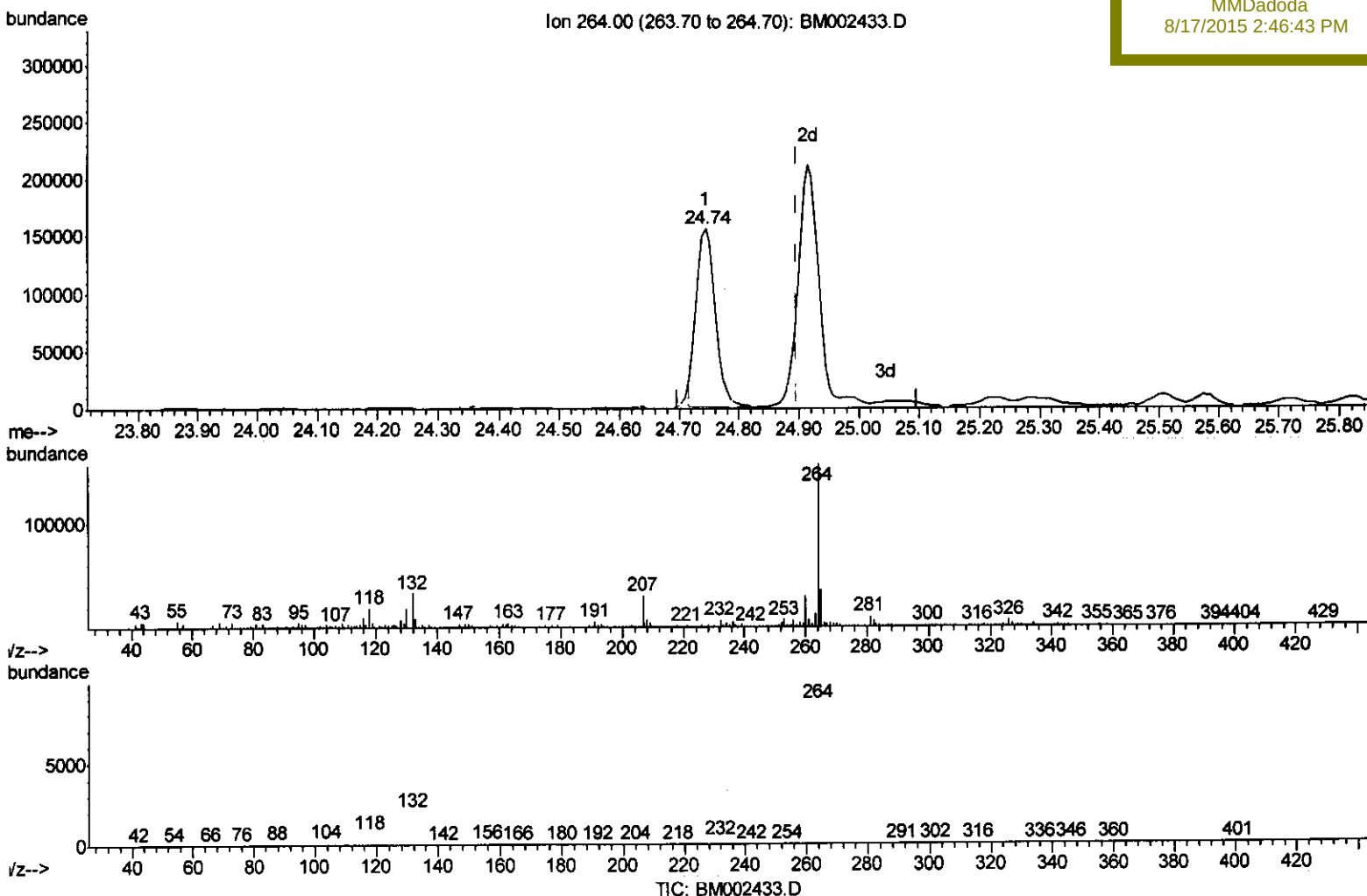
Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
 Data File : BM002433.D
 Acq On : 15 Aug 2015 20:14
 Operator : UM/IZ
 Sample : G3219-12MS
 Misc :
 ALS Vial : 39 Sample Multiplier: 1

Quant Time: Aug 17 05:18:08 2015
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Mon Aug 17 05:12:59 2015
 Response via : Initial Calibration

Instrument :
 BNA_M
 ClientSampleId :
 D9DA4MS

Manual Integrations
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(22) Perylene-d12 (I)

24.745min (-0.153) 20.00ng/ul

response 341499

Ion	Exp%	Act%
264.00	100	100
260.00	23.60	19.33
265.00	21.40	22.84
0.00	0.00	0.00

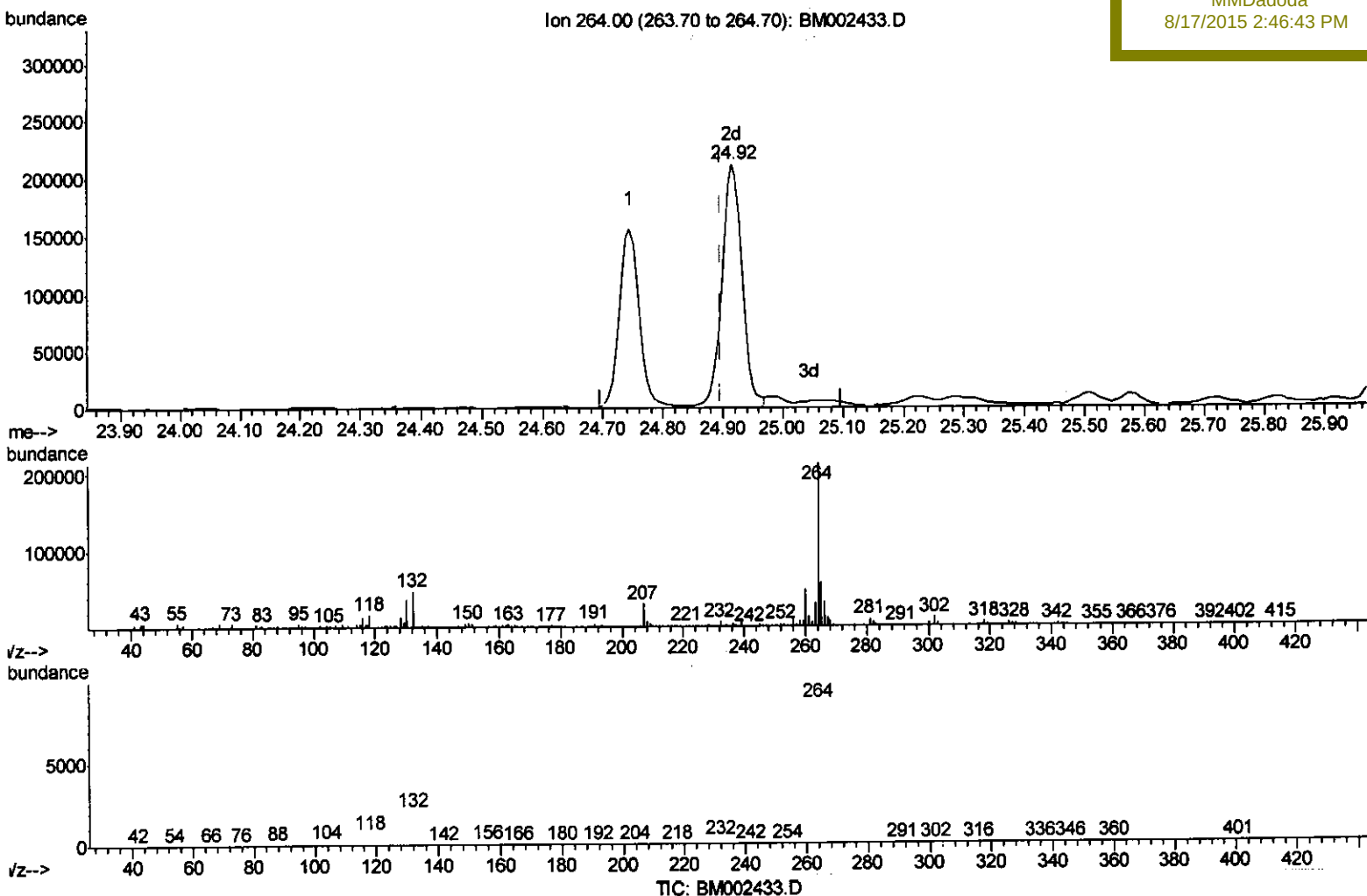
Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
 Data File : BM002433.D
 Acq On : 15 Aug 2015 20:14
 Operator : UM/IZ
 Sample : G3219-12MS
 Misc :
 ALS Vial : 39 Sample Multiplier: 1

Quant Time: Aug 17 05:18:08 2015
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Mon Aug 17 05:12:59 2015
 Response via : Initial Calibration

Instrument :
 BNA_M
 ClientSampleId :
 D9DA4MS

Manual Integrations
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(22) Perylene-d12 (I)

24.915min (+0.018) 20.00ng/ul m

response 503850

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Ion	Exp%	Act%
264.00	100	100
260.00	23.60	23.02
265.00	21.40	27.05#
0.00	0.00	0.00

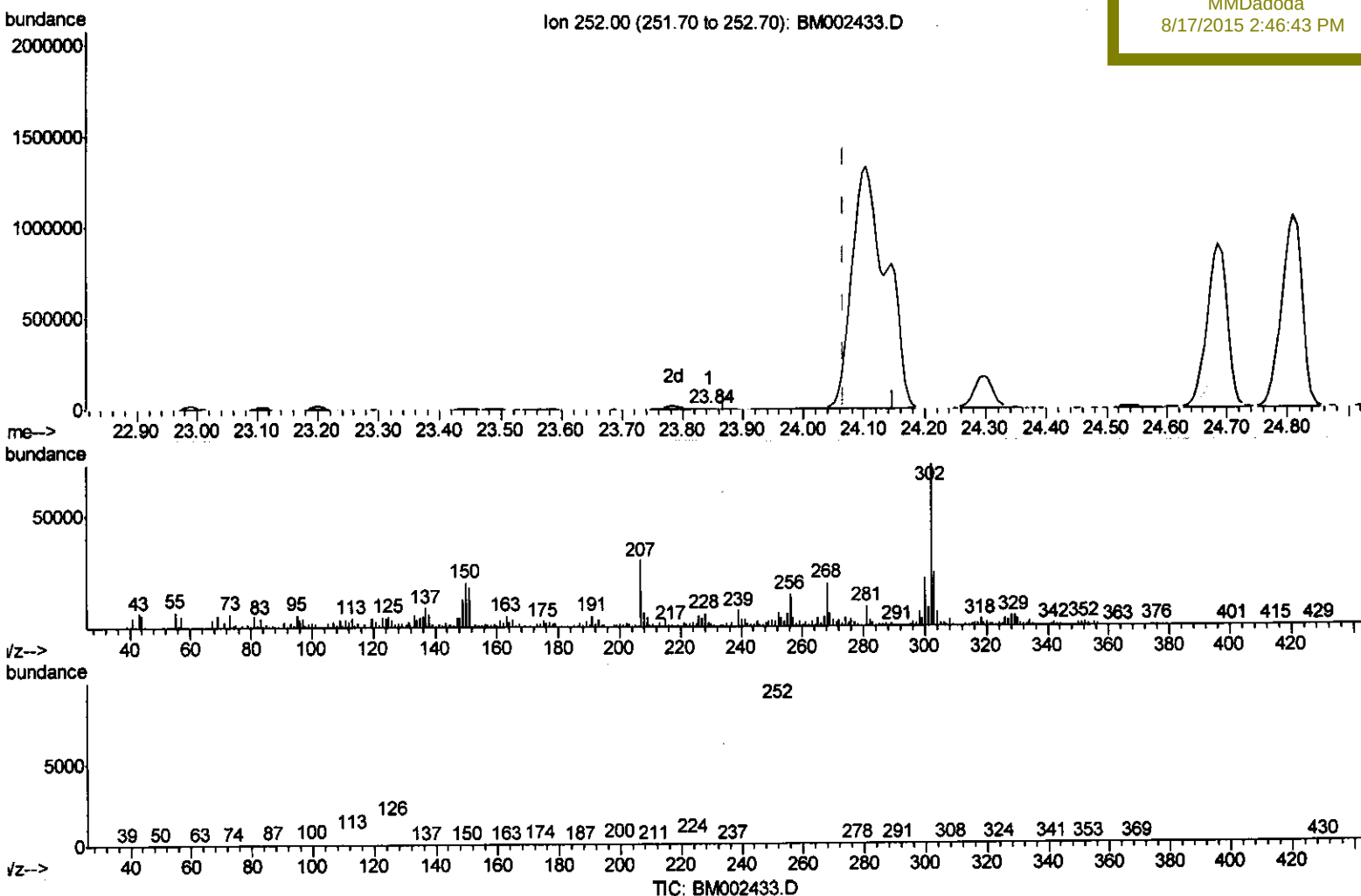
Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
 Data File : BM002433.D
 Acq On : 15 Aug 2015 20:14
 Operator : UM/IZ
 Sample : G3219-12MS
 Misc :
 ALS Vial : 39 Sample Multiplier: 1

Quant Time: Aug 17 05:50:20 2015
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 OLast Update : Mon Aug 17 05:12:59 2015
 Response via : Initial Calibration

Instrument :
 BNA_M
 ClientSampleId :
 D9DA4MS

Manual Integrations
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(23) Benzo(b)fluoranthene

23.845min (-0.223) 0.47ng/ul

response 14263

Ion	Exp%	Act%
252.00	100	100
253.00	21.70	62.74#
125.00	12.50	72.02#
0.00	0.00	0.00

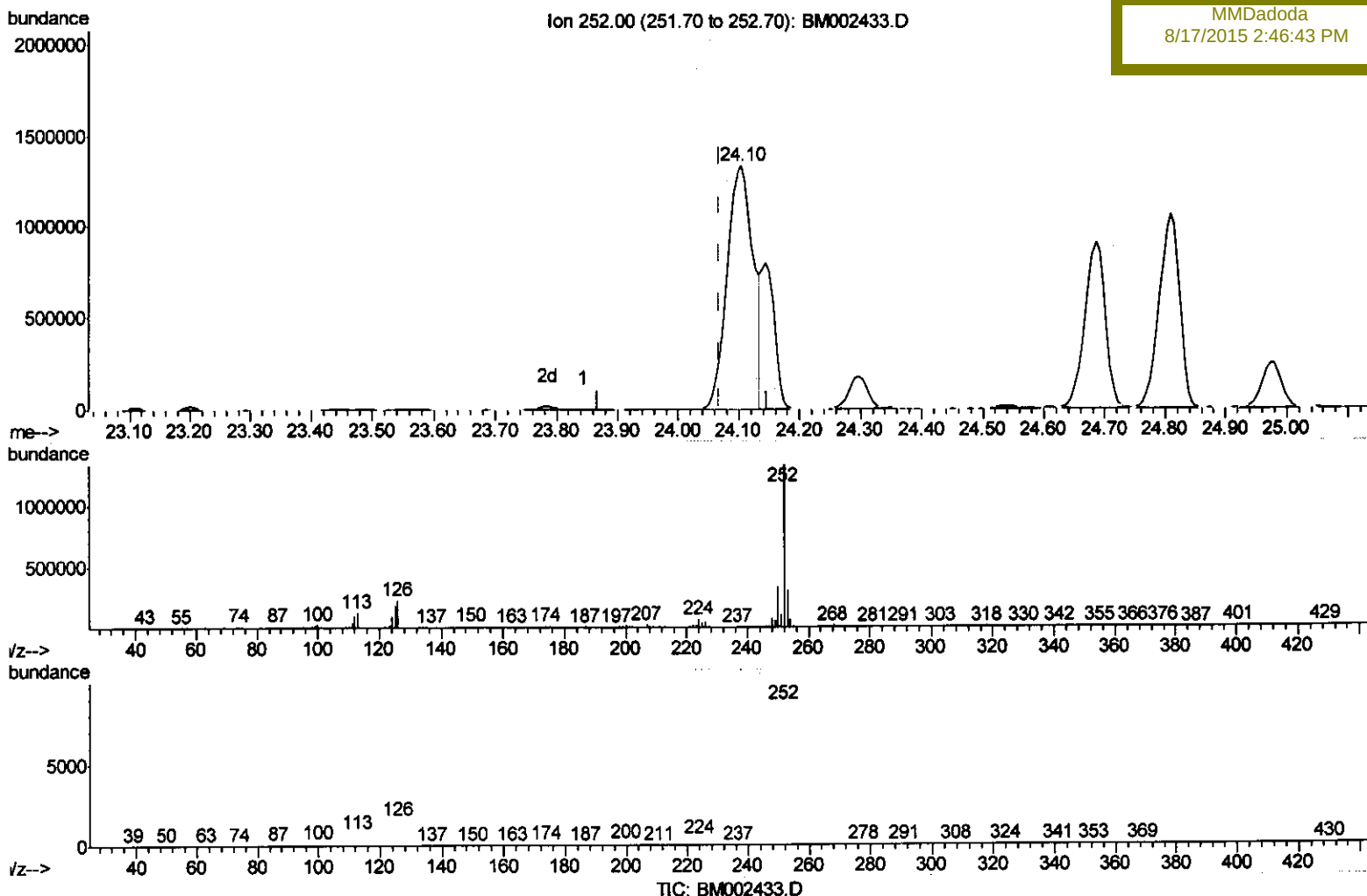
Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
 Data File : BM002433.D
 Acq On : 15 Aug 2015 20:14
 Operator : UM/IZ
 Sample : G3219-12MS
 Misc :
 ALS Vial : 39 Sample Multiplier: 1

Quant Time: Aug 17 05:50:20 2015
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Mon Aug 17 05:12:59 2015
 Response via : Initial Calibration

Instrument :
 BNA_M
 Client Sampled :
 D9DA4MS

Manual Integrations
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(23) Benzo(b)fluoranthene

24.103min (+0.036) 131.66ng/ul m

response 4010480

Ion	Exp%	Act%
252.00	100	100
253.00	21.70	22.64
125.00	12.50	13.84
0.00	0.00	0.00

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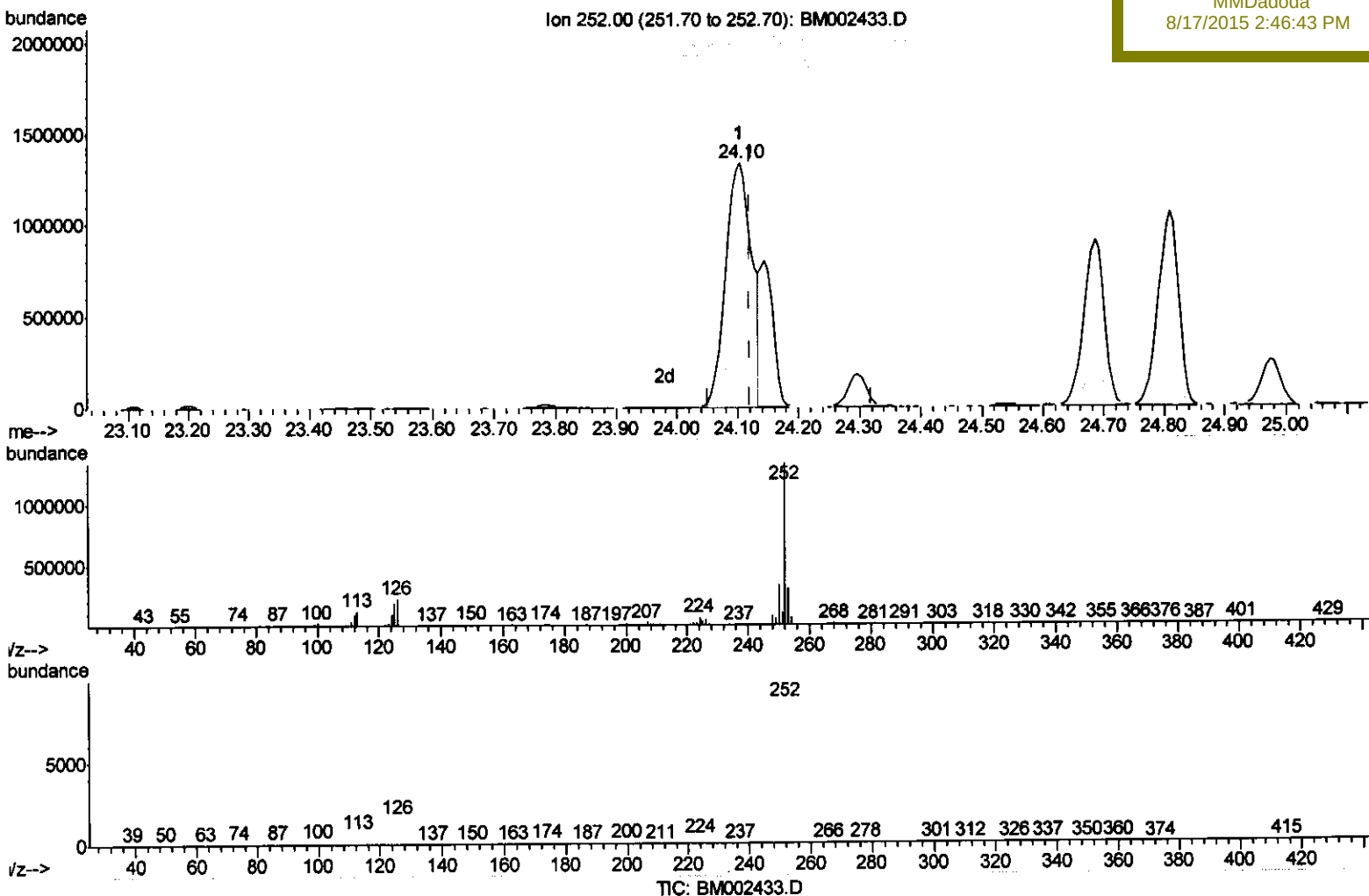
Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
 Data File : BM002433.D
 Acq On : 15 Aug 2015 20:14
 Operator : UM/IZ
 Sample : G3219-12MS
 Misc :
 ALS Vial : 39 Sample Multiplier: 1

Quant Time: Aug 17 05:50:20 2015
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Mon Aug 17 05:12:59 2015
 Response via : Initial Calibration

Instrument :
 BNA_M
 ClientSampleId :
 D9DA4MS

Manual Integrations
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(24) Benzo(k)fluoranthene

24.103min (-0.017) 138.36ng/ul

response 3994022

Ion	Exp%	Act%
252.00	100	100
253.00	22.20	22.64
125.00	12.30	13.84
0.00	0.00	0.00

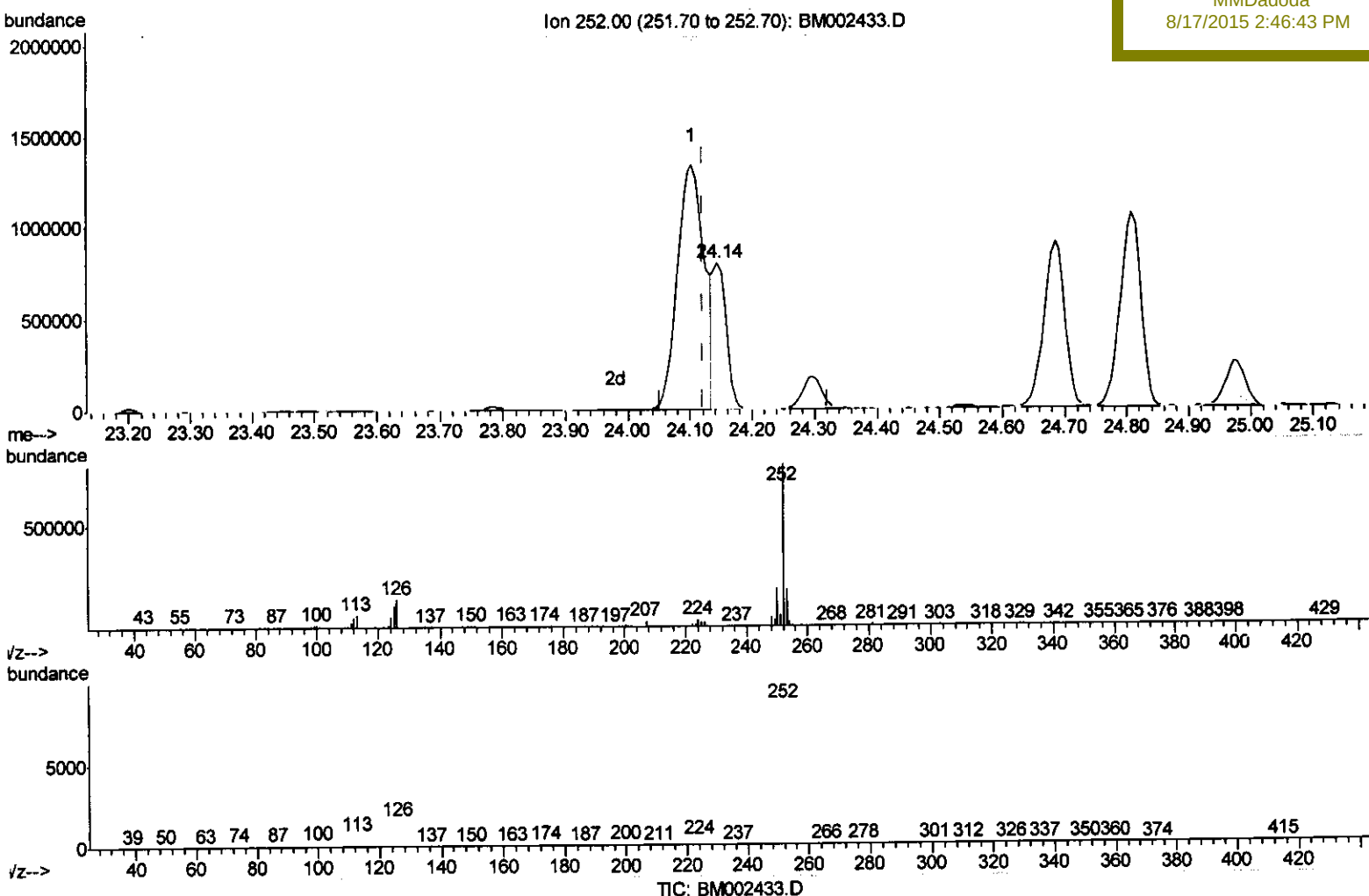
Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
 Data File : BM002433.D
 Acq On : 15 Aug 2015 20:14
 Operator : UM/IZ
 Sample : G3219-12MS
 Misc :
 ALS Vial : 39 Sample Multiplier: 1

Quant Time: Aug 17 05:50:20 2015
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Mon Aug 17 05:12:59 2015
 Response via : Initial Calibration

Instrument :
 BNA_M
 ClientSampleId :
 D9DA4MS

Manual Integrations
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(24) Benzo(k)fluoranthene

24.145min (+0.024) 41.76ng/ul m

response 1205327

Ion	Exp%	Act%
252.00	100	100
253.00	22.20	22.84
125.00	12.30	13.03
0.00	0.00	0.00

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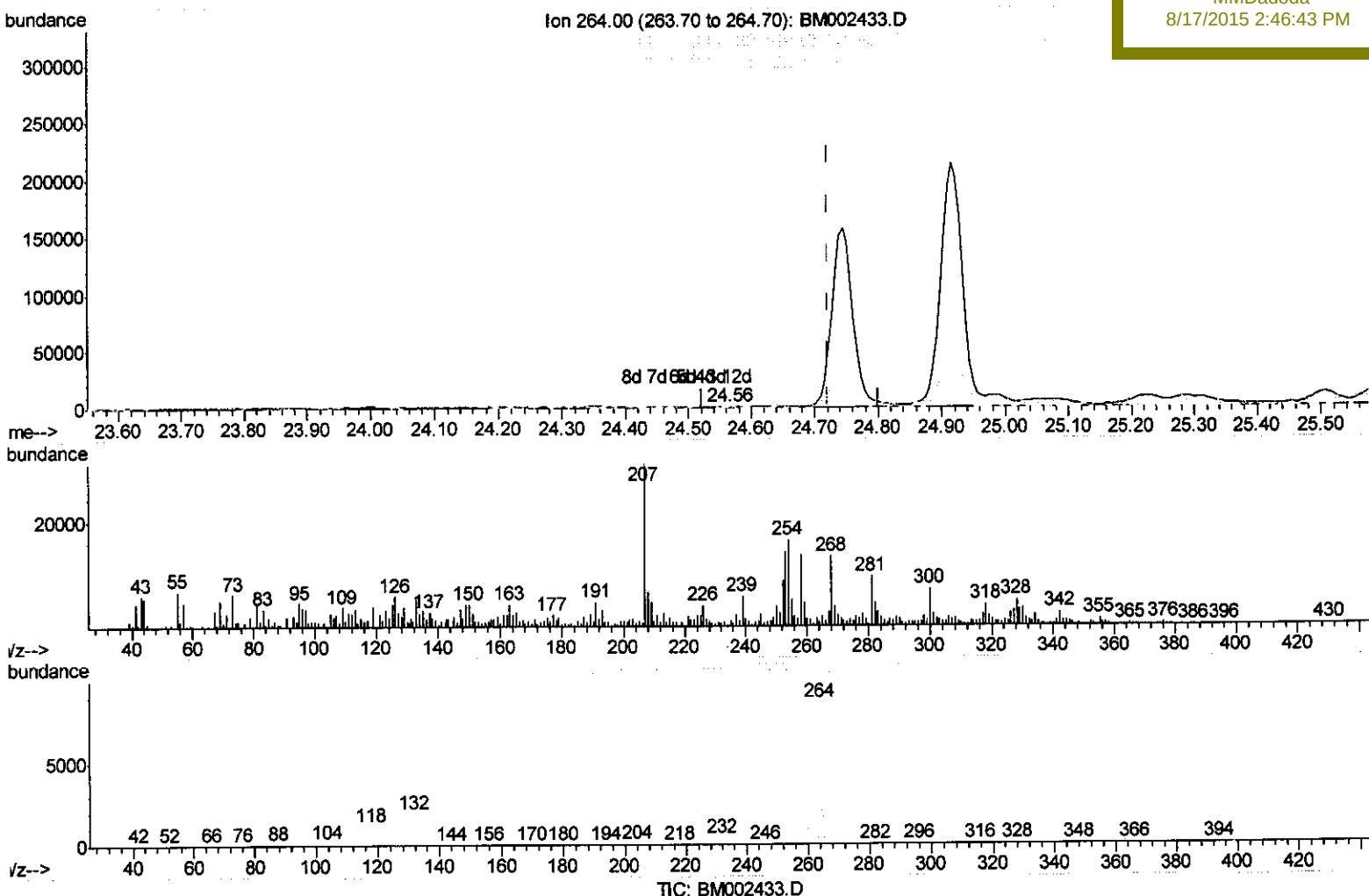
Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
 Data File : BM002433.D
 Acq On : 15 Aug 2015 20:14
 Operator : UM/IZ
 Sample : G3219-12MS
 Misc :
 ALS Vial : 39 Sample Multiplier: 1

Quant Time: Aug 17 05:50:20 2015
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Mon Aug 17 05:12:59 2015
 Response via : Initial Calibration

Instrument :
 BNA_M
 ClientSampleId :
 D9DA4MS

Manual Integrations
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(25) Benzo(a)pyrene-d12 (S)

24.562min (-0.159) 0.01ng/ul

response 307

Ion	Exp%	Act%
264.00	100	100
132.00	20.40	131.79#
118.00	11.60	0.00#
0.00	0.00	0.00

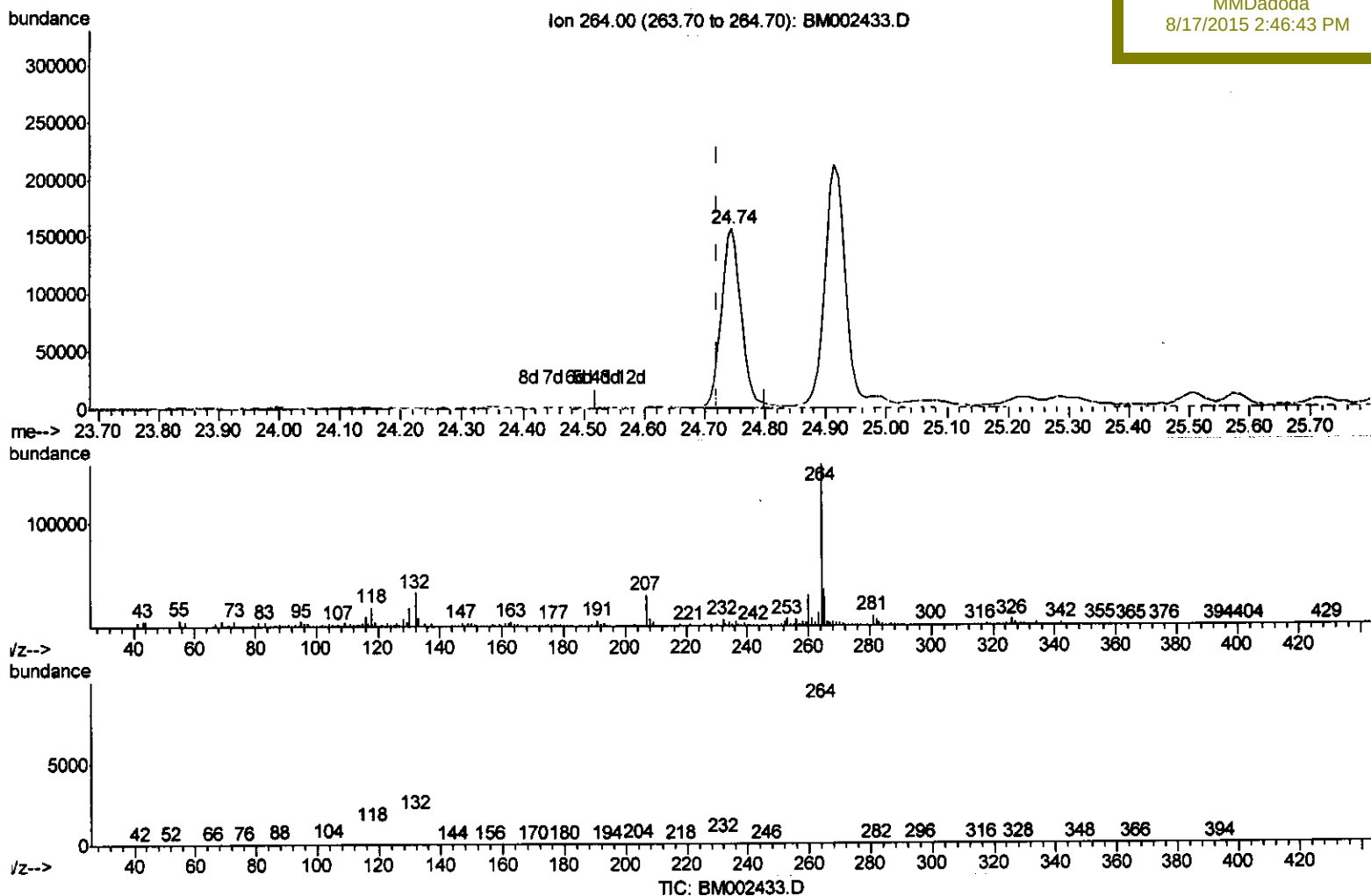
Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
 Data File : BM002433.D
 Acq On : 15 Aug 2015 20:14
 Operator : UM/IZ
 Sample : G3219-12MS
 Misc :
 ALS Vial : 39 Sample Multiplier: 1

Quant Time: Aug 17 05:50:20 2015
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Mon Aug 17 05:12:59 2015
 Response via : Initial Calibration

Instrument :
 BNA_M
 ClientSampleId :
 D9DA4MS

Manual Integrations
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(25) Benzo(a)pyrene-d12 (S)

24.745min (+0.024) 13.55ng/ul m

response 358628

Ion	Exp%	Act%
264.00	100	100
132.00	20.40	21.30
118.00	11.60	12.05
0.00	0.00	0.00

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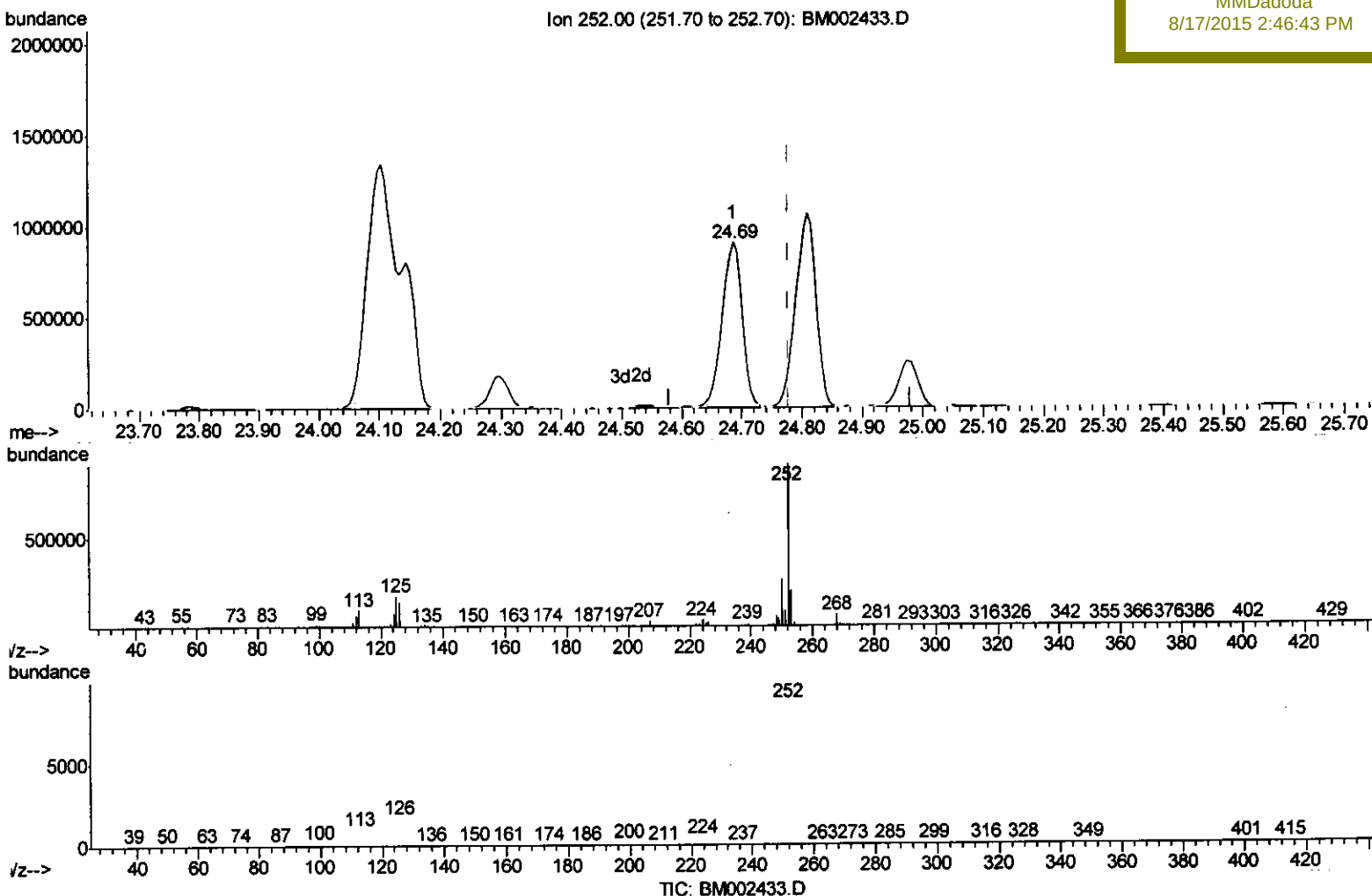
Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
 Data File : BM002433.D
 Acq On : 15 Aug 2015 20:14
 Operator : UM/IZ
 Sample : G3219-12MS
 Misc :
 ALS Vial : 39 Sample Multiplier: 1

Quant Time: Aug 17 05:50:20 2015
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Mon Aug 17 05:12:59 2015
 Response via : Initial Calibration

Instrument :
 BNA_M
 ClientSampleId :
 D9DA4MS

Manual Integrations
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(26) Benzo(a)pyrene (C)

24.686min (-0.094) 72.83ng/ui

response 2118935

Ion	Exp%	Act%
252.00	100	100
253.00	22.00	22.07
125.00	13.40	18.54#
0.00	0.00	0.00

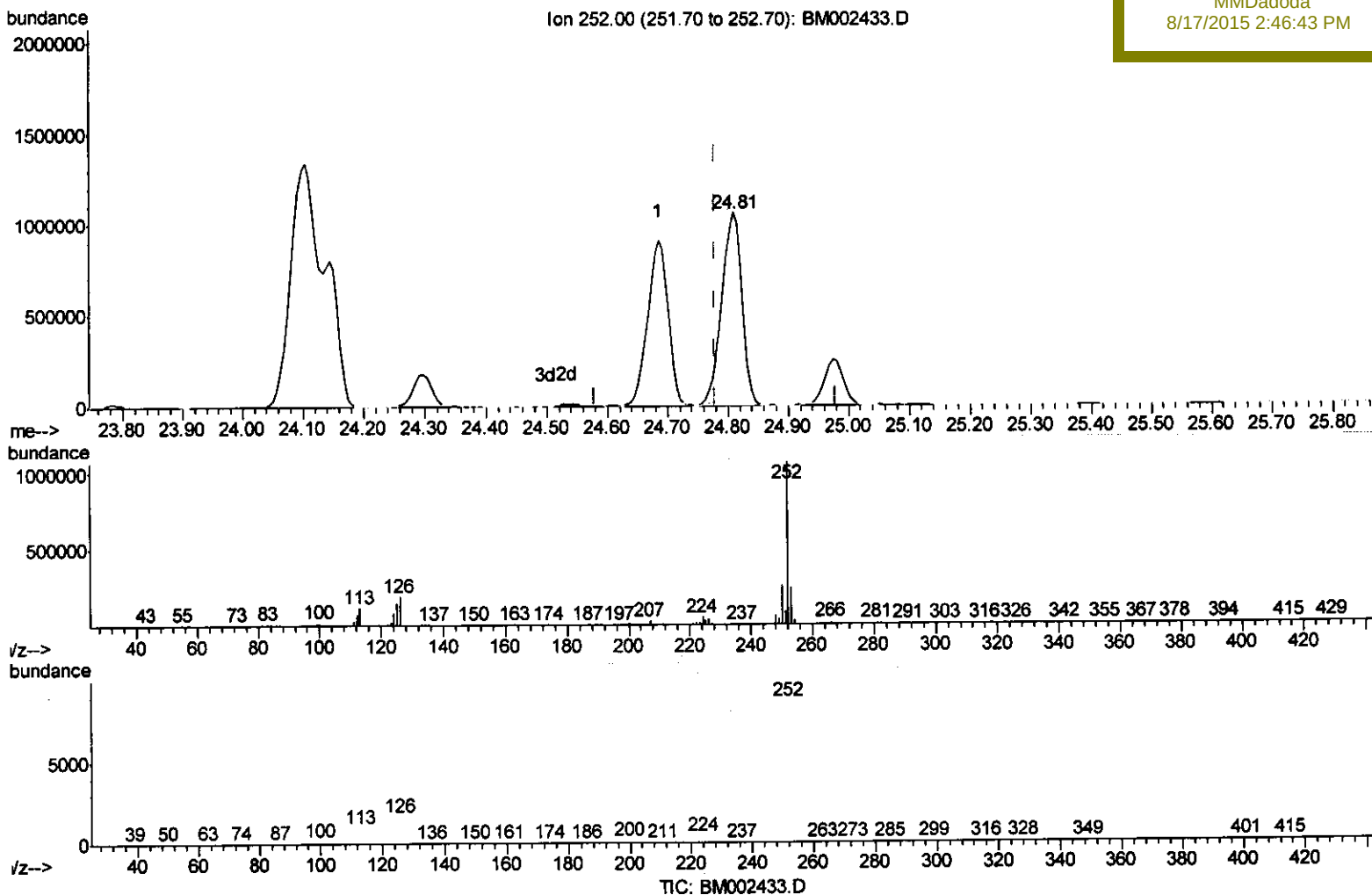
Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
 Data File : BM002433.D
 Acq On : 15 Aug 2015 20:14
 Operator : UM/IZ
 Sample : G3219-12MS
 Misc :
 ALS Vial : 39 Sample Multiplier: 1

Quant Time: Aug 17 05:50:20 2015
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Mon Aug 17 05:12:59 2015
 Response via : Initial Calibration

Instrument :
 BNA_M
 ClientSampleId :
 D9DA4MS

Manual Integrations
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(26) Benzo(a)pyrene (C)

24.809min (+0.030) 85.98ng/ul m

response 2501533

Ion	Exp%	Act%
252.00	100	100
253.00	22.00	22.39
125.00	13.40	14.09
0.00	0.00	0.00

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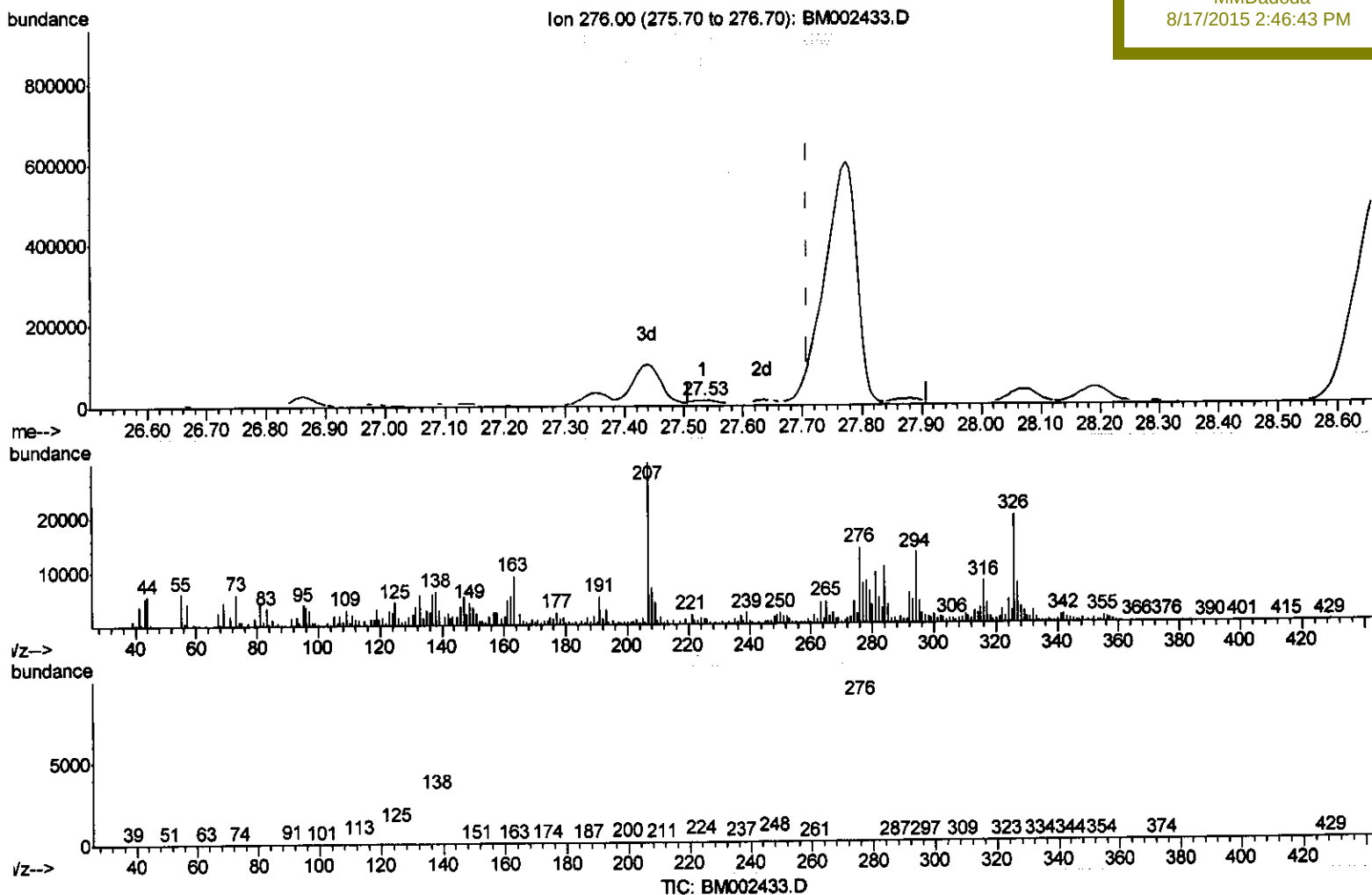
Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
 Data File : BM002433.D
 Acq On : 15 Aug 2015 20:14
 Operator : UM/IZ
 Sample : G3219-12MS
 Misc :
 ALS Vial : 39 Sample Multiplier: 1

Quant Time: Aug 17 05:50:20 2015
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Mon Aug 17 05:12:59 2015
 Response via : Initial Calibration

Instrument :
 BNA_M
 ClientSampleId :
 D9DA4MS

Manual Integrations
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(27) Indeno(1,2,3-cd)pyrene

27.533min (-0.176) 0.73ng/ui

response 24364

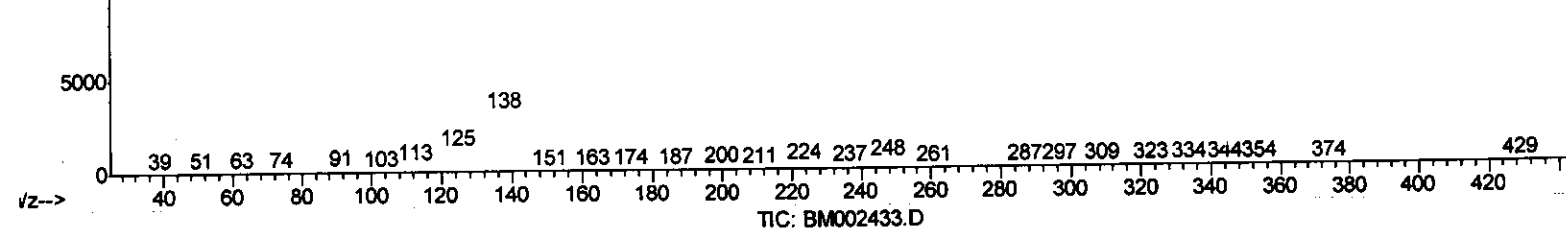
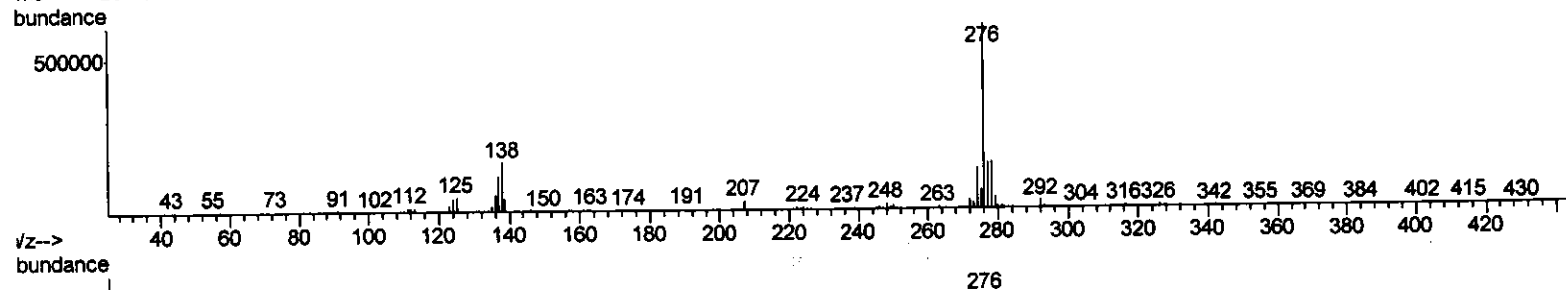
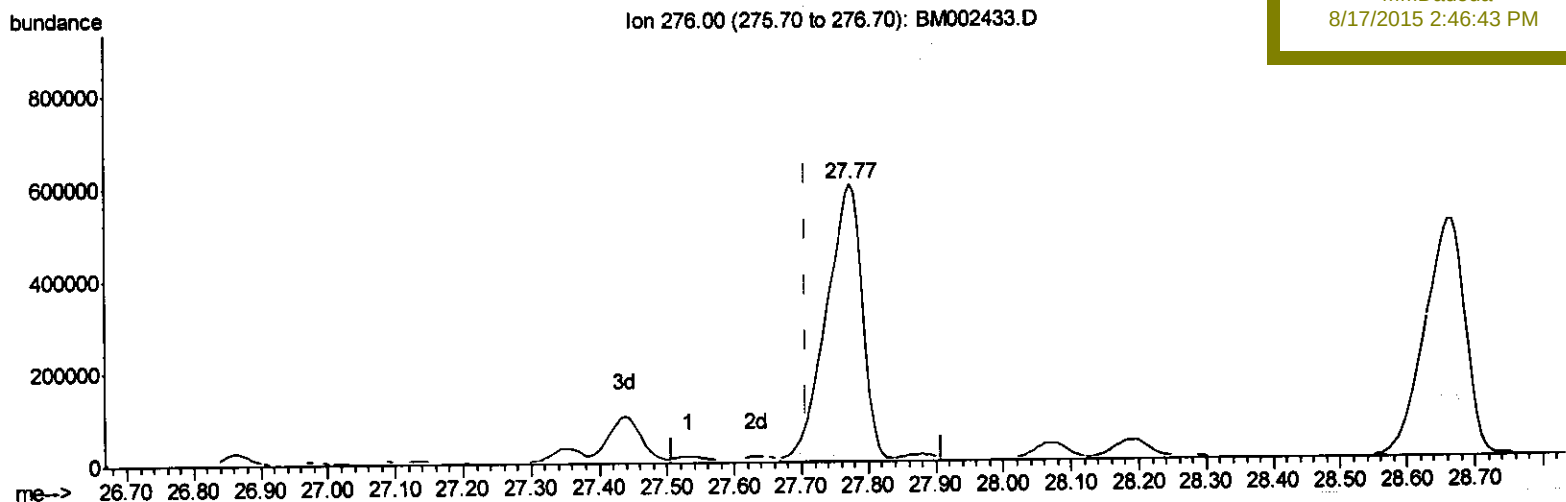
Ion	Exp%	Act%
276.00	100	100
138.00	31.60	45.84#
277.00	25.20	54.04#
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
 Data File : BM002433.D
 Acq On : 15 Aug 2015 20:14
 Operator : UM/IZ
 Sample : G3219-12MS
 Misc :
 ALS Vial : 39 Sample Multiplier: 1

Quant Time: Aug 17 05:50:20 2015
 Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Mon Aug 17 05:12:59 2015
 Response via : Initial Calibration

Instrument :
 BNA_M
 ClientSampleId :
 D9DA4MS

Manual Integrations
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(27) Indeno(1,2,3-cd)pyrene

27.774min (+0.065) 67.30ng/ul m } *U.M.*
08/18/15

response 2251967

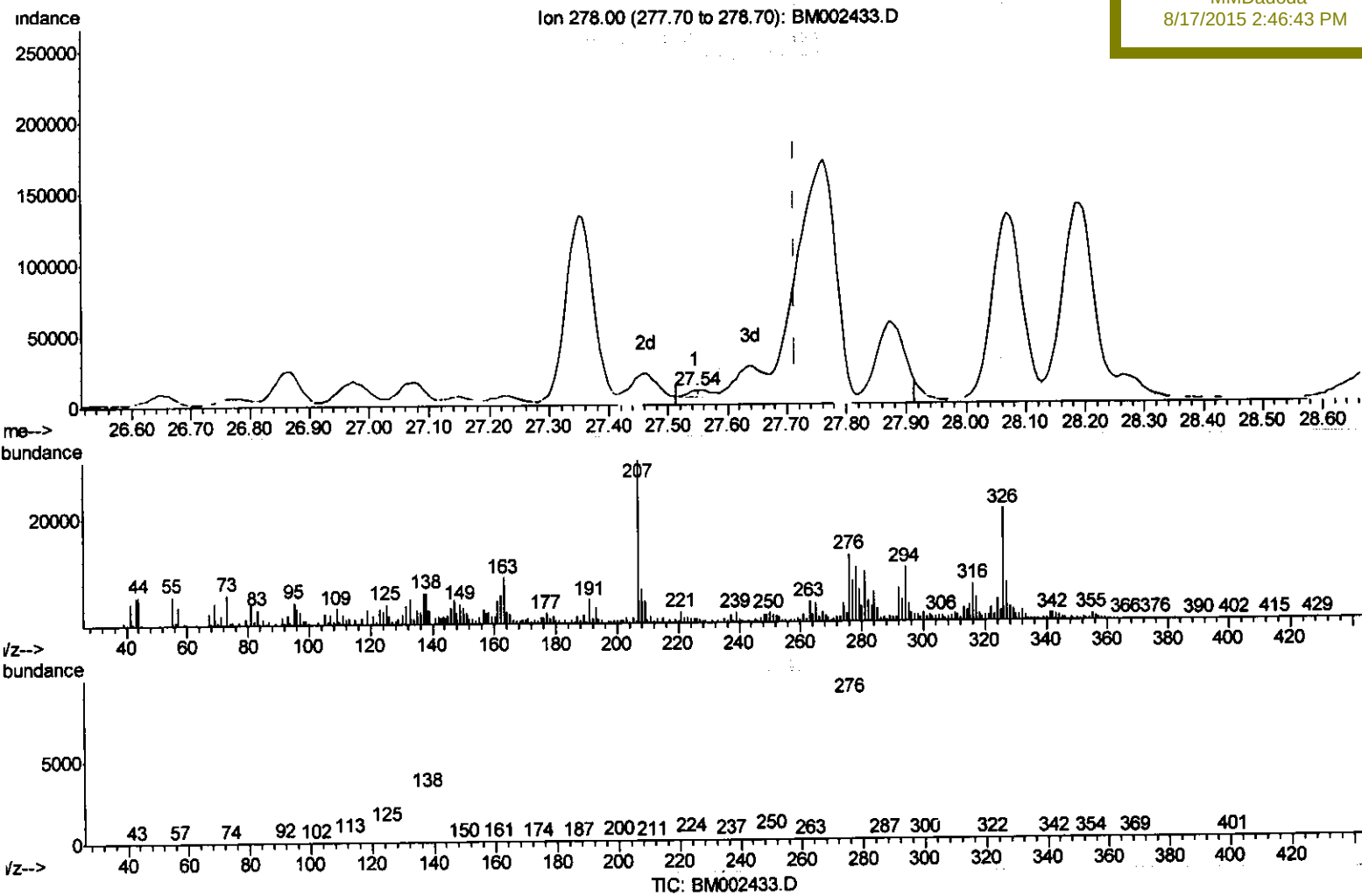
Ion	Exp%	Act%
276.00	100	100
138.00	31.60	26.58
277.00	25.20	24.71
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
Data File : BM002433.D
Acq On : 15 Aug 2015 20:14
Operator : UM/IZ
Sample : G3219-12MS
Misc :
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Aug 17 05:50:20 2015
Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Aug 17 05:12:59 2015
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
D9DA4MS

Manual Integrations
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(28) Dibenzo(a,h)anthracene

27.544min (-0.170) 0.21ng/ul

response 5770

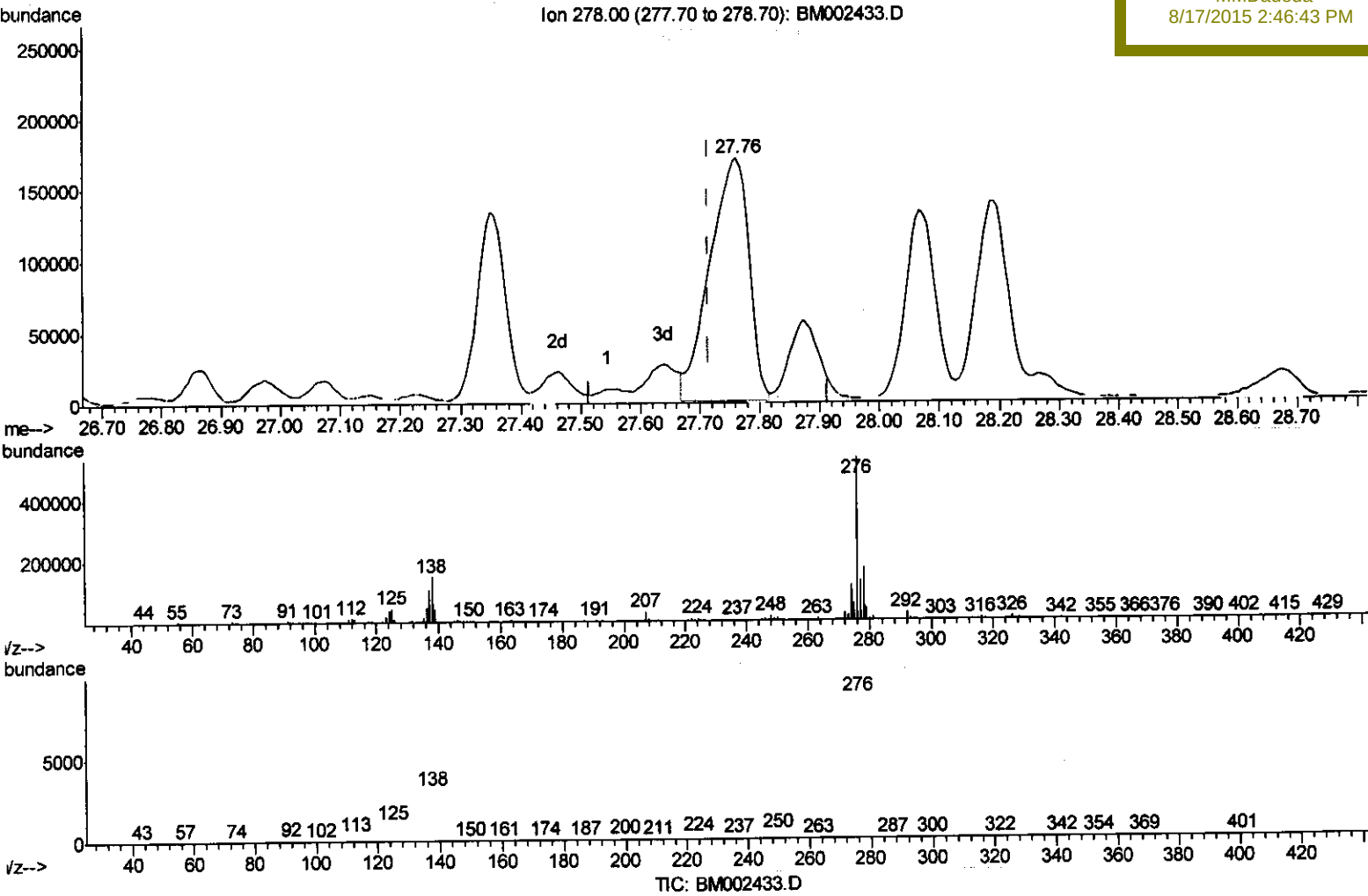
Ion	Exp%	Act%
278.00	100	100
139.00	20.60	56.08#
279.00	23.50	60.80#
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
Data File : BM002433.D
Acq On : 15 Aug 2015 20:14
Operator : UM/IZ
Sample : G3219-12MS
Misc :
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Aug 17 05:50:20 2015
Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Aug 17 05:12:59 2015
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
D9DA4MS

Manual Integrations
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(28) Dibenzo(a,h)anthracene

27.762min (+0.047) 27.71ng/ul m > U.M.
response 775078 08/18/15

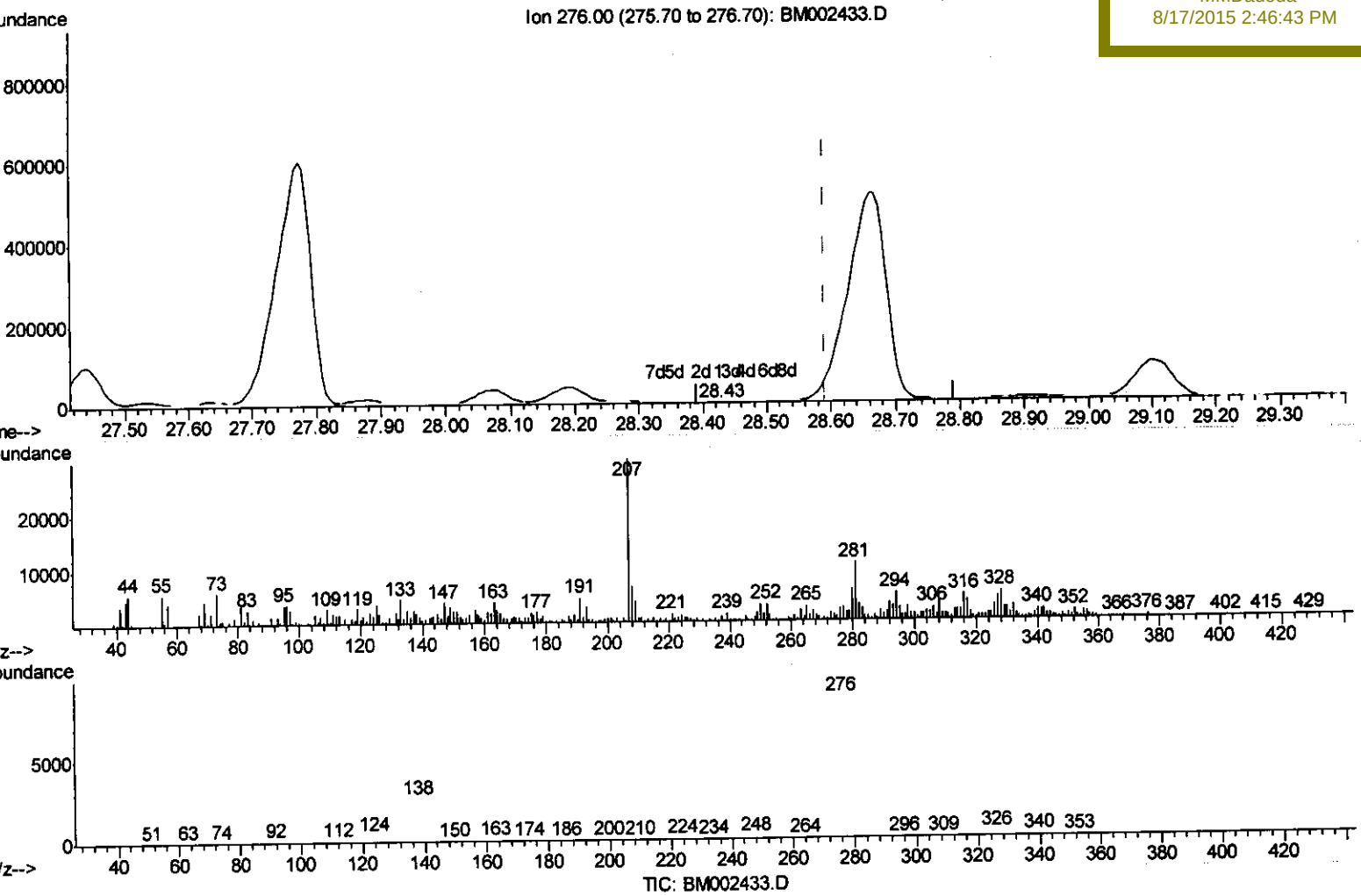
Ion	Exp%	Act%
278.00	100	100
139.00	20.60	24.64
279.00	23.50	24.69
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
Data File : BM002433.D
Acq On : 15 Aug 2015 20:14
Operator : UM/IZ
Sample : G3219-12MS
Misc :
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Aug 17 05:50:20 2015
Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Aug 17 05:12:59 2015
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
D9DA4MS

Manual Integrations
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(29) Benzo(g,h,i)perylene

28.427min (-0.164) 0.01ng/ul

response 335

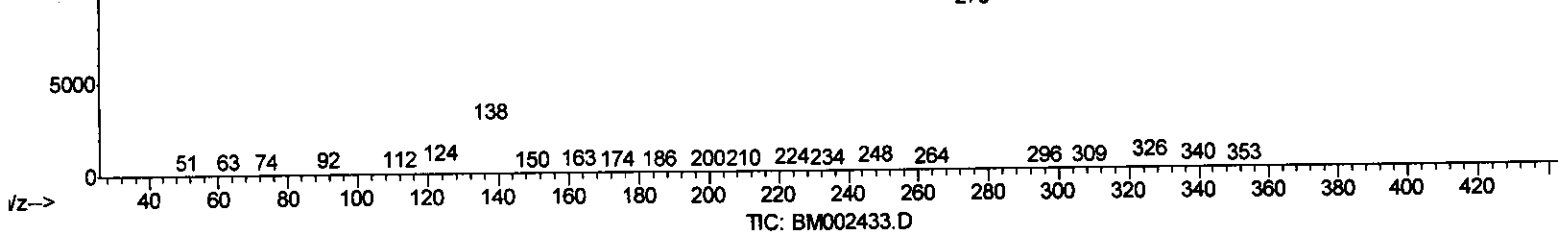
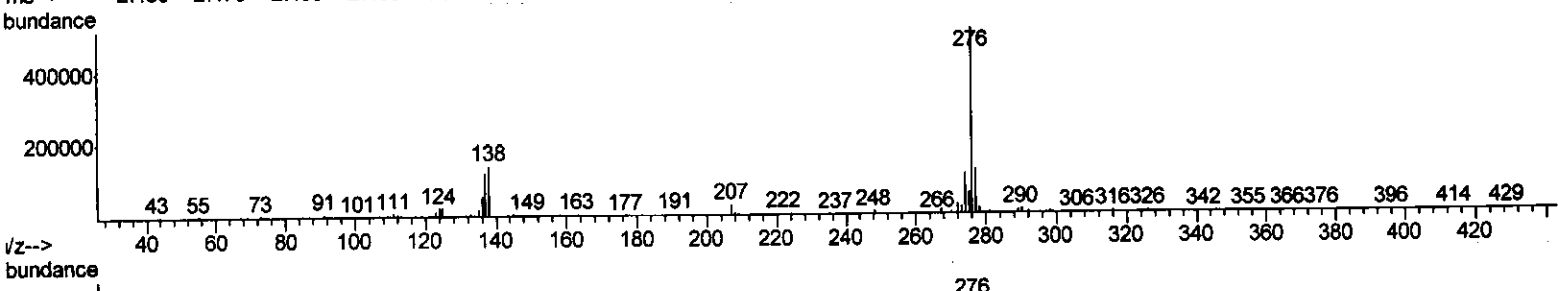
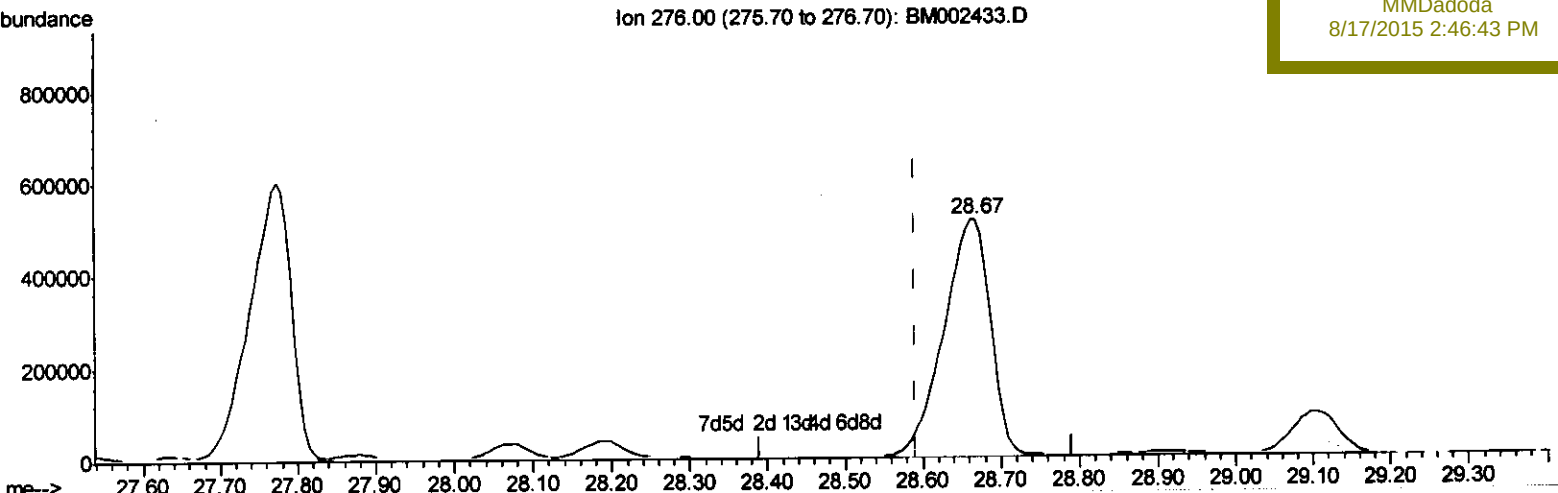
Ion	Exp%	Act%
276.00	100	100
138.00	26.30	87.39#
277.00	24.00	108.56#
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
Data File : BM002433.D
Acq On : 15 Aug 2015 20:14
Operator : UM/IZ
Sample : G3219-12MS
Misc :
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Aug 17 05:50:20 2015
Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
Quant Title : SVOA CALIBRATION
QLast Update : Mon Aug 17 05:12:59 2015
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
D9DA4MS

Manual Integrations
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(29) Benzo(g,h,i)perylene

28.668min (+0.077) 76.54ng/ul m > U.M.
08/18/15

response 2131727

Ion	Exp%	Act%
276.00	100	100
138.00	26.30	26.94
277.00	24.00	24.27
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA M\DATA\BM081415\
Data File : BM002433.D
Acq On : 15 Aug 2015 20:14
Operator : UM/IZ
Sample : G3219-12MS
Misc :
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Aug 17 05:57:17 2015
Quant Method : Z:\HPCHEM1\BNA M\METHODS\SOM02.2-EPA-BM081415MA.M
Quant Title : SVOA CALIBRATION
Last Update : Mon Aug 17 05:12:59 2015
Response via : Initial Calibration

Instrument :
BNA_M
Client Sampled :
D9DA4MS

Manual Integrations
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Internal Standards	R.T.	Q Ion	Response	Conc	Units	Dev (Min)
1) 1,4-Dichlorobenzene-d4	8.87	152	153689	20.00	ng/ul	0.00
2) Naphthalene-d8	11.75	136	721465	20.00	ng/ul	0.00
6) Acenaphthene-d10	15.45	164	380957	20.00	ng/ul	0.00
12) Phenanthrene-d10	18.16	188	772267	20.00	ng/ul	0.00
17) Chrysene-d12	22.24	240	535555	20.00	ng/ul	0.00
22) Perylene-d12	24.92	264	503850m	20.00	ng/ul	0.02

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System Monitoring Compounds	R.T.	Q Ion	Response	Conc	Units	Dev (Min)
7) Acenaphthylene-d8	15.16	160	611912	15.71	ng/ul	0.00
10) Fluorene-d10	16.42	176	412334	15.07	ng/ul	0.00
14) Anthracene-d10	18.26	188	583289	15.66	ng/ul	0.00
18) Pvrene-d10	20.47	212	497888	20.97	ng/ul	0.00
25) Benzo(a)pyrene-d12	24.74	264	358628m	13.55	ng/ul	0.02

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Target Compounds	R.T.	Q Ion	Response	Conc	Units	Ovalue
9) Acenaphthene	15.52	153	393715	14.66	ng/ul	99
13) Phenanthrene	18.20	178	338263	7.59	ng/ul	100
15) Anthracene	18.29	178	69751	1.54	ng/ul	98
16) Fluoranthene	20.15	202	1437906	28.48	ng/ul	99
19) Pvrene	20.50	202	1997018	63.65	ng/ul	99
20) Benzo(a)anthracene	22.22	228	1633714	51.01	ng/ul	98
21) Chrysene	22.29	228	2025973	67.63	ng/ul	98
23) Benzo(b)fluoranthene	24.10	252	4010480m	131.66	ng/ul	
24) Benzo(k)fluoranthene	24.14	252	1205327m	41.76	ng/ul	
26) Benzo(a)pyrene	24.81	252	2501533m	85.98	ng/ul	
27) Indeno(1,2,3-cd)pyrene	27.77	276	2251967m	67.30	ng/ul	
28) Dibenzo(a,h)anthracene	27.76	278	775078m	27.71	ng/ul	
29) Benzo(a,h,i)perylene	28.67	276	2131727m	76.54	ng/ul	

U.M.
08/18/15

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