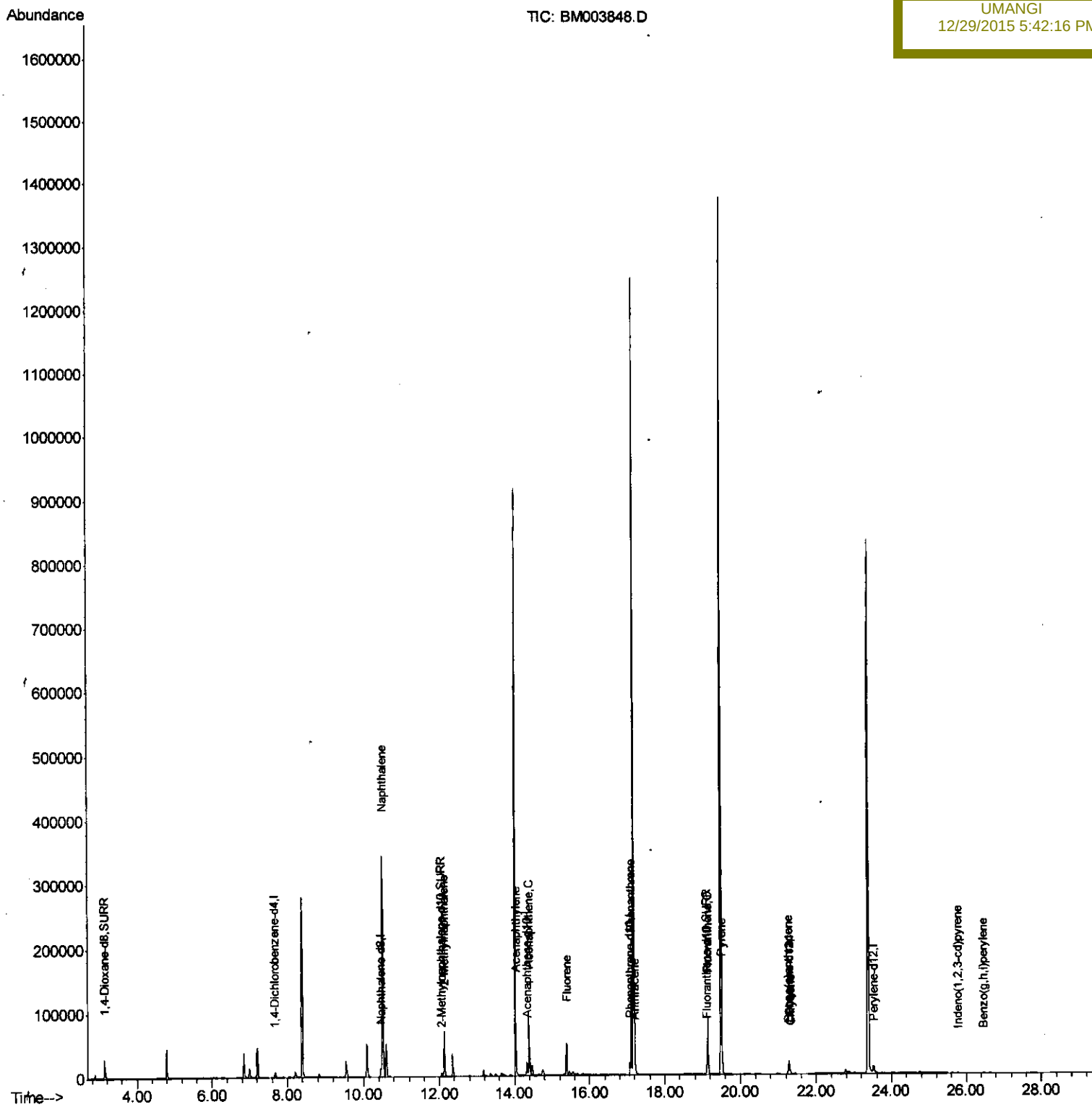
Data Path : Z:\HPCHEM1\BNA_M\DATA\BM123015\
Data File : BM003848.D
Acq On : 29 Dec 2015 03:31
Operator : SJ/UM
Sample : G4848-13
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 29 08:37:09 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 : Tue Dec 29 08:19:02 2015
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
D9N59

Manual Integrations APPROVED
UMANGI
12/29/2015 5:42:16 PM

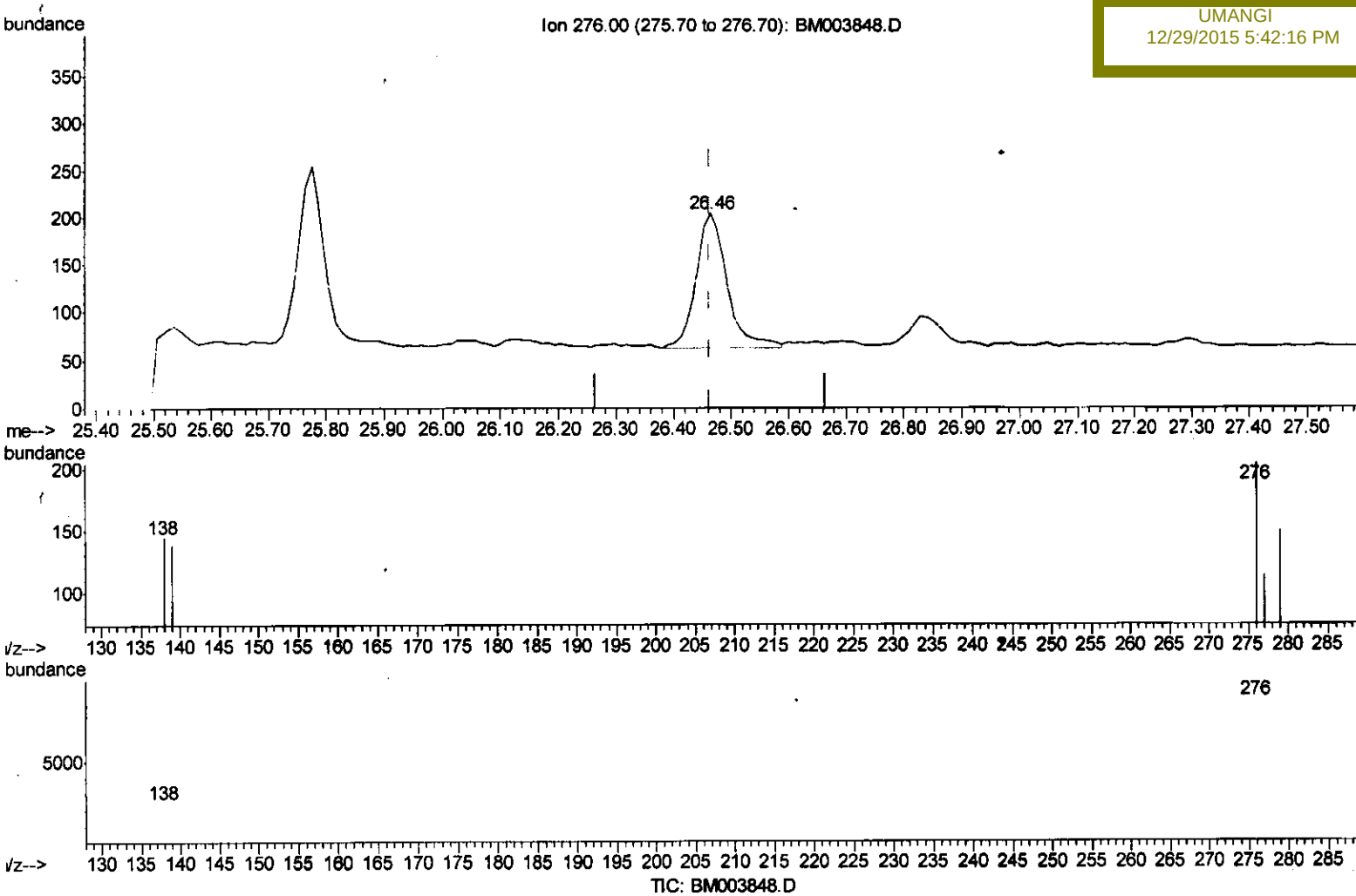


Data Path : Z:\HPCHEM1\BNA_M\DATA\BM123015\
Data File : BM003848.D
Acq On : 29 Dec 2015 03:31
Operator : SJ/UM
Sample : G4848-13
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 29 08:35:46 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 : Tue Dec 29 08:19:02 2015
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
D9N59

Manual Integrations APPROVED
UMANGI
12/29/2015 5:42:16 PM



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

26.464min (+0.000) 0.01ng/ul m

response 517

Ion	Exp%	Act%
276.00	100	100
277.00	23.60	55.39#
138.00	28.10	70.59#
0.00	0.00	0.00

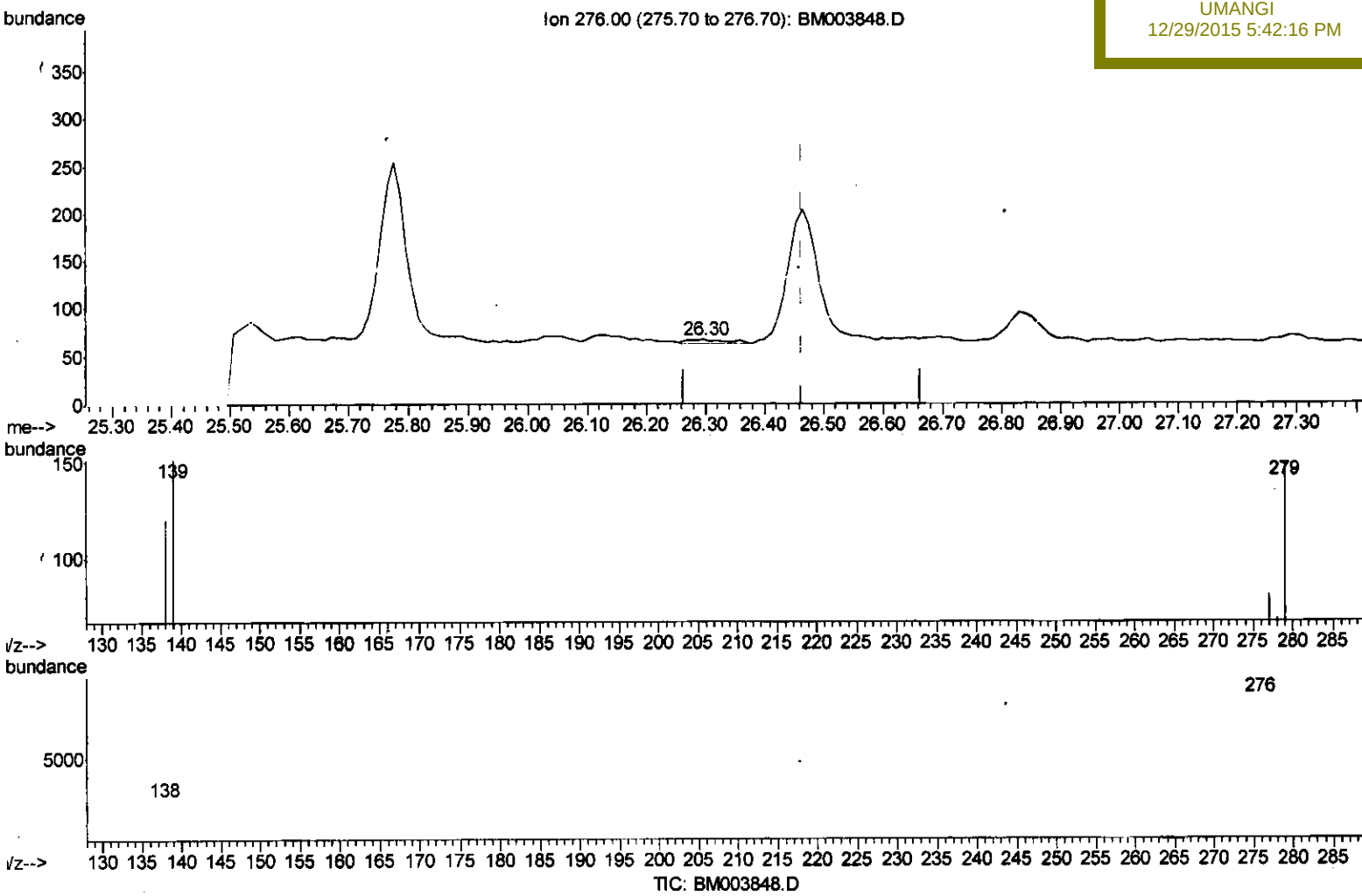
U.M 12/31/15

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM123015\
Data File : BM003848.D
Acq On : 29 Dec 2015 03:31
Operator : SJ/UM
Sample : G4848-13
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 29 08:35:46 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 : Tue Dec 29 08:19:02 2015
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
D9N59

Manual Integrations APPROVED
UMANGI
12/29/2015 5:42:16 PM



TIC: BM003848.D

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

26.297min (-0.167) 0.00ng/ul

response 18

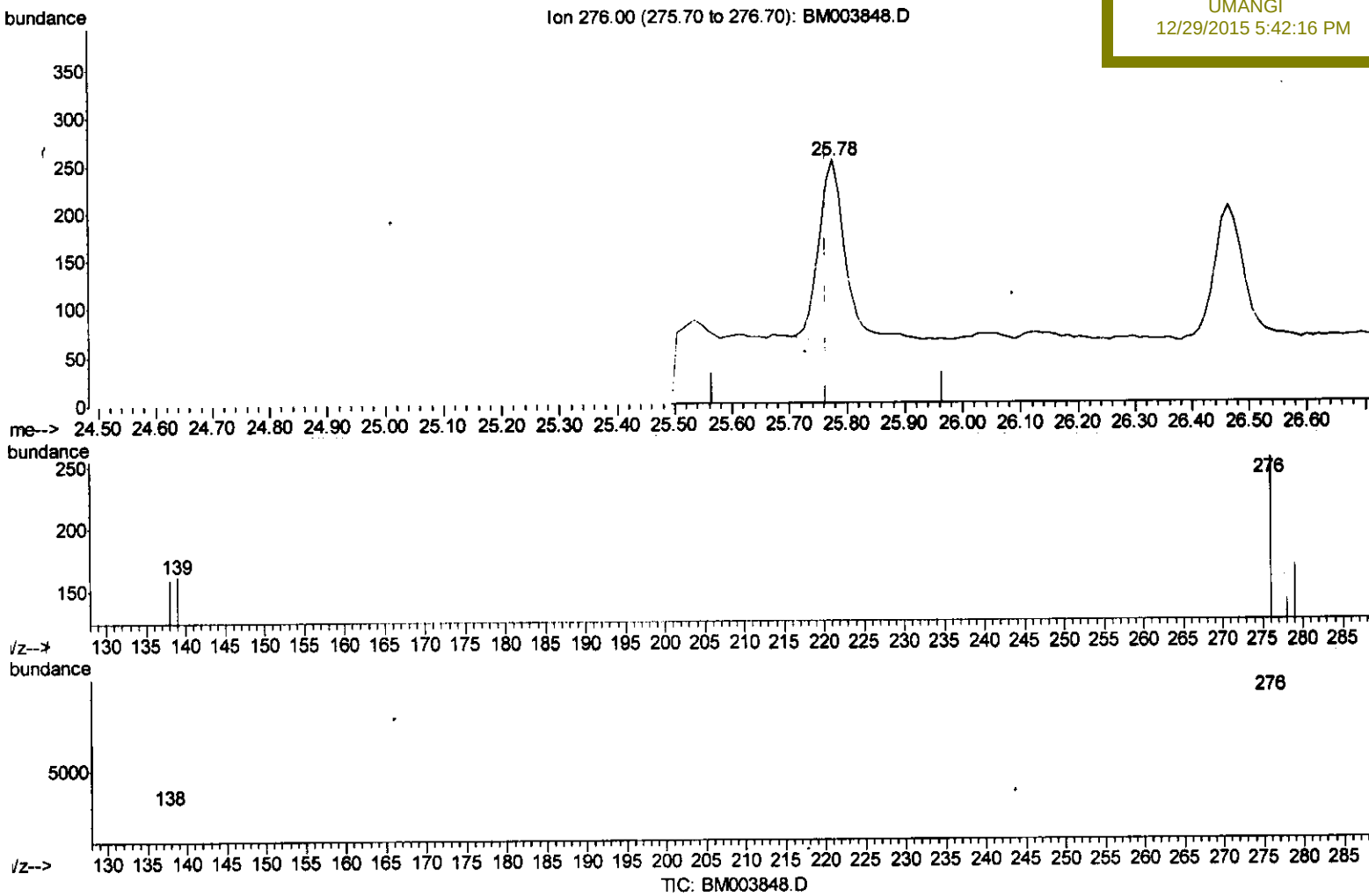
Ion	Exp%	Act%
276.00	100	100
277.00	23.60	120.90#
138.00	28.10	179.10#
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM123015\
Data File : BM003848.D
Acq On : 29 Dec 2015 03:31
Operator : SJ/UM
Sample : G4848-13
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 29 08:35:46 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 : Tue Dec 29 08:19:02 2015
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
D9N59

Manual Integrations APPROVED
UMANGI
12/29/2015 5:42:16 PM



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

25.776min (+0.011) 0.01ng/ul m

response 584

U.M 12/31/15

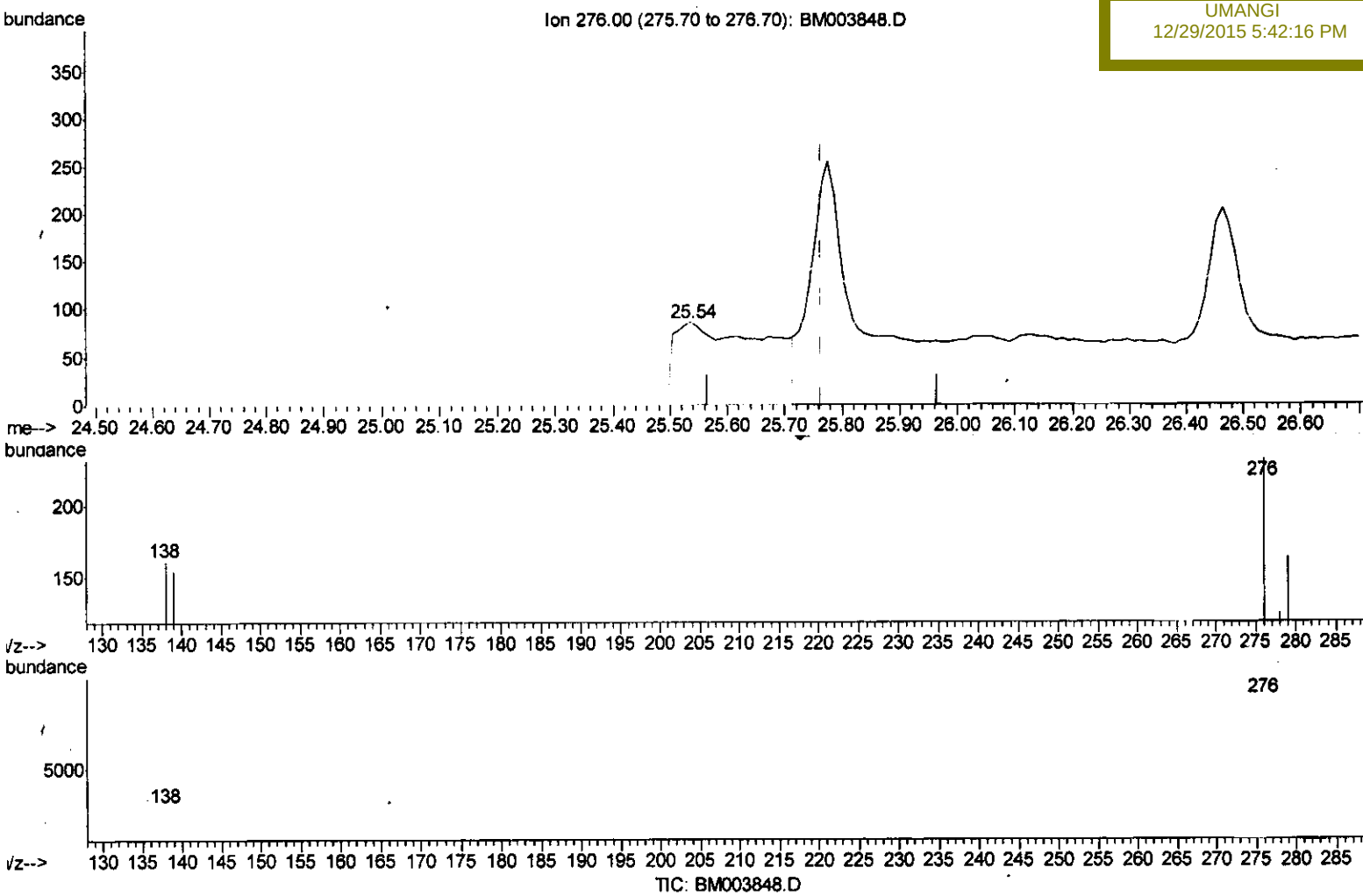
Ion	Exp%	Act%
276.00	100	100
138.00	20.40	0.00#
277.00	24.80	0.00#
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM123015\
Data File : BM003848.D
Acq On : 29 Dec 2015 03:31
Operator : SJ/UM
Sample : G4848-13
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 29 08:35:46 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 : Tue Dec 29 08:19:02 2015
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
D9N59

Manual Integrations APPROVED
UMANGI
12/29/2015 5:42:16 PM



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

25.536min (-0.229) 0.02ng/ul

response 941

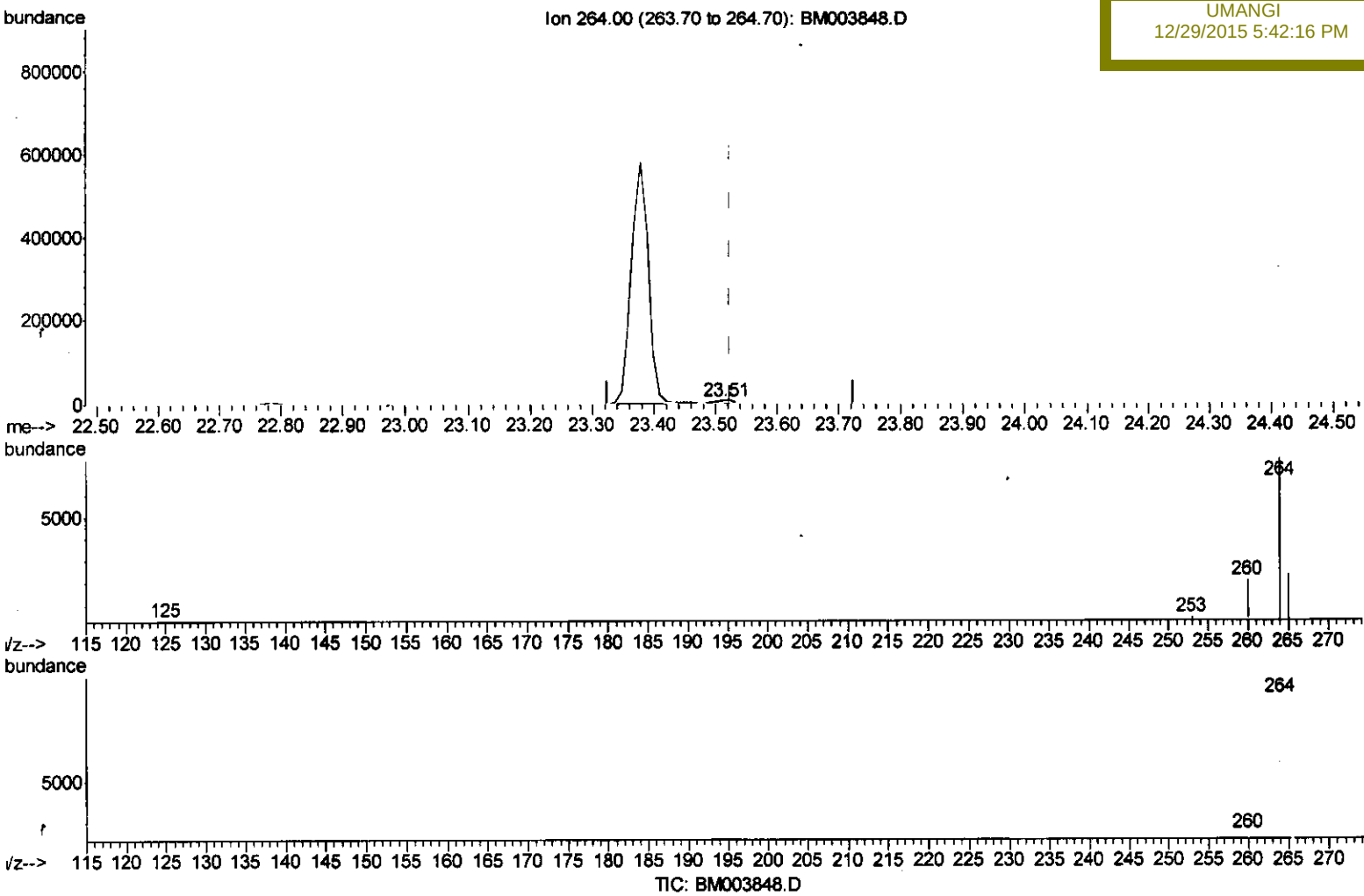
Ion	Exp%	Act%
276.00	100	100
138.00	20.40	0.00#
277.00	24.80	0.00#
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM123015\
Data File : BM003848.D
Acq On : 29 Dec 2015 03:31
Operator : SJ/UM
Sample : G4848-13
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 29 08:34:41 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 : Tue Dec 29 08:19:02 2015
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
D9N59

Manual Integrations APPROVED
UMANGI
12/29/2015 5:42:16 PM



(22) Perylene-d12 (I)

23.514min (-0.010) 0.40ng/ul m

response 12541

V.M 12/31/15

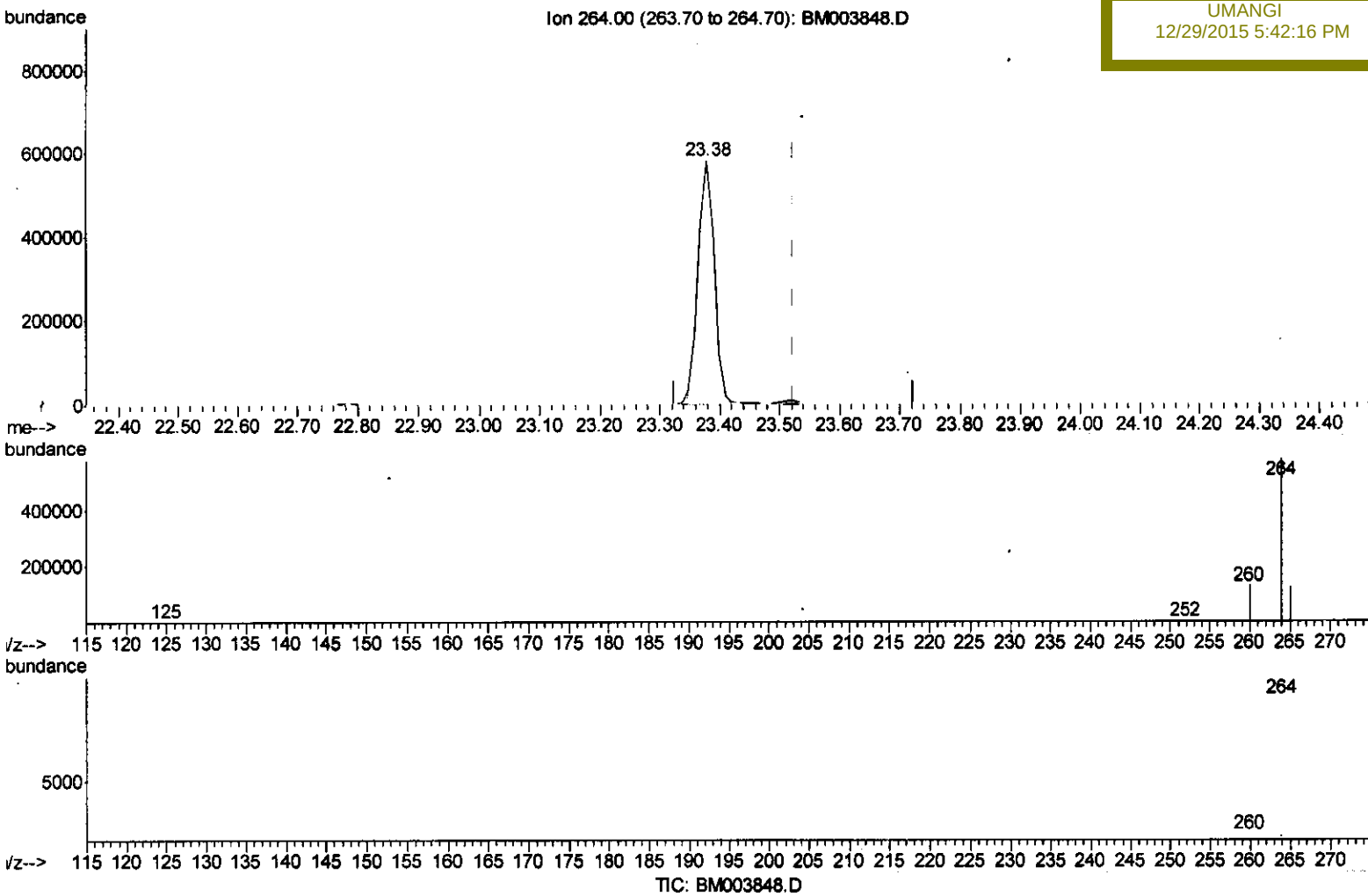
Ion	Exp%	Act%
264.00	100	100
260.00	25.60	26.82
265.00	38.20	29.88#
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM123015\
Data File : BM003848.D
Acq On : 29 Dec 2015 03:31
Operator : SJ/UM
Sample : G4848-13
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 29 08:34:41 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 : Tue Dec 29 08:19:02 2015
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
D9N59

Manual Integrations APPROVED
UMANGI
12/29/2015 5:42:16 PM



(22) Perylene-d12 (I)

23.378min (-0.146) 0.40ng/ul

response 1073148

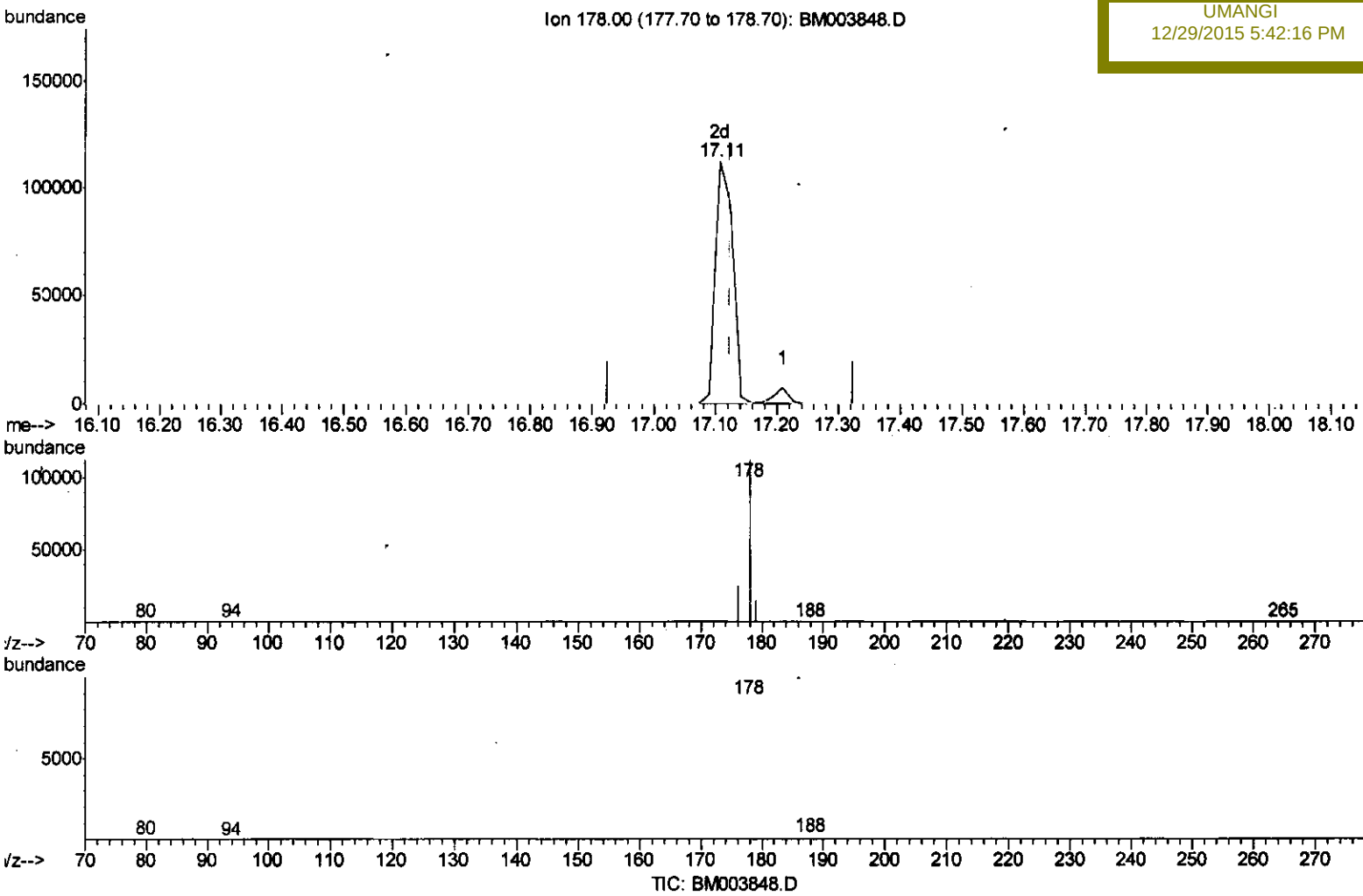
Ion	Exp%	Act%
264.00	100	100
260.00	25.60	21.74
265.00	38.20	21.67#
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM123015\
Data File : BM003848.D
Acq On : 29 Dec 2015 03:31
Operator : SJ/UM
Sample : G4848-13
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 29 08:34:41 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 : Tue Dec 29 08:19:02 2015
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
D9N59

Manual Integrations APPROVED
UMANGI
12/29/2015 5:42:16 PM



(14) Phenanthrene

17.108min (-0.017) 3.53ng/ul m

response 219459

Ion	Exp%	Act%
178.00	100	100
176.00	16.20	21.85#
179.00	17.70	13.37#
0.00	0.00	0.00

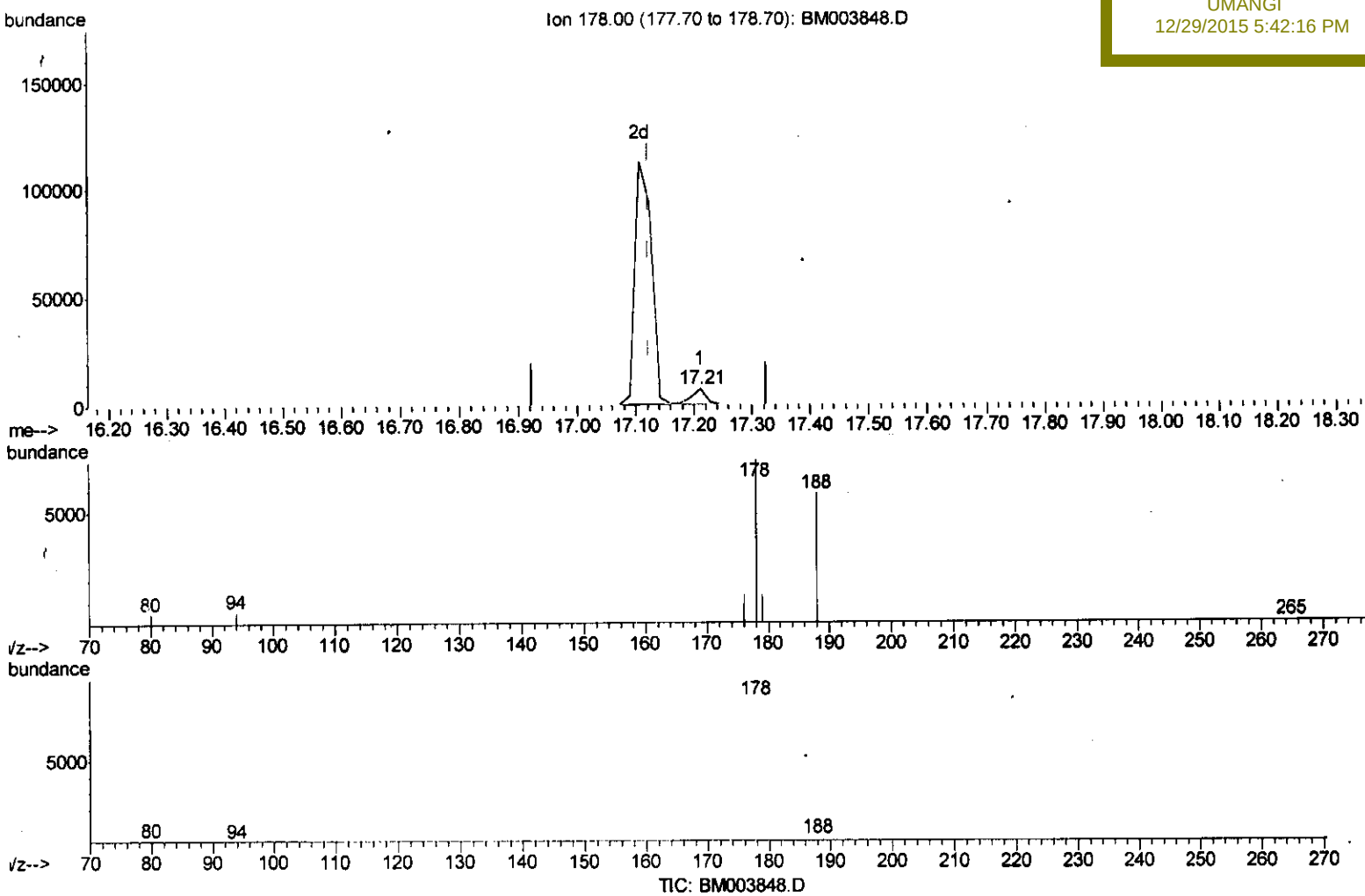
U.M
12/31/15

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM123015\
Data File : BM003848.D
Acq On : 29 Dec 2015 03:31
Operator : SJ/UM
Sample : G4848-13
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 29 08:34:41 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 : Tue Dec 29 08:19:02 2015
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
D9N59

Manual Integrations APPROVED
UMANGI
12/29/2015 5:42:16 PM



(14) Phenanthrene

17.211min (+0.086) 0.20ng/ul

response 12588

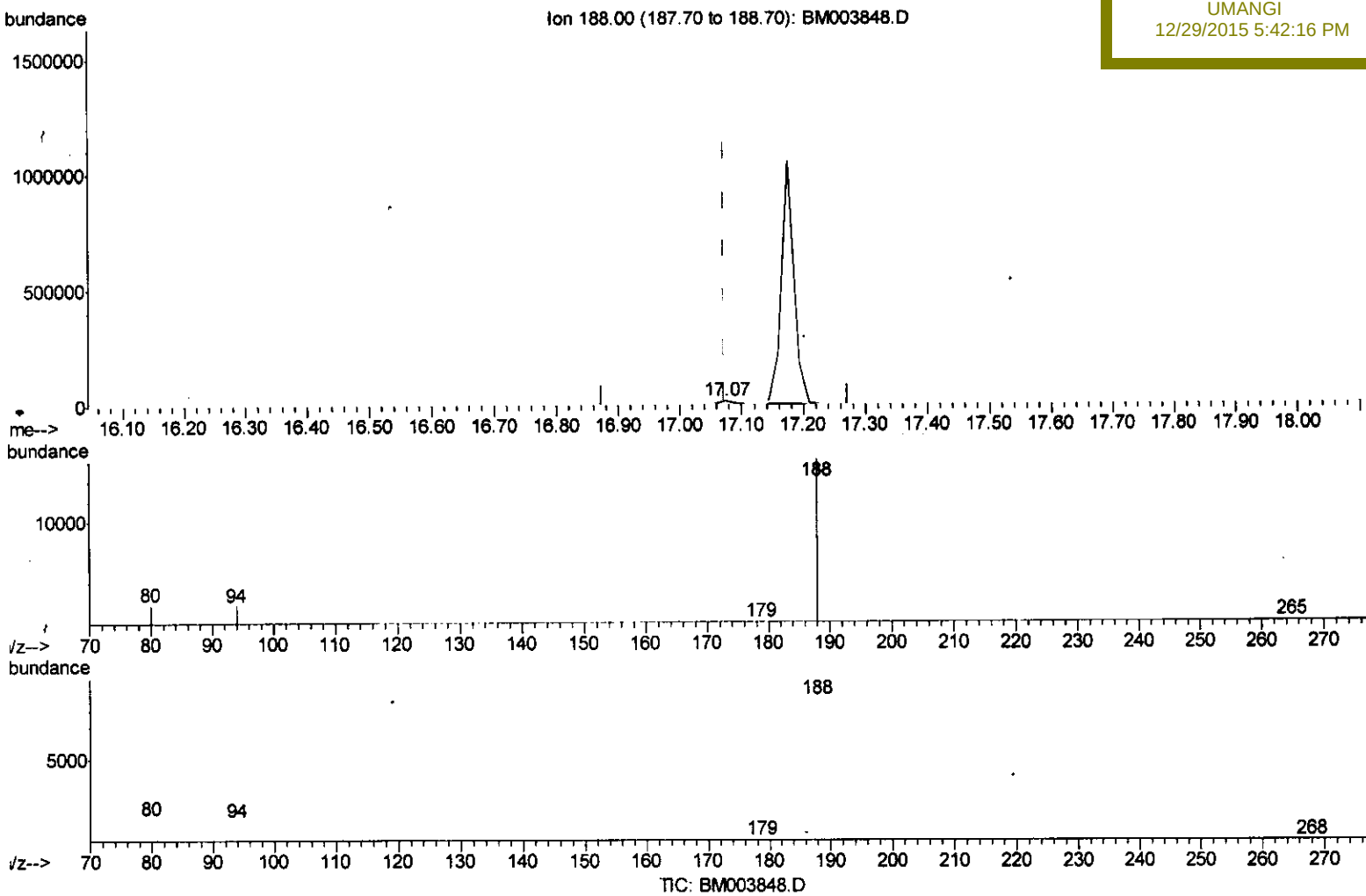
Ion	Exp%	Act%
178.00	100	100
176.00	16.20	17.54
179.00	17.70	17.76
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM123015\
Data File : BM003848.D
Acq On : 29 Dec 2015 03:31
Operator : SJ/UM
Sample : G4848-13
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 29 08:22:11 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 : Tue Dec 29 08:19:02 2015
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
D9N59

Manual Integrations APPROVED
UMANGI
12/29/2015 5:42:16 PM



(12) Phenanthrene-d10 (I)

17.073min (+0.000) 0.40ng/ul m

response 24106

U.M 12/31/15

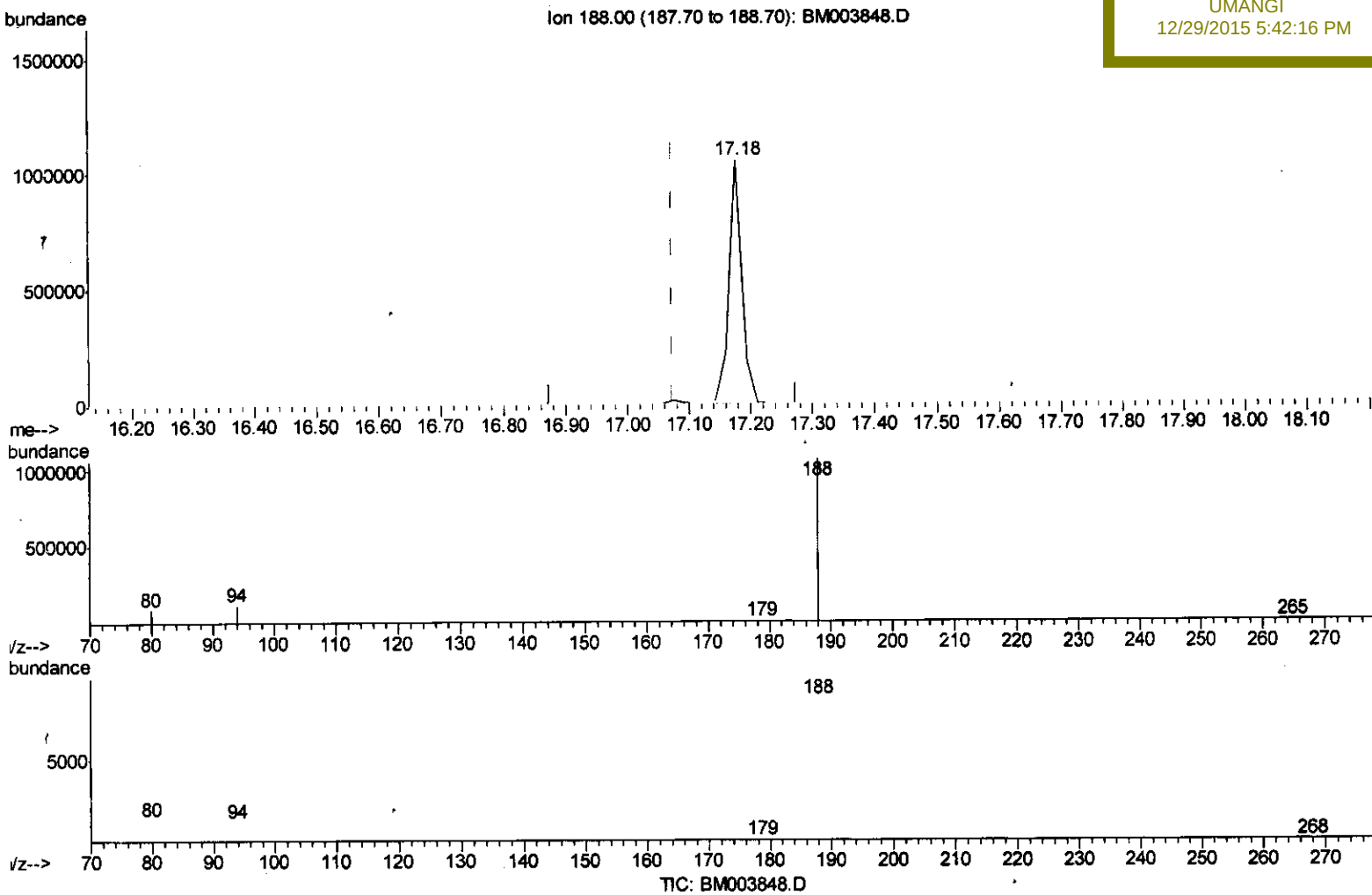
Ion	Exp%	Act%
188.00	100	100
94.00	11.70	11.11
80.00	11.90	11.48
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM123015\
Data File : BM003848.D
Acq On : 29 Dec 2015 03:31
Operator : SJ/UM
Sample : G4848-13
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 29 08:22:11 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 : Tue Dec 29 08:19:02 2015
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
D9N59

Manual Integrations APPROVED
UMANGI
12/29/2015 5:42:16 PM



(12) Phenanthrene-d10 (I)

17.176min (+0.103) 0.40ng/ul

response 1495494

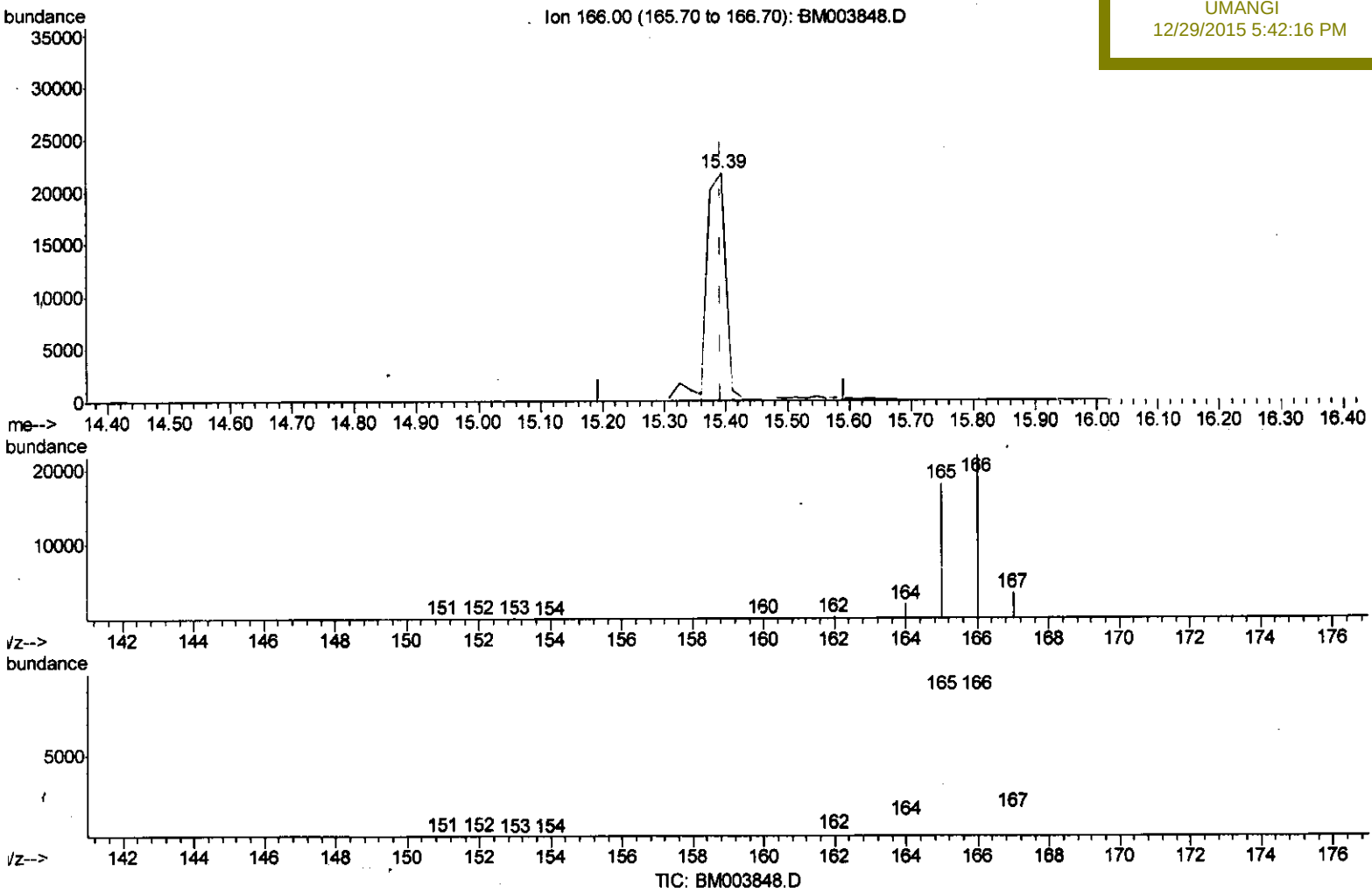
Ion	Exp%	Act%
188.00	100	100
94.00	11.70	10.32
80.00	11.90	8.11#
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM123015\
Data File : BM003848.D
Acq On : 29 Dec 2015 03:31
Operator : SJ/UM
Sample : G4848-13
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 29 08:22:11 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 : Tue Dec 29 08:19:02 2015
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
D9N59

Manual Integrations APPROVED
UMANGI
12/29/2015 5:42:16 PM



(11) Fluorene

15.393min (+0.000) 1.15ng/ul m

response 44082

U.M 12/31/15

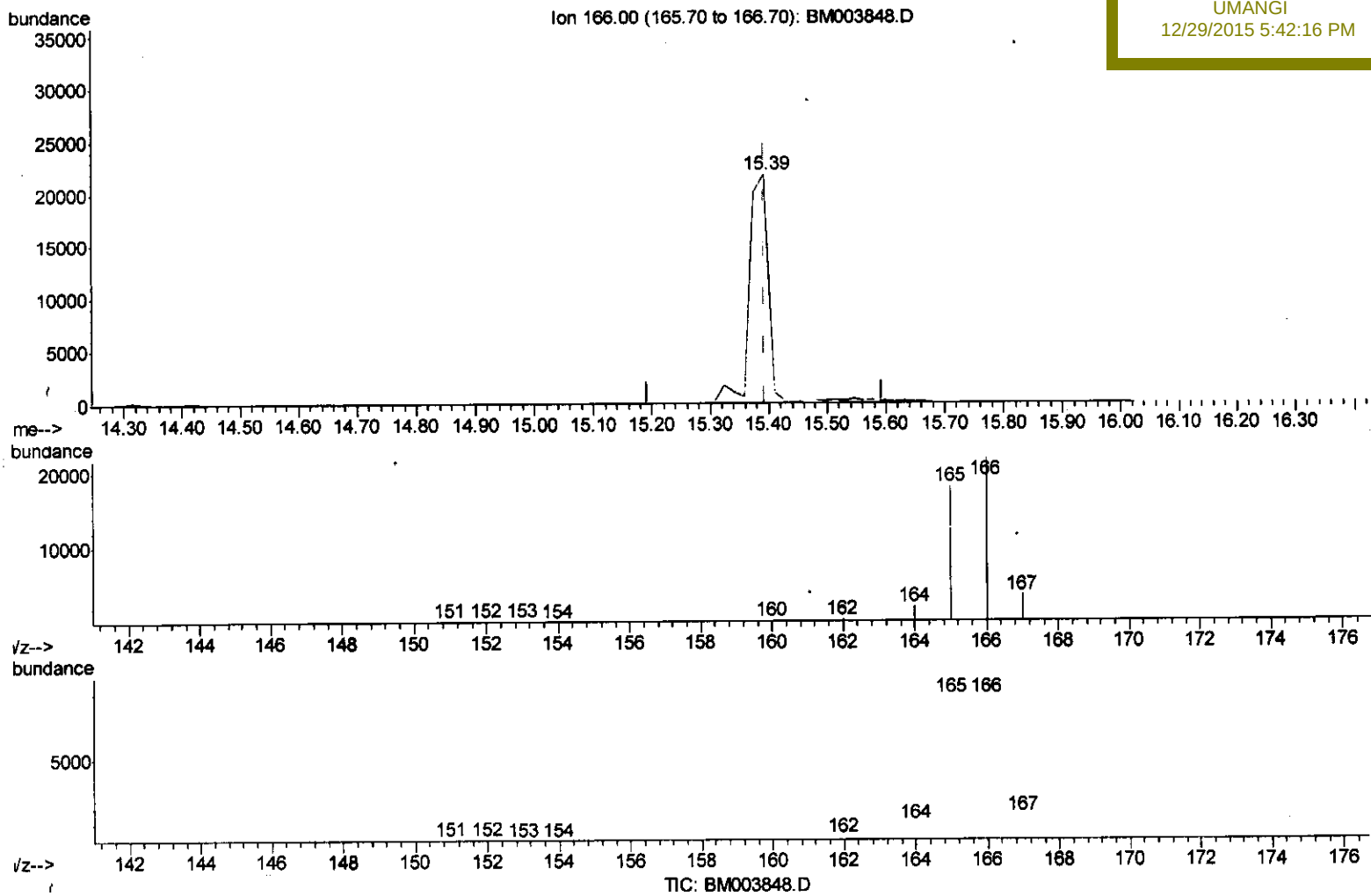
Ion	Exp%	Act%
166.00	100	100
165.00	87.00	82.36
167.00	14.90	15.76
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM123015\
Data File : BM003848.D
Acq On : 29 Dec 2015 03:31
Operator : SJ/UM
Sample : G4848-13
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 29 08:22:11 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 : Tue Dec 29 08:19:02 2015
Response via : Initial Calibration

Instrument :
BNA_M
ClientSampleId :
D9N59

Manual Integrations APPROVED
UMANGI
12/29/2015 5:42:16 PM



(11) Fluorene

15.393min (+0.000) 1.24ng/ul

response 47562

Ion	Exp%	Act%
166.00	100	100
165.00	87.00	82.36
167.00	14.90	15.76
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA_M\DATA\BM123015\
Data File : BM003848.D
Acq On : 29 Dec 2015 03:31
Operator : SJ/UM
Sample : G4848-13
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Dec 29 08:37:09 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 : Tue Dec 29 08:19:02 2015
Response via : Initial Calibration

Instrument : BNA_M
ClientSampleId : D9N59

Manual Integrations APPROVED
UMANGI
12/29/2015 5:42:16 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	7.68	152	4255	0.40	ng/ul	0.00
4) Naphthalene-d8	10.46	136	18523	0.40	ng/ul	-0.01
8) Acenaphthene-d10	14.33	164	11244	0.40	ng/ul	0.00
12) Phenanthrene-d10	17.07	188	24106m	0.40	ng/ul	0.00
18) Chrysene-d12	21.28	240	18232	0.40	ng/ul	0.00
22) Perylene-d12	23.51	264	12541m	0.40	ng/ul	-0.01
System Monitoring Compounds						
2) 1,4-Dioxane-d8	3.14	96	21440	11.79	ng/uL	0.00
6) 2-Methylnaphthalene-d10	12.06	152	8176	0.37	ng/ul	-0.01
16) Fluoranthene-d10	19.12	212	19579	0.38	ng/ul	0.00
Target Compounds						Qvalue
5) Naphthalene	10.51	128	479183	11.48	ng/ul	98
7) 2-Methylnaphthalene	12.13	142	52073	1.86	ng/ul	99
9) Acenaphthylene	14.04	152	2568	0.06	ng/ul#	90
10) Acenaphthene	14.38	153	62461	1.80	ng/ul#	81
11) Fluorene	15.39	166	44082m	1.15	ng/ul	
14) Phenanthrene	17.11	178	219459m	3.53	ng/ul	
15) Anthracene	17.21	178	12623	0.23	ng/ul	98
17) Fluoranthene	19.14	202	79831	1.18	ng/ul	98
19) Pyrene	19.51	202	56150	1.14	ng/ul	99
20) Benzo(a)anthracene	21.26	228	7516	0.17	ng/ul	95
21) Chrysene	21.31	228	6446	0.13	ng/ul	95
26) Indeno(1,2,3-cd)pyrene	25.78	276	584m	0.01	ng/ul	
28) Benzo(g,h,i)perylene	26.46	276	517m	0.01	ng/ul	

U.M 12/31/15

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