

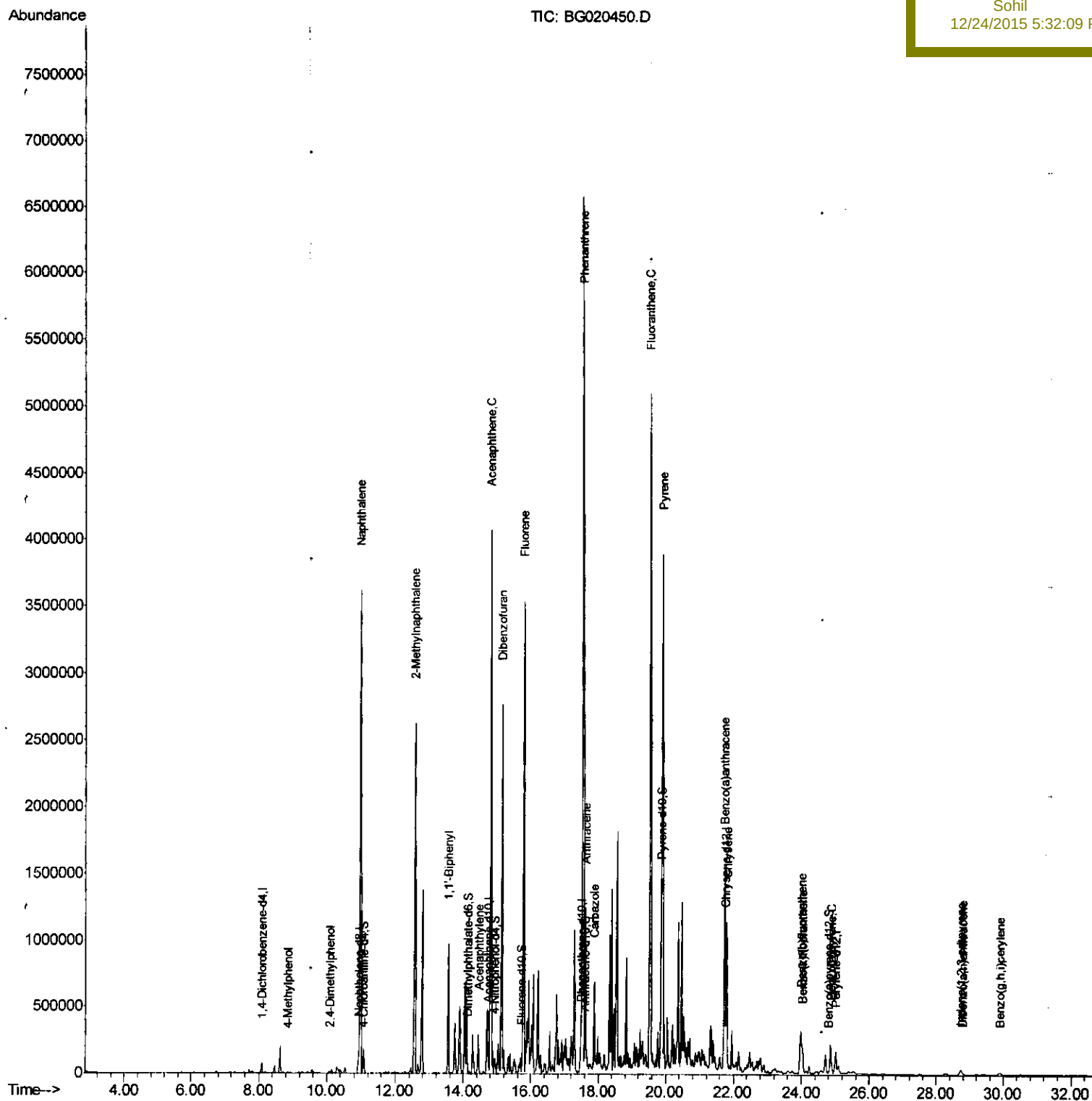
Data Path : Z:\HPCHEM1\BNA_G\DATA\BG122215\
Data File : BG020450.D
Acq On : 23 Dec 2015 19:27
Operator : UM/SJ
Sample : G4848-05DL 30X
Misc :
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Dec 24 03:19:48 2015
Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 24 02:43:25 2015
Response via : Initial Calibration

Instrument :
BNA_G
Client Sampled :
D9N51DL

Manual Integrations
APPROVED

Sohil
12/24/2015 5:32:09 PM



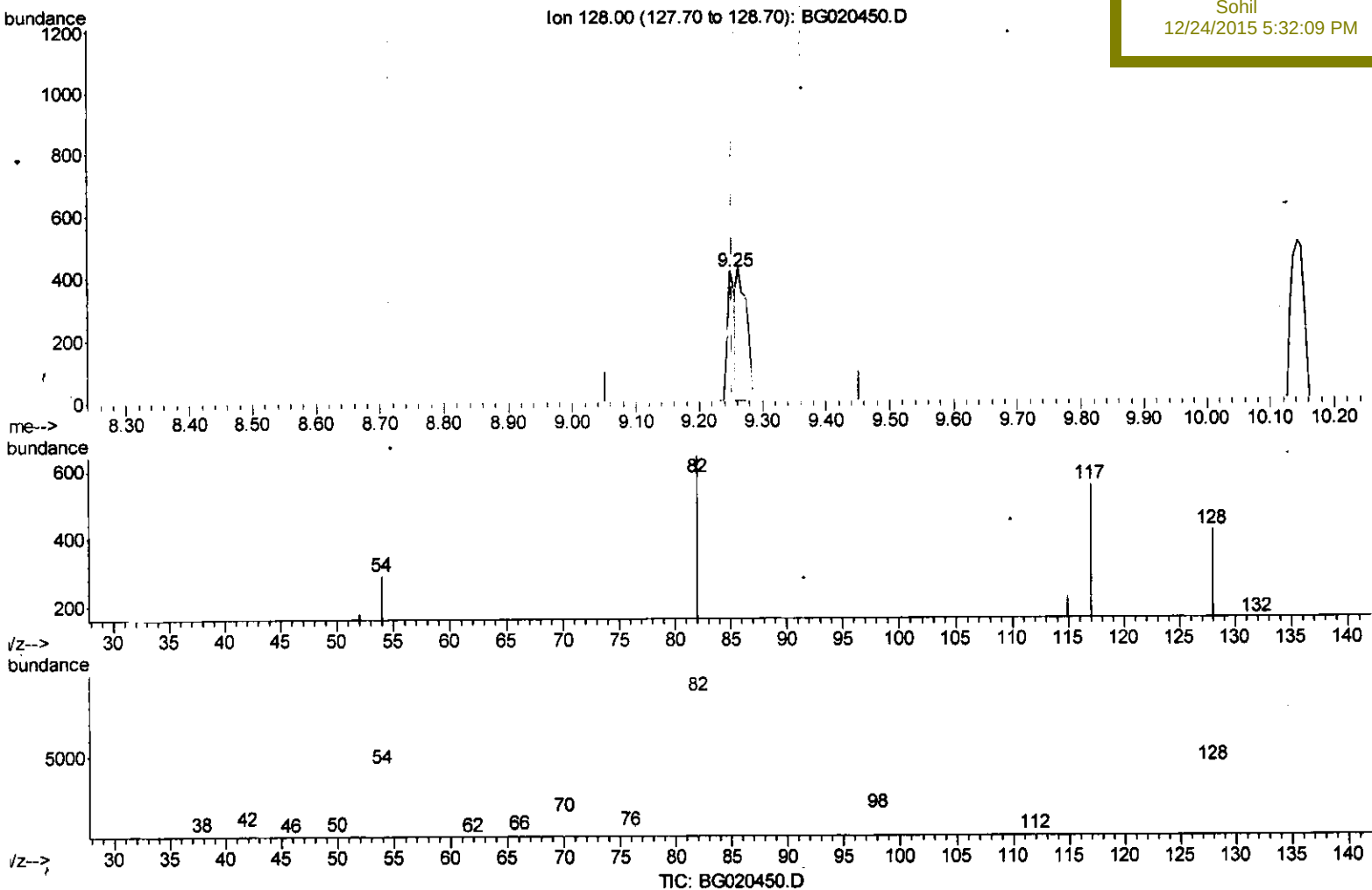
Data Path : Z:\HPCHEM1\BNA_G\DATA\BG122215\
 Data File : BG020450.D
 Acq On : 23 Dec 2015 19:27
 Operator : UM/SJ
 Sample : G4848-05DL 30X
 Misc :
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Dec 24 02:50:21 2015
 Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Thu Dec 24 02:43:25 2015
 Response via : Initial Calibration

Instrument :
 BNA_G
 ClientSampled :
 D9N51DL

Manual Integrations
 APPROVED

Sohil
 12/24/2015 5:32:09 PM



(19) Nitrobenzene-d5 (S)

9.250min (-0.004) 0.41ng/ul

response 326

Ion	Exp%	Act%
128.00	100	100
82.00	258.00	153.72#
54.00	123.60	69.78#
0.00	0.00	0.00

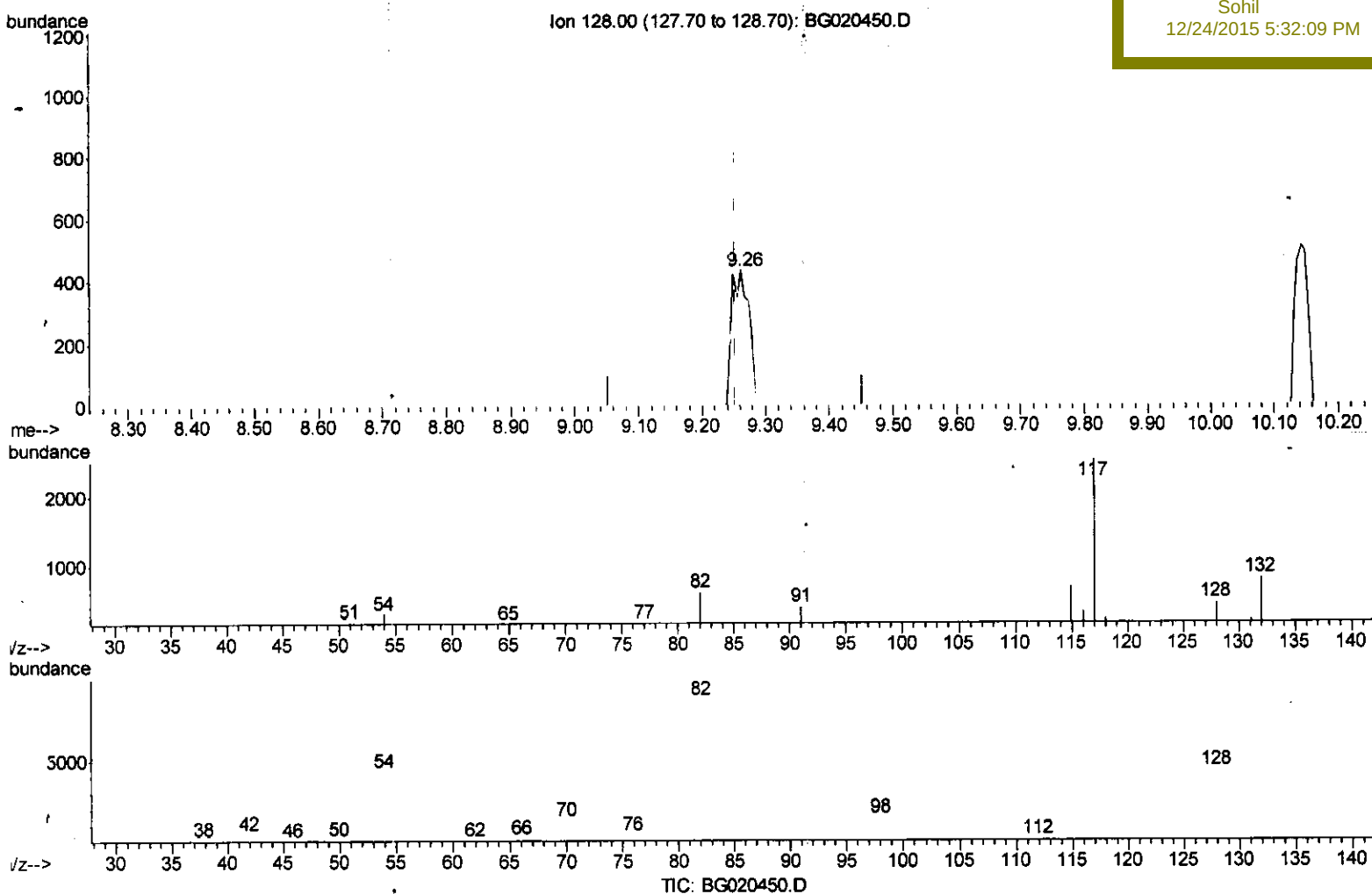
Data Path : Z:\HPCHEM1\BNA_G\DATA\BG122215\
 Data File : BG020450.D
 Acq On : 23 Dec 2015 19:27
 Operator : UM/SJ
 Sample : G4848-05DL 30X
 Misc :
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Dec 24 02:50:21 2015
 Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Thu Dec 24 02:43:25 2015
 Response via : Initial Calibration

Instrument :
 BNA_G
 ClientSampleId :
 D9N51DL

Manual Integrations
 APPROVED

Sohil
 12/24/2015 5:32:09 PM



(19) Nitrobenzene-d5 (S)

9.262min (+0.008) 0.99ng/ul m

response 795

Ion	Exp%	Act%
128.00	100	100
82.00	258.00	138.28#
54.00	123.60	67.98#
0.00	0.00	0.00

U.M
 12/23/15

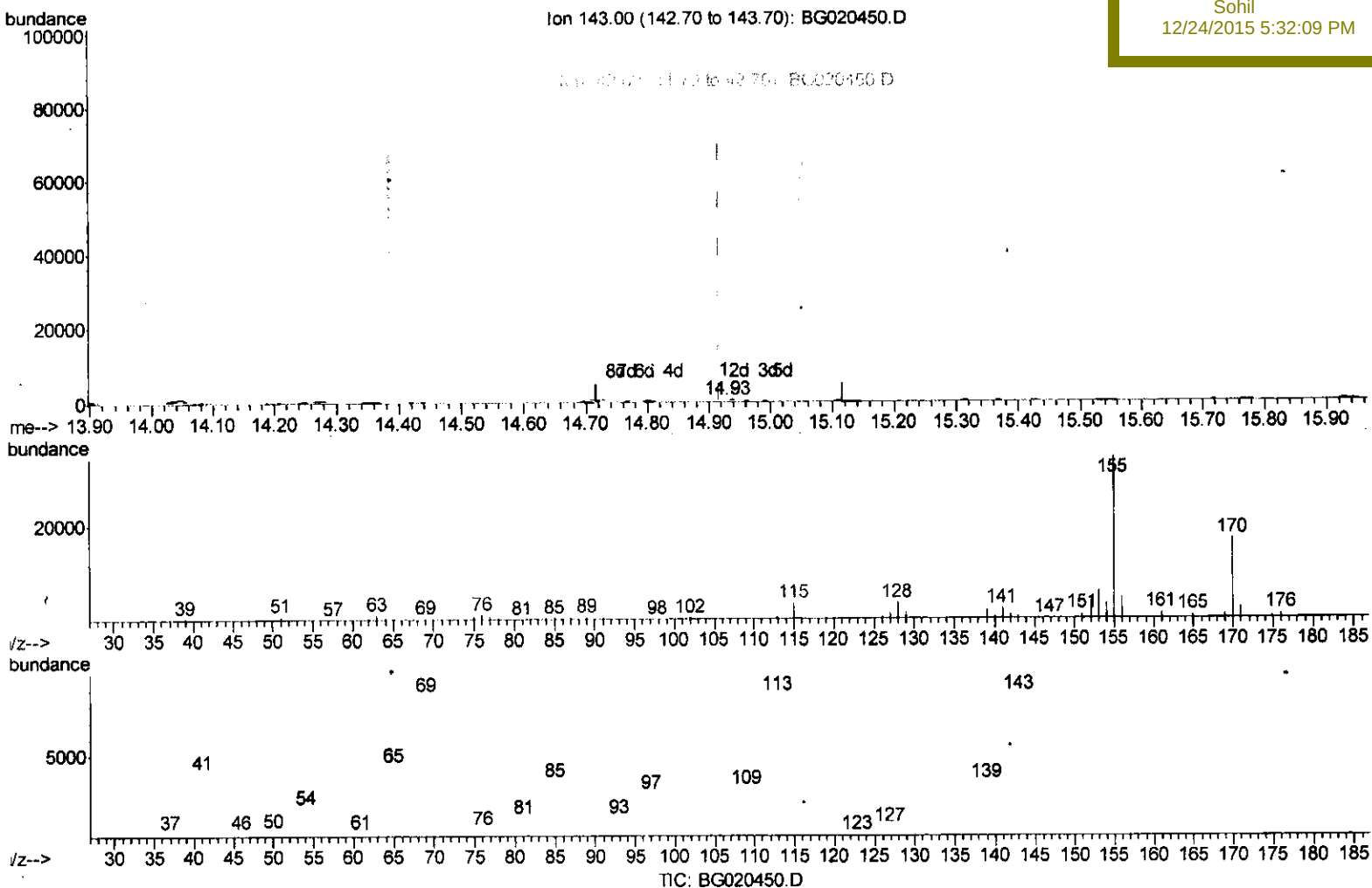
Data Path : Z:\HPCHEM1\BNA_G\DATA\BG122215\
 Data File : BG020450.D
 Acq On : 23 Dec 2015 19:27
 Operator : UM/SJ
 Sample : G4848-05DL 30X
 Misc :
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Dec 24 02:50:21 2015
 Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Thu Dec 24 02:43:25 2015
 Response via : Initial Calibration

Instrument :
 BNA_G
 ClientSampleId :
 D9N51DL

Manual Integrations
 APPROVED

Sohil
 12/24/2015 5:32:09 PM



(52) 4-Nitrophenol-d4 (S)

14.926min (+0.008) 1.22ng/ul m

response 1254

Ion	Exp%	Act%
143.00	100	100
113.00	89.00	116.83#
41.00	38.30	26.96#
42.00	23.40	0.00#

U.M
 12/23/15

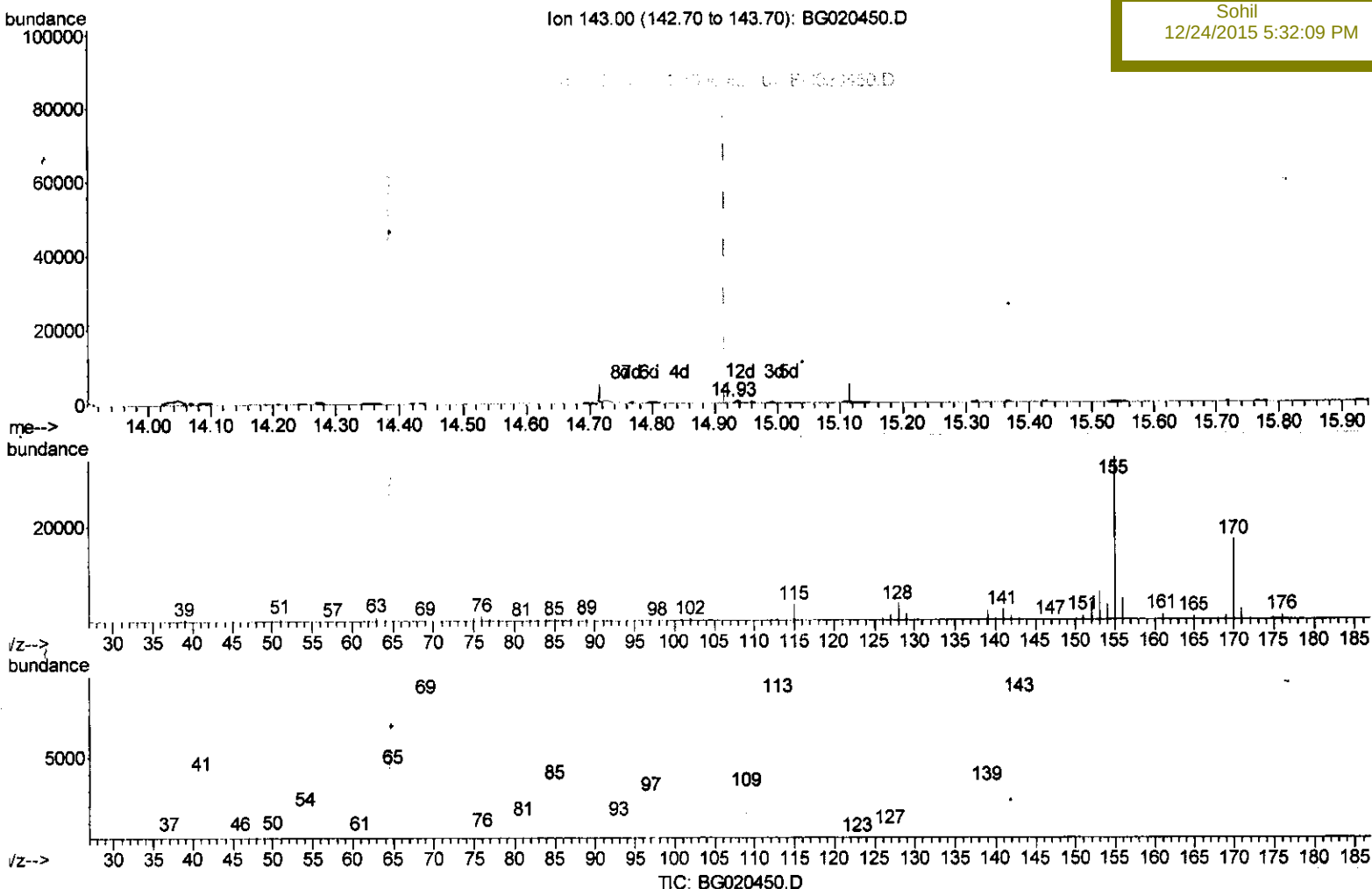
Data Path : Z:\HPCHEM1\BNA_G\DATA\BG122215\
 Data File : BG020450.D
 Acq On : 23 Dec 2015 19:27
 Operator : UM/SJ
 Sample : G4848-05DL 30X
 Misc :
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Dec 24 02:50:21 2015
 Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
 Quant Title : SVOA CALIBRATION
 Last Update : Thu Dec 24 02:43:25 2015
 Response via : Initial Calibration

Instrument :
 BNA_G
 ClientSampleId :
 D9N51DL

Manual Integrations
 APPROVED

Sohil
 12/24/2015 5:32:09 PM



(52) 4-Nitrophenol-d4 (S)

14.923min (+0.008) 0.94ng/ul

response 967

Ion	Exp%	Act%
143.00	100	100
113.00	89.00	116.83#
41.00	38.30	26.96#
42.00	23.40	0.00#

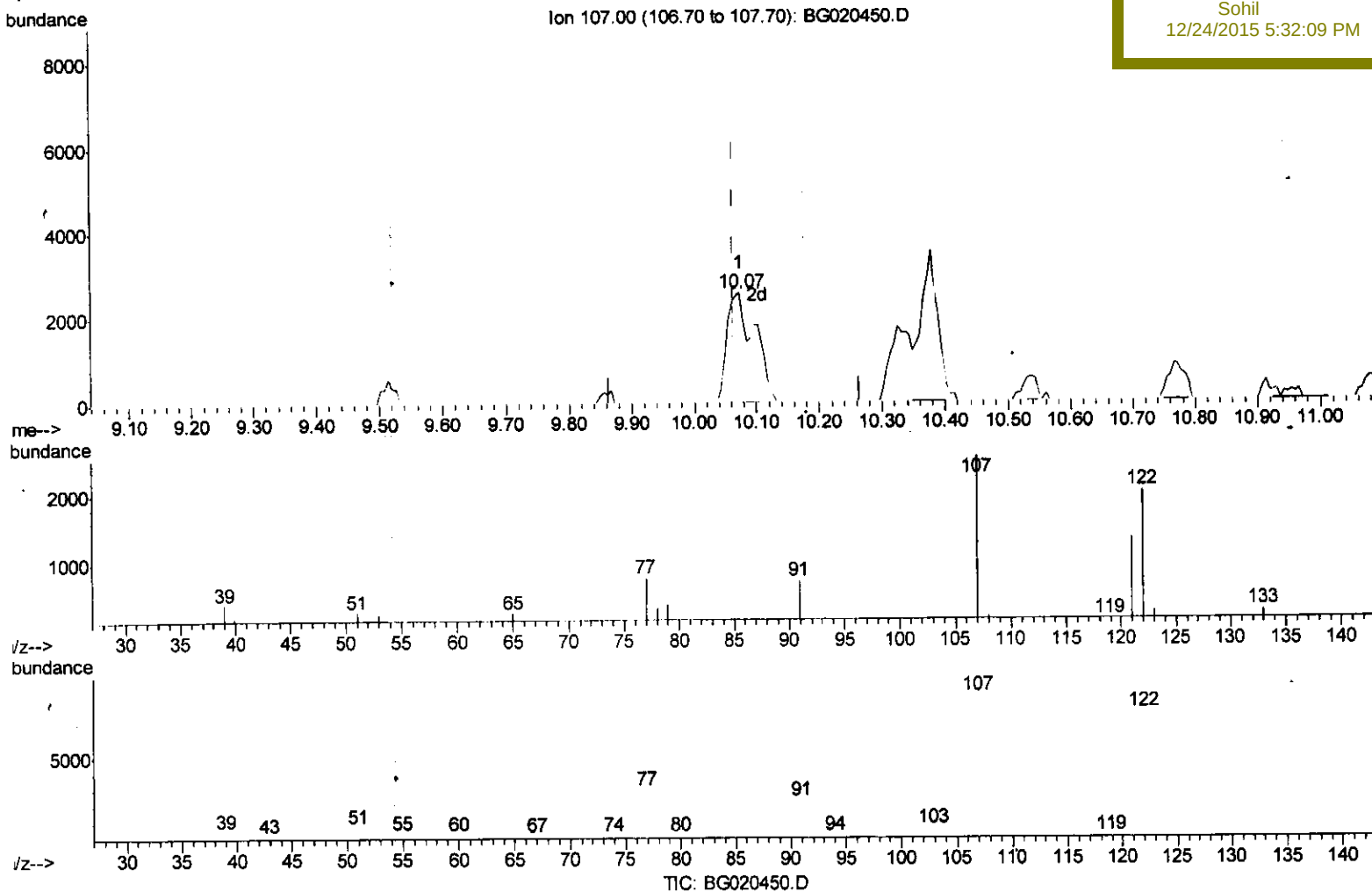
Data Path : Z:\HPCHEM1\BNA_G\DATA\BG122215\
 Data File : BG020450.D
 Acq On : 23 Dec 2015 19:27
 Operator : UM/SJ
 Sample : G4848-05DL 30X
 Misc :
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Dec 24 02:50:21 2015
 Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Thu Dec 24 02:43:25 2015
 Response via : Initial Calibration

Instrument :
 BNA_G
 ClientSampleId :
 D9N51DL

Manual Integrations
 APPROVED

Sohil
 12/24/2015 5:32:09 PM



(24) 2,4-Dimethylphenol

10.072min (+0.008) 3.54ng/ul m

response 7720

Ion	Exp%	Act%
107.00	100	100
121.00	48.70	52.62
122.00	77.60	79.73
0.00	0.00	0.00

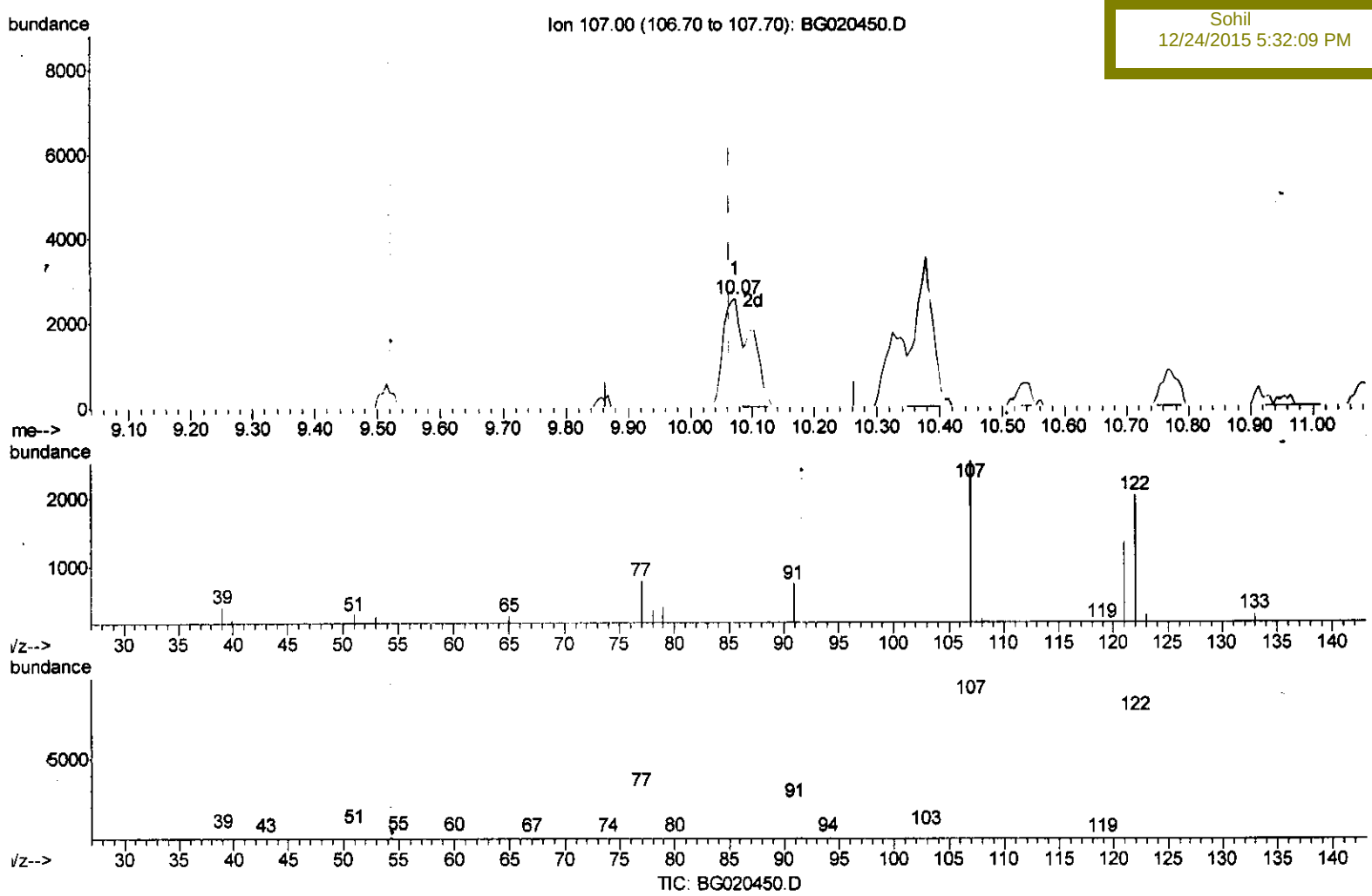
U.M
 12/23/15

Data Path : Z:\HPCHEM1\BNA_G\DATA\BG122215\
Data File : BG020450.D
Acq On : 23 Dec 2015 19:27
Operator : UM/SJ
Sample : G4848-05DL 30X
Misc :
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Dec 24 02:50:21 2015
Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 24 02:43:25 2015
Response via : Initial Calibration

Instrument :
BNA_G
ClientSampleId :
D9N51DL

Manual Integrations
APPROVED
Sohil
12/24/2015 5:32:09 PM



(24) 2,4-Dimethylphenol

10.072min (+0.008) 2.25ng/ul

response 4896

Ion	Exp%	Act%
107.00	100	100
121.00	48.70	52.62
122.00	77.60	79.73
0.00	0.00	0.00

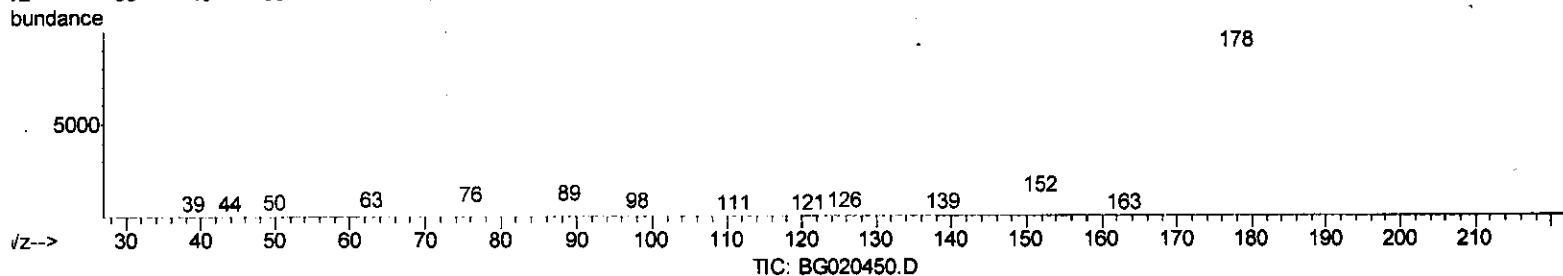
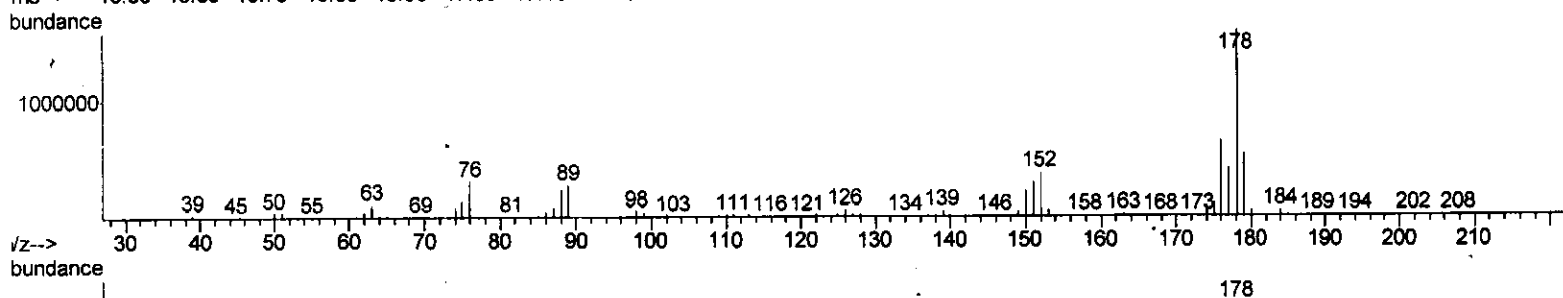
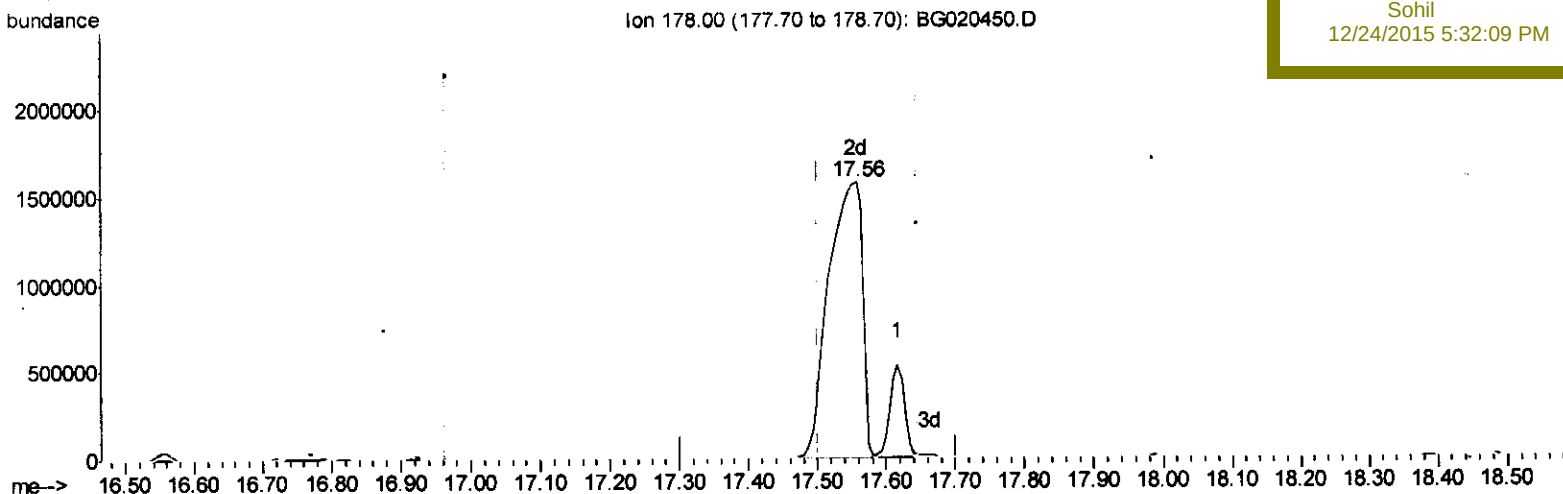
Data Path : Z:\HPCHEM1\BNA_G\DATA\BG122215\
 Data File : BG020450.D
 Acq On : 23 Dec 2015 19:27
 Operator : UM/SJ
 Sample : G4848-05DL 30X
 Misc :
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Dec 24 02:50:21 2015
 Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Thu Dec 24 02:43:25 2015
 Response via : Initial Calibration

Instrument :
 BNA_G
 ClientSampleId :
 D9N51DL

Manual Integrations
 APPROVED

Sohil
 12/24/2015 5:32:09 PM



(70) Phenanthrene

17.558min (+0.055) 637.57ng/ul m

response 5330194

Ion	Exp%	Act%
178.00	100	100
179.00	16.10	33.88#
176.00	19.10	41.11#
0.00	0.00	0.00

U.M
 12/23/15

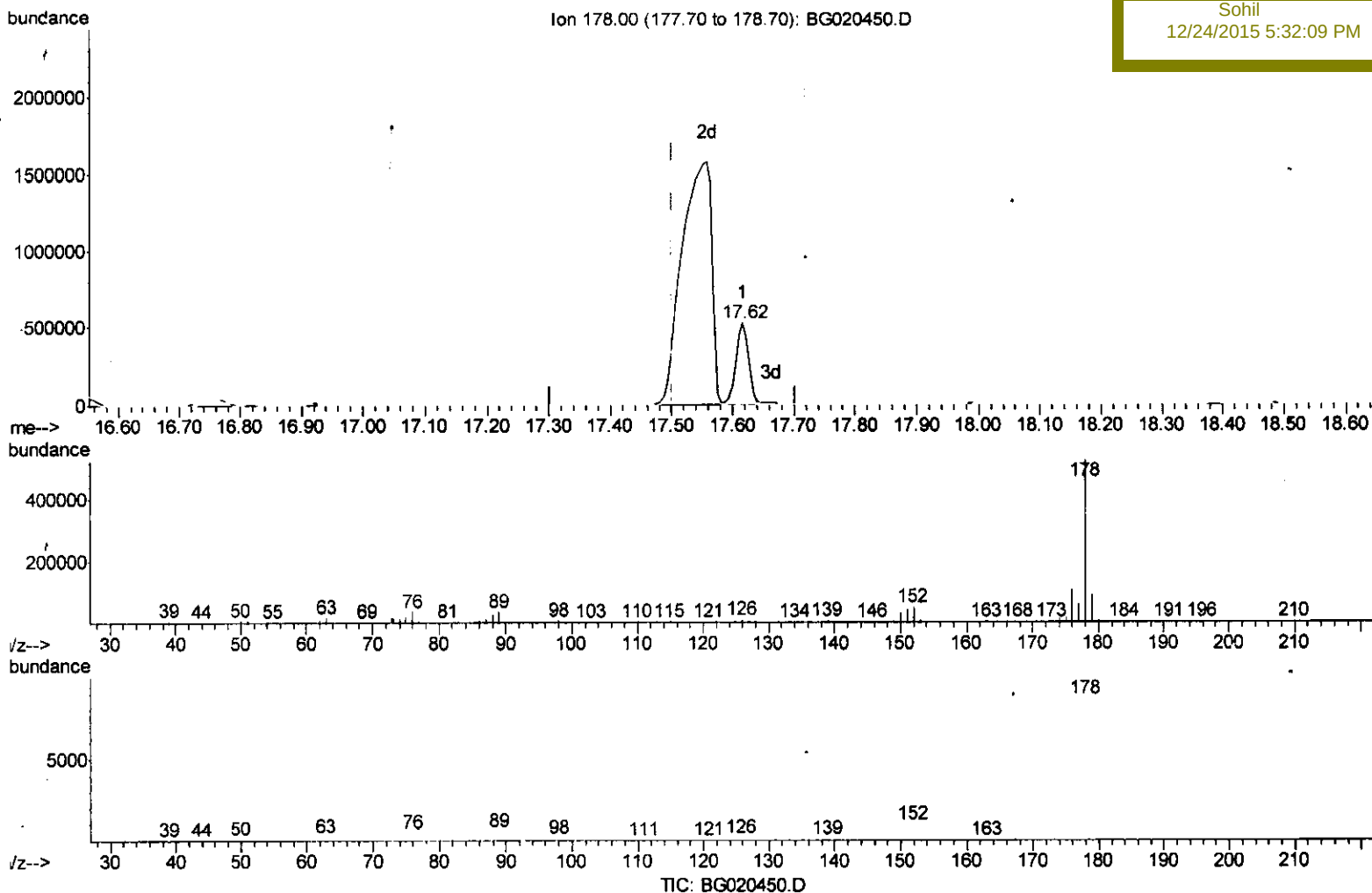
Data Path : Z:\HPCHEM1\BNA_G\DATA\BG122215\
 Data File : BG020450.D
 Acq On : 23 Dec 2015 19:27
 Operator : UM/SJ
 Sample : G4848-05DL 30X
 Misc :
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Dec 24 02:50:21 2015
 Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Thu Dec 24 02:43:25 2015
 Response via : Initial Calibration

Instrument :
 BNA_G
 ClientSampleId :
 D9N51DL

Manual Integrations
 APPROVED

Sohil
 12/24/2015 5:32:09 PM



(70) Phenanthrene

17.617min (+0.114) 89.66ng/ul

response 749604

Ion	Exp%	Act%
178.00	100	100
179.00	16.10	17.04
176.00	19.10	20.09
0.00	0.00	0.00

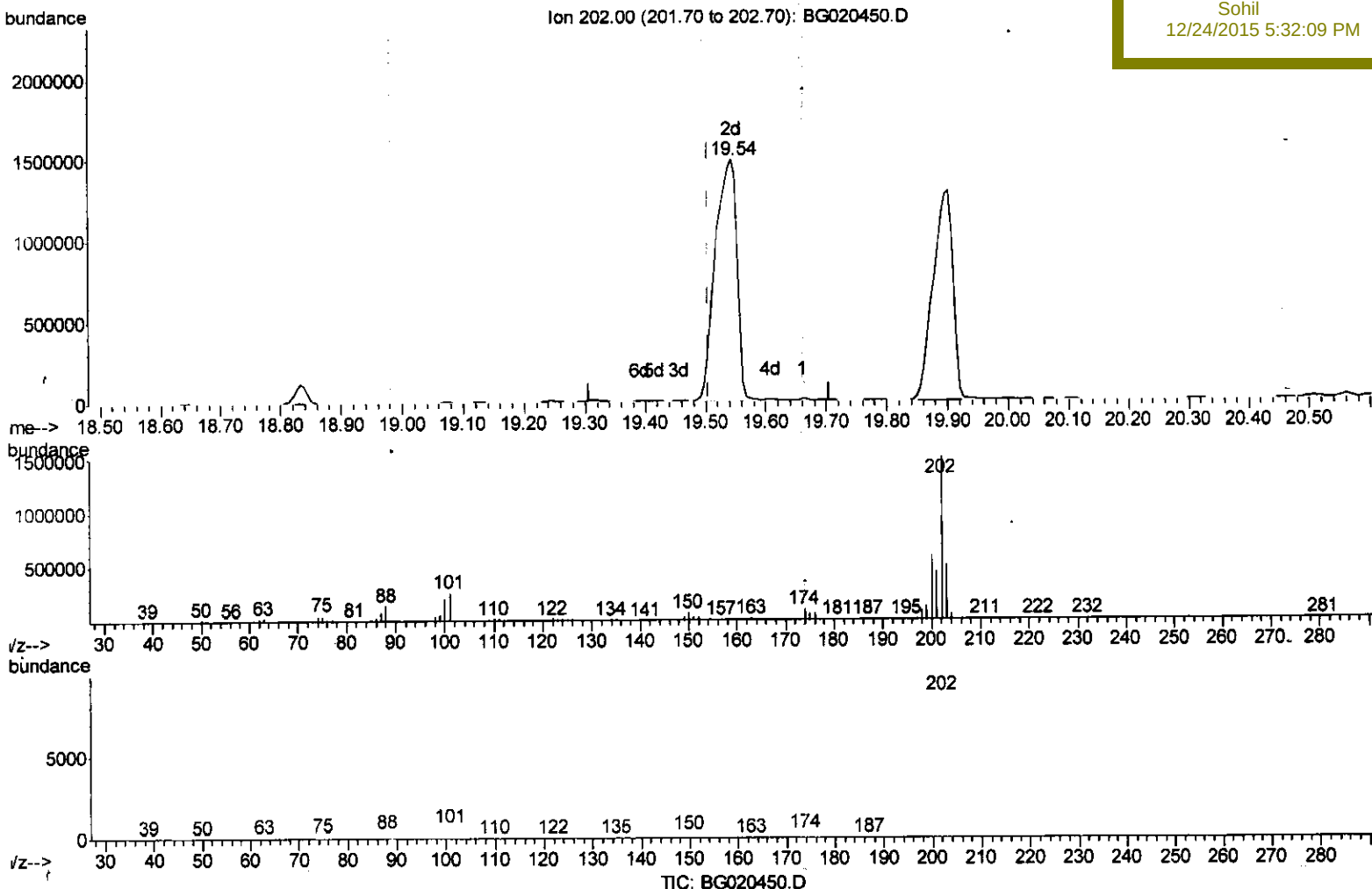
Data Path : Z:\HPCHEM1\BNA G\DATA\BG122215\
 Data File : BCG020450.D
 Acq On : 23 Dec 2015 19:27
 Operator : UM/SJ
 Sample : G4848-05DL 30X
 Misc :
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Dec 24 02:50:21 2015
 Quant Method : Z:\HPCHEM1\BNA G\METHODS\SOM02.2-EPA-BG121415.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Thu Dec 24 02:43:25 2015
 Response via : Initial Calibration

Instrument :
 BNA_G
 ClientSampleID :
 D9N51DL

Manual Integrations
 APPROVED

Sohil
 12/24/2015 5:32:09 PM



(77) Fluoranthene (C)

19.544min (+0.037) 385.67ng/ul m

response 3768303

Ion	Exp%	Act%
202.00	100	100
101.00	7.80	17.33#
100.00	6.40	13.91#
0.00	0.00	0.00

U.M
 12/23/15

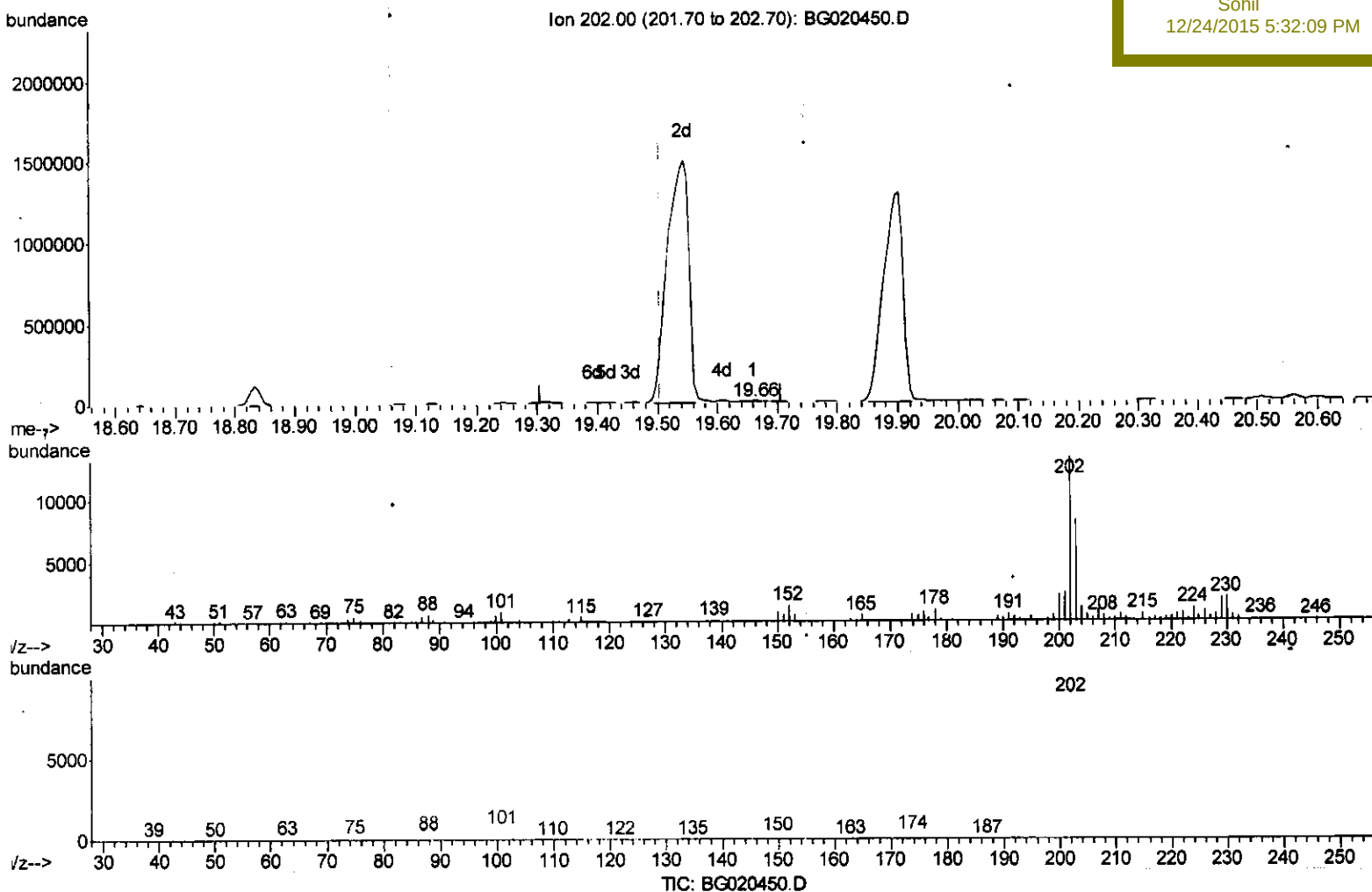
Data Path : Z:\HPCHEM1\BNA_G\DATA\BG122215\
 Data File : BG020450.D
 Acq On : 23 Dec 2015 19:27
 Operator : UM/SJ
 Sample : G4848-05DL 30X
 Misc :
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Dec 24 02:50:21 2015
 Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Thu Dec 24 02:43:25 2015
 Response via : Initial Calibration

Instrument :
 BNA_G
 ClientSampleId :
 D9N51DL

Manual Integrations
 APPROVED

Sohil
 12/24/2015 5:32:09 PM



(77) Fluoranthene (C)

19.661min (+0.155) 1.44ng/ul

response 14021

Ion	Exp%	Act%
202.00	100	100
101.00	7.80	7.44
100.00	6.40	5.18
0.00	0.00	0.00

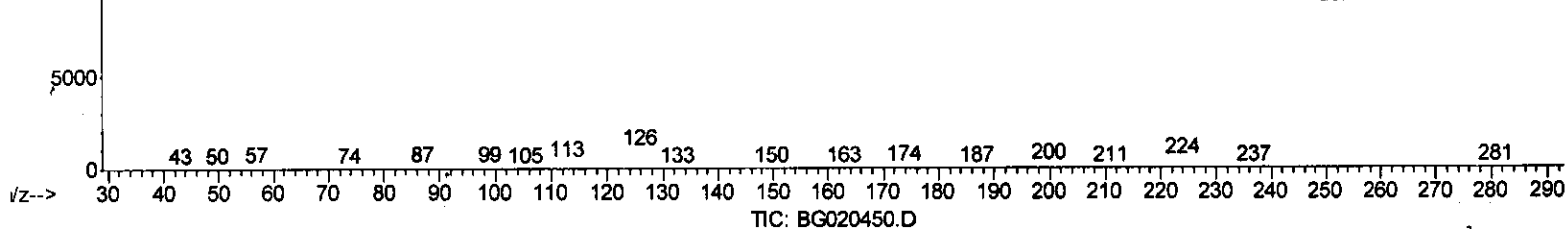
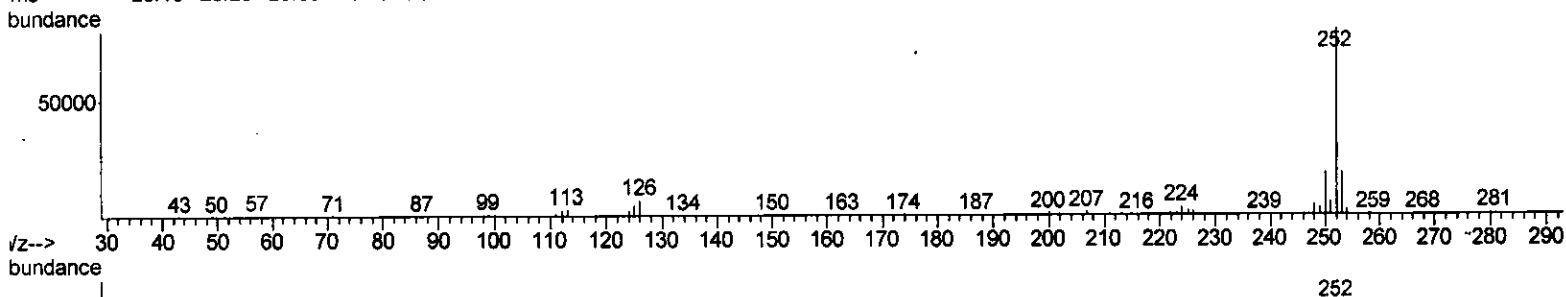
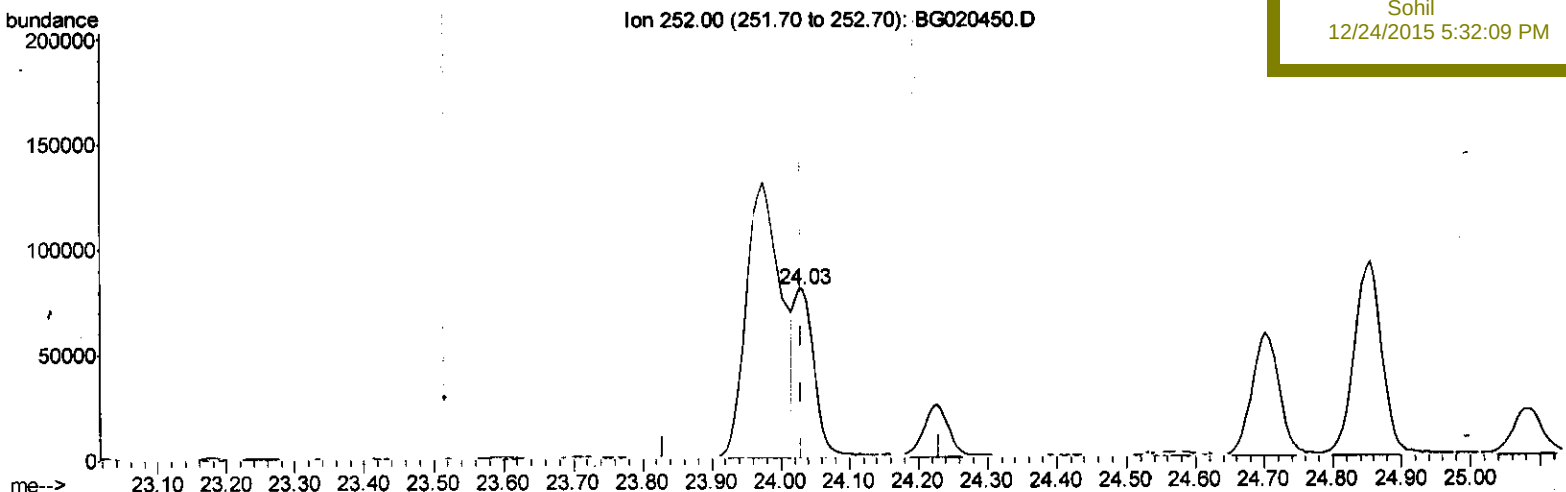
Data Path : Z:\HPCHEM1\BNA_G\DATA\BG122215\
 Data File : BG020450.D
 Acq On : 23 Dec 2015 19:27
 Operator : UM/SJ
 Sample : G4848-05DL 30X
 Misc :
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Dec 24 02:50:21 2015
 Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Thu Dec 24 02:43:25 2015
 Response via : Initial Calibration

Instrument :
 BNA_G
 ClientSampled :
 D9N51DL

Manual Integrations
 APPROVED

Sohil
 12/24/2015 5:32:09 PM



(89) Benzo(k)fluoranthene
 24.033min (+0.002) 16.14ng/ul m
 response 165630

U.M
 12/23/15

Ion	Exp%	Act%
252.00	100	100
253.00	22.40	23.07
125.00	7.20	5.69#
0.00	0.00	0.00

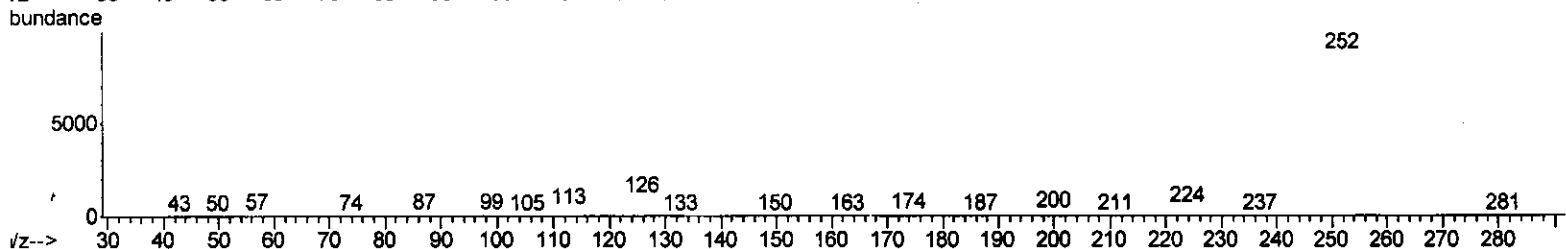
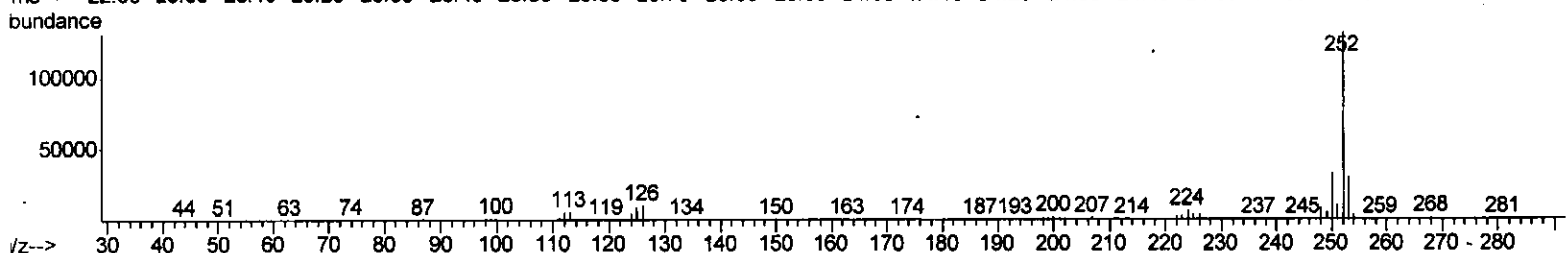
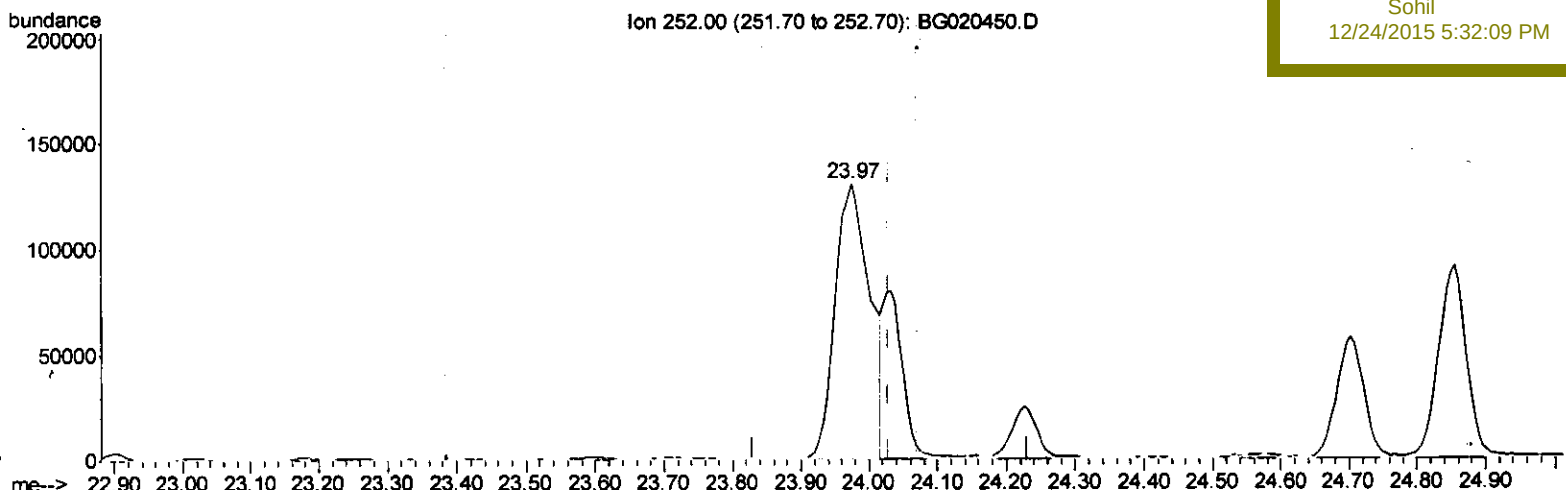
Data Path : Z:\HPCHEM1\BNA_G\DATA\BG122215\
 Data File : BG020450.D
 Acq On : 23 Dec 2015 19:27
 Operator : UM/SJ
 Sample : G4848-05DL 30X
 Misc :
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Dec 24 02:50:21 2015
 Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Thu Dec 24 02:43:25 2015
 Response via : Initial Calibration

Instrument :
 BNA_G
 ClientSampled :
 D9N51DL

Manual Integrations
 APPROVED

Sohil
 12/24/2015 5:32:09 PM



(89) Benzo(k)fluoranthene
 23.974min (-0.057) 44.31ng/ul
 response 454636

Ion	Exp%	Act%
252.00	100	100
253.00	22.40	22.86
125.00	7.20	6.70
0.00	0.00	0.00

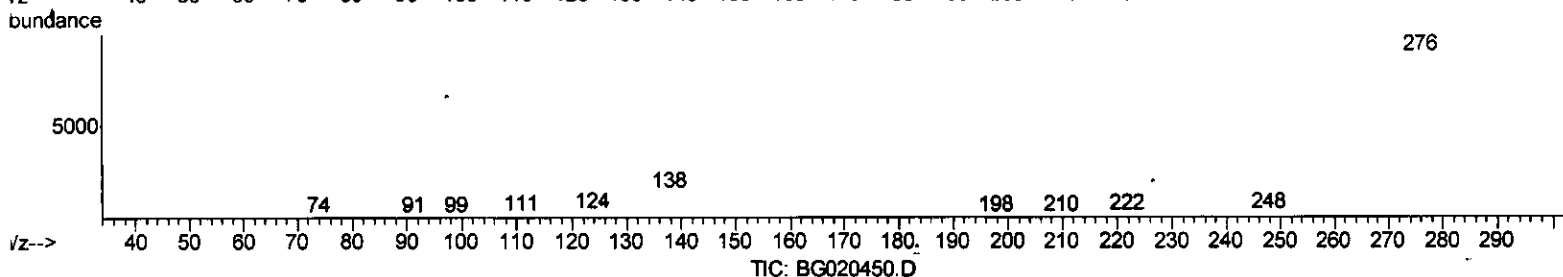
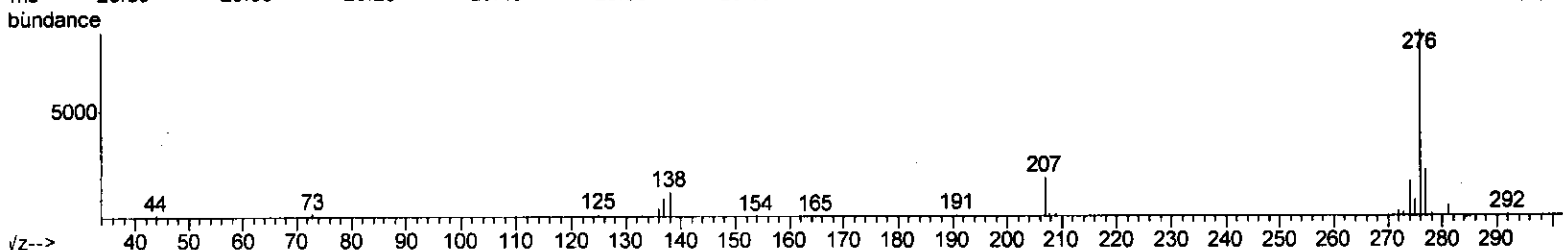
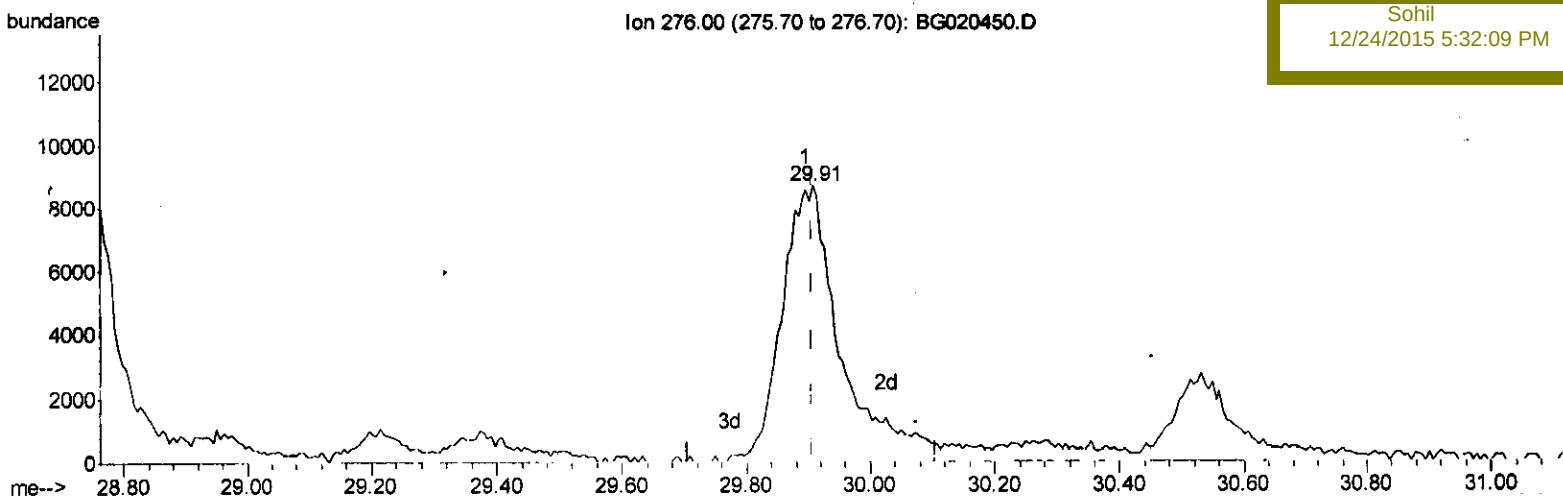
Data Path : Z:\HPCHEM1\BNA_G\DATA\BG122215\
 Data File : BG020450.D
 Acq On : 23 Dec 2015 19:27
 Operator : UM/SJ
 Sample : G4848-05DL 30X
 Misc :
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Dec 24 02:50:21 2015
 Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Thu Dec 24 02:43:25 2015
 Response via : Initial Calibration

Instrument :
 BNA_G
 ClientSampled :
 D9N51DL

Manual Integrations
 APPROVED

Sohil
 12/24/2015 5:32:09 PM



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

29.908min (+0.002) 5.79ng/ul m

response 57255

Ion	Exp%	Act%
276.00	100	100
138.00	13.50	14.61
277.00	24.90	25.72
0.00	0.00	0.00

U.M
 12/23/15

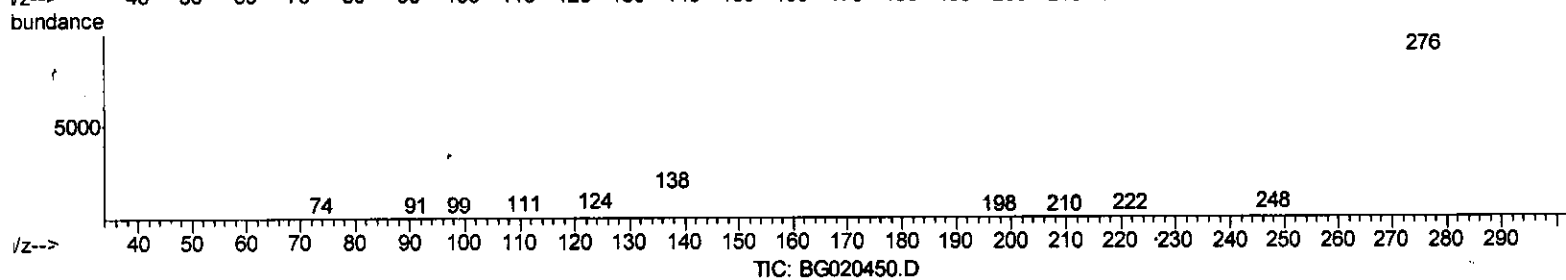
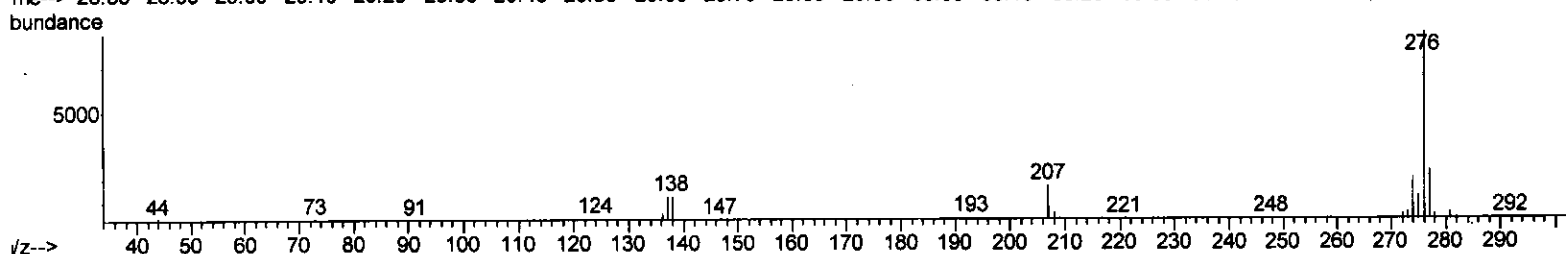
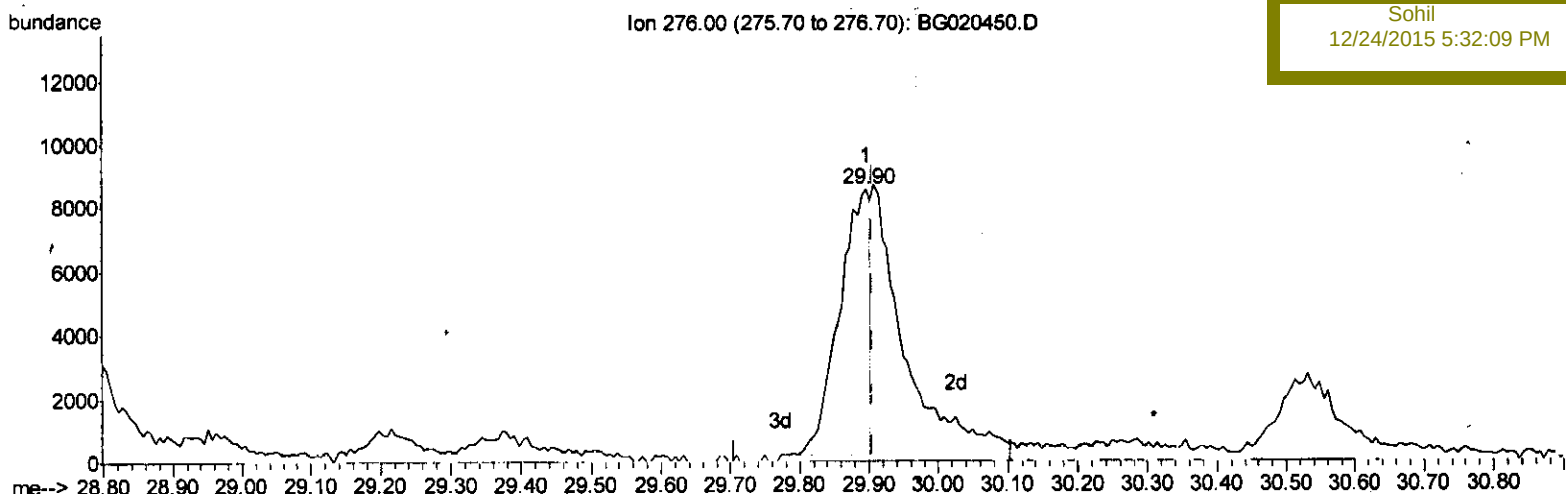
Data Path : Z:\HPCHEM1\BNA_G\DATA\BG122215\
 Data File : BG020450.D
 Acq On : 23 Dec 2015 19:27
 Operator : UM/SJ
 Sample : G4848-05DL 30X
 Misc :
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Dec 24 02:50:21 2015
 Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Thu Dec 24 02:43:25 2015
 Response via : Initial Calibration

Instrument :
 BNA_G
 ClientSampleId :
 D9N51DL

Manual Integrations
 APPROVED

Sohil
 12/24/2015 5:32:09 PM



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

29.896min (-0.010) 2.63ng/ul

response 26047

Ion	Exp%	Act%
276.00	100	100
138.00	13.50	14.40
277.00	24.90	27.21
0.00	0.00	0.00

Data Path : Z:\HPCHEM1\BNA_G\DATA\BG122215\
Data File : BG020450.D
Acq On : 23 Dec 2015 19:27
Operator : UM/SJ
Sample : G4848-05DL 30X
Misc :
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Dec 24 03:19:48 2015
Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
Quant Title : SVOA CALIBRATION
QLast Update : Thu Dec 24 02:43:25 2015
Response via : Initial Calibration

Instrument :
BNA_G
ClientSampleId :
D9N51DL

Manual Integrations
APPROVED
Sohil
12/24/2015 5:32:09 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
--------------------	------	------	----------	------	-------	----------

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

Data Path : Z:\HPCHEM1\BNA_G\DATA\BG122215\
 Data File : BG020450.D
 Acq On : 23 Dec 2015 19:27
 Operator : UM/SJ
 Sample : G4848-05DL 30X
 Misc :
 ALS Vial : 40 Sample Multiplier: 1

Quant Time: Dec 24 03:19:48 2015
 Quant Method : Z:\HPCHEM1\BNA_G\METHODS\SOM02.2-EPA-BG121415.M
 Quant Title : SVOA CALIBRATION
 QLast Update : Thu Dec 24 02:43:25 2015
 Response via : Initial Calibration

Instrument :
 BNA_G
 ClientSampleId :
 D9N51DL

Manual Integrations
 APPROVED

Sohil
 12/24/2015 5:32:09 PM

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.09	152	23956	20.00	ng/ul	0.00
18) Naphthalene-d8	10.91	136	103210	20.00	ng/ul	0.01
36) Acenaphthene-d10	14.72	164	70920	20.00	ng/ul	0.00
62) Phenanthrene-d10	17.48	188	152842	20.00	ng/ul	0.01
78) Chrysene-d12	21.75	240	190518	20.00	ng/ul	0.00
86) Perylene-d12	25.01	264	177652	20.00	ng/ul	0.00

System Monitoring Compounds

3) 1,4-Dioxane-d8	0.00	96	0	0.00	ng/uL	
5) Phenol-d5	7.25	99	1115	0.53	ng/ul	0.00
7) Bis-(2-Chloroethyl)ether-d	7.41	67	800	0.63	ng/ul	0.00
9) 2-Chlorophenol-d4	7.61	132	937	0.61	ng/ul	0.00
13) 4-Methylphenol-d8	8.79	113	1110	0.61	ng/ul	0.00
19) Nitrobenzene-d5	9.26	128	795m	0.99	ng/ul	0.00
22) 2-Nitrophenol-d4	9.99	143	774	0.86	ng/ul	0.01
26) 2,4-Dichlorophenol-d3	10.52	165	1264	0.70	ng/ul	0.00
29) 4-Chloroaniline-d4	11.04	131	2296	1.13	ng/ul	0.00
44) Dimethylphthalate-d6	14.12	166	6144	1.07	ng/ul	0.00
47) Acenaphthylene-d8	14.41	160	6117	0.92	ng/ul	0.00
52) 4-Nitrophenol-d4	14.93	143	1254m	1.22	ng/ul	0.00
58) Fluorene-d10	15.71	176	6092	1.17	ng/ul	0.00
63) 4,6-Dinitro-2-methylphenol	0.00	200	0	0.00	ng/ul	
71) Anthracene-d10	17.59	188	7163	1.02	ng/ul	0.03
79) Pyrene-d10	19.85	212	9536	1.07	ng/ul	0.00
90) Benzo(a)pyrene-d12	24.77	264	8970	1.01	ng/ul	0.00

Target Compounds

						Qvalue
16) 4-Methylphenol	8.86	108	3567	1.87	ng/ul.	84
24) 2,4-Dimethylphenol	10.07	107	7720m	3.54	ng/ul	
28) Naphthalene	10.98	128	3511260	651.46	ng/ul#	79
34) 2-Methylnaphthalene	12.57	142	1357782	329.80	ng/ul	99
41) 1,1'-Biphenyl	13.56	154	524359	98.00	ng/ul	98
48) Acenaphthylene	14.44	152	124318	17.53	ng/ul#	94
50) Acenaphthene	14.81	153	1988045	416.71	ng/ul#	92
54) Dibenzofuran	15.13	168	1969853	277.56	ng/ul#	87
59) Fluorene	15.79	166	1923452	337.50	ng/ul#	98
70) Phenanthrene	17.56	178	5330194m	37.57	ng/ul	
72) Anthracene	17.62	178	749604	88.40	ng/ul	96
75) Carbazole	17.88	167	432327	60.68	ng/ul	99
77) Fluoranthene	19.54	202	3768303m	85.67	ng/ul	
80) Pyrene	19.90	202	2931944	254.27	ng/ul#	86
83) Benzo(a)anthracene	21.72	228	965916	86.89	ng/ul	95
85) Chrysene	21.79	228	793125	75.75	ng/ul	95
88) Benzo(b)fluoranthene	23.97	252	454636	42.52	ng/ul	96
89) Benzo(k)fluoranthene	24.03	252	165630m	16.14	ng/ul	
91) Benzo(a)pyrene	24.86	252	253917	25.05	ng/ul	98
92) Indeno(1,2,3-cd)pyrene	28.73	276	68158	5.65	ng/ul	96
93) Dibenzo(a,h)anthracene	28.78	278	20302	2.03	ng/ul	96
94) Benzo(g,h,i)perylene	29.91	276	57255m	5.79	ng/ul	

O.m
 12/23/15