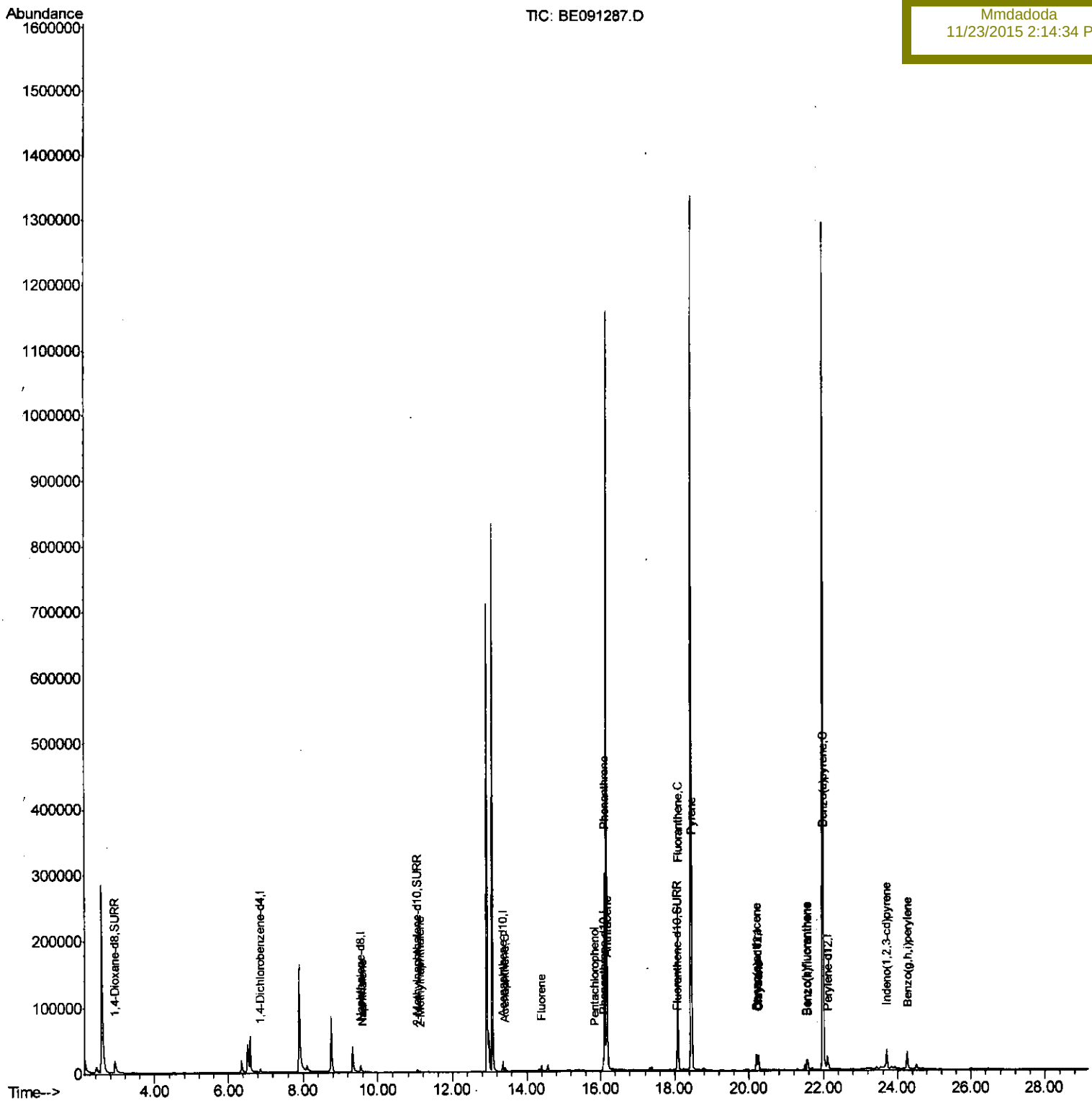
Data Path : Z:\HPCHEM1\BNA E\DATA\BE112215\
Data File : BE091287.D
Acq On : 21 Nov 2015 21:43
Operator : UM/NP
Sample : G4345-23
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 22 02:27:26 2015
Quant Method : Z:\HPCHEM1\BNA E\METHODS\SOM02.2-EPA-SIM-BE102715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sun Nov 22 01:59:17 2015
Response via : Initial Calibration

Instrument :
BNA_E
ClientSampleId :
A4J68

Manual Integrations APPROVED
Mmdadoda
11/23/2015 2:14:34 PM

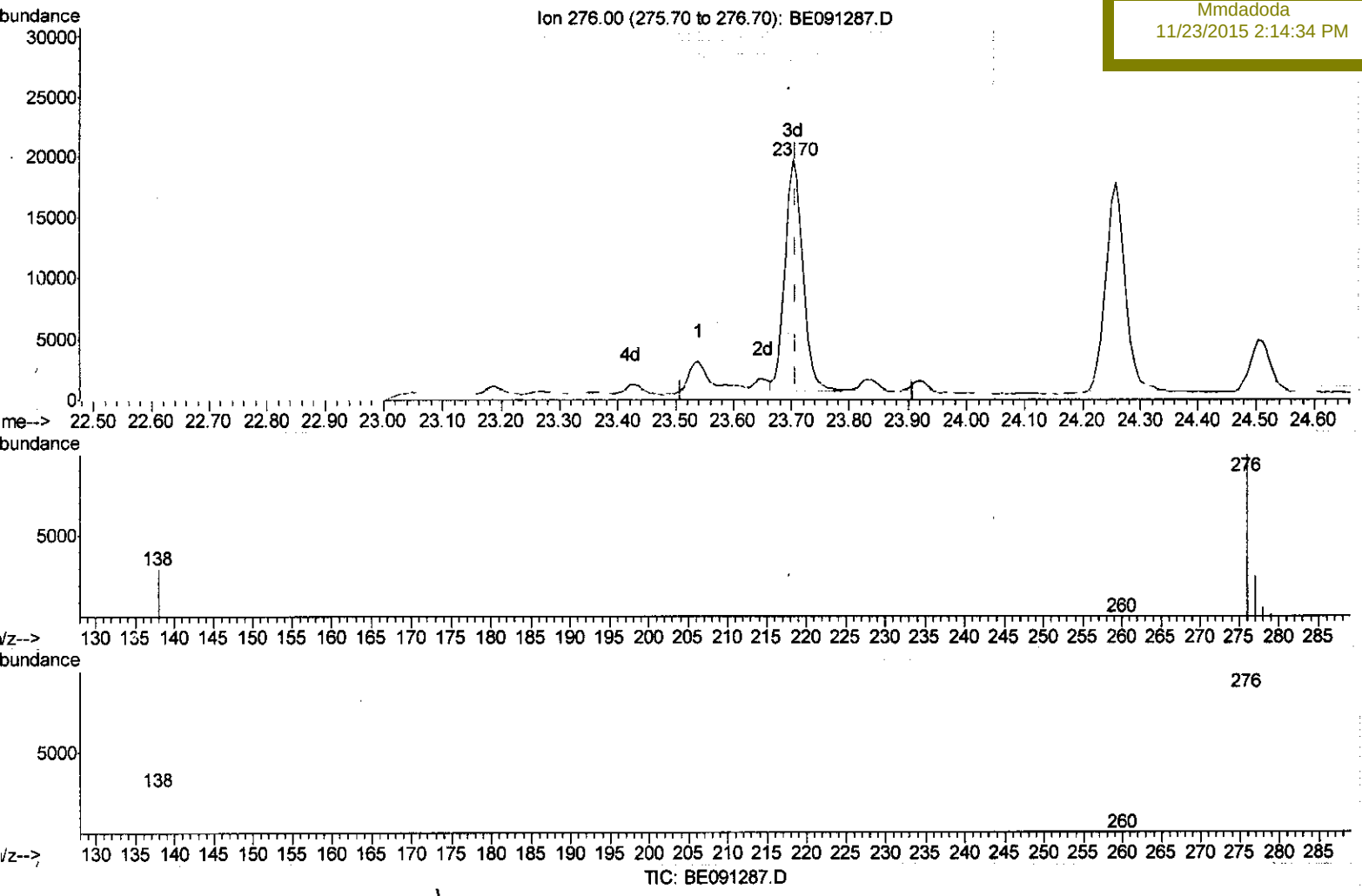


Data Path : Z:\HPCHEM1\BNA_E\DATA\BE112215\
Data File : BE091287.D
Acq On : 21 Nov 2015 21:43
Operator : UM/NP
Sample : G4345-23
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 22 02:26:10 2015
Quant Method : Z:\HPCHEM1\BNA_E\METHODS\SOM02.2-EPA-SIM-BE102715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sun Nov 22 01:59:17 2015
Response via : Initial Calibration

Instrument :
BNA_E
ClientSampleId :
A4J68

Manual Integrations APPROVED
Mmdadoda
11/23/2015 2:14:34 PM



(26) Indeno(1,2,3-cd)pyrene
23.703min (-0.006) 0.20ng/ul m
response 40147

U.M
11/25/2015

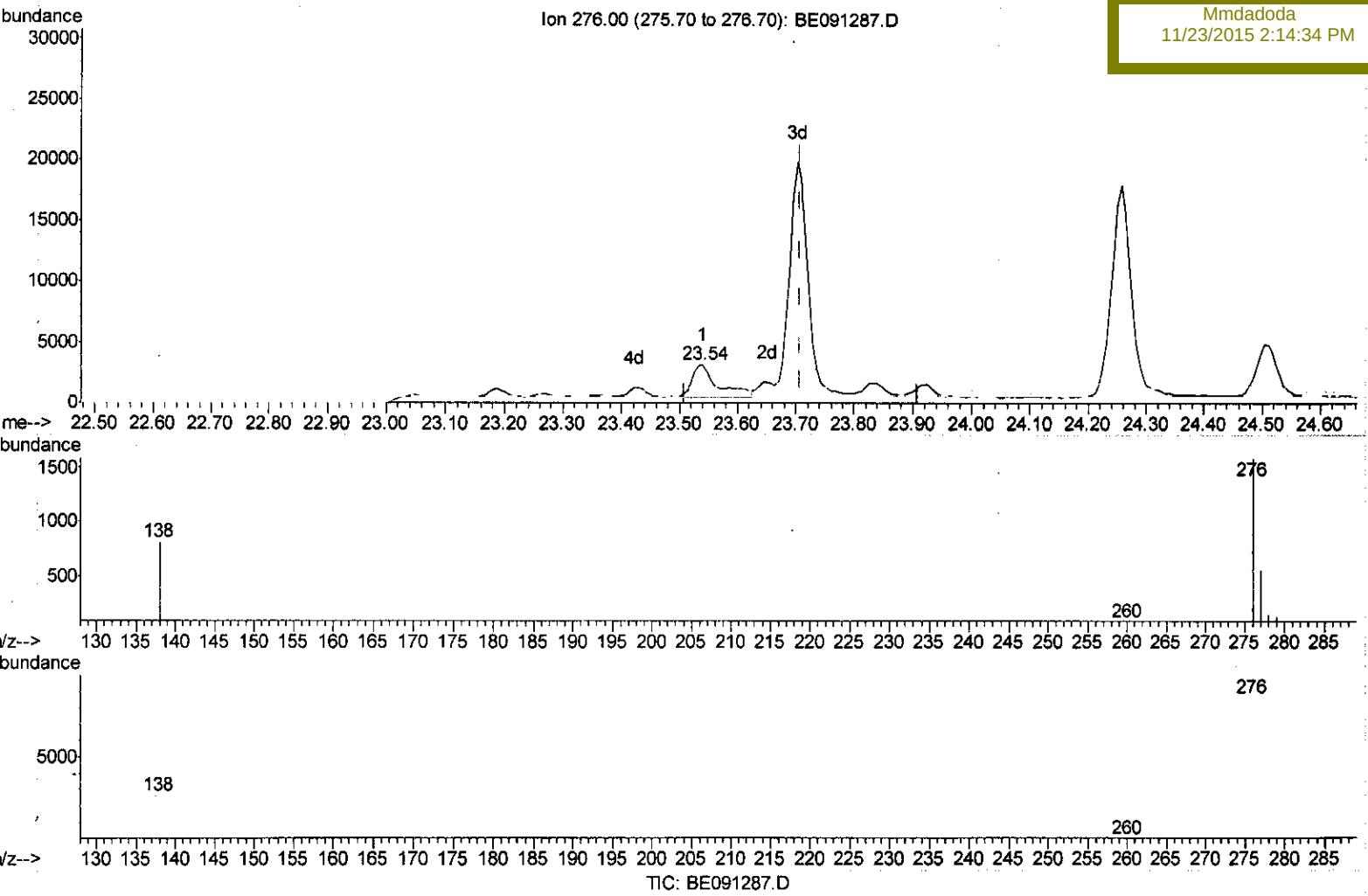
Ion	Exp%	Act%
276.00	100	100
138.00	34.40	4.57#
277.00	24.10	4.42#
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA_E\DATA\BE112215\
Data File : BE091287.D
Acq On : 21 Nov 2015 21:43
Operator : UM/NP
Sample : G4345-23
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 22 02:26:10 2015
Quant Method : Z:\HPCHEM1\BNA_E\METHODS\SOM02.2-EPA-SIM-BE102715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sun Nov 22 01:59:17 2015
Response via : Initial Calibration

Instrument :
BNA_E
ClientSampleId :
A4J68

Manual Integrations APPROVED
Mmdadoda
11/23/2015 2:14:34 PM



(26) Indeno(1,2,3-cd)pyrene

23.540min (-0.169) 0.04ng/ul

response 8395

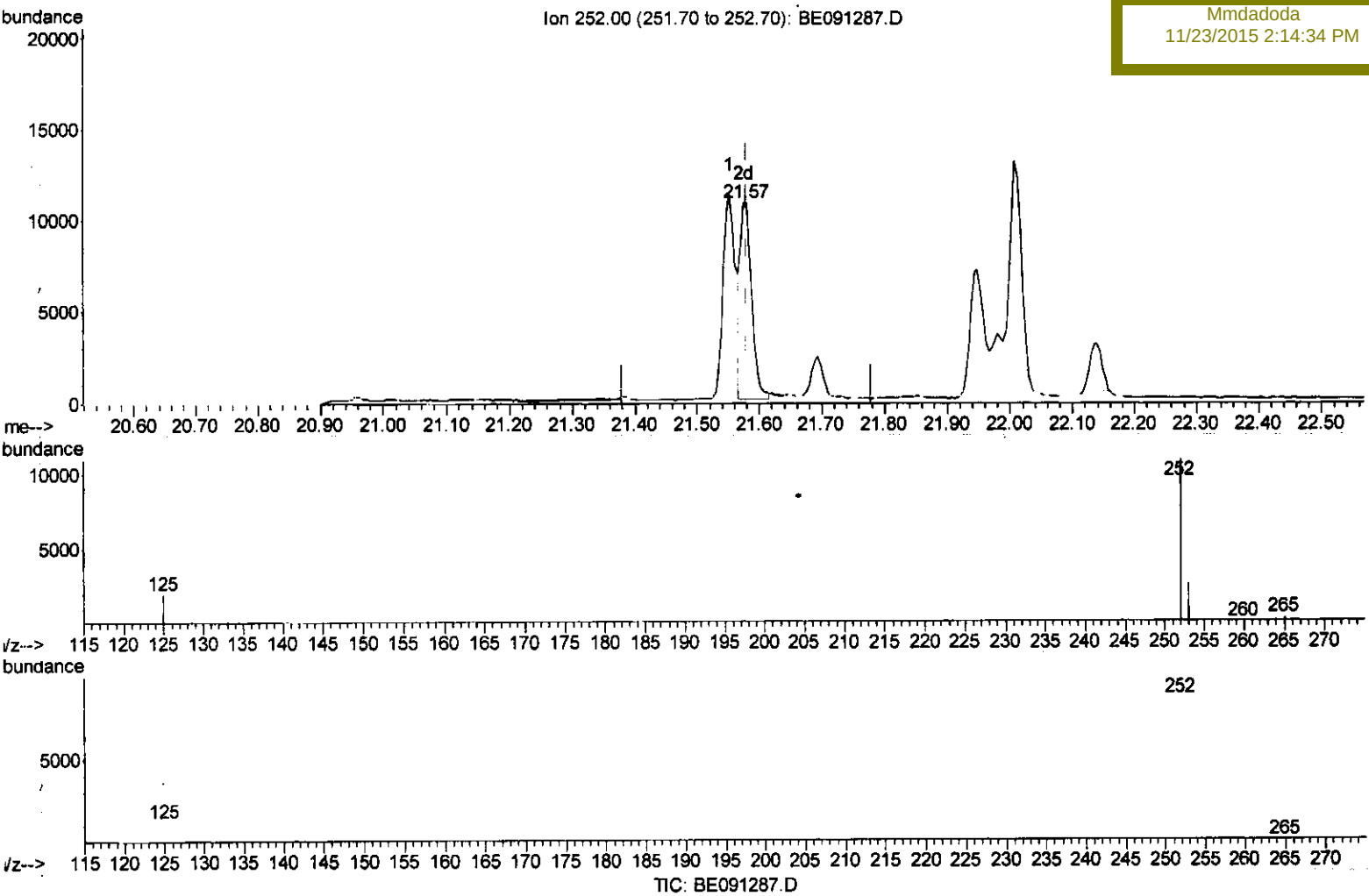
Ion	Exp%	Act%
276.00	100	100
138.00	34.40	21.85#
277.00	24.10	21.14
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA_E\DATA\BE112215\
Data File : BE091287.D
Acq On : 21 Nov 2015 21:43
Operator : UM/NP
Sample : G4345-23
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 22 02:26:10 2015
Quant Method : Z:\HPCHEM1\BNA_E\METHODS\SOM02.2-EPA-SIM-BE102715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sun Nov 22 01:59:17 2015
Response via : Initial Calibration

Instrument :
BNA_E
ClientSampleId :
A4J68

Manual Integrations APPROVED
Mmdadoda
11/23/2015 2:14:34 PM



(24) Benzo(k)fluoranthene

21.575min (-0.006) 0.26ng/ul m

response 13627

U.M
11/25/2015

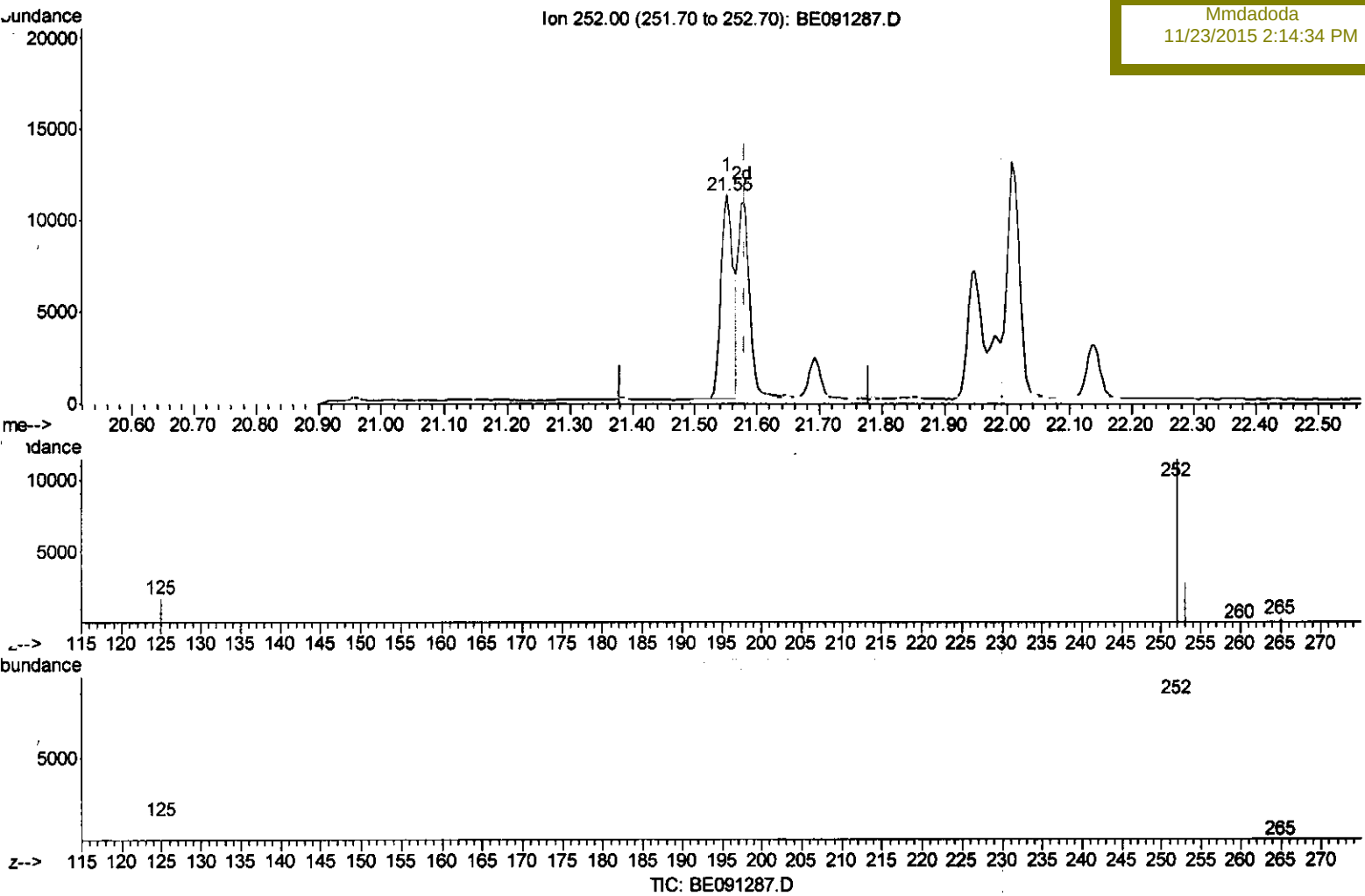
Ion	Exp%	Act%
252.00	100	100
253.00	26.00	23.92
125.00	15.30	18.08
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA_E\DATA\BE112215\
Data File : BE091287.D
Acq On : 21 Nov 2015 21:43
Operator : UM/NP
Sample : G4345-23
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 22 02:26:10 2015
Quant Method : Z:\HPCHEM1\BNA_E\METHODS\SOM02.2-EPA-SIM-BE102715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sun Nov 22 01:59:17 2015
Response via : Initial Calibration

Instrument :
BNA_E
ClientSampleId :
A4J68

Manual Integrations APPROVED
Mmdadoda
11/23/2015 2:14:34 PM



(24) Benzo(k)fluoranthene

21.552min (-0.029) 0.30ng/ul

response 15660

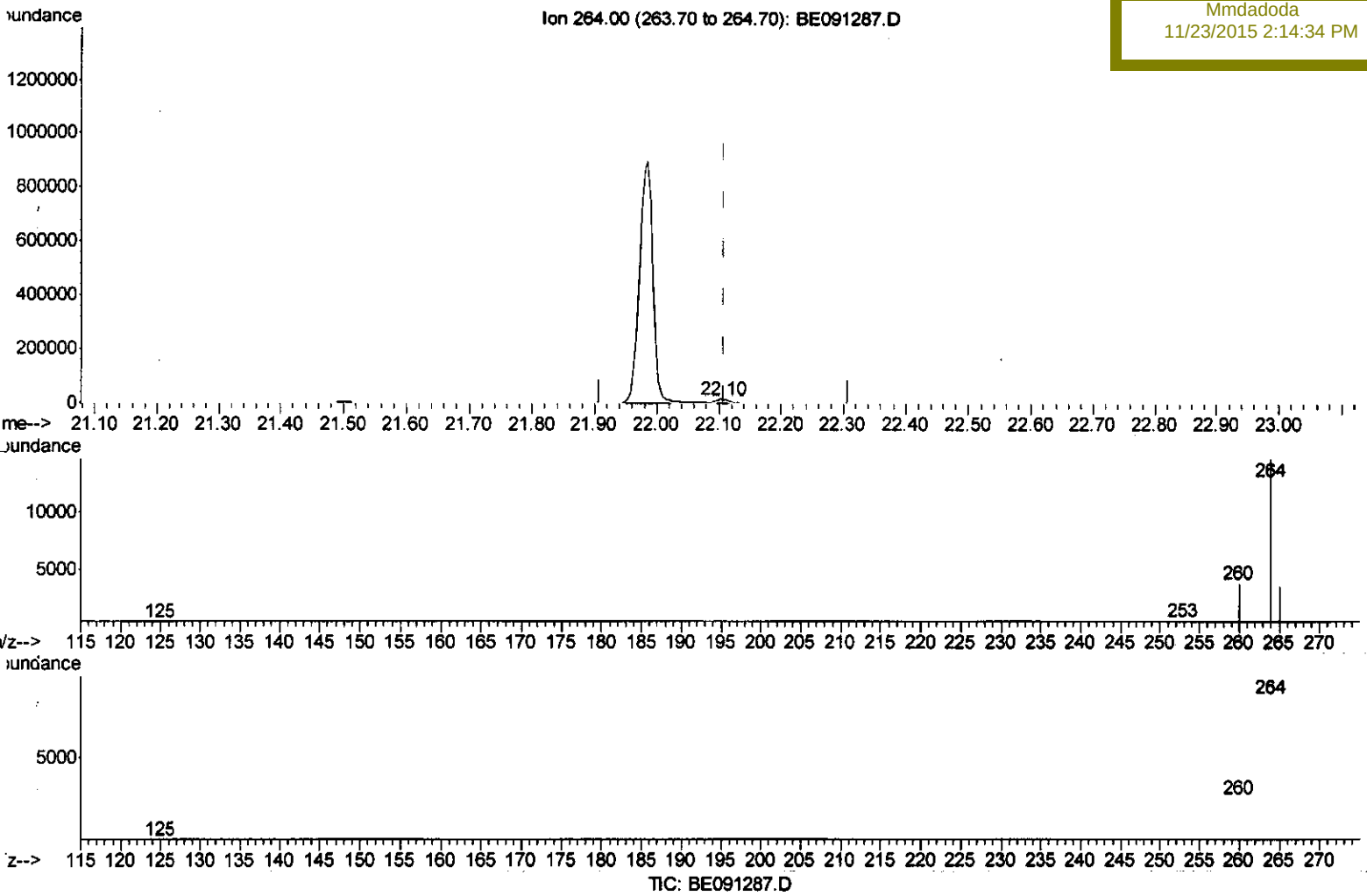
Ion	Exp%	Act%
252.00	100	100
253.00	26.00	24.70
125.00	15.30	15.43
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA_E\DATA\BE112215\
Data File : BE091287.D
Acq On : 21 Nov 2015 21:43
Operator : UM/NP
Sample : G4345-23
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 22 02:24:33 2015
Quant Method : Z:\HPCHEM1\BNA_E\METHODS\SOM02.2-EPA-SIM-BE102715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sun Nov 22 01:59:17 2015
Response via : Initial Calibration

Instrument :
BNA_E
ClientSampleId :
A4J68

Manual Integrations APPROVED
Mmdadoda
11/23/2015 2:14:34 PM



(22) Perylene-d12 (I)

U.M 11/25/2015

22.103min (-0.006) 0.40ng/ul m

response 16473

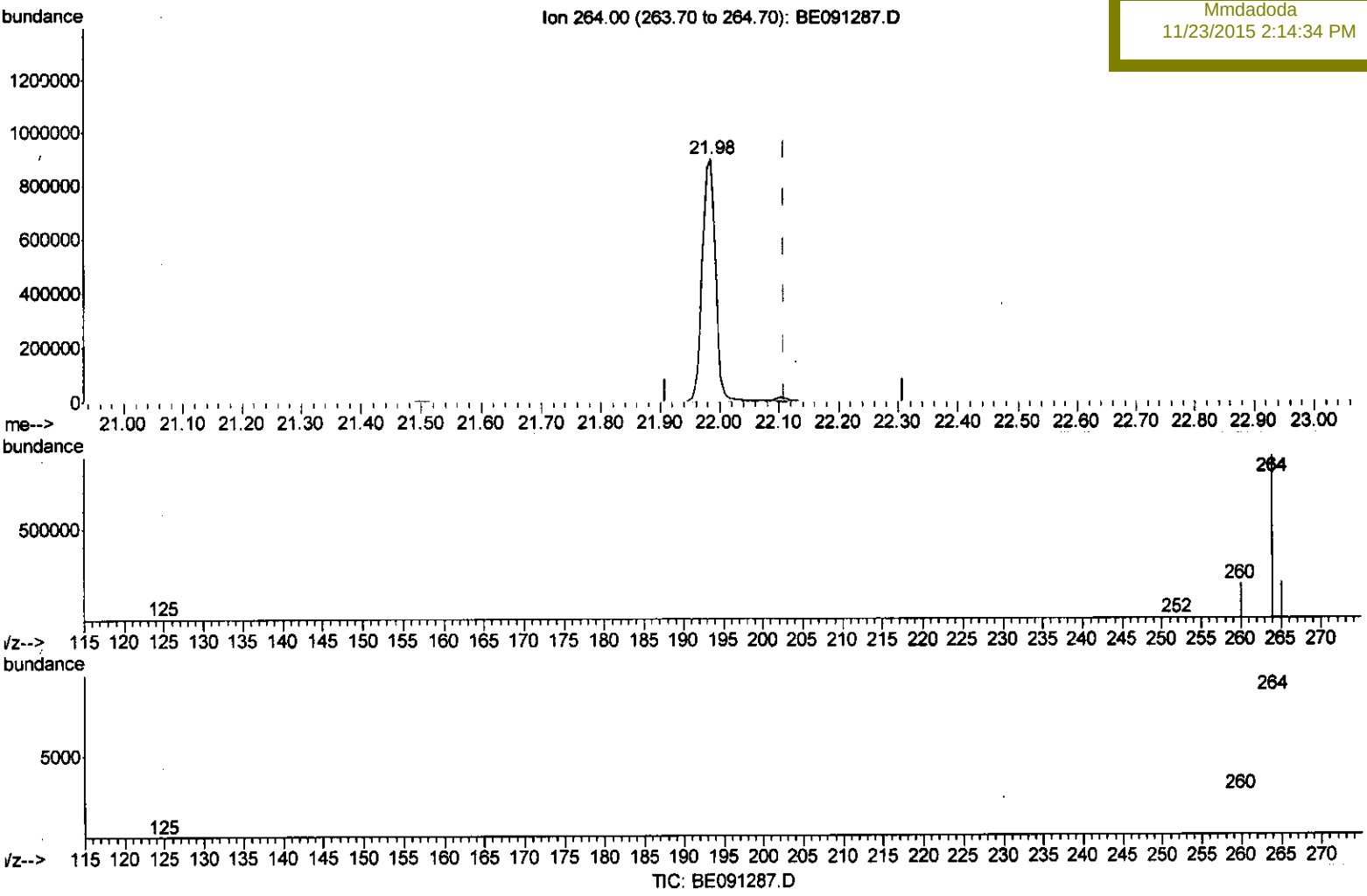
Ion	Exp%	Act%
264.00	100	100
260.00	28.90	25.44
265.00	34.70	23.68#
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA_E\DATA\BE112215\
Data File : BE091287.D
Acq On : 21 Nov 2015 21:43
Operator : UM/NP
Sample : G4345-23
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 22 02:24:33 2015
Quant Method : Z:\HPCHEM1\BNA_E\METHODS\SOM02.2-EPA-SIM-BE102715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sun Nov 22 01:59:17 2015
Response via : Initial Calibration

Instrument :
BNA_E
ClientSampleId :
A4J68

Manual Integrations APPROVED
Mmdadoda
11/23/2015 2:14:34 PM



TIC: BE091287.D

(22) Perylene-d12 (I)

21.985min (-0.124) 0.40ng/ul

response 1371464

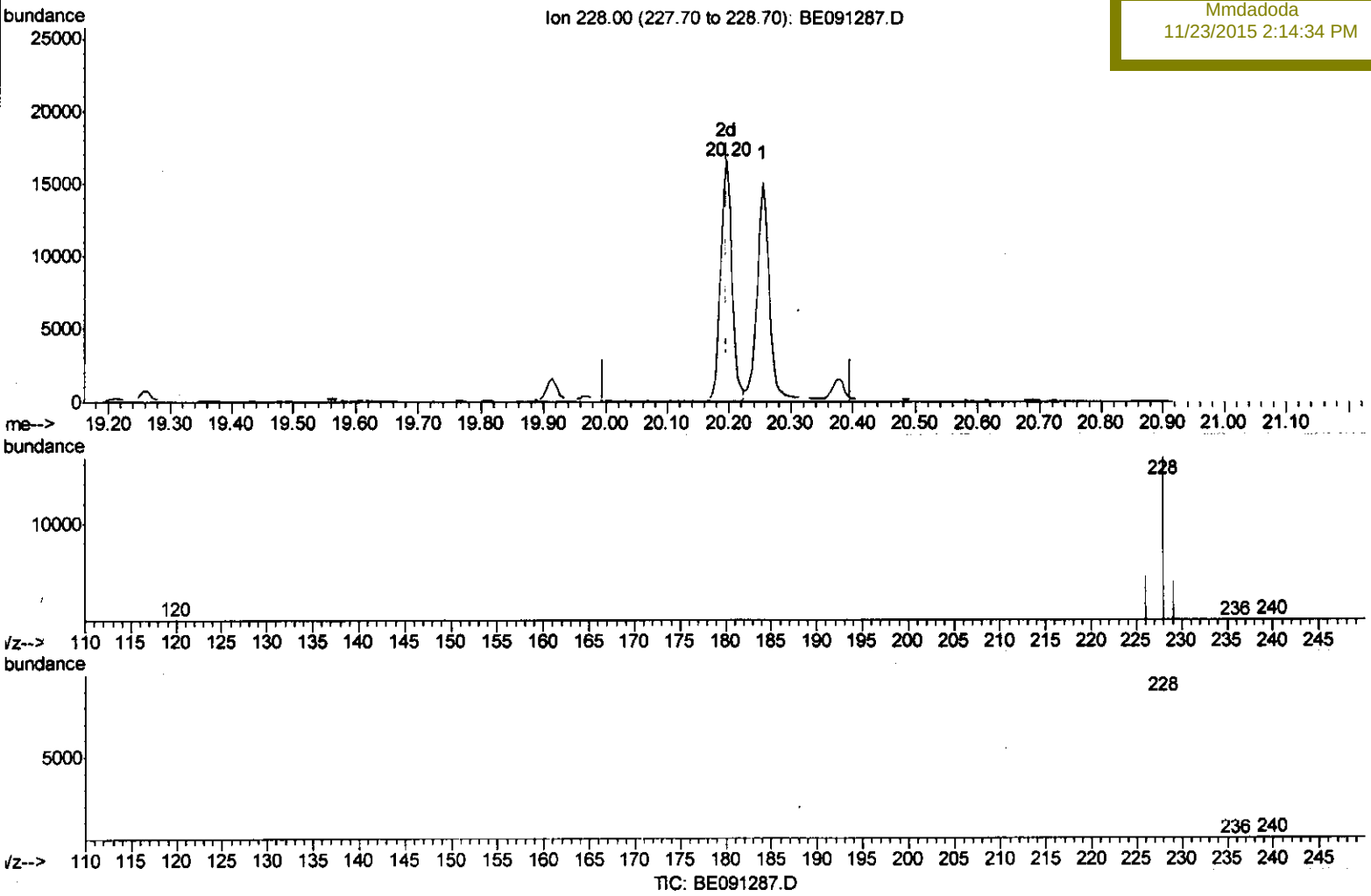
Ion	Exp%	Act%
264.00	100	100
260.00	28.90	21.16#
265.00	34.70	22.33#
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA_E\DATA\BE112215\
Data File : BE091287.D
Acq On : 21 Nov 2015 21:43
Operator : UM/NP
Sample : G4345-23
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 22 02:24:33 2015
Quant Method : Z:\HPCHEM1\BNA_E\METHODS\SOM02.2-EPA-SIM-BE102715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sun Nov 22 01:59:17 2015
Response via : Initial Calibration

Instrument :
BNA_E
ClientSampleId :
A4J68

Manual Integrations APPROVED
Mmdadoda
11/23/2015 2:14:34 PM



(20) Benzo(a)anthracene

20.196min (-0.001) 0.38ng/ul m

U.M 11/25/20 U

response 20453

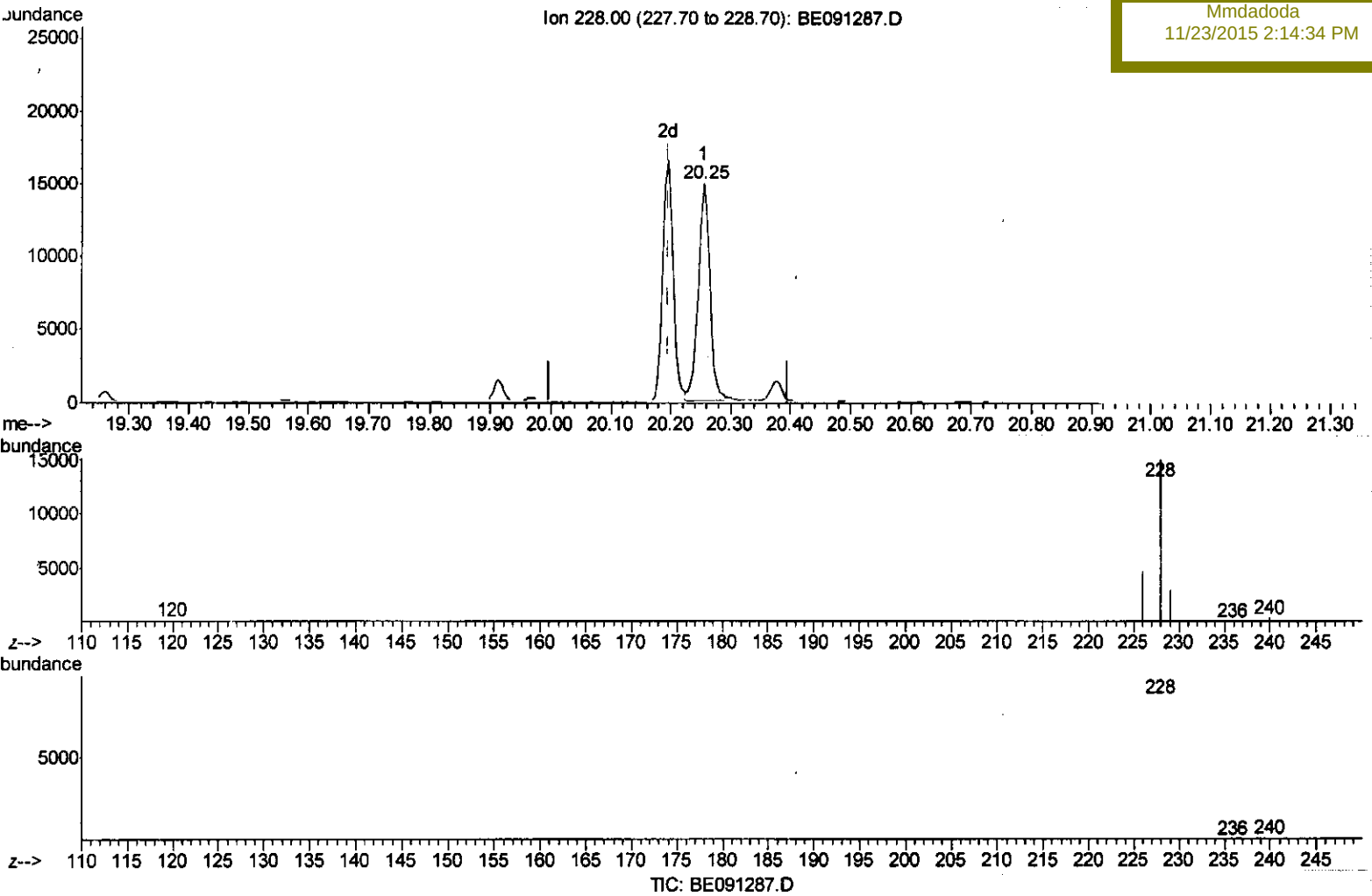
Ion	Exp%	Act%
228.00	100	100
226.00	28.70	27.26
229.00	19.00	23.84#
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA_E\DATA\BE112215\
Data File : BE091287.D
Acq On : 21 Nov 2015 21:43
Operator : UM/NP
Sample : G4345-23
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 22 02:24:33 2015
Quant Method : Z:\HPCHEM1\BNA_E\METHODS\SOM02.2-EPA-SIM-BE102715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sun Nov 22 01:59:17 2015
Response via : Initial Calibration

Instrument :
BNA_E
ClientSampleId :
A4J68

Manual Integrations APPROVED
Mmdadoda
11/23/2015 2:14:34 PM



(20) Benzo(a)anthracene

20.255min (+0.058) 0.38ng/ul

response 20262

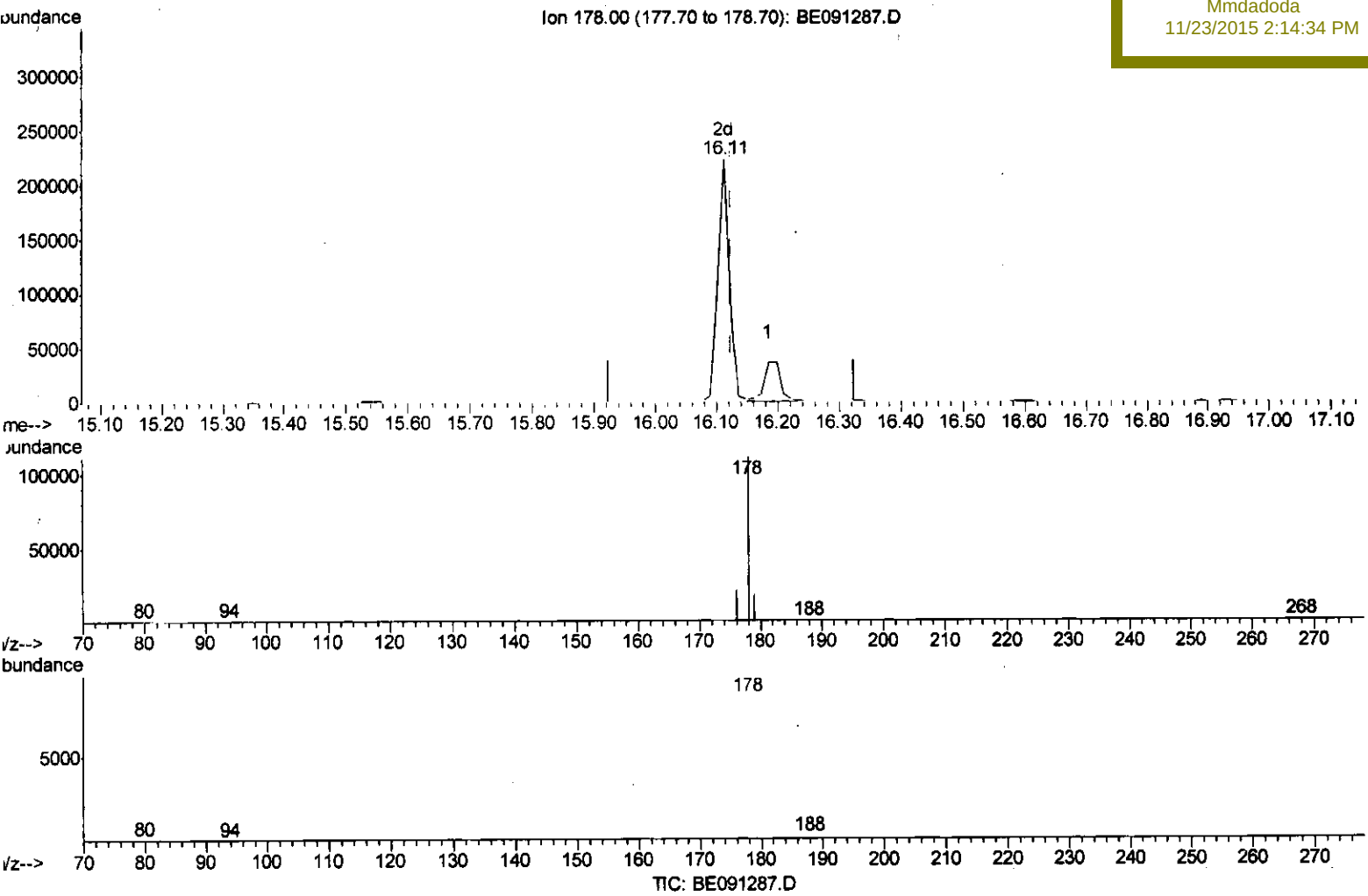
Ion	Exp%	Act%
228.00	100	100
226.00	28.70	31.56
229.00	19.00	20.14
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA_E\DATA\BE112215\
Data File : BE091287.D
Acq On : 21 Nov 2015 21:43
Operator : UM/NP
Sample : G4345-23
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 22 02:24:33 2015
Quant Method : Z:\HPCHEM1\BNA_E\METHODS\SOM02.2-EPA-SIM-BE102715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sun Nov 22 01:59:17 2015
Response via : Initial Calibration

Instrument :
BNA_E
ClientSampleId :
A4J68

Manual Integrations APPROVED
Mmdadoda
11/23/2015 2:14:34 PM



TIC: BE091287.D

(14) Phenanthrene

16.113min (-0.012) 1.31ng/ul m

response 287364

U.M 11/25/2015

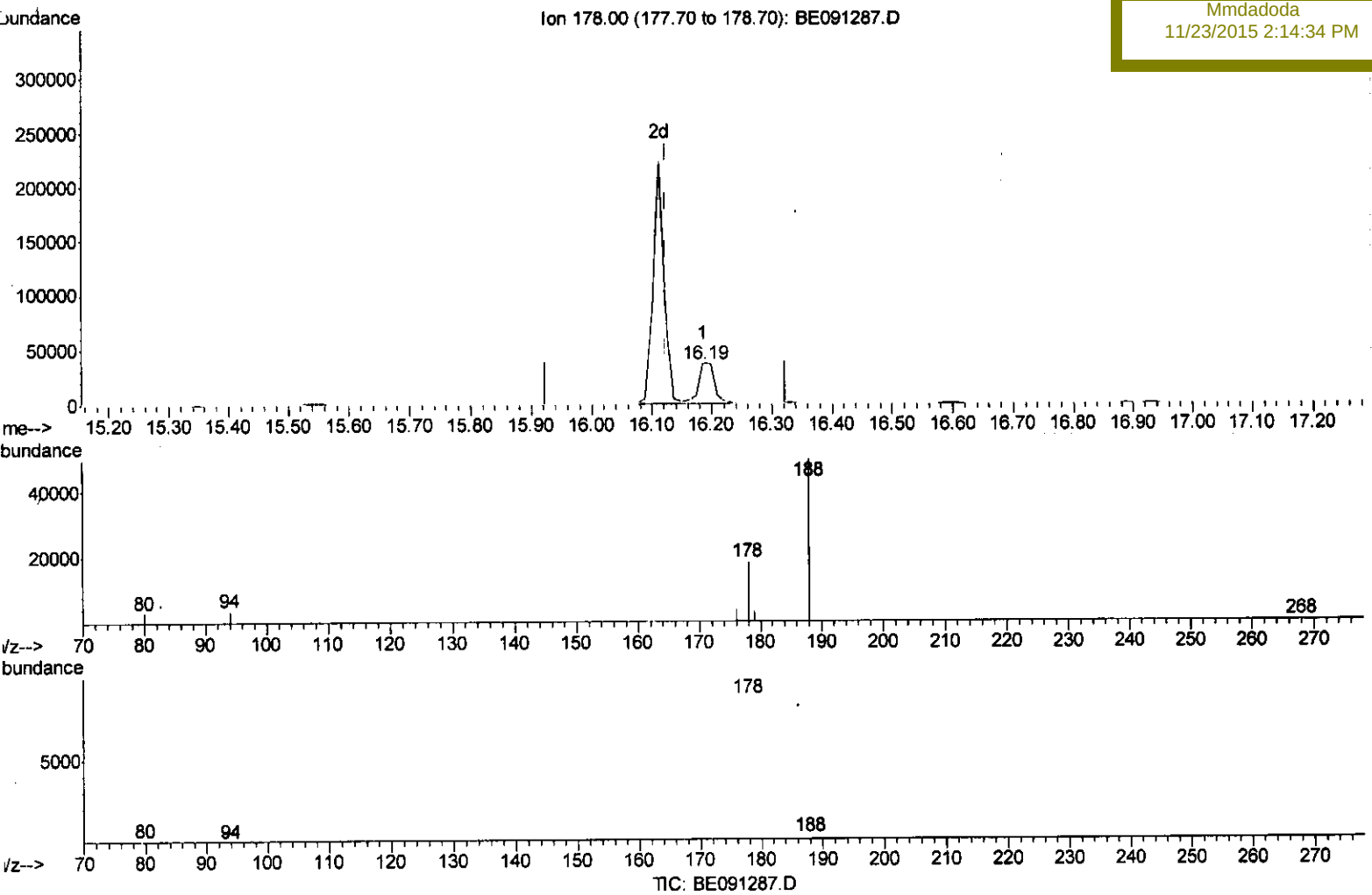
Ion	Exp%	Act%
178.00	100	100
176.00	20.30	18.87
179.00	16.00	15.52
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA_E\DATA\BE112215\
Data File : BE091287.D
Acq On : 21 Nov 2015 21:43
Operator : UM/NP
Sample : G4345-23
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 22 02:24:33 2015
Quant Method : Z:\HPCHEM1\BNA_E\METHODS\SOM02.2-EPA-SIM-BE102715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sun Nov 22 01:59:17 2015
Response via : Initial Calibration

Instrument :
BNA_E
ClientSampleId :
A4J68

Manual Integrations APPROVED
Mmdadoda
11/23/2015 2:14:34 PM



(14) Phenanthrene

16.185min (+0.061) 0.30ng/ul

response 65068

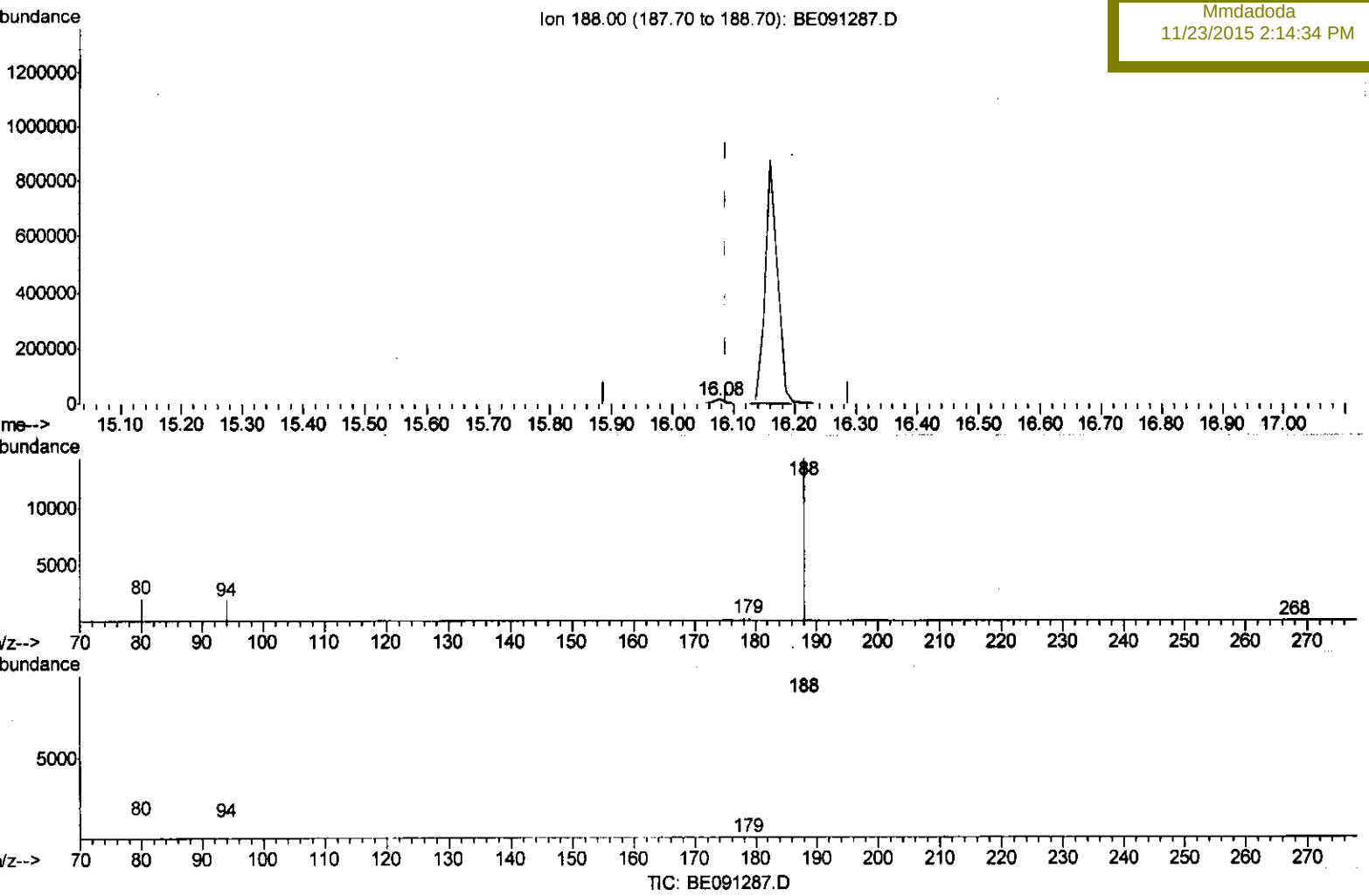
Ion	Exp%	Act%
178.00	100	100
176.00	20.30	20.93
179.00	16.00	17.57
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA_E\DATA\BE112215\
Data File : BE091287.D
Acq On : 21 Nov 2015 21:43
Operator : UM/NP
Sample : G4345-23
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 22 02:03:30 2015
Quant Method : Z:\HPCHEM1\BNA_E\METHODS\SOM02.2-EPA-SIM-BE102715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sun Nov 22 01:59:17 2015
Response via : Initial Calibration

Instrument :
BNA_E
ClientSampleId :
A4J68

Manual Integrations APPROVED
Mmdadoda
11/23/2015 2:14:34 PM



(12) Phenanthrene-d10 (I)
16.076min (-0.012) 0.40ng/ul m
response 18976

U.M
11/25/2015

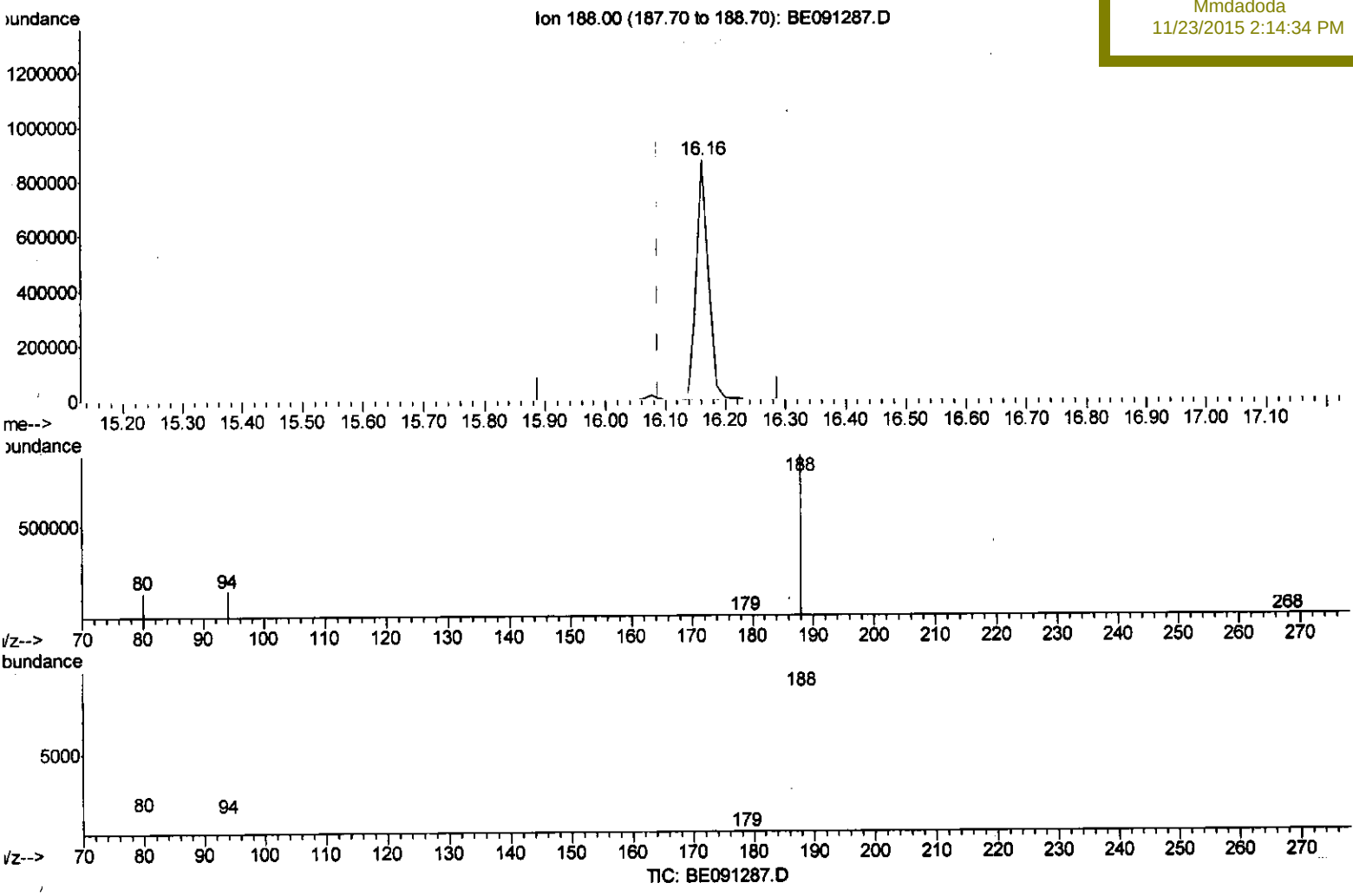
Ion	Exp%	Act%
188.00	100	100
94.00	9.00	13.22#
80.00	8.90	14.25#
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA_E\DATA\BE112215\
Data File : BE091287.D
Acq On : 21 Nov 2015 21:43
Operator : UM/NP
Sample : G4345-23
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 22 02:03:30 2015
Quant Method : Z:\HPCHEM1\BNA_E\METHODS\SOM02.2-EPA-SIM-BE102715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sun Nov 22 01:59:17 2015
Response via : Initial Calibration

Instrument :
BNA_E
ClientSampleId :
A4J68

Manual Integrations APPROVED
Mmdadoda
11/23/2015 2:14:34 PM



(12) Phenanthrene-d10 (I)

16.161min (+0.073) 0.40ng/ul

response 1233555

Ion	Exp%	Act%
188.00	100	100
94.00	9.00	16.33#
80.00	8.90	15.31#
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA E\DATA\BE112215\
Data File : BE091287.D
Acq On : 21 Nov 2015 21:43
Operator : UM/NP
Sample : G4345-23
Misc :
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Nov 22 02:27:26 2015
Quant Method : Z:\HPCHEM1\BNA E\METHODS\SOM02.2-EPA-SIM-BE102715.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Sun Nov 22 01:59:17 2015
Response via : Initial Calibration

Instrument : BNA_E
ClientSampleId : A4J68

Manual Integrations APPROVED
Mmdadoda
11/23/2015 2:14:34 PM

U.M 11/25/2015

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.87	152	2728	0.40	ng/ul	-0.02
4) Naphthalene-d8	9.54	136	13597	0.40	ng/ul	-0.02
8) Acenaphthene-d10	13.36	164	8290	0.40	ng/ul	0.00
12) Phenanthrene-d10	16.08	188	18976m	0.40	ng/ul	-0.01
18) Chrysene-d12	20.22	240	20976	0.40	ng/ul	0.00
22) Perylene-d12	22.10	264	16473m	0.40	ng/ul	0.00
System Monitoring Compounds						
2) 1,4-Dioxane-d8	2.91	96	24054	12.26	ng/uL	-0.04
6) 2-Methylnaphthalene-d10	11.05	152	5908	0.32	ng/ul	0.00
16) Fluoranthene-d10	18.06	212	15060	0.28	ng/ul	0.00
Target Compounds						Qvalue
5) Naphthalene	9.58	128	2929	0.09	ng/ul#	84
7) 2-Methylnaphthalene	11.12	142	706	0.03	ng/ul	95
10) Acenaphthene	13.42	153	3629	0.13	ng/ul	91
11) Fluorene	14.40	166	5665	0.16	ng/ul	89
13) Pentachlorophenol	15.85	266	217	0.12	ng/ul	93
14) Phenanthrene	16.11	178	287364m	1.31	ng/ul	
15) Anthracene	16.19	178	64540	0.32	ng/ul	98
17) Fluoranthene	18.09	202	259038	1.01	ng/ul	90
19) Pyrene	18.47	202	230866	0.97	ng/ul#	79
20) Benzo(a)anthracene	20.20	228	20453m	0.38	ng/ul	
21) Chrysene	20.25	228	20538	0.33	ng/ul	98
23) Benzo(b)fluoranthene	21.55	252	15660	0.30	ng/ul	96
24) Benzo(k)fluoranthene	21.57	252	13627m	0.26	ng/ul	
25) Benzo(a)pyrene	22.01	252	17388	0.37	ng/ul	96
26) Indeno(1,2,3-cd)pyrene	23.70	276	40147m	0.20	ng/ul	
28) Benzo(g,h,i)perylene	24.26	276	41010	0.20	ng/ul	100

U.M 11/25/2015

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